

October 2020

IP City of Highland Park





Acknowledgments

MoveHP is made possible through the volunteer efforts and input from dedicated members of the Highland Park community.

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Executive Summary

What is MoveHP?

MoveHP is a 5-year update to Bike-Walk HP 2030, Highland Park's non-motorized transportation plan. MoveHP envisions the development of a comprehensive and connected non-motorized transportation system. It proposes that the City of Highland Park plan for improvements to the City's street and transportation system that will serve all transportation users: cyclists, pedestrians, transit users and drivers, regardless of age or ability. The Plan aims to provide each user with improved, more enjoyable, and safer access to local and regional destinations.

The Importance of MoveHP

The City has progressed as a bicycle- and pedestrian-friendly community through the implementation of Bike-Walk HP 2030 and continues this commitment through MoveHP. Updates to the plan are needed to reflect new bike infrastructure and pedestrian connections, integrate the Family Friendly Bikeways Action Plan (2016), and re-evaluate project and policy priorities. MoveHP provides the City with a plan that reflects current community needs and desires.



MoveHP Goals

- 1. Develop and adopt policies, plans and guidelines to assure that cycling and walking are a safe and integral part of City life.
- 2. Partner with government, non-profit, and local organizations agencies to incorporate bicycle and pedestrian policies in projects and facilities in the community.
- 3. Develop and maintain a continuous, interconnected cycling and pedestrian system that accommodates short and long distance trips and provides connections and access to major community destinations.
- 4. Provide funding for bicycle and pedestrian-related improvements through the capital improvement program, grants, and other funding sources.
- 5. Implement bicycle and pedestrian education, encouragement, and evaluation programs.



Existing Conditions

Achievements

Since the passage of BikeWalk HP 2030, the City of Highland Park has made significant strides in biking and walking infrastructure. New infrastructure improvements include the addition of 18 miles of shared lane markings ("sharrows"), development of the Family Friendly Bikeway route in the Highlands neighborhood, a new bike repair station, and sidewalk gaps filled on Green Bay Road and Ridge Road. These efforts enabled Highland Park to achieve Bronze-level status as a Bicycle Friendly Community by the League of American Bicyclists in 2018.

Existing Bike/Ped Network

This section is an abbreviated version of the MoveHP Existing Conditions Report released in July 2019. Please visit Cityhpil.com to view the full report.

Highland Park has an existing bike and pedestrian network that stretches across the City. Major features include the Robert McClory Path and Skokie Valley Path, which run north-south across much of the city and connect it with neighboring municipalities. In 2017, 18 miles of sharrows were installed on primary and secondary roads throughout the City. The majority of the City's neighborhoods have sidewalks and downtown is a walkable, pedestrian-friendly destination.

Safety is a key factor that motivates whether people choose to walk or bike to a destination. Staff analyzed police crash data involving pedestrians or cyclists, and found that there were challenging intersections in the central business district, the Briergate District, at the intersection of Lake Cook Road with Skokie Valley Road and the access ramps of US-41. Additionally, some bike routes in Highland Park – either signed or with sharrows installed in 2017 – are located on roads with speed limits (35 MPH) higher than what is considered safe for non-segregated traffic (25 MPH). While the project was implemented by the Bike Walk Advisory Group and City staff



with approval of City Council, emerging best practices indicate that additional safety measures may be necessary for certain roadway conditions.

While the City has made significant improvements to its biking and walking infrastructure, Highland Park's zoning code does not effectively promote walkability and bikeability. Highland Park does not require bicycle parking in new developments and has a difficult process for parking reductions in return for constructing bicycle parking. Furthermore, while the Highland Park Municipal Code requires sidewalks to be installed on both sides of major arterial streets and either or both sides of minor arterials, the policy is not currently enforced. Finally, the City code does not require internal walkway networks in new parking lots, which reduce the risk of conflicts. All of the above are considered best practices and required in several communities within the region.

Public Outreach

MoveHP outreach efforts included a public workshop, online survey, open house, and a resident-led Steering Committee. Feedback consistently stressed the need for east-west connections over/across US-41, which was considered unsafe and uncomfortable; as well as filling in sidewalk gaps, connecting the bicycle path network, and improving specific intersections across the city. Refer to the MoveHP Existing Conditions Report for a more detailed summary and analysis of public outreach.

Recommendations

Key Themes

Using public outreach and careful analysis, city staff formed a set of goals, objectives and recommendations to make Highland Park a more walk- and bike-friendly community. Infrastructure improvements in the plan follow three main themes:

- Sidewalk Infill: Well-connected pedestrian and bicycling networks make it easier and safer for people to walk and bike. Highland Park has numerous gaps in its sidewalk network; MoveHP recommends filling these gaps as a key improvement.
- Improved Intersections & Crossings: Police crash data shows several dangerous intersections for pedestrians and cyclists, and several intersections are hard to navigate. MoveHP recommends the redesign and improvement of intersections across the city to increase safety and comfort.
- East-West Connections: Public outreach stressed the importance of improved east-west connections, especially over US-41. Connecting the trail network is a key recommendation of MoveHP



A volunteer counts pedestrians downtown during the bi-annual Bike/Ped Count in fall 2019

Implementation

Highland Park will need to utilize five strategies to successfully implement MoveHP. This includes: using MoveHP regularly, using MoveHP as a guidebook for the Bike Walk Advisory Group (BWAG) and Transportation Advisory Group (TAG), continuing to review the Capital Improvement Plan (CIP), identifying and applying for funding, and updating MoveHP on a regular basis. MoveHP should be consulted often by elected officials, planners, engineers, and advocates. Frequently utilizing MoveHP, and regular evaluation and updating of the Plan, will ensure its implementation is successful and adapts to new challenges. Each recommendation presented in the Plan is scored by priority and cost in order to help staff and elected officials plan projects over the next 5 to 10 years. Finally, MoveHP includes a list of funding opportunities at local, state, and federal levels – as well as the non-profit sector – in order to guide staff in finding the grants and loans projects require.



MoveHP is the City of Highland Park's non-motorized transportation plan. It is an update to the 2012 Bike-Walk HP 2030 Plan and proposes that the City of Highland Park plan for improvements to the City's street and transportation system that will serve all transportation users: cyclists, pedestrians, transit users and drivers, regardless of age or ability. The Plan aims to provide each user with improved, more enjoyable, and safer access to local and regional destinations.

Purpose of MoveHP

In 2012, the City of Highland Park adopted Bike-Walk HP 2030, the City's comprehensive bicycle and pedestrian plan. In the seven years since the adoption of Bike-WalkHP 2030, the City has made significant strides to improve its non-motorized transportation infrastructure. The City completed multiple pedestrian and cycling-focused projects, including adding 18 miles of shared-used lanes; constructing 2.5 miles of sidewalk; and adding or improving connections between shared-use trails. In 2018, the City was awarded a Bronze status as a Bicycle Friendly Community by the American League of Bicyclists, one of only 19 Bicycle Friendly Communities in the state.

Updates to BikeWalkHP 2030 are needed to reflect new bike infrastructure and pedestrian connections, integrate the Family Friendly Bikeways Action Plan (2016), and re-evaluate project priorities. The updated plan, known as MoveHP, provides the City with a plan that represents the community's current needs and desires for biking, walking, transit, and other forms of active transportation. Just as Bike-Walk HP 2030 served to replace the Greenways Plan, MoveHP will serve as the City's comprehensive non-motorized and active transportation plan

MoveHP Goals

- 1. Develop and adopt policies, plans and guidelines to ensure that cycling and walking are a safe and integral part of City life.
- 2. Partner with government, non-profit, and local organizations agencies to incorporate bicycle and pedestrian policies in projects and facilities in the community.
- 3. Develop and maintain a continuous, interconnected cycling and pedestrian system that accommodates short and long distance trips and provides connections and access to major community destinations.
- 4. Provide funding for bicycle and pedestrian-related improvements through the capital improvement program, grants, and other funding sources.
- 5. Implement bicycle and pedestrian education, encouragement, and evaluation programs.

Mission

MoveHP envisions the development of a comprehensive and connected non-motorized transportation system. Much of the mission of Bike-Walk HP 2030 carries forward with this plan:

To develop a community-wide system of facilities that will provide opportunities for safe active transportation, recreation, and fitness activities; connect neighborhoods, parks, schools and business areas with facilities to provide an enjoyable alternate form of transportation; educate the community about the opportunities for, and benefits of, walking, running and bicycling; and encourage residents to participate in these activities.

MoveHP & Equity

Promoting a safe non-motorized transportation network isn't just a healthy, sustainable thing to do, it is an equitable policy. Studies have shown that people of color have the highest rates of walking and bicycling rates are higher in communities of color; however, it is also people of color who are disproportionately affected by traffic violence. This plan recommends a number of safe, and effective transportation infrastructure improvements and educational strategies to improve the lives and health outcomes of all members of the community, including its most vulnerable.

Existing Conditions Report

In July 2019, staff drafted an Existing Conditions Report for MoveHP. The Existing Conditions Report provides a snapshot of the existing bicycle and pedestrian infrastructure and policies in Highland Park. It also outlines and celebrates what the City has accomplished since the adoption of Bike-Walk HP 2030. The Existing Conditions Report provides the foundation to reevaluate recommendations from Bike-Walk HP 2030 and introduce new recommendations that align with current trends and best practices.

Planning Process

MoveHP followed a 10-step plan from kick-off to adoption:

Step 1: Project Kick-Off
Step 2: Public Workshop
Step 3: Existing Conditions Analysis
Step 4: Steering Committee Meeting
Step 5: Presentation to the City Manager
Step 6: Draft Plan
Step 7: Steering Committee Meeting
Step 8: Revise Plan
Step 9: Open House

Step 10: Final Plan & Approval Process

This process was designed to thoroughly evaluate Bike-Walk HP 2030, garner feedback, and research and apply best practices.

Public Outreach

Because MoveHP is an update of an existing document, outreach opportunities were limited; however, the process included several opportunities for public input. Outreach opportunities included a community workshop, online survey, and open house. In addition, staff received input from the Plan and Design Commission and Transportation Advisory Group.

Steering Committee

Throughout the process, City staff regularly solicited feedback from the Steering Committee, and hosted four meetings of the Committee. The Steering Committee is comprised of community stakeholders including the Park District of Highland Park, residents, bike-enthusiasts, and every-day walkers. The committee worked closely with staff to serve as a sounding board and ensure the plan met the needs of the Highland Park community.

Existing Conditions

Highland Park has an urban downtown area, rail and bus access, and regional attractions within biking and walking distances. Since the adoption of Bike-Walk HP 2030, new paths, sidewalk, and shared-use lanes have been installed throughout the city. More improvements are planned or underway in 2020 and beyond. This chapter provides an overview of Highland Park's existing non-motorized transportation policy, accessibility, and data.

Accomplishments

Bicycle Friendly Community

In 2018, the League of American Bicyclists designated the City of Highland Park a Bicycle Friendly Community at the Bronze level. The League reserves this award for select communities with impressive commitments to bicycling. A Bicycle Friendly Community welcomes bicyclists by providing safe accommodations for bicycling and encouraging people to bike for transportation and recreation. There are currently 19 recognized Bicycle Friendly Communities in Illinois including the City of Highland Park.

In addition to the Bike Friendly Community designation, Highland Park includes U.S. Bike Route 37. In 2014, the City passed a resolution to designate parts of the McClory Trail (also known as the Gren Bay Trail) as a designated national bike route. The U.S. Bike Route System (USBRS) is federally coordinated by the American Association of State Highway and Transportation Officials (AASHTO), the Federal Highway Administration (FHWA), and several non-profit organizations. The system is designed to facilitate travel on appropriate roads, paths, and highways over routes that are desirable for interstate bicyclists.



Previous Plans

Bike-Walk HP 2030

The City of Highland Park adopted Bike-Walk HP 2030 in 2012 as the non-motorized transportation plan for Highland Park. It is complementary to the Greenways Plan element of the City of Highland Park Master Plan; and is an evolution and update of concepts and policies already established. The plan ultimately aims to encourage more residents to walk or bike to work, school, and local destina-

Existing Bike/Ped Network



tions. The plan recommended both programmatic improvements as well as physical improvements to the street, sidewalk, intersection and trail systems.

The planning process included a review of current pedestrian and cycling infrastructure in Highland Park and integrated multiple avenues for community input. City staff hosted two community meetings in June 2011, an online survey, and accepted written responses on the plan.

Specific proposals included the development of dedicated bicycle lanes, designation of shared roadways, signed bicycle routes and shared-use paths, as well as improved sidewalks and intersections throughout the City for cyclists and pedestrians. The plan also included recommendations to make it easier to use existing local public transportation for persons of all abilities. These improvements were to be integrated into the City's Capital Improvement Program.

Family Friendly Bikeways Plan

In 2016, city staff and the Bike Walk Advisory Group collaborated with the Active Transportation Alliance—a Chicago non-profit advocating improved bicycling and pedestrian transportation—to create the Family Friendly Bikeways Action Plan. The plan was based on a regional campaign goal to help build a network of streets that are comfortable for cyclists of all ages and abilities. In Highland Park, the plan focused on improving cycling routes in the Highlands neighborhood using signage and public education.

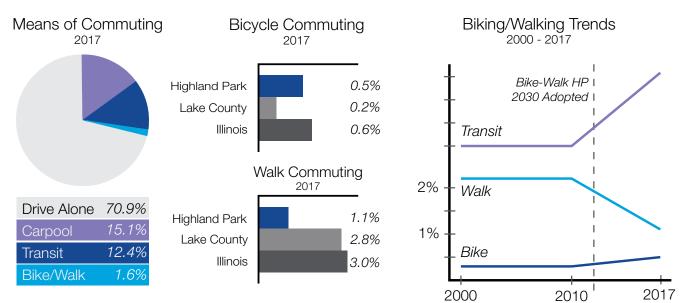
Non-Motorized Transportation

Highland Park includes diverse land uses, a robust park system, and regional attractions, many of which are accessible by the City's existing pedestrian and bicycle infrastructure. Anchored by an urban downtown adjacent to a Metra commuter rail station, the City includes dense, multi-family housing near downtown and the Ravinia Business District, while the majority of the City is comprised of single-family residential neighborhoods.

Modeshare

According to the American Community Survey, the majority of Highland Park residents commuted by car in 2017, with 70.9% of workers driving alone and 15.1% of workers carpooling. Public transit was the next most popular option, with 12.4% of residents taking Metra or Pace to work. Finally, 1.1% of all daily commutes were made by walking, and 0.5% were made by bike. The percentage of Highland Park residents commuting on foot or by bike is significantly lower than Illinois or Lake County overall. Furthermore, commuting on foot has seen a 50% decline from 2010.

Internal pedestrian and bike counts at peak travel times have seen moderate declines (14% and 22%, respectively) between 2013 and 2018. These data



Source: US Census

HP

confirm declines reported in the American Community Survey. The most popular destination for work is Chicago with 22.7% of residents traveling there; Highland Park is the second most popular destination, with 13% of residents commuting internally.

Bike/Pedestrian Counts

In May and September of 2013 and 2014, the City of Highland Park, in conjunction with the Bike Walk Advisory Group, performed bike and pedestrian counts to better understand the utilization of local roads and trails by alternative transportation modes. No counts were performed between 2015-2017, but the efforts were restarted in the fall of 2018. The results of the count show declines in both biking and walking. Because the declines are numerous, sharp, and averaged across four sampling periods during peak hours, it can be assumed that the general trend in Highland Park is a decrease in biking and walking during commuting hours. This correlates with declines reported in the American Community Surveys and noted in this section; however, additional analvsis reveals that the City's recreational bicycle population is growing. It should be noted that this data is limited and due to the recreational nature of users in Highland Park, weather likely affected bike and pedestrian traffic on the given count days.

Safety

Safety is a key factor that motivates whether people choose to walk or bike to a destination. According to a 2018 national survey by People For Bikes, 50% of adults would like to ride bikes more, but are concerned about safety around motor vehicles. These perceptions are not unfounded. Between 2012-2018, 122 automobile crashes involving a cyclist or pedestrian occurred within the City, based on reports from the Highland Park Police Department. Of those crashes, 71 resulted in physical injuries. The highest concentration of crashes is in downtown Highland Park, and typically involve pedestrians rather than cyclists. The on and off-ramps on Route 41 on Lake Cook Road also have a significant concentration, especially for cyclists. The Briergate District is a notable hazardous area for pedestrians.

Average Daily Count of Peak Pedestrian and Bicyclist Traffic

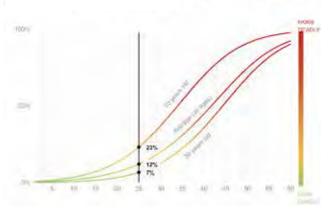
Highland Park, September 2013 and September 2018

	Pedestrian Daily Average			Bicyclist Daily Average		
Intersection	Sept. 2013	Sept. 2018	Change	Sept. 2013	Sept. 2018	Change
Clavey @ Green Bay	17.25	9.75	-43%	7	5.75	-18%
Green Bay @ Clavey	10.5	11.25	7%	11.5	11.75	2%
McClory Path @ Lincoln	65.25	66.25	2%	19.5	17	-13%
Lincoln @ McClory Path	31	7.25	-77%	11	6.25	-43%
St Johns @ Lincoln	11.75	6.75	-43%	17	23.5	38%
Lincoln @ St. Johns	3.5	9.25	164%	1.25	6.25	400%
Laurel @ Green Bay	32.5	29.75	-8%	5	5.25	5%
Green Bay @ Laurel	32	25.75	-20%	5.5	4.75	-14%
Sheridan @ Moraine	24	23.75	-1%	37.75	43.75	16%
Moraine @ Sheridan	12	7.25	-40%	2.5	0.75	-70%
Summit @ Old Trail	19	24	26%	10	5.25	-48%
Old Trail @ Summit	11.5	10.75	-7%	13	3.5	-73%
Total	270.25	231.75	-14%	141	133.75	-5%

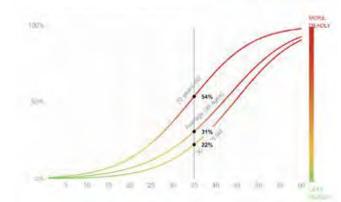


Highland Park Police Department

The Chance of Being Killed by a Car Going 25 mph



The Chance of Being Killed by a Car Going 35 mph



Source: ProPublica, https://www.propublica.org/article/unsafe-at-many-speeds

Notably, many of the areas with a higher frequency of crashes are on roadways with high traffic volumes, such a roads like Lake Cook Road (County jurisdiction) that has approximately 33,000 cars traveling on it per day past Skokie Valley Road (2014 IDOT data). In addition to roadway volumes that may increase opportunities for car-pedestrian/cyclist collisions, a major factor in cyclist and pedestrian safety is the speed at which a vehicle travels. As speed increase, the risk of severe injury does as well.¹ When age is factored into the equation, the risk rises as age increases.

As vehicle speeds increase, so do the risk for severe injury to a pedestrian if struck. In Highland Park, the default roadway speed limit is 25 MPH, but some roads that currently have bicycle infrastructure (sharrows) have speed limits up to 35 MPH. This includes Clavey Road, Half Day Road, and Park Avenue West. As identified by the National Association of City Transportation Officials (NACTO), designated bicycle routes without any separation on roads faster than 25 MPH can make cycling both uncomfortable and more dangerous.

Each year City evaluates crash data and makes improvements for the safety of pedestrians and bicyclists. In Downtown and the Ravinia Business District, bump outs were constructed at key locations to shorten pedestrian crossing distances, automatic pedestrian signal timings were installed high foot-traffic intersections, crosswalks are striped regularly, and signage is evaluated and added along with other needed improvements.

Zoning & Ordinances

The City's Municipal Code, including the Zoning Code, provide policies that can shape the walkability and bikeability of the community. A current policy in place is an incentive to decrease vehicle parking and encourage additional bicycle parking. The City of Highland Park offers an automobile parking reduction at a ratio of ten (10) long-term bicycle parking spots for one (1) automobile spot reduced; however, this reduction has stringent requirements that may make the bicycle parking reduction a less attractive option for developers. The City Code does not include required bicycle parking as part of new developments, which does not align with best practices and regional trends. Chicago-area suburbs with a bicycle parking ordinance generally require design and location standards for required bicycle parking.

Currently, the Highland Park Municipal Code requires sidewalks to be installed "on both sides of major arterial streets" (Section 93.040(A)(1)). The code also requires that sidewalks shall be installed on both or at least one side of minor arterial streets based on zoning district. However, because the City is mostly built-out, this code requirement for new streets is rarely used. Instead, the City of Highland Park Department of Public Works follows Local Streets New Sidewalk Installation Guideline, which requires 51% of property owners consent for new sidewalk on a residential street. The Guideline, effective October 2020, updates a 2016 policy that required 75% owner consent. By lowering the threshold for affected property owner support, the City may be able to construct additional sidewalks and connections within residential neighborhoods.

¹ Tefft, B.C. (2011). Impact Speed and a Pedestrian's Risk of Severe Injury or Death. AAA Foundation for Traffic Safety.





New sidewalk construction in Spring 2019 on Ridge Road, between Lake Cook Road and Lawrence Lane fills a critical gap in the sidewalk network.

The City Code does not require internal walkway networks in new parking lots. Internal walkways, usually separated from vehicular parking and traffic by landscaping, promote pedestrian safety and reduce the risk of injury. Both Chicago and Portland, OR, require internal walkways for large-scale parking lots. Oak Park, IL, requires internal walkways in all parking lots.

Pedestrian Network

Since 2012, the City of Highland Park has added 2.5 miles of sidewalk and improved wayfinding signage within the city. Major improvements include building sidewalks on Lake Cook Road, filling in sidewalk gaps on Green Bay Road and Sheridan Road, and improving the Robert McClory Path near Highland Park High School. However, several gaps in the pedestrian network remain, ranging from half-a-block to half-a-mile.

Sidewalks and paths are typically constructed at the discretion of City Council and Public Works. However, as mentioned previously, residents may request a new sidewalk under the Local Streets New Sidewalk Installation Guideline. The 51% owner consent threshold will enable additional sidewalks to be constructed in residential areas. Pedestrian infrastructure downtown was improved by re-marking intersections, installing signs in downtown Highland Park in 2016, and removing "beg buttons" for pedestrian signaling. Wayfinding signs throughout the city were installed in conjunction with the 2017 Sharrows Project. To improve connectivity for both pedestrians and cyclists, the City constructed a "cut-through" at Greenwood Avenue and North Avenue providing a pedestrian-only connection between the two streets.

Bike Network

A significant amount of work on Highland Park's bicycle network was completed since the adoption of Bike-Walk HP 2030. Most importantly, Public Works installed 18 miles of shared-lane markings (sharrows) in 2017, utilizing funding from the Illinois Department of Transportation and a City Council apportionment; an investment totaling \$429,000. These sharrows run on many of the most-traveled streets in Highland Park, as well as connector streets within neighborhoods. The Sharrows Project also included improved wayfinding signage, helping both residents and visitors find their way around town more easily.

According to the National Association of City Transportation Officials (NACTO) guide "Designing for All Ages & Abilities: Contextual Guidance for High-Comfort Bicycle Facilities," bike boulevards and sharrows should be reserved for roadways with a speed limit of 25 mph and less than 1,500 vehicles per day. Beyond 25 mph or on higher volume roadways, shared lanes are less comfortable and more dangerous for cyclists of all ages and abilities. Most sharrows in Highland Park are on residential streets with slow-moving traffic; however, sharrows are present on Half Day Road, Clavey Road, and Sheridan Road, where the speed limits are between 30 and 35 MPH.

The City's bike network also includes bike racks and other facilities. In spring 2018, the City installed a bicycle repair station along the Robert McClory Trail near the Ravinia Metra station. This was funded through a 2017 ComEd Green Region Grant. In addition, the City has 103 bike racks on both commercial and public properties, with most of these concentrated downtown and in parks. While several bike rack types exist, U-racks, and bollard racks are the most preferable because they allow both the front wheel and frame to be secured by a single U-shaped lock (See Bike Parking Guide on Page 22). Nevertheless, the City includes a myriad of bike rack styles ranging from wave designs to wheel wells, which are not the most effective designs for bike security.

Shared Use/Trail Improvements

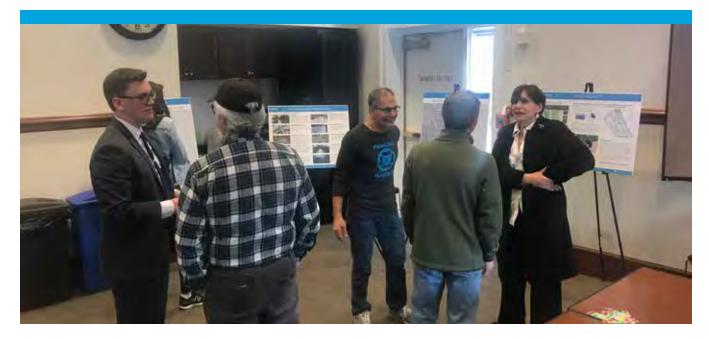
At the end of 2018, the City installed a key connection on the Trail Way path that links Sleepy Hollow Park to Danny Cunniff Park and the Centennial Ice Arena. Previously, the trail from Sleepy Hollow Park north towards Danny Cunniff Park required users to cross a parking area, but the new 0.035-mile extension now provides a safe and continuous path. The city also completed a side path along Walker Avenue from St. Johns Avenue to Oak Street, connecting residential areas with the footpath along the lakeshore in Fort Sheridan. Highland Park currently has 9.5 miles of off-street shared use paths, including 7 miles of paved and 2.5 miles unpaved paths.



Planned Improvements

The Capital Improvement Program includes several bike/ped projects based on recommendations from Bike-Walk HP 2030. For example, the Public Works Department is planning to replace the pedestrian bridge over US-41 within the next ten years and is working with the Illinois Department of Transportation (IDOT) to identify funding and plan the project. This project will significantly help improve east-west connections within Highland Park. Other projects planned include:

- Constructing a sidepath on Clavey Road;
- Constructing a sidewalk on Ridge Road;
- Constructing sidewalks on Sheridan Road, and improving existing segments; and
- Additional Pedestrian Improvements.



Community Engagement

Highland Park Bike Walk Advisory Group

The City formed the Bike Walk Advisory Group (BWAG) as part of the Bike-Walk 2030 implementation process. BWAG is affiliated with the City's Transportation Advisory Group (formerly the Transportation Commission). Since the adoption of Bike-Walk 2030, BWAG has served as an advocate for bike and pedestrian policies and infrastructure implementation. All BWAG activities are designed to support a thriving, healthy, safe, and sustainable community in Highland Park and the group continues to meet and provide input and support for non-motorized transportation.

Events

Events provide fun and safe opportunities for residents to enjoy riding a bike in the City and learn about bike safety. Since the adoption of Bike-Walk 2030, the City has hosted numerous bike/walk events to encourage residents to use non-motorized forms of transportation, including an annual Fourth of July Children's Bike Parade, a Bike Fair in 2018, and a Walk and Bike to School Day in 2017.

MoveHP Public Outreach

In order to gather public input on current bike/walk use and the plan, the Planning Division hosted a public workshop, an open house, an online survey, and formed a Steering Committee.

The MoveHP outreach process also included opportunities for public input through various presentations to City Council, the Plan and Design Commission, and the Transportation Advisory Group.

Public Workshop

On the evening of April 9, 2019, nearly two dozen residents attended an open house workshop for MoveHP. Participants provided input through a group mapping exercise, individual worksheets, and talking with staff about their concerns and aspirations for pedestrian and bicycle infrastructure in Highland Park.

The public workshop revealed that residents desire improved east-west connections in Highland Park, especially on Clavey Road, Deerfield Road, and over US-41/Skokie Highway. Attendees felt scared crossing difficult intersections such as Half Day Road and Skokie Highway. The negative perception, danger and difficulty of crossing these roadways may deter Highland Park residents from more pedestrian and cycling trips. Attendees also noted a desire for improvements in the Ravinia neighborhood along Roger Williams Avenue, and from Roger Williams Avenue to Rosewood Beach. Other common themes included improving the access to and from off-street paths (such as the Robert McClory Trail and Skokie Valley Bike Path), as well as improved connections to train stations.

Open House Presentation

The City and the League of Women Voters of Highland Park/ Highwood co-sponsored an open house and panel event on October 23, 2019. The event included a presentation and Q & A on MoveHP by Councilwoman Kim Stone; Deputy Director of Community Development Drew Awsumb; and Public Works Director Ramesh Kanapareddy. Questions and feedback from the event were used to further refine the plan document.

Online Survey

City staff hosted an online survey on Google Forms from mid-March to May 1st, 2019. The survey was advertised on the city's website and on promotional materials around the city. Nineteen respondents participated in the survey. The questions focused on the respondents' reasons and frequency for walking and cycling, major reasons that prevent them from doing so more often, and areas of Highland Park in which they would want to see pedestrian or cycling infrastructure improvements.

The online survey focused on reasons for and barriers to biking and walking in Highland Park. The most common reason for residents to walk was exercise, followed by errands and shopping. The most common reason for cycling was also exercise. These findings suggest both cycling and walking are highly recreational in Highland Park, but residents do walk or cycle for errands. Several respondents listed the "No sidewalks/bike lanes" as a major reason they do not walk or cycle more frequently. The most prioritized project by residents was to have safer crossings over US-41.

Steering Committee

The Steering Committee agreed with many of the major findings in the Existing Conditions Report. Significant improvements recommended by the Committee included: installing a bike corral in downtown; installing a bike lane on Green Bay Road; and improving the intersection at Vine and Green Bay Road for pedestrians and cyclists.

The MoveHP planning process utilized public input, staff analysis, and research



Proposed Bike/Ped Network

on best practices to create a set of recommendations to improve Highland Park's bikeability and walkability. Key infrastructure improvements include: filling in sidewalk gaps, improving hard-to-navigate intersections, and enhancing east-west connections within Highland Park's bike and pedestrian network. These are general themes that guide MoveHP's proposed improvements and which multiple objectives and recommendations serve to accomplish.

Key Infrastructure Improvements

Sidewalk Infill

The U.S. Department of Transportation notes that "a well-connected transportation network reduces the distances traveled to reach destinations, increases the options for routes of travel, and can facilitate walking and bicycling."² Several gaps in the pedestrian network remain, ranging from half-a-block to half-a-mile. Noteworthy gaps include:

- Ridge Road between Berkeley Road and Midland Avenue
- Lake Cook Road between Ridge Road and Red Oak Lane
- Sheridan Road between Dean Avenue and Roger Williams Avenue

Filling in these gaps opens new routes for pedestrians, especially those who may not be comfortable walking in the roadway, such as the disabled, elderly, children and expectant mothers. Priority infill areas should include connections to schools, parks, and religious institutions. In addition to sidewalks, sidepaths (which are wider than sidewalks and mix bicycle and pedestrian traffic), are another viable option to increase pedestrian connectivity.

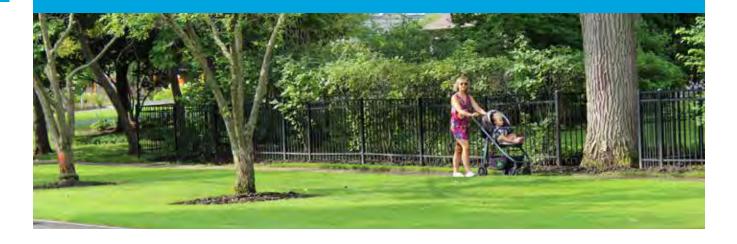
Improved Intersections and Crossings

The Federal Highway Administration remarks that "more than one in five pedestrian deaths is the result of a collision with a vehicle at an intersection"³ Furthermore, the same report notes that "the older population is overrepresented relative to intersection fatalities by a factor of more than 2 to 1." Pedestrian and cyclist-friendly intersections are crucial to a viable bike-walk street network and the success of MoveHP.

² https://www.transportation.gov/mission/health/promoting-connectivity

³ https://safety.fhwa.dot.gov/intersection/other_topics/fhwasa10005/docs/brief_9.pdf





Currently, several intersections in Highland Park are challenging for pedestrians to cross and present opportunities to improve overall safety. These include, amongst others:

- US-41 and Half Day Road
- US-41 and Park Avenue West
- Deerfield Road and Southland Avenue
- Green Bay Road, Vine Avenue, and First Avenue
- Central Avenue and McGovern Street
- Clavey Road and Hillside Drive / Hastings Avenue

The Public Works Department and Planning Division will require innovative solutions to these intersections. While some intersections may require total redesign and reconstruction, some solutions are relatively easy and cost-effective to implement.

One such solution are bike boxes, which is a "designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase."⁴ Bike boxes increase the visibility of cyclists, allowing them to turn before motorized vehicles and preventing vehicles from blocking the crosswalk. Bike boxes may be useful at an intersection such as Green Bay Road, Vine Avenue, and First Avenue, which would allow students going to and from Highland Park High School to safely cross the intersection on their bicycles.

Another cost-effective solution for pedestrian connectivity are pedestrian safety islands. These are protected areas in the median of 2-4 lane roads that give pedestrians a space to rest and wait for a break in traffic. They function to reduce the time pedestrians spend in traffic lanes at an intersection. NACTO recommends that pedestrian islands be designed 8-10 feet wide, with a minimum of 6 feet. They may be used to beautify the streetscape using plantings or street trees; however, these need to be maintained to ensure visibility. A pedestrian safety island is recommended for a non-signalized pedestrian crossing at Central Avenue and McGovern Street.

East-West Connections

Comments from the public workshop, online survey and Steering Committee all stressed the importance of improved east-west connections within Highland Park. The city currently has two long-distance bike trails running north-south, but no effective bike or pedestrian connection between them. A major hindrance is US-41, which has large, unsafe, and uncomfortable at-grade crossings at Half Day Road and Park Avenue West; the overpass crossings at Clavey Road and Lake Cook Road are both hampered by the on- and off-ramps to the highway, while the pedestrian bridge at off Fredrickson Place is in need of replacement. Furthermore, sections of these major east-west thoroughfares in Highland Park lack pedestrian infrastructure. And while sharedlane markings (sharrows) were installed in 2017, the 35 MPH speed limit of these roads exceeds some industry recommendations. Improved eastwest connections are important at both a local and regional scale and are a major priority for MoveHP. MoveHP looks forward over the next 5 years and envisions a robust, non-motorized and active trans-

⁴ https://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/bike-boxes/

Proposed Pedestrian Infrastructure



Proposed Bicycle Infrastructure



Goals & Objectives

portation network. The Plan's goals and objectives outline how the City can achieve its desired outcomes, and form the framework for future projects and actions.

Goals – are the end situation toward which planning efforts should be directed. They are broad and long-range, and set a bar for which progress can be evaluated over time.

Objectives – are more specific actions that should be undertaken by the City to advance goals. They provide more specific and measurable steps for planning action.

Goal 1: Policies

Develop and adopt policies, plans and guidelines to assure that cycling and walking are a safe and integral part of City life.

Objective 1: Consider adopting a Complete Streets Policy as a distinct, separate resolution and general policy guide.

Bike-Walk HP 2030 included a proposal for a Complete Streets Policy. While the plan itself was adopted, the Complete Streets Policy was not adopted as a distinct policy. The City should assess the model Complete Street Policy provided by the Active Transportation Alliance (the regional non-profit advocacy organization that works to improve conditions for bicycling, walking and transit), make any revisions as necessary, and actively consider adopting it as an official policy by resolution. (See Appendix)



Bike rack design should allow both the bicycle frame and the wheels to be locked with the bicycle in an upright position using a standard U-lock. The APBP provides guides for preferred bike rack types, sizes, and locations.

Preferred Designs





A-Rack proposed in the Downtown Streetscape Conceptual Design Plan

Modified U-Rack proposed in the Ravinia Business District Streetscape & Lighting Plan

Designs to be avoided





Grid



Wheel well

Objective 2: Amend the Highland Park Municipal Code to promote and enhance biking and walking and align with best practices.

The City's Municipal Code, including the Zoning Code, provide policies that can shape the walkability and bikeability of the community. To increase accessibility and promote both walking and biking, there are several areas of the code that should be amended.

Objective 2.1: Amend the Zoning Code to require bike parking as part of new commercial and multi-family developments

The City Code does not include required bicycle parking as part of new developments, which does not align with best practices and regional trends. Cities and Chicago-area suburbs with a bicycle parking ordinance generally require design and location standards for required bicycle parking. Bicycle parking is typically required for multi-family residential, commercial, institutional, and educational land uses, while also making a distinction between short- and long-term bicycle parking with different design and location standards applying to each. Similar to required on-site vehicle parking spaces, the City should amend the code to require bike parking as part of new commercial and multi-family developments. These regulations should also include specifications for bike rack types, sizes, and location, using the Association of Pedestrian and Bicycle Professionals (APBP) Guidelines.

Objective 2.2: Amend the Zoning Code to simplify the requirements to receive parking reductions by providing bicycle parking.

As an incentive to decrease vehicle parking and encourage additional bicycle parking, the City of Highland Park offers an automobile parking reduction at a ratio of ten (10) long-term bicycle parking spots for one (1) automobile spot (City of Highland Park Zoning Code Section 150.804(C) (4)(f). However, this reduction is only offered after meeting rigorous requirements, perhaps yielding an incentive that is not as effective as other alternatives. The City could amend Article 8 of the zoning code to simplify the requirements to receive parking reductions by providing on-site bicycle parking.

Objective 2.3: Amend the Zoning Code to require internal parking lot pedestrian paths.

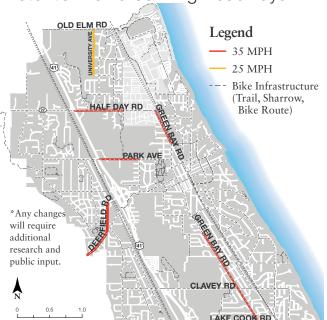
Internal walkways, usually separated from vehicular parking and traffic by landscaping, physical barriers, or otherwise distinguished from the parking area, promote pedestrian safety and reduce the risk of injury. They are also important links between the sidewalk network and storefronts, which otherwise are difficult to find or dangerous to access in large parking lots. Internal walkways make parking lots safer and more pleasant for pedestrians and drivers alike. The City should amend the Zoning Code to require internal walkways in new parking lots, regardless of size. Requirements should also consider the use of landscaping and placement of walkways to ensure they provide the most direct routes for pedestrians to store entrances.

Objective 2.4: Amend the Zoning Code to require new commercial, multi-family, and planned developments to provide connections to adjacent existing and/or planned trails.

The City is home to several miles of established trails and MoveHP envisions several more miles of trails. As new developments are constructed, they should provide connections to both existing and planned trails where possible, increasing overall network connectivity and access. To do so, the City should amend the Zoning Code to require new commercial, multi-family developments, and Planned Developments provide connections to adjacent existing and/or planned trails.

Objective 2.5: Amend the Municipal Code to align with Illinois State statutes.

The State of Illinois passed several bills in the past six years that seek to better regulate roadways and improve safety for non-motorized transportation. These laws should align with local regulations as noted in Chapter 75 of the Municipal Code. For example, the City requires a front headlight as well as rear reflector on all bikes; however, Illinois HB1784 (2017) permits use of a rear light in addition to or instead of a reflector. The City should align its municipal code with current Illinois statutes.



Objective 3: Evaluate opportunities to increase safety using traffic-calming measures and additional non-motorized transportation infrastructure.

As vehicle speeds increase, so does the risk for severe injury to pedestrians and cyclists if struck. In Highland Park, some roads with bicycle infrastructure (sharrows and bike routes) have speeds of up to 35 MPH. These roads include Lake Cook Road, Clavey Road, Deerfield Road, Half Day Road, and sections of Green Bay Road. The City should evaluate and consider opportunities on these roadways for traffic-calming measures and bike/ ped infrastructure to increase safety. Potential improvements to evaluate may include:

- Signal coordination
- Travel lane width reduction
- Permanent speed feedback signs
- On-street parking
- Pedestrian refuge islands and bump outs
- Protected bike lanes
- Roundabouts
- Speed tables

Potential Traffic Calming Roadways





Objective 4: Regularly review the City's Local Streets New Sidewalk Installation Guideline and revise as appropriate to increase the number of sidewalks in residential neighborhoods.

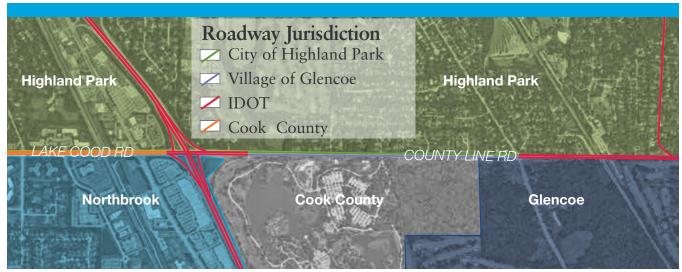
When new sidewalks are proposed, the City follows the Local Streets New Sidewalk Installation Guideline. This guideline, effective since October 2020 (Resolution No. R114-2020), outlines the requirements for the installation of new sidewalks on local, neighborhood streets. The Guideline updates a previous 2016 policy, and will continue to serve as an effective tool to construct new sidewalks throughout the City's neighborhoods. The Guideline require owners of 51% of the affected lots to support new sidewalk construction on their block. As the Local Streets New Sidewalk Installation Guideline gets utilized by residents, the City should regularly review the Guideline and evaluate its efficacy.

Goal 2: Partnerships

Partner with government, nonprofits, and local organizations agencies to incorporate bicycle and pedestrian policies in projects and facilities in the community.

Objective 1: Continue to work with the Park District of Highland Park to improve pedestrian and bike connections to local parks and recreational facilities.

The Park District of Highland Park has been engaged with the 10-Minute Walk Campaign of the National Recreation and Parks Association, and is working to expand biking and walking opportunities to its facilities. In addition, public outreach revealed that many residents walk and bike for recreation, rather than commuting. As such, an emphasis should be placed on increasing non-motorized access to the City's recreational amenities. Highland Park should work with the Park District to safely and efficiently connect residents to local parks through walking and biking paths.



Lake Cook/County Line Road is comprised of multiple jurisdictions

Objective 2: Work with the Village of Northbrook to extend the Lake Cook Road trail to the Skokie Valley Trail.

Currently, there is a 1-mile gap on the Skokie Valley Trail from Lake Cook Road to Dundee Road along the ComEd right-of-way within the Village of Northbrook. The 2018 Northbrook Master Bicycle and Pedestrian Plan recommends constructing a bridge across Lake Cook Road. Working with and supporting the Village of Northbrook in completing this missing connection will improve both the regional and local non-motorized transportation network, and bolster connectivity with attractions such as the Chicago Botanic Gardens, Northbrook Court, and the greater North Shore area.

Objective 3: Work with the City of Highwood, the City of Lake Forest, and the Town of Fort Sheridan HOA to increase connectivity and access to trails in northern Highland Park.

The Robert McClory Trail follows Sheridan Road through Highwood to connect northern Highland Park to the Openlands Lakeshore Preserve and the Town of Fort Sheridan. Nevertheless, cyclists generally cut through part of Highwood and the Town of Fort Sheridan to reach the Preserve. The City should work with the City of Highwood and Town of Fort Sheridan Homeowners Association (HOA) to increase signage and consider use of sharrows to create a connected route through Highwood to the Openlands Lakeshore Preserve.

Objective 4: Work with the Village of Northbrook, the Illinois Department of Transportation, Cook County, and Lake County to improve bicycle and pedestrian access along and across Lake Cook Road.

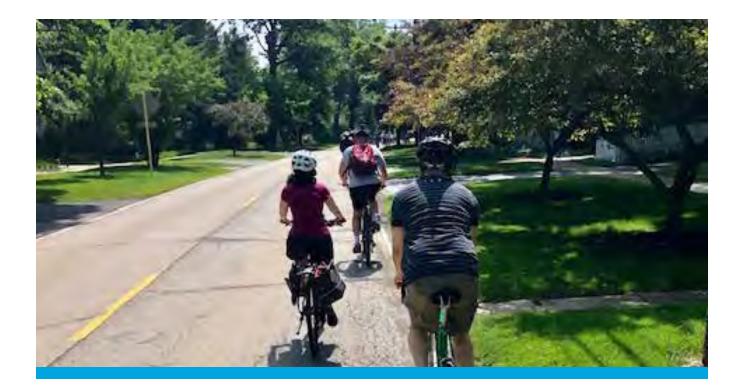
There are no designated, safe, and effective pedestrian crossings at the intersection of Lake Cook Road and Skokie Valley Road, or at US-41's access ramps onto Lake Cook Road. Analysis of police crash data showed that these areas are hot spots for crashes involving pedestrians and cyclists. In addition, safe connections are needed to connect Highland Park to Northbrook Courts, a significant local and regional destination. Because these intersections are multi-jurisdictional, Highland Park should work with the Village of Northbrook, IDOT, Cook County, and Lake County to make them safer and convenient for pedestrians and cyclists.

Objective 5: Work with the Illinois Department of Transportation to provide safe and efficient non-motorized access across US 41.

One of MoveHP's key infrastructure improvements is to improve east-west connections within Highland Park. Crossing US-41 and its on- and off-ramps at Lake Cook Road, Clavey Road, Deerfield Road, Park Avenue West, Half Day Road, and Old Elm Road are neither safe, convenient, nor comfortable for pedestrians and cyclists. Due to IDOT's authority over US-41 and the complex nature of these intersections, cooperation and planning between both parties is necessary to improve the non-motorized access across these intersections.

Objective 6: Continue to utilize BWAG and TAG as valuable stakeholder groups for feedback on non-motorized transportation infrastructure improvements.

The Bike-Walk Advisory Group (BWAG) was formed through the Bike-Walk HP 2030 planning process to provide the City with input and guidance for biking and walking. The BWAG is now an independent group of volunteers committed to citywide bike and pedestrian improvements. They have successfully led many of Highland Park's recent programming and events. The Transportation Advisory Group (TAG), formerly the Transportation Commission, provides input regarding general transportation, traffic, and parking issues. Continued dialogue with BWAG and TAG will generate new feedback as challenges arise. In addition, BWAG and TAG serve as valuable advocates, advisors and volunteers to further the implementation of MoveHP.





Objective 7: Work with adjacent municipalities and regional transit agencies to promote and implement improved local and regional transit mobility and connections.

Metra and Pace serve a critical role to move people around Highland Park and the region, and transit is complementary to walking and biking. Promoting improved pedestrian and cycling connections to and from stations can promote ridership and reduce traffic within the community. Coordinating with Metra, Pace, Highwood, and other adjacent municipalities can improve these local and regional connections as Highland Park further develops its non-motorized network. Improvements and opportunities for joint projects may include:

- Providing secure and improved protected bicycle storage at Metra Rail Stations.
- Providing hard-surface and protected bus shelters along Highland Park bus routes.
- Seeking opportunities to expand the service areas and hours of operation of the Senior Connector for persons 50 years or older, and exploring options to develop it as a Highland Park Connector that could be used by persons of any age.

Objective 8: Engage stakeholder groups such as the local school districts and places of worship to find opportunities to improve non-motorized transportation connections.

North Shore School District 112 and Township High School District 113 provide opportunities for partnership and collaboration to increase non-motorized transportation safety. In previous years, BWAG has worked with District 112 to coordinate Bike to School Day. Local places of worship serve as additional stakeholder groups that should be engaged to improve biking and walking infrastructure. The City should reach out to these organizations to better understand needs and evaluate opportunities for collaboration. Results from these interactions should be used to develop partnership opportunities on projects that will encourage walking and cycling to school as well as inform project priorities within the Capital Improvement Plan.

Bicycle Infrastructure



Sharrow/Shared Use Marking

Roadway markings used to indicated where the traffic lane is shared by bicycles and motor vehicles. Shared roadways are defined by wider pavement widths and lower traffic volumes and speeds.



Conventional Bicycle Lane A portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists.



Trail/Shared Use Path A continuous corridor for non-motorized transportation modes free of motorists and obstacles.



Sidepath/Trail A shared use path adjacent to a roadway.

Goal 3: Infrastructure

Develop and maintain a continuous, interconnected cycling and pedestrian system that accommodates short- and long-distance trips and provides connections and access to major community destinations.

Objective 1: Establish pedestrian priority routes to ensure all parks and schools have pedestrian infrastructure connections within a 10-minute walk/0.5 miles.

In 2018, the Mayor of Highland Park pledged the City's support of the 10-Minute Walk Campaign. The National Recreation and Park Association (NRPA), Trust for Public Land, and the Urban Land Institute are spearheading the nationwide campaign that aims for every person across the country to have access to a quality park. While the City's parks and schools are generally accessible by non-motorized transportation modes, access within a 10-minute or half-mile walk may be impeded by barriers such as railroad tracks, roadways, and availability of sidewalks and trails. The City should conduct an in-depth analysis to understand and identify sidewalk gaps and pedestrian barriers within a 10-minute walk of schools and parks. As these gaps are identified, they should be prioritized for infrastructure improvement.

Following a review of the half-mile/10-minute walk gaps around local parks and schools, major barriers to walking should be identified and removed for areas within 1.5 miles of local schools. Students living within 1.5 miles of a North Shore School District 112 school are not eligible to take the school bus. Focused infrastructure improvements should be directed toward creating safe walking environments for students.



Proposed sidepath on Park Avenue West

Objective 2: Continue to clear sidewalks and paved multi-use trails as part of the City snow and ice control plan.

Clear sidewalks during and after snow events are a key element that contributes to year-round walkability of Highland Park. The City maintains approximately 130 miles of public sidewalk. For every snow event, the City plows select high-traffic sidewalk areas such as in and around train stations and schools, the Central and Ravinia Business Districts, parking garage entrances, and public facilities.

Upon accumulation of 4" or more of snow, City's authorized contractors plow all public sidewalks. The sidewalk plowing typically starts 12 to 24 hours after the start of the snowfall and could take up to 24 to 48 hours or more to complete the entire plowing operation of public sidewalks. For snow totals less than 4", public sidewalks not plowed by City are, instead, the responsibility of the abutting property or business owners. Nevertheless, even a 1" accumulation of snow can be treacherous for pedestrians. The City should engage with local businesses and residents to create a snow-plowing awareness program, to continue to encourage property owners to clear their sidewalks after snow events. In addition, the City should review its snow plowing policy to ensure specific areas are prioritized for plowing and potentially reducing the 4-inch threshold. The City should also consider enforcement actions or other assistance programs for residents and businesses that do not shovel their sidewalks.

Objective 3: Plan and implement safe, off-street east-west bicycle routes through the City.

The City has two regional trails that allow for safe and efficient travel for non-motorized transportation modes: the Robert McClory Bike Path and Skokie Valley Trail. In addition, there is the proposed Skokie River Greenway. While these trails provide excellent north-south connectivity, the City lacks comparable east-west connections. Existing east-west bike routes are all on-street. The improvements on Clavey Road, which include a sidepath, will aid in east-west travel, but this route serves the southern end of the City and does not connect the Robert McClory Bike Path to the Skokie Valley Trail. Additional east-west sidepaths and trails are proposed for Half Day Road and Park Avenue West.

Objective 4: Promote transit use and local access through station area improvements and micromobility.

Access throughout Highland Park and the region is made possible in part by public transit. Pace has three fixed bus routes that serve Highland Park: Route 471, Route 472 and Route 213. Route 471 includes stops in Northbrook (Northbrook Court) and Deerfield; Route 472 serves Highland Park and Highwood; and Route 213 serves North Shore communities from Highland Park to Chicago. In addition, the Senior Connector provides free bus transportation on a fixed route to seniors and people with disabilities. Metra operates the Union Pacific North Line, which generally parallels Green Bay Road. Highland Park includes four Metra stops: Fort Sheridan, Highland Park, Ravinia, and Braeside. While not located in Highland Park, the Highwood station is used by Highland Park residents and commuters alike. Metra also runs trains that make special stops at Ravinia Festival during festival season. The City should work with Pace and Metra to promote transit use through public outreach, education, and signage.

Objective 4.1. Focus pedestrian improvements within a half-mile radius of Metra stations and bus routes.

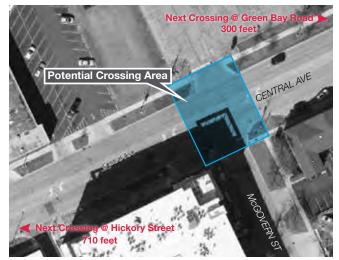
A destination is generally considered within walking distance if it is within a half-mile or a ten-minute walk. The 10-minute walkshed for Highland Park's four Metra stations is highly walkable, with the majority inclusive of sidewalk infrastructure. The City should encourage walking to local transit stations for areas within the 10-minute walkshed through education, outreach and signage. The City should consider using guerrilla wayfinding, such as the campaign started by WalkRaleigh (now known as the organization Walk [Your City], which includes temporary signage with walking times to local destinations.

Objective 4.2. Consider micromobility as an opportunity to increase non-motorized transportation options throughout the City.

Micromobility serves as additional options for non-motorized transportation. While a recent analysis by the City of Highland Park revealed that a bike share program is not feasible in the City at this time (see sidebar), there may be opportunities for other types of shared micromobility systems such as scooter share. This non-motorized transportation option has the potential to ease traffic, getting people out of their cars. To be sure, Lime, a scooter

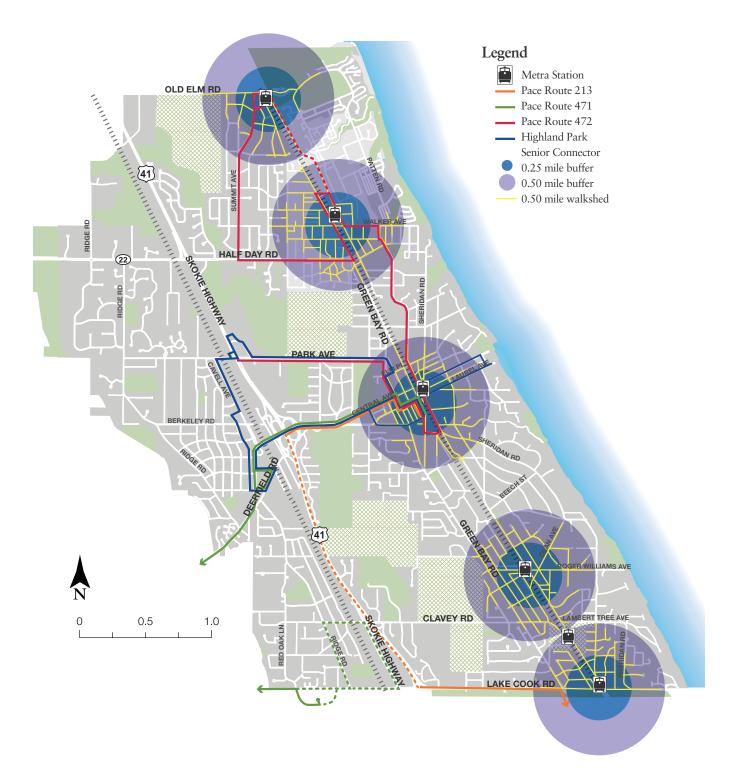


Walk {Your City} provides a guide to implement a walking campaign.



As development occurs, the City should consider opportunities for increased pedestrian connectivity, such as this intersection at Central Avenue and McGovern Street.

Transit & Access



What is Micromobility?

Micromobility refers to small, fully or partially human-powered vehicles such as bikes, e-bikes, and e-scooters.¹ Shared micromobility includes dockless and station-based bike share (including e-bikes) and scooter share systems. Much of the intent of micromobility is to solve the "firstmile, last-mile" (FMLM) transportation gap. The FMLM is the first or final leg of a trip using public transit. Micromobilty comes into play when those legs of the trip are too far to walk to make public transit convenient, providing an efficient and user-friendly mode to connect to transit. According to a 2018 NACTO report, "people took 36.5 million trips on station-based bike share systems and 38.5 million trips on shared e-scooters."

Bike Share in Highland Park

In spring 2017, City staff explored the possibility of implementing a bike share program within the City of Highland Park. A bike share program makes bicycles available for shared use on a short-term basis, usually for an hourly rate or membership fee. While Chicago's bike share system, Divvy, has proven successful since its launch in 2013, similar programs in the suburbs have struggled. Oak Park had a Divvy extension, then cancelled the contract due to high cost and low ridership. Similarly, Aurora's bike share program is limited to three stations downtown, and has low ridership for a city of its size.

The City reached out to Zagster, a bike sharing company in which users 18 years or older with an annual or monthly membership can check out a bike for short-term use. Zagster contracts with municipalities to set up a bike share program in return for an annual fee. In order to financially support bike share programs, municipalities typically find sponsorship funding. Staff reached out to potential sponsors and partners, but were not able to get sufficient interest to support a city-wide bike share system. Due to potential funding issues, it was determined that a bike share program was not feasible in the City of Highland Park at that time.

1 Shared Micromobility in the U.S.: 2018, NACTO



Divvy bike share station in Chicago. Source: Tony Weber, Flickr

share company, noted that 30% of riders report using e-scooters to replace car rides on their most recent trip.⁵ And given the size of the Highland Park community, many short car trips could be replaced by bike or scooter. Although it is difficult to discern individual trip distances (due to various travel routes and rates of speed for riders), an analysis of Citibike in New York estimates that the average trip distance for commuters is approximately 2.8 miles.⁶ This aligns with data released by Jump Bikes in San Francisco that said the average trip distance in January 2018 was 2.6 miles.7 However, in Boston, the average trip distance is 1.3 miles, and this distance remained constant with the use of e-bikes.8 The average length of a Bird trip in Santa Monica, California is 1.6 miles⁹. In Indianapolis, it's approximately 1 mile.¹⁰

While scooter share systems are proving to be highly utilized in a number of cities, additional research should be conducted to discern if scooter share is appropriate for Highland Park. Challenges for cities that currently have scooter share programs include safety, storage, and understanding the proper infrastructure for these devices. The City of Highland Park should conduct research into scooter share and consider whether it can be safely used as an alternate transportation form in the City.

Similarly, as e-bikes continue to gain popularity, the City should explore whether they are appropriate for use on Highland Park's multi-use trails. E-bikes are defined under 3 classes under a 2018 Illinois law (Public Act 100-0209). For example, Class 3 e-bikes are those that provide assistance up to 28 miles per hour. While appropriate for street use, this class of bike may not be suitable for multi-purpose trails.

- 6 Sokoloff, Juan. "How far do people commute using Bike Sharing Systems?" May 31, 2018. Medium. https://medium.com/data-tale/ how-far-do-people-travel-in-bike-sharing-systems-faf0295bc75a, accessed December 20, 2019.
- 7 Bhuiyan, Johana. Here's why owning a bike-share service makes sense for Uber." Vox. April 9, 2018. https://www.vox. com/2018/4/9/17215962/uber-jump-dockless-bike-sharing-acquisition, accessed December 20, 2019.
- 8 https://storymaps.arcgis.com/stories/f9c8e9cddc444dd7a47a678158fd3580
- 9 https://qz.com/1325064/scooters-might-actually-have-good-unit-economics/
- 10 https://www.indystar.com/story/news/2019/03/29/bird-lime-scooters-indianapolis-distance-driven-lifespan-more/3104164002/

⁵ https://www.forbes.com/sites/adeyemiajao/2019/02/01/everythingyou-want-to-know-about-scooters-and-micro-mobility/#6d06f-0ce5de6

Objective 5: Implement bicycle and pedestrian infrastructure improvements throughout the City as part of the Capital Improvement Program and Community Development, through development and related public benefits.

The Department of Public Works routinely updates the City's Capital Improvement Plan (CIP). Since the adoption of Bike-Walk HP 2030, the CIP has included several recommendations that have since been implemented. The City should continue to consult MoveHP and integrate bike/ped infrastructure projects into the Capital Improvement Plan.

In addition to implementing projects through capital improvements, the City can work with property owners/developers to provide bike/ped infrastructure improvements through the planned development process. For development projects required to provide a public benefit through the City's zoning process, the City will use the proposed amenities presented in this MoveHP plan as a guide for appropriate public benefits. The City will also include reference to this MoveHP Plan on its Public Benefit list - a document used by the City as a guide for the development community. Infrastructure improvement recommendations are listed in Tables 1, 2, and 3.

Pedestrian Infrastructure



High-Visibility Crosswalk Crosswalks improved by using contrasting textures and materials to increase visibility to motorists. Other designs include ladder, zebra, and continental crosswalk pavements markings.

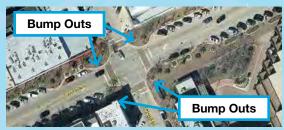


Pedestrian Refuge Island Pedestrian Safety/Refuge Islands are located in the median or halfway across a street to give pedestrians a place to rest and wait for traffic to calm. They are best utilized in large intersections and roadways with three or more lanes of traffic.



HAWK Signal

High intensity Activated crossWalK (HAWK) is a high-visibility pedestrian-activated crosswalk signal that requires vehicles to stop to allow pedestrians to safely cross a roadway.



Curb Extension/Bump Out A traffic calming device used to extend the sidewalk, reduce crossing distance for pedestrians, and make motorists more aware of pedestrians.

#	Location	Project Description
A	Clavey Road from Green Bay Road to US 41	Construct a sidepath on the south side of Clavey. Estimated construction in 2021.
В	St. Johns Ave from Laurel Ave to Ravine Drive	St. Johns Train Station Bike Path Relocation.
С	Laurel Ave between Hickory Street and Green Bay Road	Bike lanes or shared lane markings as part of the Laurel Courts II planned develop- ment at 807-833 Laurel Avenue.
D	Park Avenue West from The Preserve of Highland Park to Sunset Road	Evaluate the feasibility of a sidepath on the north side of Park Ave W.
E	Trail Way from Half Day Road to North Ave	Connect Sleepy Hollow Park/Danny Cuniff Trail to the proposed trail on Half Day Road
F	County Line Road from Trumbull Woods Court to Skokie Valley Trail	Trail on south side of County Line Road/Lake Cook Road. Within Northbrook and Glencoe limits, need to coordinate and requires IDOT and Cook County DOT approval.
G	Green Bay Road (entire length of City)	On-street route including bike lanes, shared lanes and signage. Bike lanes should be considered where the road is wide enough.
Η	Pedestrian Bridge @ Old Deerfield Road & Old Skokie Road	Replace existing pedestrian bridge over US 41. Signage and appropriate street mark- ings should lead cyclists and pedestrians to/from the bridge and the Skokie Valley Trail.
Ι	Old Elm to Danny Cunniff Park	Trail connection. Work with the Park District to Highland Park and the Old Elm Country Club to complete the planned Skokie River Trail Connection.
J	Half Day Road from Summit Ave to Skokie Valley Trail	Shared use path on the south side of Half Day Road. Needs to be coordinated with the Lake County Forest Preserve District.
K	Skokie River Woods to Highland Park Rec Center at Park Avenue West (Skokie River Greenway)	Shared-use path between Half Day Road and Park Avenue West in conjunction with the Park District of Highland Park. Modify to use Country Club and punch out through Compton Ave to Half Day Road.
L	Hidden Creek Aqua Park to Fink Park Trail (Skokie River Greenway)	Hidden Creek Aqua Park along western edge of Sunset Valley Golf Course and Bob O'Link Country Club to Edgewood Ave. right-of-way and Fink Park. Requires coordination with Park District and property owners, including country clubs.
Μ	Old Elm from Skokie River to Mc- Clory Bike Path	Develop a sidepath on the south side of Old Elm. Work with Lake Forest, High- wood, and Old Elm Country Club.
Ν	Beech Street	Build shared use path to lakefront Park District of Highland Park.
0	Ravinia Metra Station	Install a bike shelter in the vicinity of the Ravinia Metra Station as part of the 555 Roger Williams planned development.
Р	McDaniels to Foley's Park	Trail connection to park on existing right-of-way.
Q	Downtown Highland Park	Evaluate the feasibility of installing induction loops for bikes at downtown intersec- tions.
R	Robert McClory Bike Trail and Skokie Valley Trail	Update six (6) trail signs along the Robert McClory Bike Trail and Skokie Valley Trail.
S	Openlands Hamill Family Upland Trail Connectoin	Connect the north and south portions of the Hamill Family Upland Trail in the Openlands Lakeshore Preserve.
Т	Clavey Road to County Line Road (Skokie River Greenway)	Evaluate the feasibility of connecting Clavey Road to County Line Road along the Skokie River through North Shore Water Reclamation District property.
U	McClory Bike Trail from the Ravinia Metra Station to Ravinia Festival	Install pedestrian lighting along the trail.
V	Downtown Highland Park	Upgrade and strategically move existing bike racks.
†A11	projects listed are recommendations. Impler	nentation requires community feedback, funding, and City Council approval.

Table 1. Bike/Trail Infrastructure Improvement Recommendations[†]

[†]All projects listed are recommendations. Implementation requires community feedback, funding, and City Council approval.

#	Location	Project Description
Α	Arbor Ave	Berkeley to Midland. PDHP Connection to Sherwood Park
В	Brook Road	Western to Hill
С	Cloverdale Avenue	Berkeley to Cloverdale Park
D	Crofton Avenue	Bob-O-Link to Saxony
Е	First Street	Green Bay to Elm
F	Krenn Avenue	Hyacinth to Old Elm
G	University Avenue	Old Elm to Hill Street
Η	Lake Cook Road**	Ridge to western city limits. Limited right-of-way and requires Cook County Department of Transportation approval
Ι	Old Skokie Valley Road	Length of Old Skokie Valley Road
J	Old Trail	Western to Greenwood
K	Park Avenue West	Cavell to Skokie Valley Bike Path
L	Ridge Road	Half Day Road to Mill Trail
Μ	Ridge Road	Berkeley to Garland
Ν	Sheridan Road**	Roger Williams to Cedar/Dean
Ο	Park Avenue West/ Arterial	Complete sidewalk on south side from Ridge Road to Spruce Avenue
Р	Old Elm between Krenn and Sheridan	Build a sidewalk on the south side of Old Elm to connect with the Fort Sheridan. Work with Lake Forest, Highwood, UP, Metra, and Lake County Forest Preserves
Q	Eastwood Ave	Berkeley Rd to Cloverdale Park
R	Cavell Ave	Richfield Ave to Mooney Park
S	Cedar Ave	St. Johns Ave to Wade St, south side. Moroney Park connection
Т	Elm Place	Sheahen Court to Sunset Woods Park. Fill in sidewalk gap to connect to Sunset Woods

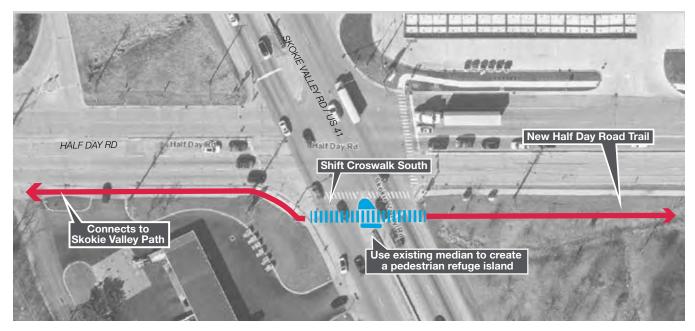
Table 2. Pedestrian Infrastructure Improvement Recommendations^{†*}

[†]All projects listed are recommendations. Implementation requires community feedback, funding, and City Council approval.

* Sidewalk improvements listed may be considered through the Local Streets New Sidewalk Installation Guideline.

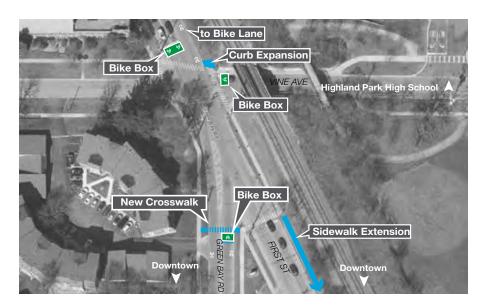
**Arterial roads are not required to adhere to the Local Streets New Sidewalk Installation Guideline.

Proposed intersection improvements at US 41 and Half Day Road



Location **Project Description** A Half day Road and Illinois Route 41 Create a pedestrian/bike refuge island, bump out curbs, and leading pedestrian interval. Will require IDOT approval. Consider grade separation between motorists and cyclist/pedestrians if funding becomes available. R Park Avenue West and Illinois Route Consider grade separation between motorists and cyclist/pedestrians if funding becomes available. 41 C Half Day Road at Trail Way and Add pedestrian refuge island to crosswalk. Change right-turn slip lane design Off-Ramp D Half Day Road at Summit Ave Crosswalk on east side of intersection E Central Avenue at McGovern Street Install a midblock crossing F Green Bay Road at First Street and Install a new crosswalk on south Green Bay Road leg of intersection. Work with Vine Ave Union Pacific Rail to expand the sidewalk on the northeast corner. Consider the addition of bike boxes on Green Bay Road Park Avenue West at Wolters Field G Install high-visibility crosswalk (HAWK signal, Rectangular Rapid Flash Beacon (RRFB), Ped-Activated LED in Border of Warning Sign), reducing curb radii at HPCC entrance H Lake Cook Road at Red Oak Lane Install crosswalk across Lake Cook Road at Red Oak Lane to Northbrook Court. Will require coordination with Cook County DOT, Northbrook, and Northbrook Court Deerfield Road at Southland Ave Pedestrian cut-through to Deerfield from Southland Ave, new crosswalk across T Deerfield to shopping center St. Johns Ave at Hazel Ave Install high-visibility crosswalk (HAWK signal, Rectangular Rapid Flash Beacon J (RRFB), Ped-Activated LED in Border of Warning Sign) K Winthrop Rd and Devonshire Ct Stripe crosswalk. Devonshire Park connection L McDaniels and Bob-o-Link Stripe crosswalk. Foley Pond Park connection Pedestrian refuge island in crosswalk. Kennedy Park connection M Clavey Rd at Hastings N Ridge Rd at West Gate Ter Stripe crosswalk. Mooney Park connection O Sheridan at Moraine Rd Stripe crosswalk. Moraine Park connection Р Arbor Ave at Northland Ave New crosswalk (should be included as part of Arbor Ave sidewalk installation). Sherwood Park connection Arbor Ave at Berkeley New crosswalk (should be included as part of Arbor Ave sidewalk installation). 0 Sherwood Park connection Arbor Ave at Southland Stripe crosswalk. Sherwood Park connection R





- [†]All projects listed are recommendations. Implementation requires community feedback, funding, and City Council approval.
- * Sidewalk improvements listed may be considered through the Local Streets New Sidewalk Installation Guideline.

As part of street reconstruction projects, the City should evaluate opportunities for intersection improvements, such as this conceptual drawing of proposed improvements for the intersection of Green Bay Road, First Street, and Vine Avenue.

Goal 4: Funding

Provide funding for bicycle and pedestrian-related improvements through the capital improvement program, grants, and other funding sources.

Objective 1: Identify and apply for grant funding for bicycle and pedestrian related improvement projects.

While bicycle and pedestrian infrastructure improvements cost less per mile than new automobile infrastructure,¹¹ funding new projects will require supplementary funds other than general fund appropriations. Grant funding is appropriated by federal and state governments or nonprofits for project development and installation. In order to plan and construct many of MoveHP's infrastructure recommendations, Highland Park should be proactive in identifying and applying for grant funding. A list of potential funding sources is included in Chapter 6 – Implementation.



Seasonal bike corral in Downtown. This project utilized existing Highland Park infrastructure to create new bike parking.

Objective 2: Establish a Sponsor-a-Rack Program that allows local businesses and organizations to fund a bike rack that includes opportunities for donation recognition.

Bicycle racks are a significant component of bike infrastructure and help to attract visitors to local businesses. The League of American Bicyclists report that bicycle customers make more trips per month and spend more per month than customers who arrive by automobile.12 A Sponsor-a-Rack program allows local businesses - especially those that want to cater to the cycling community in Highland Park - to support the installation of bike racks in the right-of-way. Such a program may include permanent bike racks in Downtown or the Ravinia Business District that comply with recommendations in the Downtown Streetscape Conceptual Plan and Ravinia Business District Streetscape Improvement Project Streetscape & Lighting Plan, respectively. Alternatively, businesses can sponsor a seasonal bike rack, such as the bike corral that was installed in front of 1791 St. Johns Ave in the summer of 2019.

Objective 3: Ensure adequate funding is allocated for the ongoing maintenance of new bicycle and pedestrian infrastructure.

While it is important to expand and improve the City's pedestrian and cycling network, these infrastructure improvements must be maintained. Increasing the number of sidepaths, trails, and sidewalks increases maintenance costs. As additional infrastructure improvements are made, Highland Park will need to increase funding for regular maintenance. Maintenance and upkeep funding should be included every year as part of the City's budget.

¹¹ http://www.pedbikeinfo.org/cms/downloads/Countermeasure_Costs_Summary_Oct2013.pdf; https://midwestepi. org/2017/05/03/what-are-road-construction-costs-per-lane-mile-inyour-state/

¹² https://bikeleague.org/sites/default/files/Bicycling_and_the_ Economy-Econ_Impact_Studies_web.pdf

Goal 5: Three E's

Implement bicycle and pedestrian education, encouragement, and evaluation programs.

Objective 1: Launch a public safety campaign for people of all ages and all users of the road.

Education is a tool to reduce conflict between road users. A public safety campaign educates drivers, cyclists, and pedestrians on how to negotiate difficult situations to make all users safer. Messages include the role of infrastructure such as "sharrows", the three-foot passing law, stopping for pedestrians and cyclists in crosswalks, and right-of-way law. The City should use its communication tools that include the monthly Highlander publication and social media to regularly educate residents about road safety and use the platforms to launch a public safety campaign.

Objective 1.1: Consider using alternative signs where appropriate.

The City of Highland Park includes sharrows and "Share the Road" signs where there is insufficient right-of-way for a conventional bike lane. As the existing signs outwear their useful lives due to vandalism and general wear and tear, the City should consider using alternative sign content in addition to sharrows to better indicate the rights and responsibilities of bicyclists and motorists with respect to travel lane occupancy. Alternative signs may include "Bikes May Use the Full Lane" or "Bicycles in Lane" in addition to warning signs to improve communication and safety.



The City should evaluate use of alternative signs as existing signs outwear their useful lives.

Objective 2: Work with Northshore School District 112 to develop School Travel Plans and Bike/Walk safety curricula for each of the schools.

Parents and guardians picking up and dropping off students increases traffic flow around Highland Park's schools, making biking and walking challenging. School travel plans direct parents with automobiles in a pre-determined, efficient manner, and can also encourage them to walk or bike with their children to school. The City should work with D112 to outline preferred travel routes and provide assistance with mapping safe walking and biking routes.

In conjunction with developing School Travel Plans, the City should work with D112 to develop curricula about biking and walking safety. This comes after the passage of Illinois HB4799: Biking and Walking Education in Schools (2018), which provides that every public school with grades between kindergarten and grade 8 shall instruct, study, and discuss "effective methods" to prevent and avoid traffic injuries while walking and bicycling. Curricula should include use of the "Dutch reach" when opening car doors.

Objective 3: Host annual and special events aimed at increasing the number of families and individuals who bike and walk in Highland Park.

Not all Highland Park residents view cycling as a convenient, safe, or fun way of getting around the community. Community events encourage residents to consider biking and walking on a more regular basis, and to use these forms of transportation for more than just recreation. These events provide valuable information on and exposure to cycling and pedestrian safety, and the health benefits of active transportation. The City should continue to host and support events such as Bike to School Day, the 4th of July Kid's Bike Parade, Bike/ Walk Fair, and local bike tours. Additional events may include Bike to Work Week, a Bicycle Festival, and open streets events. The City should work with local schools, businesses, the Park District of Highland Park, and BWAG to support, plan, and launch these events.





Dutch Reach educational material Credit: Nick Moore

dutchreach.org NM-18

Objective 4: Continue semi-annual bicycle and pedestrian counts to evaluate bicycle and pedestrian use in Highland Park.

Commuting data from the US Census Bureau does not take into account the number of recreational, occasional, and casual cyclists and pedestrians in Highland Park. Accurate data aids the City in identifying key travel corridors and estimating the number of biking and walking trips made annually. Semi-annual bicycle and pedestrian counts are necessary to ensure accurate data and informed decision-making.

In May and September of 2013 and 2014, the City of Highland Park, in conjunction with the Bike Walk Advisory Group, performed bike and pedestrian counts to better understand the utilization of local roads and trails by alternative transportation modes. No counts were performed between 2015-2017, but the efforts were restarted in the fall of 2018.

The Bike/Pedestrian Count generally follows guidelines set by the National Bicycle and Pedestrian Documentation Project, which recommends performing two counts per year. It recommends counting in May and mid-September as they represent "peak period[s] for walking and bicycling, both work- and school-related." The City should continue to perform semi-annual bike/ped counts to assess non-motorized transportation trends in the community.



Objective 5: Create and distribute an annual update that tracks the implementation progress of MoveHP.

Historically, as progress has been made to improve biking and walking infrastructure through the City, efforts to track and celebrate these improvements have been piecemeal. An annual update on biking and walking accomplishments provides valuable information to city staff, elected and appointed officials, and the public. In addition, producing succinct annual updates will make it easier for city staff to evaluate non-motorized transportation in Highland Park for subsequent update to MoveHP. The City should create an annual update to both celebrate achievements and track the implementation of MoveHP.

Objective 6: Pursue recognition as a bicycle- and pedestrian friendly community.

Regular ranking and recognition by bike and walk advocacy groups provides a benchmark to measure policy and infrastructure efficacy.

A volunteer counts cyclists during the bi-annual Bike/Ped Count

Objective 6.1: Continue to pursue certification as a Bicycle and Pedestrian Friendly Community through the League of American Bicyclists.

The League of American Bicyclists is one of the oldest bicycle advocacy organizations in the United States, and their mission is "to create a Bicycle Friendly America for everyone." Highland Park became certified as a bronze-level Bicycle Friendly Community in 2018, and the status is valid for four years. Continuing to pursue Bicycle Friendly Community designations demonstrates the City's accomplishments within the community, regionally, and nationally. As such, the City should reapply to the American League of Bicyclists to maintain and/ or elevate its status as a Bicycle Friendly Community in 2022. This can be achieved through additional bike infrastructure, events, and pilot projects.

Objective 6.2: Pursue designation as a Walk Friendly Community.

Walk Friendly Communities (WFC) is a national recognition program developed to encourage towns and cities across the U.S. to establish or recommit to a high priority for supporting safer walking environments. The WFC program recognizes communities that are working to improve a wide range of conditions related to walking, including safety, mobility, access, and comfort. The City should apply to be designated as a Walk Friendly Community. Implementation

The success of MoveHP will rely upon its implementation over the next 5-10 years. While the City will take the lead to adopt policies and make infrastructure improvements, it will require assistance from community partners and advisory groups, to ensure consistent progress. This chapter focuses on key strategies that can be implemented to turn the MoveHP plan into action.

Implementation Strategies

Use MoveHP Regularly

Using MoveHP regularly will ensure that policy choices and infrastructure improvements are coherent and consistent. A goal of Bike-Walk HP 2030, MoveHP's predecessor plan, was to integrate non-motorized transit into decision-making and general works. Considering and building possible improvements in pedestrian and cycling infrastructure in every project ensures consistent incremental improvement and policy changes. The plan should not sit on a shelf, but rather should be regularly consulted for proposed developments and infrastructure improvements.

Use MoveHP as a Guidebook for BWAG and TAG

The Bike Walk Advisory Group (BWAG) and Transportation Advisory Group (TAG) should utilize MoveHP to inform recommendations and infrastructure improvement discussions. The Existing Conditions section of MoveHP, and the full Existing Conditions Report, contain data and graphics that should be used to provide background data and the Plan should be used to guide the Advisory Groups' decision-making and recommendations to City Council.

Regularly Review the CIP

The Public Works and Community Development Departments should utilize MoveHP to assist in the prioritization of infrastructure improvement projects and policy changes. The Plan should be used as a tool to ensure that as roadway work is done, it integrates recommended improvements listed within the Plan. it should be noted, however, that prior to inclusion in the CIP, infrastructure projects will need to demonstrate public support. In addition, as policies in the plan are adopted, the Department of Community Development should coordinate closely with the Public Works Department on new policy implementation.

Identify and Apply for Funding

Many of the recommendations within MoveHP are infrastructure improvements that require significant funding. While the City budgets for some infrastructure improvements, increased implementation of projects requires outside resources. City staff should regularly search for, review, and apply for funding. City applicants can cite MoveHP as the City's official policy when applying for funding for transportation projects involving pedestrian or cycling infrastructure. A list of potential funding sources is included in this chapter.

Update MoveHP Regularly

The City of Highland Park is a dynamic municipality with evolving needs. MoveHP should reflect these changes through regular updates to this Plan. The City should maintain an ongoing list of potential projects and amendments to the Plan. The Plan should be reviewed and potentially updated every 5-6 years.

Implementation Matrix

The Implementation Matrix below displays each goal with its accompanying recommendations; each recommendation includes the relevant Department or Partner Organization responsible for implementation, and a scoring of its priority and cost. The matrix organizes the recommendations in a condensed, readable format.

Priority Scoring

Priority scoring is assigned for how important a project is to the overall plan and based on input from the public outreach process. The frequency with which a recommendation appeared in the online survey and workshop, the detailed input of the Steering Committee, and the professional opinion of city staff were all weighed when assessing priority.

Priority Scoring

Level	Description
+	Low priority, these recommendations may not have been highlighted by the Steering Committee or infrequently mentioned in public outreach.
++	Medium priority, these recommendations had moderate support from the Steering Committee or were frequently mentioned in public outreach. While not necessary, these recommendations would enhance safety or connectivity.
+++	High priority, these recommendations had strong support from the Steering Committee, near con- sensus from public outreach, or analysis deemed necessary for improved safety or connectivity.

Cost Scoring

Cost scoring is assigned based on the relative difficulty of accomplishing each recommendation. The professional opinion of city staff and comparison with similar projects in similiar communities informed the score.

Cost Scoring

Level	Description
\$	Low cost solutions, these recommendations are primarily internal and administrative. Mostly internal policies and City Council resolutions.
\$\$	Requires additional resources outside of city staff capacity. May require consultant services or contract work. Small to medium grants may be necessary for planning or construction.
\$\$\$	Major investment that requires additional re- sources outside of city staff capacity. Will require medium to large grants and coordination with other agencies such as IDOT to accomplish.

Goal 1: Develop and adopt policies, plans and guidelines to assure that cycling and walking are a safe and integral part of City life.

Objective	Department / Partner Organization	Priority	Cost
Objective 1: Consider adopting the Complete Streets Policy as a distinct, separate resolution and general policy guide	Community Development, Public Works	+++	\$
Objective 2: Amend the Highland Park Municipal Code to promote and enhance biking and walking and align with best practices.	Community Development	+++	\$
Objective 2.1: Amend the Zoning Code to require bike parking as part of new commercial and multi-family developments.	Community Development	+++	\$
Objective 2.2: Amend the Zoning Code to simplify the requirements to receive parking reductions by providing bicycle parking.	Community Development	++	\$
Objective 2.3: Amend the Zoning Code to require internal parking lot pedestrian paths.	Community Development	++	\$
Objective 2.4: Amend the Zoning Code to require new commercial, multi-family, and planned developments to provide connections to adjacent existing and/or planned trails.	Community Development	+++	\$
Objective 2.5: Amend the Municipal Code to align with Illinois State statutes.	Community Development	+	\$
Objective 3: Evaluate opportunities to increase safety using traffic-calming measures and additional non-motorized transportation infrastructure.	Community Development, Public Works, Police	++	\$-\$\$\$
Objective 4: Regularly review the City's Local Streets New Sidewalk Installation Guideline and revise as appropriate to increase the number of sidewalks in residential neighborhoods.	Community Development, Public Works	++	\$

Goal 2: Partner with government, non-profit, and local organizations/agencies to incorporate bicycle and pedestrian policies in projects and facilities in the community.

Objective	Department / Partner Organization	Priority	Cost
Objective 1: Continue to work with the Park District of Highland Park to improve pedestrian and bike connections to local parks and recreational facilities.	Community Development, Park District of Highland Park	++	\$
Objective 2: Work with the Village of Northbrook to extend the Lake Cook Road trail to the Skokie Valley Trail & other neighboring munici- palities.	Public Works, Village of Northbrook	+	\$\$\$
Objective 3: Work with the City of Highwood, the Village of Lake Forest, and the Town of Fort Sheridan HOA to increase connectivity and access to trails in northern Highland Park.	Public Works, Communi- ty Development, City of Highwood, the Village of Lake Forest, and the Town of Fort Sheridan HOA	++	\$\$
Objective 4: Work with the Village of Northbrook, the Illinois Depart- ment of Transportation, Cook County, and Lake County to improve bicycle and pedestrian access along and across Lake Cook Road.	Public Works, Northbrook, IDOT, Cook County, Lake County	++	\$\$
Objective 5: Work with the Illinois Department of Transportation to pro- vide safe and efficient non-motorized access across US 41.	Public Works, IDOT	++	\$\$\$

Objective 6: Continue to utilize BWAG and TAG as valuable stakehold- er groups for feedback on non-motorized transportation infrastructure improvements.	Community Development, Public Works	+++	\$
Objective 7: Work with adjacent municipalities and regional transit agencies to promote and implement improved local and regional transit mobility and connections.	Community Development, Public Works	+	\$\$
Objective 8: Engage stakeholder groups such as the local school districts and places of worship to find opportunities to improve non-motorized transportation connections.	Community Development	+	\$

Goal 3: Develop and maintain a continuous, interconnected cycling and pedestrian system that accommodates short- and long-distance trips and provides connections and access to major community destinations.

	Department /		
Objective	Partner Organization	Priority	Cost
Objective 1: Establish pedestrian priority routes to ensure all parks and schools have pedestrian infrastructure connections within a 10-minute walk/0.5 miles.	Community Development, Park District of Highland Park, D112	++	\$
Objective 2: Continue to clear sidewalks and paved multi-use trails as part of the City snow and ice control plan.	Public Works	+	\$\$
Objective 3: Plan and implement safe, off-street east-west bicycle routes through the City.	Community Development, Public Works	+++	\$\$\$
Objective 4: Promote transit use and local access through station area improvements and micromobility.	Community Development, Public Works, City Manag- ers Office	+	\$\$
Objective 4.1. Focus pedestrian improvements within a half-mile radius of Metra stations and bus routes.	Community Development, Public Works	+	\$\$
Objective 4.2. Consider micromobility as an opportunity to increase non-motorized transportation options throughout the City.	Community Development, Public Works, City Manag- ers Office	+	\$\$
Objective 5: Implement bicycle and pedestrian infrastructure improve- ments throughout the City as part of the Capital Improvement Program and Community Development project public benefits.	Community Development, Public Works	+++	\$\$\$

Goal 4: Provide funding for bicycle and pedestrian-related improvements through the capital improvement program, grants, and other funding sources.

Objective	Department / Partner Organization	Priority	Cost
Objective 1: Identify and apply for grant funding for bicycle and pedestri- an related improvement projects.	Community Development, Public Works, Park District of Highland Park	+++	\$
Objective 2: Establish a Sponsor-a-Rack Program that allows local busi- nesses and organizations to fund a bike rack that includes opportunities for advertisements.	Community Development, City Managers Office, Chamber of Commerce, Ravinia Business District Association	++	\$
Objective 3: Ensure adequate funding is allocated for the ongoing mainte- nance of new bicycle and pedestrian infrastructure.	Public Works	+++	\$\$

Goal 5: Implement bicycle and pedestrian education, encouragement, and evaluation programs.

Objective	Department / Partner Organization	Priority	Cost
Objective 1: Launch a public safety campaign for people of all ages and all users of the road.	Community Development, City Managers Office	++	\$
Objective 1.1: Consider using alternative signs where appropriate.	Public Works	+	\$\$
Objective 2: Work with Northshore School District 112 to develop School Travel Plans and Bike/Walk safety curricula for each of the schools	Community Development	++	\$
Objective 3: Host annual and special events aimed at increasing the num- ber of families and individuals who bike and walk in Highland Park.	Community Development, BWAG, Park District of Highland Park	+++	\$\$
Objective 4: Continue semi-annual bicycle and pedestrian counts to evalu- ate bicycle and pedestrian use in Highland Park.	Community Development, BWAG	++	\$
Objective 5: Create and distribute an annual update that tracks the implementation progress of MoveHP.	Community Development, Public Works	+++	\$
Objective 6: Pursue recognition as a bicycle- and pedestrian friendly community.	Community Development	+++	\$
Objective 6.1: Continue to pursue certification as a Bicycle and Pedestri- an Friendly Community through the League of American Bicyclists.	Community Development	+++	\$
Objective 6.2: Pursue designation as a Walk Friendly Community.	Community Development, City Managers Office	+++	\$

Funding Opportunities

Funding pedestrian and bicycle infrastructure improvements can come from local, state and federal sources. Highland Park has utilized a diverse funding model for bike-walk projects; Illinois Department of Transportation (IDOT) funding was used in the 2017 Sharrows project while local Capital Improvement Plan (CIP) funds were utilized to fill sidewalk gaps in 2018.

Local Funding Sources

Capital Improvement Plan

Highland Park has appropriated \$20,000 annually since 2012 towards pedestrian and cycling improvements. This funding is included in the Capital Improvement Plan (CIP), which forecasts major projects over 5 years. Additionally, the Department of Public Works aims to incorporate pedestrian and cycling improvements into current projects where practicable. Continued appropriations into the Capital Improvement Plan will provide a gradual opportunity for bike-walk improvements in the community.

Sales Tax for Transportation Fund (Lake County)

Lake County Division of Transportation works with other government bodies to coordinate transportation projects and complete the work efficiently with as little disruption to County residents as possible. Revenue in this fund is derived from Lake County Sales Taxes. Lake County invested \$100 million in road projects in 2018, and plans to invest \$578 million in transportation over the next six years (2019 Lake County Budget, p. 14).

Federal and State Funding Sources

Illinois Infrastructure Bill

Public Act 101-0029, commonly called the "Illinois Infrastructure Bill", became effective July 1, 2019, and appropriated approximately \$45 billion for infrastructure improvements in the state. These appropriations included:

- \$175 million was appropriated to the Department of Commerce and Economic Opportunity (DCEO) for "grants and loans to local governments" for all aspects of transportation project design and management;
- An additional \$309 million to the DCEO for local governments "for costs associated with infrastructure improvements" (Section 155 and 160);
- \$9.4 billion to the Illinois Department of Transportation (IDOT) for the "preliminary engineering, construction engineering and contract costs of construction" of transportation infrastructure, including highways, arterial highways, roads, and bikeways (Sections 40, 45, and 60);
- \$736.5 million to IDOT for disbursement to municipalities for transportation improvements related to economic development (Section 75).

All of the above appropriations can be used for bikeway improvements, which are explicitly allowed. Even more critically, these funding streams can be tapped for improvements to US-41 crossings and on/off ramps. Several comments during public outreach for MoveHP identified US-41 as a critical area for pedestrian and cycling improvements; redesigning these intersections could improve traffic flow and reduce congestion which are major aims of IDOT. Applications should stress that improvements to US-41 intersections benefit Highland Park residents as well as neighboring communities, Lake County, and the Chicago metropolitan area overall.

Surface Transportation Program (Chicago Metropolitan Agency for Planning [CMAP])

This CMAP program is subdivided into regional councils, of which Highland Park is included in the Lake County Council of Mayors. The Lake County Council of Mayors has released project selection methodology; it prioritizes projects with high roadway volume/capacity ratios, estimated vehicle emission reductions, ability to garner federal funding, and the overall road condition. Categories include: air quality, arterial management, bridges, enhancement and bikepaths, local assistance maintenance, multi-modal, safety, and traffic flow. Projects benefiting bike-walk infrastructure could fit into any of these categories; for example, projects improving traffic flow at intersections along US-41 could also improve pedestrian connections and mobility. That being said, the multi-modal, bikepath, bridge, and safety projects are most promising for implementing MoveHP.

Transportation Alternatives Program (CMAP)

This federally funded program is designed to support non-motorized transportation. The current round of funding will expire in 2020, and will require new federal appropriations to renew the program. Projects must have substantially completed Phase I Engineering prior to programming of funds, and the project should be included in at least one formally adopted plan by a local, regional, or state government. Projects are graded on how they further connect the regional trail network, the population and employment density in the surrounding area, and the quality of the current connection. The ideal project would connect two existing regional trails, be in a dense area with many residents and employers, and be currently impassable for walking and biking or have no bike/ped accommodation.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

CMAQ is a federally-funded program of surface transportation improvements designed to improve air quality and mitigate congestion; it is administered regionally through CMAP and IDOT. CMAQ is aimed to improve air quality in non-attainment areas for several air quality measures, which is to be achieved through the following four objectives: localized congestion relief, operational improvements, mode shift, and direct emissions reduction. Eligible projects include transit improvements, traffic flow eliminations (bottleneck eliminations, intersection improvements, signal interconnects), bicycle facility projects, direct emission reductions, and other projects.

BUILD Transportation Grants Program (US Department of Transportation)

The US Department of Transportation's Better Utilizing Investments to Leverage Development (BUILD) Grants Program succeeded the TIGER Discretionary Grants Program. BUILD funding supports road, bridges, transit, rail, port or intermodal transportation projects. The program has made \$900 million available for local, regional, and state governments. Successful projects include a \$21 million complete streets project in Mobile, Alabama and \$22 million in bridge reconstruction in Des Moines, Iowa. As most successful BUILD applicants are large-scale projects, long-range and high-cost projects with a strong regional impact; such projects could include improvements to US-41 and east-west connections in Highland Park. Improved pedestrian and cycling infrastructure should be combined with updating bridges, intersections, and major thoroughfares to make the application as competitive as possible.

Coastal Management Grant Program

The Illinois Department of Nature Resources (IDNR) provides funding to communities along Lake Michigan to enhance coastal public access, recreation, and coastal-dependent economic development. Grants range from \$1,000 to \$100,000 and require a local match.

Other Funding Sources

PeopleForBikes Community Grants Program

The PeopleForBikes Community Grants fund projects supporting bicycling nationally. Since 1999, they've invested \$3.5 million nationally. The grant program is funded by partners in the bicycle industry, such as Cannondale, Giant, Shimano and Trek. In 2019, grant applications were limited to bike park and pump track projects in an effort to get more children on bikes. 2020 may have another theme that could complement MoveHP's mission, goals, and recommendations.

Safe Routes to School

The National Center for Safe Routes to School supports the ability of children to safely walk and bike to school. It is part of the University of North Carolina Highway Safety Research Center, and closely works with federal and private sector sponsors. The Illinois Department of Transportation created a program, the Illinois Safe Routes to School Program, to fund infrastructure and non-infrastructure projects to create safer and more enjoyable biking and walking routes to schools. The infrastructure grant program funds physical improvements up to \$200,000, including sidewalk pavement, trail creation, improved signaling, and more. The non-infrastructure grant program funds educational materials, events, data analysis, and other programs, up to \$50,000.

10-Minute Walk Campaign

The 10-Minute Walk Campaign is supported by the National Recreation and Park Association (NRPA). As part of the campaign, the NRPA offers grants and technical assistance to support planning to make high-quality parks accessible within a 10-minute walk of every resident. In 2019, 10 cities received over \$40,000 to work with the NRPA, The Trust for Public Land, and the Urban Land Institute to devise improved walking and biking connections to parks.

AARP Community Challenge Grant

The AARP offers a grant as part of their Livable Communities Initiative. The program aims to start long-term progress and make immediate improvements in support of residents of all ages. The grant program distributed approximately \$1.6 million total to 159 recipients nationwide. Projects must be dedicated to one of the following objectives: create vibrant public places, demonstrate the tangible value of "smart cities", deliver a range of transportation and mobility options, and support the availability of a range of housing. Projects are graded on the overall impact to make positive changes, the capacity of the application to execute the project, and a degree of innovation in community change.

America Walks Community Change Grants

This program awards grantees \$1,500.00 in community stipends for projects related to creating healthy, active, and engaged places to live, work, and play. Funded projects will increase walking and benefits of walkability in communities, work to grow the walking movement by engaging people and organizations new to the efforts, and take steps towards creating a culture of inclusive health. Projects should be able to demonstrate how they will create healthy, active, and engaged communities that support walking as transportation, health, and recreation.

Public Benefit

As part of the Planned Development process, projects that request a variation from the Zoning Code are required to provide a "public benefit." A public benefit mean an amenity provided in the form of an improvement, donation or dedication that is not otherwise required as part of the development process and that serves the residents of the Planned Development and the community at large. The City should work with planned development applicants to provide information about bicycle and pedestrian infrastructure projects that my qualify as a public benefit.

Sponsorships

Sponsorships serve as a potential funding source for bike and pedestrian infrastructure improvements and events. The City should consider the use of sponsorships to financially support bike/walk community events or fund infrastructure improvements such as bike racks.

Appendix

- 1. Complete Streets Policy Draft
- 2. Existing Conditions Report



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Highland Park Complete Streets Policy DRAFT

Introduction

WHEREAS, transportation, quality of life, and economic development are all connected through wellplanned, well-designed, and context sensitive transportation solutions; and

WHEREAS, a Complete Street is defined as one that provides safe and convenient access and mobility for all users of the road, including pedestrians, bicyclists, transit users, and vehicular traffic; and

WHEREAS, City of Highland Park views all transportation improvements as opportunities to connect neighborhoods, calm traffic and improve safety, provide greater access and mobility for users of the public way, and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system; and

WHEREAS, the City of Highland Park MoveHP Plan promotes a transportation principal that City of Highland Park residents should be able to drive, walk, or bike safely and conveniently throughout the City of Highland Park for daily needs and activities.

WHEREAS, this policy will help support City of Highland Park in securing funding for future Complete Streets projects from the Council of Government and other regional and state grant programs;

WHEREAS, numerous jurisdictions in the United States have adopted Complete Streets Policies, including the State of Illinois, and Lake County; and

WHEREAS, the City of Highland Park strives to provide transportation options to maximize the independence and mobility of its growing and diversifying population;

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HIGHLAND PARK, LAKE COUNTY, ILLINOIS THAT THE CITY OF HIGHLAND PARK HEREBY ADOPTS A COMPLETE STREETS POLICY, the goals, elements, and procedures of which are as follows:

Section 1. Vision and Intent

Under this Complete Streets policy, the City of Highland Park will develop and provide an integrated multi-modal transportation network that contributes directly to the safety, health, economic vitality and quality of life of all residents, especially the most vulnerable (pedestrians, bicyclists, youth, senior citizens, disabled, low-income, minority and immigrant populations).

Non-automobile modes of transportation including bicycling, walking, and public transportation will be included in transportation planning and project delivery to create a complete and connected network of Complete Streets. Underserved populations will be prioritized throughout the planning process.

The transportation system of the City of Highland Park will be an equitable, balanced, and effective system where every transportation user can travel safely and comfortably. Persons of all ages, abilities and circumstances will be able to use their transportation mode of choice for trips including commuting, shopping, going to school, and recreating; and they will be able to meet their transportation needs safely, conveniently, reliably, affordably, and efficiently. Together, this integrated transportation system will support healthy and thriving individuals in the City of Highland Park, as well as the cultural life and businesses of the City of Highland Park.

Section 2. Prioritization of Diverse Users

City of Highland Park's Complete Streets project delivery process will prioritize underserved populations to ensure that lack of access to a car is not a barrier to travel, safety, health, employment, and housing. These populations will include census tracts where at-risk populations meet or exceed county averages. These populations include people of color, people with disabilities, senior citizens, youth, households with no or limited access to a vehicle, and households where people speak English less than very well.

Section 3. Applicability Across Projects, Phases, and Jurisdictions

All projects will start with a Complete Streets approach, where Complete Streets objectives and elements are incorporated into all phases of the project development process, including statement of purpose and need, scoping, design, and construction, and for all project types, including newly constructed roads, reconstruction and roadway retrofits, resurfacing projects, repaving projects, and routine maintenance, where applicable, to allow all road users to move safely, comfortably, conveniently and independently.

During construction projects and repair work, accommodations will be provided for pedestrians, cyclists, transit users, and motor vehicles to ensure safe and comfortable access is provided.

All projects and facilities in public right-of-way, whether publicly or privately funded, will adhere to this Complete Streets Policy. City of Highland Park will work with each transportation agency at the start of each project to scope out opportunities for the inclusion of Complete Streets elements, such as sidewalks, bicycle infrastructure, transit amenities, and intersection improvements. These agencies include but are not limited to the Illinois Department of Transportation (IDOT), and Lake County Department of Transportation.

In addition, City of Highland Park will coordinate with external partner agencies to get input on roadway projects, including but not limited to the Lake County Health Department, Illinois Department of Natural Resources, Park District of Highland Park, North Shore School District 112, Township High School District, 113, Pace, Metra, local non-profits, and members of the public.

The lead department managing transportation projects for the City of Highland Park will ensure inter-departmental coordination. Departments will include community development, public works, City of Highland Park City Council, and others.

Section 4. Exceptions to the Policy

This policy allows for the exclusion of modes of transportation and users types, specified in Section 1, on corridors and/or in projects where:

- 1. Accommodation for the specified users are prohibited, such as limited access highways or walking paths.
- 2. Cost of the facility or accommodation for a specific mode or user type is excessively disproportionate to the need or probable use expected over the next 20 years.
- 3. A documented absence of current and future need as specified by local and regional long-range plans, including the most recent versions of the Chicagoland Metropolitan Agency for Planning's Regional Trails and Greenways Plan, and City of Highland Park bicycle, pedestrian, and comprehensive plans.
- 4. Emergency repairs that require an immediate, rapid response will not require the addition of Complete Streets accommodation; however, opportunities to improve multi-modal access should be considered where feasible. Temporary accommodations for all modes currently served by the corridor should still be made.
- 5. Projects that were initiated prior to this policy, where additional design and engineering costs would exceed the budget and/or impact the project timeline.

The process for approving exceptions will be established by the committee created in Section 9. Exceptions will be discussed, publicized, and open for public comment during a City Council meeting prior to approval.

Section 5. Design Guidelines and Flexibility

The City of Highland Park will consult the latest best practices when designing projects, including the most recent editions of:

- American Association of State Highway and Transportation Officials (AASHTO)
 - o A Policy on Geometric Design of Highways and Streets
 - o Guide for the Development of Bicycle Facilities
 - o Guide for the Planning, Design and Operations of Pedestrian Facilities
- American Planning Association (APA)
 - o Complete Streets: Best Policy and Implementation Practices
 - o U.S. Traffic Calming Manual
- Federal Highway Administration (FHWA)
 - o Small Towns and Rural Multi-Modal Networks
 - o Manual of Uniform Traffic Control Devices (MUTCD)
 - o PEDSAFE: Pedestrian Safety Guide and Countermeasures Selection System
 - o Incorporating On-Road Bicycle Networks Intro Resurfacing Projects
- Institute of Transportation Engineers (ITE): Designing Walkable Urban Thoroughfares: A Context Sensitive Approach
- National Association of City Transportation Officials (NACTO)
 - o Urban Bikeway Design Guide
 - Urban Street Design Guide
- U.S. Access Board: Accessible Public Rights-of-Way: Planning and Designing for Alterations
- Pace: Transit Supportive Guidelines
- Chicagoland Metropolitan Agency for Planning: Complete Streets Toolkit
- Active Transportation Alliance: Complete Streets Complete Networks

The above guidelines will serve as a starting point for all projects and will be adhered to on all locally-led and funded projects.

The City of Highland Park will review design manuals for guidance on projects led by other jurisdictions to identify opportunities for the inclusion of Complete Streets. Additional manuals that will be used on projects led by, controlled by, or funded by outside jurisdictions include the Illinois Department of Transportation's (IDOT's) Bureau of Design Environment and Bureau of Local Roads manuals, and the Lake County Department of Transportation design standards.

Staff, elected officials, and the committee established in Section 9 responsible for designing, reviewing, and approving transportation projects, programs, and procedures will receive training on Complete Streets design considerations best practices for implementation annually.

Section 6. Land Use and Context

The City of Highland Park will require new or revised land use policies, plans, zoning ordinances or equivalent documents to incorporate and reference the City of Highland Park's Complete Streets policy and vision. Existing plans, policies, and ordinances will be reviewed in the early scoping phase of each roadway project. Where existing plans and policies conflict with the Complete Streets policy, the former will be revised to ensure consistency with the latter.

Complete Streets elements considered for projects will be sensitive to the surrounding context, including current and planned buildings, parks, trails, other adjacent land uses and nearby destinations, general development pattern, roadway typologies, as well as its current and expected transportation needs.

Unintended consequences, such as involuntary displacement, will be avoided when possible or addressed with equity and fairness to the affected party or parties.

Section 7. Performance Measures

In general, City of Highland Park will use available information and datasets to track high-level progress toward the implementation of the Complete Streets policy. The City of Highland Park Public Works Director will report annually in a public forum to the City of Highland Park Transportation Advisory Group. on the below performance measures. Target dates and the process for reporting will be developed by the committee established in Section 9 of this policy. The performance measures will include:

- Accommodations and infrastructure constructed:
 - Linear miles, by bikeway facility type, of bike infrastructure, and linear feet of sidewalks installed: calculated upon completion of each Complete Streets project and tallied annually.
 - o Number of bike racks installed.
- User Counts:
 - o Five-year American Community Survey data on modes of travel to work.
 - o Bike and Pedestrian counts collected at least twice annually.
- Safety and Equity:
 - Severe and fatal crash statistics for all modes of transportation using IDOT's annual crash summaries by the City of Highland Park Police Department.

Other measures may be tracked at the project level including cost of project, potential number of users, traffic safety impact, and/or percent of transportation- and public works-related budget, which is spent on bicycle and pedestrian infrastructure, facilities, or elements.

Section 8. Project Selection Criteria

When considering the various elements of street design, the City of Highland Park shall give priority as follows:

- Above all, safety is imperative, with pedestrian safety having the highest priority followed by bicyclists, the next most vulnerable types of users. Safety of children, seniors, and mobility-challenged individuals and populations, who cannot or choose not to drive, shall be a high priority.
- Street design elements that encourage and support walking, biking, and transit trips in a manner that considers the context of the surrounding community as well as the broader urban design needs of the City of Highland Park.
- The City of Highland Park recognizes that not all modes can receive the same degree of accommodations on every street, but the goal is for users of all ages and abilities to safely, comfortably and conveniently travel across and through the network.

During the City of Highland Park's annual budgeting process, projects that advance Complete Streets and the performance standards outlined in Section 8, including equitable access to those most in need, will be prioritized for funding. As such, the City of Highland Park will prioritize universal and equitable investment in underserved communities throughout the City of Highland Park which lack existing infrastructure that encourages walking, biking, and transit trips, as well as areas where data indicate crash risk and health disparities. Projects will be reviewed by the committee established in Section 9 during City of Highland Park's annual budgeting process.

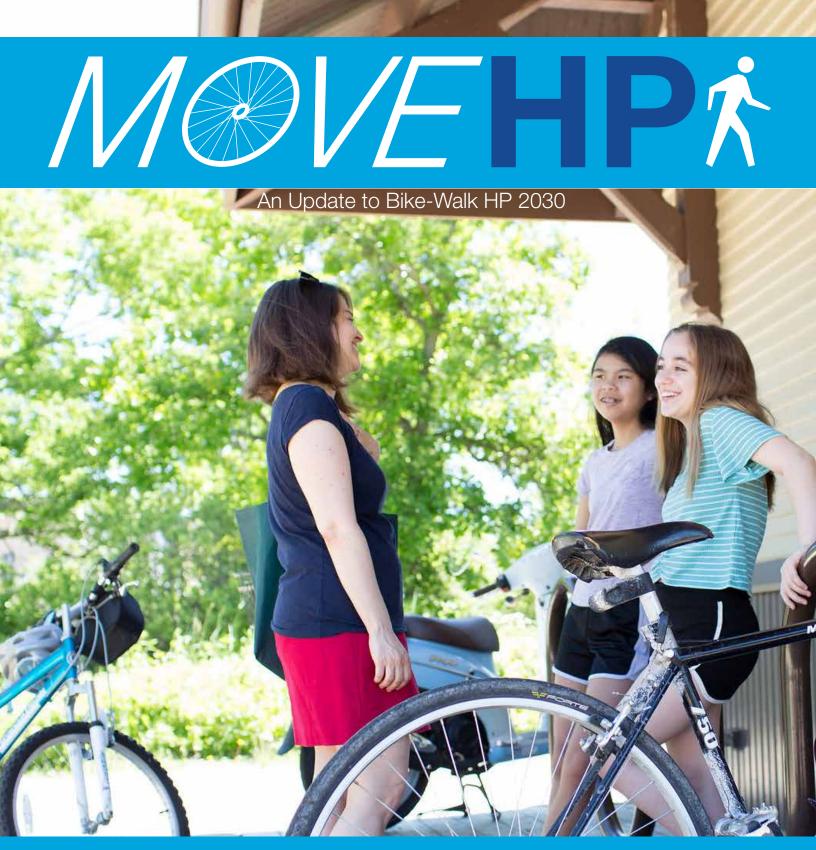
Section 9. Implementation

The Transportation Advisory Group and Bike Walk Advisory Group will convene to establish a schedule to implement this policy. Following the initial task, the committee will continue to oversee implementation of the policy. Tasks will include, but are not limited to:

- Developing a project delivery process that ensures:
 - High need areas defined in Section 2 of this policy are identified and included in the project selection process.
 - o Complete Streets considerations are included in City of Highland Park's scoping and budgeting process
 - A checklist is developed to ensure the inclusion of Complete Streets in all projects and all phases of development.
 - Standards and a review process are developed for the inclusion of Complete Streets in private development.
 - Diverse users and community-based organizations, including bicycling groups and organizations, walking and running clubs, organizations representing senior and disabled persons, and minority or underserved populations are incorporated into public engagement processes and project decision-making.
 - o Relevant agencies, departments, legislative bodies and partners are consulted at key points.
 - o Previous planning studies are reviewed during project scoping and design for consistency.
 - A transparent, public process is established for requesting and approving exceptions to this policy.
- Establishing a methodology and protocol for providing a public approach for performance measures identified in Section 8.
- Identifying training opportunities for staff and elected officials to receive regular training on internal processes, procedures, protocols, and best practices in Complete Streets design and policy implementation.



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Existing Conditions Report

IP City of Highland Park



Acknowledgments

MoveHP is made possible through the volunteer efforts and input from dedicated members of the Highland Park community.

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1. Introduction

The City of Highland Park had made big strides since the adoption of Bike-Walk HP 2030 in 2012, the City's comprehensive bicycle and pedestrian plan. Since its adoption, the City achieved multiple recommendations from the plan, including a pedestrian cut-through, installation of a bicycle repair station, and 18 miles of shared-use lane marking (sharrows) and signage. In 2018, the City was awarded a Bronze status as a Bicycle Friendly Community by the American League of Bicyclists, one of only 19 Bicycle Friendly Communities in the state.

The City seeks to continue serving as a bicycle- and pedestrian-friendly community through the implementation of Bike-Walk HP 2030. Updates to the plan are needed to reflect new bike infrastructure and pedestrian connections, integrate the Family Friendly Bikeways Action Plan (2016), and re-evaluate project priorities. The updated plan, known as MoveHP, will provide the City with a non-motorized transportation plan that represents changing community needs and desires.

Purpose of the Existing Conditions Report

The Existing Conditions Report provides a snapshot of the existing bicycle and pedestrian infrastructure and policies in Highland Park. It also outlines and celebrates what the City has accomplished since the adoption of Bike-Walk HP 2030. The Existing Conditions report provides the foundation to reevaluate recommendations from Bike-Walk HP 2030 and introduce new recommendations that align with current trends and best practices.





Process

MoveHP is following a 10-step planning process from kick-off to adoption:

Step 1: Project Kick-Off

- Step 2: Public Workshop
- Step 3: Existing Conditions Analysis
- Step 4: Steering Committee Meeting
- Step 5: Committee of the Whole
- Step 6: Bicycle and Pedestrian Network Analysis
- Step 7: Steering Committee Meeting
- Step 8: Draft Plan
- Step 9: Open House
- Step 10: Final Plan & Approval Process

This process is designed to thoroughly evaluate Bike-Walk HP 2030, garner feedback, and research and apply best practices.

Public Outreach

MoveHP is an update of an existing document, which limits the need for the extensive outreach that occurred through Bike-Walk HP 2030. Nevertheless, the process includes several chances for public input. Outreach opportunities include a community workshop, online survey, and open house.

The MoveHP outreach process also includes multiple opportunities for public input through various presentations to City Council during regular updates and throughout the approval process.

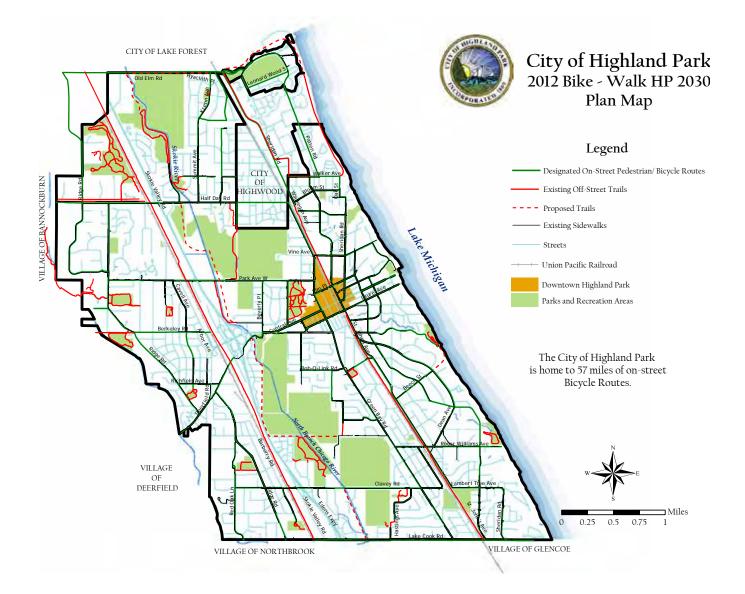
Steering Committee

During the planning process, City staff regularly solicits feedback from the Steering Committee. The Steering Committee is comprised of community stakeholders including the Park District of Highland Park, residents, bike-enthusiasts, and every-day walkers. The committee will work closely with staff to serve as a sounding board and ensure the plan meets the needs of the Highland Park community.

Existing Bike/Ped Network



Bike-Walk HP 2030 Existing & Proposed Improvements



2. Accomplishments

In the seven years since the adoption of Bike-Walk HP 2030, the City has made significant strides to improve its non-motorized transportation infrastructure. The City has a designated annual budget of \$20,000 to implement Bike-Walk HP 2030; however, as part of regular roadway improvement projects, active transportation infrastructure is included as applicable. The City has completed multiple pedestrian and cycling-focused projects, including adding 18 miles of shared-used lanes, constructing 2.5 miles of sidewalk, and adding or improving connections between shared-use trails.

Recognition & Ratings

Bike Friendly Community Designation

In 2018, the League of American Bicyclists designated the City of Highland Park a Bicycle Friendly Community at the Bronze level. The League reserves this award for select communities with impressive commitments to bicycling. A Bike Friendly Community welcomes bicyclists by providing safe accommodations for bicycling and encouraging people to bike for transportation and recreation. Making



bicycling safe and convenient are keys to improving public health, reducing traffic congestion, and improving both air quality and quality of life. There are currently 19 recognized Bicycle Friendly Communities in Illinois including the City of Highland Park. Previously, Highland Park received honorable mention, but with the implementation of key recommendations from Bike-Walk HP 2030, the City is now nationally-recognized for its commitment to bike infrastructure and safety.

PlacesForBikes Rating

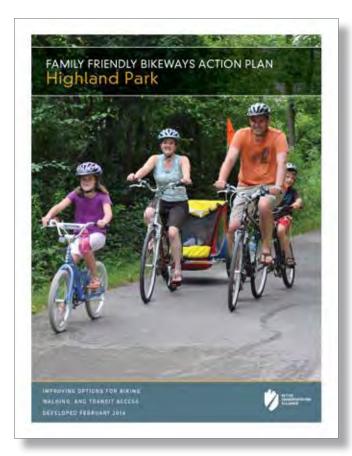
Places for bikes is a ranking system used by People ForBikes, a national bike advocacy organization. According to PeopleForBikes, "PlacesForBikes is a data-driven approach to identifying the best U.S. cities and towns for bicycling to help city leaders pinpoint improvements, and make riding better for everyone. Using feedback from everyday bike riders, city staffers, open-source maps and publicly available data, it scores five key factors: Ridership, Safety, Network, Acceleration and Reach." In 2018, Highland Park scored 1.3 out of 5. By adding additional data to open-source maps that includes the City's most recent bike infrastructure improvements, the 2019 score jumped to 2.4 out of 5. This represents another measure of progress in the last several years.

Plans & Policies

Bike-Walk HP 2030

The City of Highland Park adopted Bike-Walk HP 2030 plan in 2012. It serves as the non-motorized transportation plan and policy document for Highland Park. It is complementary to the Greenways Plan element of the City of Highland Park Master Plan; and is an evolution and update of the concepts and policies already established. The plan ultimately aimed to encourage more residents to walk or bike to work, school and shopping, and provide every user with an improved, more enjoyable and safer access to local and regional destinations. The plan recommended both programmatic improvements as well as physical improvements to the street, sidewalk, intersection, and trail systems.

The planning process included a thorough review of current pedestrian and cycling infrastructure in Highland Park and multiple avenues for community input. City staff held two community meetings in





June 2011, an online survey, and accepted written responses on the plan.

Specific recommendations in the plan include the development of dedicated bicycle lanes, designation of shared roadways, signed bicycle routes and shared-use paths, as well as improved sidewalks and intersections throughout the City for cyclists and pedestrians. The plan also includes recommendations to make it easier to use existing local public transportation for persons of all abilities. These improvements are to be integrated into the city's annual continuous improvement plan. A status document with all the recommendations from Bike-Walk HP 2030 is included in the Appendix.

Family Friendly Bikeways Plan

In 2016, City staff and the Bike Walk Advisory Group collaborated with the Active Transportation Alliance – a Chicago non-profit advocating improved bicycling and pedestrian transportation – to create the Family Friendly Bikeways Action Plan. The regional campaign's goal is to help build a network of streets that are comfortable for cyclists of all ages and abilities. In Highland Park, the plan focused on improving cycling routes in the Highlands neighborhood.

The Highlands neighborhood was selected because it is primarily residential, includes numerous schools and parks, and is near restaurants and other facilities. The planning process included reviewing existing plans and data, visiting the High-

Bike/Ped Infrastructure Improvements





Greenwood Cut Through

lands neighborhood, and meeting with residents to identify barriers and opportunities to develop family-friendly bikeways.

The plan recommended numerous improvements to the area, including a new shared-use path along Half Day Road, family-friendly bikeways along Greenwood Avenue and Summit Avenue, and traffic calming along University Avenue, among other recommendations.

Highland Park Bike Walk Advisory Group

The Bike Walk Advisory Group (BWAG) was formed as part of the Bike-Walk HP 2030 implementation process. BWAG works with the city Transportation Advisory Group (formerly the Transportation Commission) to advise the City on bike/walk initiatives. Since the adoption of Bike-Walk 2030, BWAG has served as an advocate for bike and pedestrian policies and infrastructure implementation. All BWAG activities are designed to support a thriving, healthy, safe, and sustainable community in Highland Park and the group continues to meet and provide input and support for non-motorized transportation.

Trail extension on Trail Way

Pedestrian Infrastructure Improvements

Since 2012, the City of Highland Park added 2.5 miles of sidewalk and improved wayfinding signage within the city. Major improvements include building sidewalks on Lake Cook Road, filling sidewalk gaps on Green Bay Road, and improving the Robert McClory Path near Highland Park High School.

Pedestrian infrastructure downtown was improved by re-marking intersections, installing signs in downtown Highland Park in 2016, and removing "beg buttons" for pedestrian signaling. Wayfinding signs throughout the city were installed in conjunction with the 2017 Sharrows Project. In 2019, a sidewalk was built on the west side of Ridge Road from Lawrence Lane to Lake Cook Road.

To improve connectivity for both pedestrians and cyclists, the City constructed a "cut-through" at Greenwood Avenue and North Avenue. Previously, Greenwood Avenue came to a dead end north of North Avenue, near Northwood Junior High. A new sidewalk now improves network connectivity.

Bicycle Infrastructure Improvements

Since the adoption of Bike-Walk HP 2030, Highland Park has made substantial progress improving bicycle infrastructure. A significant investment included the 2017 Shared-Lane Project, which added or updated 18 miles of shared-use lanes throughout the city of Highland Park. These run primarily along secondary, low-speed streets making cycling comfortable for users of multiple abilities. The Sharrows Project also included improved wayfinding signage helping both residents and visitors find their way around town easier.

In May 2019 as part of the Family Friendly Bikeways Plan, the City installed 11 signs throughout the Highlands neighborhood. The signs identify the Family Friendly Bikeway Route.

In spring 2018, the City installed a bicycle repair station on the Robert McClory trail near the Ravinia Metra stop. The station includes a bicycle stand with an air pump and commonly-used tools attached. The station was a \$2,650 investment utilizing part of a \$10,000 2017 ComEd Green Region Grant. The bicycle repair station was part of a larger project to remove invasive buckthorn and install a pollinator garden along the trail. The station was installed to draw people toward the new garden and improved landscaping.

Shared Use/Trail Improvements

At the end of 2018, the City installed a key connection on the Trail Way path that links Sleepy Hollow Park to Danny Cunniff Park and the Centennial Ice Arena. Previously, the trail from Sleepy Hollow Park north towards Danny Cunniff Park required users to cross a parking area, but the new 0.035mile extension now provides a safe and continuous path. The City also completed a shared-use side path along Walker Avenue from St. Johns Avenue to Oak Street, connecting residential areas with the Hamill Family Upland Trail in the Openlands Lakeshore Preserve. Highland Park currently has 9.5 miles of off-street shared-use paths, that include 7 miles of paved and 2.5 miles unpaved paths.

Summary of Bike-Walk HP 2030 Accomplishments

Pedestrian Improvements

- Develop the bicycle and pedestrian system through implementation of other improvements including street striping and signage: Signs installed w/ sharrows in 2017.
- Robert McClory Path On-street connection from Lincoln Avenue to Vine Avenue/Highland Park High School: Bridge abutments over Mulberry Place repaired in 2017 including additional bracing of the handrails.
- Green Bay Road sidewalks: Completed gaps on west side of road between Lake Cook and Edge-wood Roads.
- Ridge Road/Collector sidewalks: Sidewalk on west side of Ridge Road from Ridgelee to Lake Cook to be completed in 2019.
- Lake Cook Road sidewalk from Ridge Road to City limits: *Partially constructed*.
- Central Avenue @ Second St, First St, St Johns, Sheridan Road intersection marking improvements: Completed 2016
- Elm Place and First Street intersection marking improvements: Signs installed throughout Elm Place *☆ pavement markings are maintained as required.*
- Downtown crosswalk "Beg Buttons": removed at key CBD intersections 2019.

Bicycle Improvements

- Develop the bicycle and pedestrian system through implementation of other improvements including street striping and signage: *Signs installed with sharrows in 2017.*
- Plan for and improve the arterial, collector and primary residential streets with striping and signage as needed so that they provide a secondary cycling and walking system and a link to the primary system: *Sharrows in 2017*.
- All On-Street bicycle routes signage improvements: Installed in sharrows project in 2017
- Robert McClory Path On-street connection from Lincoln Avenue to Vine Avenue/Highland Park High School: Bridge abutments over Mulberry Place repaired in 2017
- Central Avenue @ Second St, First St, St Johns, Sheridan Road intersection marking improvements: Completed 2016
- Elm Place and First Street intersection marking improvements: Signs installed throughout Elm Place & pavement markings are maintained as required.

Other Infrastructure Improvements

In 2018, the City created new angled parking on First Street north of Central Avenue. The design intent was to add additional on-street parking; however, an additional benefit of the change is traffic calming. The angled parking forces drivers to slow and veer slightly around the parked vehicles, and functions as a chicane. Chicanes are an intentional serpentine curve in a road used to slow speed. A chicane is one example of a traffic calming measure, which uses physical design to slow speed and make roadways safer for pedestrians, cyclists, and motorists alike.

Planned Improvements

Capital Improvement Program

The majority of infrastructure improvements were implemented under the City's Capital Improvement Program. The Department of Public Works oversees an annual 10-Year Capital Improvement Program (CIP). The plan prioritizes and budgets projects ranging from street rehabilitation to facility upgrades. Each year, as part of the 10-Year CIP budget process, the Department reviews upcoming needs in infrastructure improvements and prioritizes projects based on asset rating, master plans, grant funding, public input, City funding and Council approval. The 10-Year CIP incorporates short-term and long-term projects, including implementing water conservation and efficiency initiatives, facility upgrades, Emerald Ash Borer infested tree management plan including replacement of trees, green fleet initiatives, implementation of WaterSmart program whereby residents can view water usage in real time, improving sidewalk snow removal operations and implementation of the Bike-Walk HP 2030 plan for pedestrian safety and connectivity. The FY2020-2029 CIP includes a number of bike/walk projects:

• Clavey Road Reconstruction, including an 8-foot trail on the south side of the road

- Sidewalk installation/reconstruction (new sidewalk construction is subject to adjacent resident approval, see Section 4)
 - o Arbor Ave (Berkeley to Midland)
 - o Brook Road (Western to Hill)
 - Cloverdale Avenue (Berkeley to Cloverdale Park)
 - o Crofton Avenue (Bob-O-Link to Saxony)
 - o First Street (Green Bay to Elm)
 - o Krenn Avenue (Hyacinth to Old Elm)
 - o Lake Cook Road (Ridge to western city limits)
 - o Old Skokie Valley Road
 - o Old Trail (Western to Greenwood)
 - Park Avenue West (Cavell to Skokie Valley Bike Path
 - o Ridge Road (Half Day Road to Mill Trail)
 - o Ridge Road (Berkeley to Garland)
 - Sheridan Road (Roger Williams to Cedar/ Dean)
 - o Taylor Avenue
- Downtown Crosswalk Improvements
- Miscellaneous Pedestrian Enhancements (signals, striping, bumpouts, etc.)
- St. Johns Train Station Bike Path Relocation

Development Projects

Bike and pedestrian improvements were included as part of approval for three developments in the last several years. Projects include Laurel Courts II, 515 Roger Williams Avenue, and Capital Senior Housing.

- Bike lanes are proposed on the Laurel Avenue right-of-way as part of the Laurel Courts II development at 807-833 Laurel Avenue, (Ord #32-14). According to the ordinance, the applicant must:
 - Develop a design for dedicated bicycle lanes, or shared lane markings if dedicated lanes are infeasible, for both sides of Laurel Avenue between Hickory Street and Green Bay Road; and
 - Make a payment to the City of the costs of installation of such lanes or markings.

Planned Improvements

Capital Improvement Program FY 2020-2029 & Development Projects







Bike and Walk to School Day at Edgewood Middle School, October 2017

- The development for the proposed mixed-used development at 515 Roger Williams Avenue includes a provision for a Bicycle Parking Structure (Ord #34-15). The approved ordinance states, "the developer must cause to be designed and installed, at no cost to the City, a covered bicycle parking structure in the vicinity of the Ravinia Metra Station"
- The Capital Senior Housing project at 968-998 Central Avenue requires the developer to construct a sidewalk on the north side of Deerfield Road and an improved crossing across at Central Avenue and Sunset Road (Ord #45-2018).

Events

Events provide fun and safe opportunities for residents to enjoy riding a bike in the City and learn about bike safety. Since the adoption of Bike-Walk 2030, the City has hosted numerous bike-walk events to encourage residents to use non-motorized forms of transportation. Each year as part of Fourth of July festivities, the City hosts a Children's Bike Parade. In 2018, as part of the Park District of Highland Park Fourth Fest event, the City hosted a Bike Fair. The City of Highland Park Police Department coordinated the event, offering bicycle and helmet safety checks, demos, bike rodeo, and raffles. Working Bikes, a local non-profit, accepted donations of new and used bicycles. This Bike Fair was one of several that were held on an annual basis. In 2015, the Bike Fair included a Bicycle Film Fest at the Highland Park Library.

In October 2017, North Shore School District participated in Walk and Bike to School Day. The Bike Walk Advisory Group asked the school district to participate as part of its education campaign. The event was well-received, with students, parents, and teachers biking and walking to school.

The annual Art Fair and the Taste of Highland Park close Central Avenue between Green Bay Road and First Street, turning the street into a pedestrian mall. These events also help to promote walking in the community.

3. Non-Motorized Transportation Status

The City of Highland Park includes diverse land uses, a robust park system, and regional attractions, many of which are accessible by the City's existing pedestrian and bicycle infrastructure. This chapter provides an overview of the current state of Highland Park's non-motorized transportation system, accessibility, and data.

Land Use Overview

Highland Park is a suburban community defined by diverse neighborhood characteristics. Anchored by an urban downtown adjacent to a Metra commuter rail station, the City includes dense, multi-family housing near downtown and the Ravinia Business District, while the majority of the City is comprised of single-family residential neighborhoods.

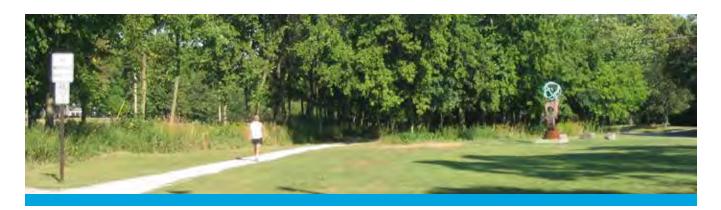
Parks & Schools

Residents and visitors of Highland Park benefit from a robust park system. The Park District of Highland Park operates over 700 acres of land in 45 park areas and offers approximately 2,800 recreation and seasonal programs." These parks include 4 lakefront park properties open to Highland Park residents and visitors. Park District parks are complemented by Openlands, which owns and operates the Openlands Lakeshore Preserve that comprises nearly 77 acres of natural area at Fort Sheridan and includes nearly 3 linear miles of trails.

Highland Park is served by North Shore School District 112, Township High School District 113, and several private school organizations.

Attractions & Destinations

In addition to the many parks in the City, residents and visitors enjoy a variety of cultural attractions. These include commercial areas such as Downtown and the Ravinia Business District, as well as the City's many businesses located along the Skokie Valley corridor. Ravinia Festival draws more than half a million visitors every season to its many concerts and shows. In addition, the City is home to a wealth of historic structures, including more than 150 listed on the National Register of Historic Places and over 130 designated as local landmarks.



Current Land Use



Attractions

Fort Sheridan 1 2 Ravinia Festival

Schools

- Braeside School 1
- Edgewood School 2
- 3 Elm Place School
- 4 Highland Park High School **2** Northwood School
- 5 Indian Trail School
- 6 Lincoln School (vacant)
- North Suburban Beth El
- 8 North Suburban Special
- Education District & School (Sherwood School
- **()** Oak Terrace (Highwood)
- Ravinia School
- Red Oak School (B) St. James (Highwood) (Wayne Thomas School C Deerfield High School (Deerfield)

Transit

Highland Park includes a public transit system that provides access to neighboring municipalities and local destinations. Pace has three fixed bus routes that serve Highland Park: Route 471, Route 472 and Route 213. Route 471 includes stops in Northbrook (Northbrook Court) and Deerfield; Route 472 serves Highland Park and Highwood; and Route 213 serves North Shore communities from Highland Park to Chicago. In addition, the Senior Connector provides free bus transportation on a fixed route to seniors and people with disabilities.

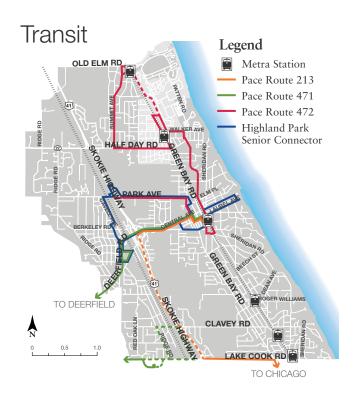
Metra operates the Union Pacific North Line, which generally parallels Green Bay Road. Highland Park includes four Metra stops: Fort Sheridan, Highland Park, Ravinia, and Breaside. While not located in Highland Park, the Highwood station is used by residents and commuters alike. In addition, Metra runs trains that make special stops at Ravinia Festival during festival season.

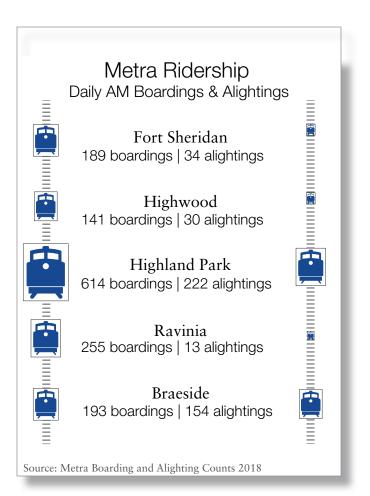
Active Transportation Use

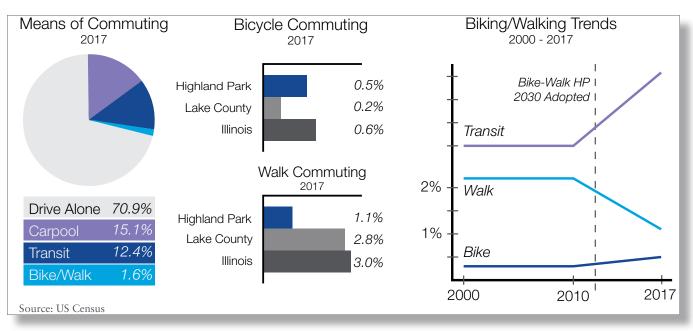
How Residents Get Around

According the U.S. Census, the majority of Highland Park residents commuted by car in 2017, with 70.9% of workers driving alone and 15.1% of workers carpooling. Public transit was the next most popular option, with 12.4% of residents taking Metra or Pace to work. Finally, 1.1% of all daily commutes were made by walking, and 0.5% were made by bike.

These numbers differ in several key aspects from 2012 when the City approved Bike-Walk HP 2030. First, there was a decline in the number of people walking to work; in 2012, 1.8% of workers walked to work. Secondly, there was an increase in the number of people taking public transit to work – in 2012, approximately 10% of workers commuted by public transit. Finally, the total number of Highland Park residents walking, biking, or taking public transit to work rose from 12.5% to 14% between 2012 and 2017. This increase is a significant improvement; however, it is concerning that walking declined one-third over the same period of time.





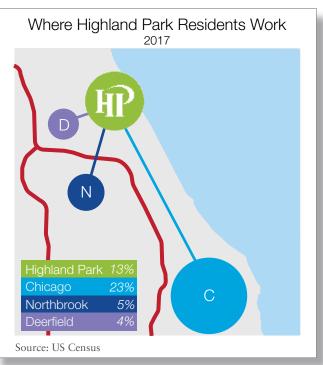


The rate of walking in Highland Park compares poorly to both Lake County and Illinois overall. In 2017, 2.8% of workers in Lake County and 3% across Illinois walked to work. Highland Park has more favorable bicycling numbers; it is significantly above the 0.2% average for Lake County and approximate to the 0.6% average for Illinois.

The data presented is collected by the U.S. Census Bureau detailing the commuting habits of workers. It does not include recreational use and errands. It may be worthwhile to note that Highland Park's workforce is declining in both real and relative terms: in 2000, the labor force participation rate was 52%; in 2017, the estimated rate was 49%. The working-age population (between 18 and 65 years old) has declined from 58% of the total in 2000 to an estimated 52% of the total in 2017. Some of the decline in commuting numbers may be attributed to the declining overall workforce. However, even as workforce participation rates and the working-age population shrink, biking and walking may be even more important for recreation and errands.

Home and Work Commutes

Of the approximately 11,000 Highland Park residents who work, Chicago is the most popular destination at 22.7% of commutes. Highland Park is the second most common workplace with 13% of



commutes internal to the city. Neighboring Northbrook and Deerfield are the destinations for 5.4% and 3.8% of commutes, respectively. Less than 2% of workers commute out of state. These commuting patterns suggest there is room for improving the number of residents that bike, walk, or take transit to work.

New Laws

The State of Illinois passed several bills in the past six years that seek to better regulate roadways and improve safety for non-motorized transportation.

Public Act 98-0485: Bicycles May Pass Cars on the Right (2013)

• This act exempts bicycles from certain restrictions on overtaking from the right. Prior to the amendment, bicycles could not pass on the right unless the unobstructed pavement to the right was a width of 8 feet or more. The act exempts bicycles from this requirement, and prioritizes that safe conditions are the only requirement for a bicyclist to pass on the right of a vehicle.

Illinois SB0396: Electric-assist Bicycles (2017)

- Defined and created a regulatory structure for e-bikes.
- Senate Bill 0396 defines a low-speed electric bicycle and divides them in three different classes depending on how the electric assist is utilized and the max speed. The bill further states that laws and regulations that adhere to bicycles shall also apply to low-speed electric bicycles. Furthermore, the bill provides that low-speed electric bicycles may be operated on any bicycle path unless the municipality, county, or local authority prohibits their use on that path. Became a public act on August 18, 2017.

Illinois HB4799: Biking and Walking Education in Schools (2018)

- Requires school boards to educate K-8 students about biking and walking safety.
- House Bill 4799 provides that every public school with grades between kindergarten and grade 8 shall instruct, study, and discuss "effective methods" to prevent and avoid traffic injuries while walking and bicycling. If school boards provide safety education as already required in the State of Illinois, then the instruction should also include pedestrian and bicycling safety. School boards are to update their policies and instruction every 2 years. Became a public act on August 24, 2018.

Illinois HB5143: Bicycle Safety and the Dutch Reach (2018)

- Illinois Vehicle Code recommends the Dutch Reach method, and bike safety will feature in the Rules of the Road manual and driver's license exam.
- House Bill 5143 provides that information advising drivers use the Dutch Reach method when opening a vehicle door. The Dutch Reach method is a strategy used while parallel parking that reduces the risk of injury to a bicyclist or striking an oncoming vehicle. The information will be included in the Illinois Rules of the Road publication, and included as a test question in the driver's license examination.

Illinois HB2895: Cycling is official State exercise (2018)

• Cycling is designated the official State exercise of the State of Illinois.

Illinois HB1784: Bicycle Rear Light in addition to or instead of a Reflector and Allows Passing in No-Passing Zones (2017)

- This bill allows a rear red light instead of or in addition to a rear red reflector, and allows motorists to pass bicyclists in a no-passing zone under certain conditions to improve cyclist safety.
- Due to improvements in bicycle light technology, red lights have greater visibility than reflectors. House Bill 1784 has changed to allow cyclists to solely use rear red lights instead of rear red reflectors.
- Motorists are now able to pass cyclists in otherwise no-passing zones. This change should increase traffic flow, place less pressure on cyclists, and allow for safer passing around cyclists. In addition, cyclists may now utilize the shoulder on roads, which is typically prohibited for most vehicles.

Bike/Pedestrian Counts

In May and September of 2013 and 2014, the City of Highland Park, in conjunction with the Bike Walk Advisory Group, performed bike and pedestrian counts to better understand the utilization of local roads and trails by alternative transportation modes. No counts were performed between 2015-2017, but the efforts were restarted in the fall of 2018.

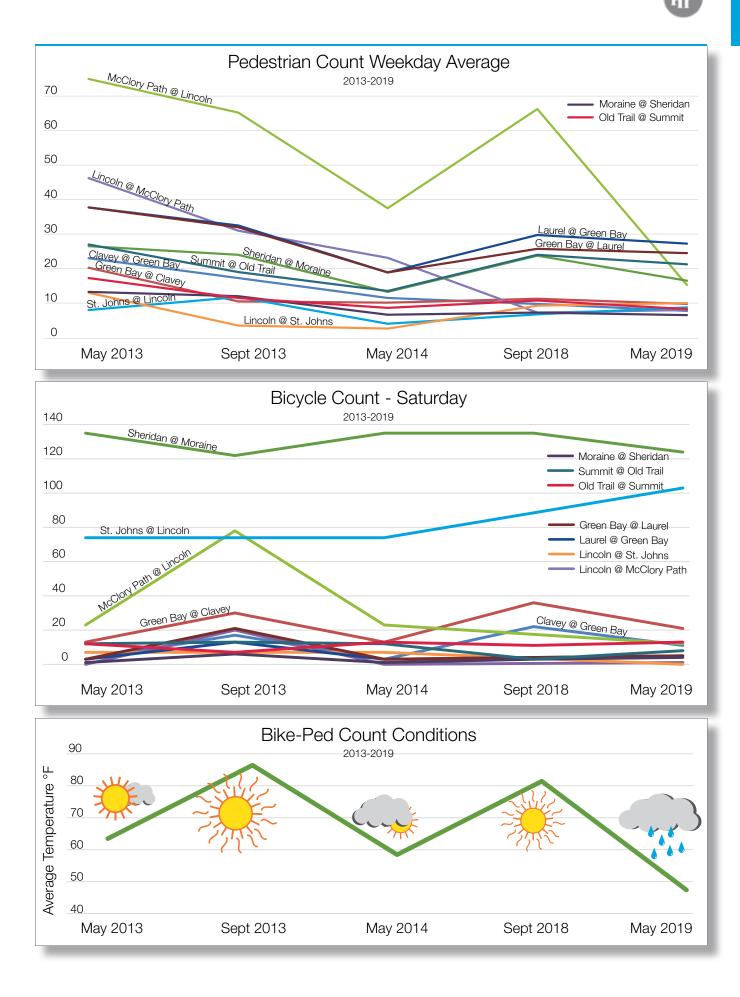
The Bike/Pedestrian Count generally follows guidelines set by the National Bicycle and Pedestrian Documentation Project, which recommends performing two counts per year. It recommends counting in May and mid-September as they represent "peak period[s] for walking and bicycling, both work- and school-related."

The average daily peak hour traffic for both pedestrians and bicyclists has fallen from September 2013 to September 2018, as the table below demonstrates. Pedestrian traffic has fallen by 14% and bicyclist traffic has fallen by 22% in that time period. Out of the 12 intersections observed, 9 saw reductions in pedestrian traffic and 9 saw reductions in bicyclist traffic. Several saw sharp declines, such as Lincoln at McClory which saw a 77% in pedestrian traffic (from 62 to 14.5 on average) and 59% in bicyclist traffic (from 22 to 9 on average). Because the declines are numerous, sharp, and averaged across four sampling periods during peak hours, it can be assumed that the general trend in Highland Park is a decrease in biking and walking during commuting hours. This correlates with declines reported in the American Community Surveys and noted in this section.

During the course of preparing this Existing Conditions Report, the City conducted the Spring 2019 bike-ped count. The data has been entered is available to view in the Appendix. Preliminary analysis reveals that the City's recreational bicycle population is growing and inclement weather has a significant impact on the number of bicyclists and pedestrians.

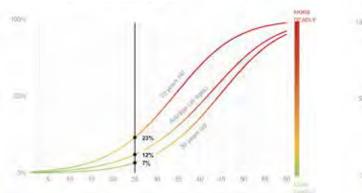
	Pedestrian Daily Average			Bicyclist Daily Average		
Intersection	Sept. 2013	Sept. 2018	Change	Sept. 2013	Sept. 2018	Change
Clavey @ Green Bay	17.25	9.75	-43%	7	5.75	-18%
Green Bay @ Clavey	10.5	11.25	7%	11.5	11.75	2%
McClory Path @ Lincoln	65.25	66.25	2%	19.5	17	-13%
Lincoln @ McClory Path	31	7.25	-77%	11	6.25	-43%
St Johns @ Lincoln	11.75	6.75	-43%	17	23.5	38%
Lincoln @ St. Johns	3.5	9.25	164%	1.25	6.25	400%
Laurel @ Green Bay	32.5	29.75	-8%	5	5.25	5%
Green Bay @ Laurel	32	25.75	-20%	5.5	4.75	-14%
Sheridan @ Moraine	24	23.75	-1%	37.75	43.75	16%
Moraine @ Sheridan	12	7.25	-40%	2.5	0.75	-70%
Summit @ Old Trail	19	24	26%	10	5.25	-48%
Old Trail @ Summit	11.5	10.75	-7%	13	3.5	-73%
Total	270.25	231.75	-14%	141	133.75	-5%

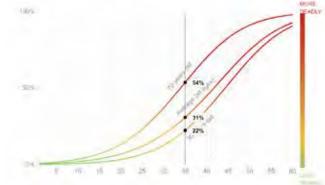
Average Daily Count of Peak Pedestrian and Bicyclist Traffic Highland Park, September 2013 and September 2018





The Chance of Being Killed by a Car Going 35 mph





Source: ProPublica, https://www.propublica.org/article/unsafe-at-many-speeds

Safety

Safety is a key factor that motivates whether people choose to walk or bike to a destination. In fact, according to a 2018 national survey by PeopleFor-Bikes, 50% of adults would like to ride bikes more, but are concerned about safety around motor vehicles. These perceptions are not unfounded. Between 2012-2018, 122 automobile crashes involving a cyclist or pedestrian occurred within the City, based on reports from the Highland Park Police Department. Of those crashes, 71 resulted in physical injuries.

Crash Data Analysis

City staff identified intersections, roadways, and areas that are hazardous to pedestrian and cyclist safety. Utilizing geographic information systems (GIS), staff performed hotspot and density analysis to identify areas with spatially concentrated or above average crashes involving pedestrians or cyclists. The highest concentration of crashes is in downtown Highland Park, which matches with its high level of pedestrian activity. The majority of crashes in downtown involve more pedestrians than cyclists. The second significant concentration of crashes are along the on- and off-ramps of Route 41 on Lake Cook Road. Notably, Highland Park only has half of the crash data along Lake Cook Road (and County Line Road) because the jurisdiction is shared with Glencoe and Northbrook on the eastbound lanes. The crashes involve a similar number of pedestrians and cyclists. Improvements to the intersection of Lake Cook Road and Skokie Valley Road will require coordination with both IDOT and the Village of Northbrook.

Pedestrian Safety

The majority of crashes involving pedestrians occur downtown, especially along 1st Street and 2nd Street between Elm Place and Laurel Ave. The intersections along Central Avenue have pedestrian bump-outs and highly visible crosswalks while those along Elm Place and Laurel Avenue only have crosswalks. Notably, the Laurel Avenue viaduct may contribute to poor visibility and the high number of crashes at the intersection of Laurel Avenue and 1st Street.

Crashes occurring outside of downtown are more widespread. One significant area is the Briergate District around the intersection of Deerfield and Old Deerfield roads. Deerfield Road is four-laneswide and receives a high volume of traffic (18,200 ADT, IDOT 2015) and both its width and volume may contribute to decreased pedestrian safety.

Bicycle Safety

There are two significant hot spots for crashes involving cyclists, downtown Highland Park and the on- and off-ramps of Route 41 on Lake Cook Road. Significantly, several roads including Green Bay Road and Central Avenue have an above average number of crashes involving cyclists. Because many cyclists utilize the roadway instead of side-

Vehicle Speed Limits + Crashes Involving Bikes & Peds



Highland Park Police Department





walks, crashes will occur along a route instead of just intersections.

Roadway Speed & Traffic Volume

Many of the areas with a higher frequency of crashes are on roadways with high traffic volumes. For example, according to a 2014 IDOT traffic count, Lake Cook Road has approximately 33,000 cars traveling on it per day past Skokie Valley Road.

In addition to roadway volumes, which may increase opportunities for car-pedestrian/cyclist collisions, a major factor in cyclist and pedestrian safety is the speed at which a vehicle travels. According to a 2011 report by the AAA Foundation for Traffic Safety, the average risk of severe injury for a pedestrian struck by a vehicle going 25 MPH is 12%. When age is factored into the equation, the risk rises as age increases. A 70-year-old pedestrian has 23% change of severe injury if struck by a vehicle traveling 25 MPH.

As vehicle speeds increase, so do the risk for severe injury to pedestrians and cyclists if struck. In Highland Park, the default roadway speed is 25 MPH, but some roads that currently have bicycle infrastructure (sharrows) have speeds of up to 35 MPH. These roads include Lake Cook Road, Clavey Road, Deerfield Road, Half Day Road, and sections of Green Bay Road. At a speed of 35 MPH, the average risk of severe injury for a pedestrian struck by a vehicle jumps to 31%. While the majority of crashes involving pedestrians and cyclists occur within or near the downtown area, roadways in Highland Park with higher speed limits are proving to be hazardous to pedestrians and cyclists alike. For example, Lake Cook Road has a frequency of crashes significantly higher than Highland Park overall. Lake Cook Road is a 35 MPH road, vet is a designated Bike Route. The National Association of City Transportation Officials (NACTO) recommends that on-street "Bicycle Boulevards" without any bicycle lanes or separation should be no more than 25 MPH and have fewer than 1,500 motor vehicles daily (NACTO, "Designing for All Ages & Abilities", 2017). It is not a best practice to have designated bicycle routes without any separation on roads faster than 25 MPH because it makes cycling both uncomfortable and more dangerous.

It is practicable and possible to reduce vehicular speeds in Highland Park. The speed limit on Park Avenue West was reduced in front of the High School field from 35 MPH to 30 MPH to make the road safer for pedestrians and cyclists.

Zoning & Code Analysis

The City's Municipal Code, including the Zoning Code, provide policies that can shape the walkabili-

23

ty and bikeability of the community. This section of the Existing Conditions Report provides a review and analysis of the City's code related to bicycles and pedestrians.

Bicycle Regulations

Bicycles are regulated by Chapter 75 of the Highland Park Code of 1968, as Amended. Bike-Walk HP 2030 includes a recommendation to amend Chapter 75; however, it does not specify the recommended amendments. Since the adoption of BikeWalk HP 2030 in 2012, the State of Illinois passed several new laws related to biking (See Page 17), which may require City's regulations in Chapter 75 to be updated in order to align with state laws.

As an incentive to decrease vehicle parking and encourage additional bicycle parking, the City of Highland Park offers an automobile parking reduction at a ratio of ten (10) long-term bicycle parking spots for one (1) automobile spot (City of Highland Park Zoning Code Section 150.805(C)(4)). However, this reduction must meet the following conditions: approval from the City Council, have a park-

Pedestrian and Bicycle Zoning Policies in Select Chicago Suburbs and Other Cities						
Municipality	Access in Parking Lots	Bicycle Parking (Multi-Family)	Bicycle Parking (Commercial)	Bicycle Parking Design	Code	
Evanston, IL		Per requirement by the Design & Project Review Committee	Per requirement by the Design & Project Review Committee.		Article 16-6-16-2- 11, Evanston Code of Ordinances	
Oak Park, IL	All parking must have internal paths (Article 10.3.B.2)	1 bicycle : 4 dwell- ing units	1 bicycle : 2,000 sf GFA.	50 ft. rule; long- term rule.	Article 10, Oak Park Zoning Ordi- nance	
Wilmette, IL		3 bicycle : 20 dwelling units	1 bicycle : 10 auto- mobile spaces	Size rule; long-term rule; U-lock rule; paved rule.	Article 14.12 of Wilmette Zoning Ordinance	
Northbrook, IL		1 bicycle : 20 auto- mobile spaces	1 bicycle : 4 auto- mobile spaces	Visible, well-lit, and accessible	Article 9-104 I, Northbrook Zon- ing Code	
Chicago, IL	Internal paths in parking lots with 150 or more spaces (Article 17.10.1006)	1 bicycle : 2 auto- mobile spaces (min. 8 units)	1 bicycle : 5 auto- mobile spaces	Size rule; paved rule	Chapter 17-10- 0300, Chicago Zoning Ordinance	
Minneapolis, MN		1 bicycle : 4 bed- rooms	1 bicycle : 20 au- tomobile spaces (min. 4)	50 ft. rule; long- term rule	Chapter 541.180, Minneapolis Zon- ing Ordinance	
Portland, OR	Internal paths in parking lots with 125,000 sf (Article 33.266.130.F.5)	1.1 bicycle : 1 unit	1 bicycle : 5,000 sf net building area	50 ft. rule; U-lock rule; long-term rule; size rule.	Chapter 33.266, Portland Zoning Code	

Table Notes:

50 ft. rule: short-term parking must be within 50 ft. of main entrance and visible to street.

U-lock rule: all required bicycle racks must allow both the bike frame and a wheel to be secured by a common U-shaped lock. Paved rule: bicycle parking must be paved and drained, and free of mud, dust, water, snow and ice.

Size rule: specifies that each space must be a minimum size, typically 2 ft. wide by 6 ft. long, with a 5-6 ft. aisle behind the rack to allow exit and entry.

Long-term rule: Long-term parking, where provided, must be covered, and either enclosed, secured, or supervised by a camera or within view of security.

ing demand analysis prepared by a qualified traffic consultant, and have an alternative plan for parking if the reduction does not meet demand (the City Council may revoke the reduction). These stringent requirements may make the bicycle parking reduction a less attractive option for developers and a disincentive to the policy.

The City includes bicycle parking design standards as part of its automobile parking reduction policy (City of Highland Park Zoning Code Section 150.805(C)(4)). These standards requires bike parking protect bicycles from weather, discourage theft, allow for both the frame and wheel to be secured with a standard U-shaped lock, and have a minimum dimension of two feet in width by six feet in length.

The City Code does not include *required* bicycle parking as part of new developments, which does not align with best practices and regional trends. Cities and Chicago-area suburbs with a bicycle parking ordinance generally require design and location standards for required bicycle parking. Bicycle parking is typically required for multi-family residential, commercial, institutional, and educational land uses. Zoning ordinances typically make a distinction between short-term and long-term bicycle parking with different design and location standards applying to each; a certain percentage of total bicycle parking must be allocated to each. The number of bicycle parking spaces required is determined as a ratio to required automobile spaces, gross floor area, net building area, or number of units in a building (see Table of Pedestrian and Bicycle Zoning Policies in Chicago Suburbs and Cities).

Pedestrian-related Regulations

Sidewalks are regulated, in part, by Chapter 93 of the Municipal Code. Specifically, the code requires sidewalks to be installed "on both sides of major arterial streets" (Section 93.040(A)(1)). The code also requires that sidewalks shall be installed on both or at least one side of minor arterial streets based on zoning districts.

In addition to the code requirements, the City of Highland Park Department of Public Works follows Local Streets Sidewalk Installation Policy, which requires property owners consent for new sidewalk on a residential street (See Section 4. Pedestrian Infrastructure for more information).

For example, street work was done on North Avenue between Summit and Priscilla Avenue. A sidewalk currently exists on the north side of North Avenue, but not the full length of the south side. Due to lack of owner consent, no sidewalk was built on the south side as part of the roadway improvement.

Additional code review reveals that the City does not currently mandate internal walkways in new parking lots of any size. Both Chicago and Portland, OR, require internal walkways in large-sized parking lots. Oak Park, IL, requires internal walkways in all parking lots. Internal walkways, usually separated from vehicular parking and traffic by landscaping, promote pedestrian safety and reduce the risk of injury. They are also important links between the sidewalk network and storefronts, which otherwise are difficult to find or dangerous to access in large parking lots. Internal walkways make parking lots safer and more pleasant for pedestrians and drivers alike.

4. Pedestrian Infrastructure

Pedestrian infrastructure includes sidewalk, trails, and crosswalks that allow pedestrians safe access to destinations throughout the community. This section provides a summary of the pedestrian infrastructure improvements implemented since the adoption of Bike-Walk HP 2030.

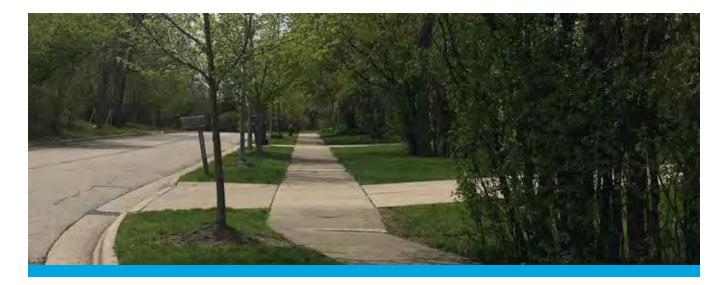
New Trails & Sidewalks

Highland Park has added several trail segments since the adoption of Bike-Walk HP 2030. These include new segments of sidewalk on Green Bay Road between Lake Cook Road and Edgewood Road, extending the Skokie Valley Trail from Old Elm Road to Half Day Road, and adding a shared-use sidepath on Walker Avenue from St. Johns Avenue to Oak Street. The City began work in Spring 2019 on a new sidewalk along Lake Cook Road from Ridge Road to the city limits.

Sidewalk Gaps

According to the U.S. Department of Transportation, "a well-connected transportation network reduces the distances traveled to reach destinations, increases the options for routes of travel, and can facilitate walking and bicycling." Several gaps in the pedestrian sidewalk network remain. These gaps range from half a block to half a mile. The following sidewalk gaps have been identified, but it is not exhaustive:

- Sheridan Road from Roger Williams Avenue to Cedar Avenue.
- Groveland between Oakland Drive and Hedge Run, and from Oakland Drive to Sheridan Road.







New sidewalk construction in Spring 2019 on Ridge Road, between Lake Cook Road and Lawrence Lane fills a critical gap in the sidewalk network.

- Highland Place & Hillside Drive 1 block
- Western Avenue from Euclid Avenue to North Avenue
- Lake Cook Road from Ridge Road to Red Oak Lane
- Crofton Avenue from Saxony to Bob-O-Link
- Hyacinth Place between Krenn Avenue and Western Avenue, Western Avenue to Fort Sheridan
- Old Deerfield Road and Richfield Avenue

These gaps, and specific neighborhoods that lack pedestrian infrastructure, are further highlighted in the Existing Pedestrian Infrastructure Map presented later in this section.

Downtown Beg Buttons

Pedestrian crosswalk buttons, commonly known as "beg buttons," require pedestrians to push a button to activate a crosswalk signal. Often this act requires a pedestrian to wait an additional light cycle for permission to cross a street, giving preferencital treatment to vehicles. While beg buttons are appropriate for heavily trafficked roads with little pedestrian activity, they continue to prioritize car movement over pedestrian movement in pedestrian-oriented areas. In 2018, the City removed the beg button function at four intersections down-town. These intersections include:

- Laurel Avenue and St. Johns Avenue
- Laurel Avenue and First Street
- Laurel Avenue and Green Bay Road
- Green Bay Road and Central Avenue

By eliminating the beg buttons, those who walk in downtown are given as much priority to move through the streets as automobiles. This promotes more efficient pedestrian movement and enhances the pedestrian-oriented nature of downtown.

Local Streets Sidewalk Installation Policy

The Public Works Department continues to identify gaps and install sidewalks as part of roadway improvements and implementation of Bike-Walk HP 2030. When new sidewalks are proposed, the Department follows the Local Streets Sidewalk Installation Policy. This policy, effective since July 2016 (Resolution No. R109-2016), outlines the requirements for the installation of new sidewalks on local, neighborhood streets.

Existing Pedestrian Infrastructure









Specifically, the policy for a new sidewalk must adhere to the following procedure:

- The process is initiated by a resident volunteer and requires the support of 75% of residents on the same side of the street where a sidewalk is proposed for construction.
- Preliminary engineering plans and estimates will be developed. Neighborhood meeting(s) will be held to present the plans and costs.
- A new sidewalk will be considered for inclusion in the City's Capital Improvement Program through the City's annual budget process based on the required 75% resident support.
- Should there be a lack of required support, the petition for the sidewalk will be tabled for a 3 year period.

This policy has been effective in bringing new sidewalks to neighborhoods within the City. Nevertheless, the requirement for 75% of residents on the same side of the street to support a new sidewalk has resulted in street reconstruction projects that are completed without a sidewalk due to a lack of resident support.

Sidewalk Installation Policies in Highland Park and Other Communities

Municipality	Policy		
Highland Park, IL	New sidewalk requires the support of 75% of residents on the same side of the street where a sidewalk is proposed for construction.		
Des Plaines, IL	Sidewalk requests under 100' in length are added it to upcoming nearby projects, and if over 100' in length it is added to a sidewalk request list and constructed as the budget allows.		
Lake Forest, IL	If a resident requests a sidewalk to be installed in their area where no sidewalk exist, they are required to have 51% of the property owners on the block consent.		
Libertyville, IL	Sidewalk requests go before a Streets Committee, and if there is no objection, the installation goes forward.		
In addition to the above communities, staff contacted the Village of Deerfield, Glencoe, Elmhurst, Lombard, Downers Grove, and Northbrook.			

Sidewalk Policy Comparison

Staff reached out to several communities in the Chicago area to better gauge Highland Park's sidewalk installation policy. Of the municipalities that responded, staff found that the City's policy creates a higher threshold for sidewalk installation.

Streets Lights

The presence of street lights increases pedestrian safety, and follows a similar installation policy as sidewalks. The Public Works Department generally installs streetlights as part of roadway improvements, as well as at the request of residents. To this effect, the Department follows the Local Streets Sidewalk Installation Policy. This policy, effective since June 2007 (Directive No. 03-0507-18) states that requests for new streetlights are to be referred to the Department of Public Works, and that the installation of new streetlights requires a survey of the neighbors to determine need or City Council approval. The City Engineer further confirmed that the Department of Public Works seeks 75% approval from residents, similar to the Sidewalk Installation Policy. New construction is required to build streetlights as per Section 93.062 of the Code of Ordinances.

Sidewalk Snow Removal

Clear sidewalks during and after snow events is a key element that contributes to year-round walkability of Highland Park. The City maintains approximately 120 miles of public sidewalk. For every snow event, City plows high pedestrian select sidewalk areas such as in and around train stations and schools, the Central and Ravinia Business Districts, parking garage entrances, and public facilities.

Upon accumulation of 4" or more of snow, City's authorized contractor(s) plow all public sidewalks, approximately 110 miles. The sidewalk plowing typically starts 12 to 24 hours after the start of the snowfall and could take up to 24 to 48 hours or more to complete the entire plowing operation of public sidewalks.

For snow totals less than 4", public sidewalks not plowed by City are the responsibility of the abutting property or business owners to clean the public sidewalks.



Strava Running Route Heat Map, 2019 White indicates "hotter" or more frequent use.

Frequently-Used Routes

Strava is an application that "turns every iPhone and Android into a sophisticated running and cycling computer" (strava.com/features, accessed April 29, 2019). It uses GPS to gather activity data, which provides user performance data and insight into frequently used walking, running, and cycling routes. The heat map below shows the "heat" made by aggregated public activities over the last two years. The "hottest" routes include the Robert Mc-Clory Trail and the Skokie Valley Trail. In contrast to the cycling Strava map, local neighborhoods and parks see increased activity.

Comparison of the Strava map with existing pedestrian infrastructure indicate people are running or walking on streets without sidewalks. This activity supports the need for additional sidewalk infrastructure to provide safer routes for pedestrians.



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5. Bike Infrastructure

Highland Park has an extensive network of shared-use paths and shared-use lanes that connect the city. Since the adoption of Bike-Walk HP 2030, the City has made numerous improvement to its bike network.

Infrastructure Improvements

The most significant bicycle infrastructure project was the creation and updating of 18 miles of shared-use lane markings, or sharrows, in Highland Park in 2017. Additional improvements include a new bike repair station near the Ravinia Metra station and several expansions to shared-use paths. These recent improvements serve to both expand and connect Highland Park's bicycle network, providing for leisure, errands, and commuting needs.

Shared-Use Lane Markings

A Shared-Use Lane Marking, also known as a "sharrow," is a street marking placed in the travel lane to indicate where people should cycle and have equal priority with motor vehicles. Importantly, sharrows alert motorists that a route is frequented by cyclists, and encourages extra vigilance and the safe passing of cyclists by motorists. Sharrows often denote bicycle boulevards, which are low-speed continuous cycling routes utilizing wayfinding signage and traffic calming to make the street safe for cyclists.



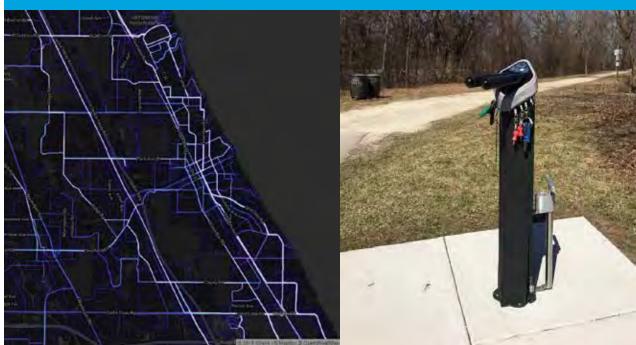
According to the 2017 National Association of City Transportation Officials (NACTO) guide "Designing for All Ages & Abilities: Contextual Guidance for High-Comfort Bicycle Facilities," bike boulevards and sharrows are recommended for roadways with a speed limit of 25 mph and less than 1,500 vehicles per day. Beyond 25 mph or on higher volume roadways, shared lanes are less comfortable and more dangerous for cyclists of all ages and abilities. Most sharrows in Highland Park are residential streets with slow-moving traffic; however, sharrows are present on Half Day Road, Clavey Road, and Sheridan Road, where the speed limits are between 30 and 35 MPH.

The City of Highland Park installed 18 miles of

shared-lane markings in 2017. This improvement is a major investment into Highland Park's bicycle infrastructure and bike-friendly future. The project cost \$429,000, and was funded in-part by the Illinois Department of Transportation (IDOT). IDOT's share was 80% of the project cost, while the local share was the remaining 20%.

Existing Bicycle Infrastructure





Strava Bicycle Route Heat Map, 2019 White indicates "hotter" or more frequent use.

Bike repair station on the Robert McClory Trail near the Ravinia Business District

Bike Routes

Highland Park has 9.5 miles of bicycle and shareduse trails. Notable routes include the Robert Mc-Clory Bike Path and the Skokie Valley Bike Path. The Fort Sheridan Forest Preserve boasts improved trails for cyclists' recreational use.

The bicycle and shared-use paths in Highland Park connect the city north-south. These routes are long-distance routes that connect Highland Park to other destinations in both Lake and Cook Counties. In order to travel between paths, cyclists must enter the on-street network of shared-use lane markings. This may involve crossing busy and automobile-dominated roads such as Skokie Highway, Skokie Valley Road, and Green Bay Road.

Similar to the Strava running/walking routes, the heat map above shows the "heat" made by aggregated bicycling activities over the last two years. The City's trails are heavily used, as are other north/south streets such as Sheridan Road and St. Johns Avenue. They City's east/west roads with the highest routes include Old Elm Road, Park Avenue West, Clavey Road, and Lake Cook Route. This data provides support for improved bicycle facilities on these routes.

Bike Repair Station

In spring 2018, the City installed a bike repair station near the Ravinia Metra station. It is located on the Robert McClory Bike Path, and features an air pump and tools required to make basic repairs to a bicycle. The project cost \$2,650 and was fully funded by a 2017 ComEd Green Region Grant. The bike repair station was part of a larger project to remove invasive buckthorn and install a pollinator garden along the Robert McClory Trail, and is intended to draw people to the improved landscape. The facility is a useful addition to Highland Park's bicycle infrastructure, providing cyclists an opportunity to make a repair mid-ride if needed.

Bike Racks

Bike racks are important components of a bike network that allow cyclists to securely store their bicycles. This freedom of movement has a positive impact on retail, as racks enable cyclists to travel to stores or make unplanned stops along their routes. Common bike rack types include U-racks, wave racks, bollard or post-and-ring racks, and grid racks. There are also decorative types, which may reflect one of the above styles or be more freestyle. Of these, the U-racks are the most desirable, followed by post-and-ring and wave racks. They allow for a bicycle's frame as well as front wheel to lock to the rack. The grid type is the least desirable. They allow for only the front wheel to be normally locked with a standard U-shaped lock; however, they are cheap and easy to install, so many stores utilize them. Many cities include shape standards for bike racks, restricting to U-racks, wave racks, or post-and-ring or a variant; the important feature is security and the ability to lock the bike frame as well as front wheel to the rack (See Bicycle Regulations in Section 4).

There are 78 public and private bike racks located across the city. The Park District of Highland Park has an additional 25 at its parks and facilities. The largest concentration of bike racks are in the downtown area, especially along Central Avenue and 1st and 2nd Streets; however, they are not well-distrib-





Typical Wave Rack



Unique bike rack at the Park District West Ridge Center



Grid Bike Rack at the Highland Park Metra Station



Downtown Bike Rack



U-Rack Proposed in the Downtown Streetscape Conceptual Design Plan



Trail Map as installed in 2006

Trail Map in 2019

uted throughout downtown. Other business districts, including the Briergate District, Ravinia Business District, and Skokie Valley Road all have some bike racks available. Bike racks are sparse throughout the residential neighborhoods, and many main roads have few or none available. Highland Park has 35 of the wave type, and 25 of the post-andring type. Almost all of the post-and-ring types are located downtown, chosen as part of a streetscape project in the 1980s.

Signs

Signs indicating bike routes and stating drivers must give cyclists 3 feet of space were installed as part of the 2017 sharrows project. In addition, the City installed several signs throughout the Highlands neighborhood to indicate designated Family-Friendly Bike Routes. In 2006, the City installed 6 pedestrian/bike trial sign maps. These sign posts are located at:

- Green Bay/McClory Bike Trail
 - o North of the Braeside Train Station parking lot
 - South of the intersection of the trail and Lincoln Avenue West
 - South of the main entrance to the town of Fort Sheridan
- Skokie Valley Trail
 - At the beginning of the trail behind the Shell Station at Lake Cook and Skokie Valley Road
 - South of the intersection of the trail and Old Deerfield Road
 - South of the intersection of the trail and Old Elm Road

The signs are valuable wayfinding and placemaking tools, but have not been maintained or updated over the years.





Bike Share

What is Bike Share?

A bike share program makes bicycles available for shared use on a short term basis, usually for a hourly or membership fee. Bike share programs may be either dock or dockless systems. Dock systems require users to place their bikes in company-owned "smart" racks that lock and unlock the bicycles; because the number of racks are generally limited and spread apart, users may have to walk to their end destination. Dockless systems, however, allow the users to place the bikes anywhere when finished and allow users to stop at their destination. Dockless systems may become chaotic, with users leaving bicycles in lawns, in streets, on sidewalks and shareduse paths, or spread the available bicycles out over a much larger area. To solve this problem, some dockless systems have utilized geofencing, where users can only end their trips in specific, predetermined locations. Smartphone mapping apps are critical for dockless systems to track the location of bicycles, and are commonly developed for dock systems as well.

Divvy bike share station in Chicago. Source: Tony Weber, Flickr

Local Examples

Bike share systems in the Chicago metropolitan area include Divvy in Chicago, Zagster in Aurora, and a Divvy expansion in Oak Park and Evanston. While Chicago's Divvy program is considered a success, the expansion in Oak Park failed after a year of low ridership and high public cost. Aurora's program continues, but it is very limited in geographic scope and ridership, while Evanston's program is ongoing.

Divvy launched in 2013 with 750 bikes at 75 stations in a limited central area of Chicago. An expansion has been announced in 2015. Fees are \$99 for an annual membership, \$15 for a daily pass, and \$3 for a single 30-minute trip. Between June 2017 and May 2018, Divvy hosted 3.5 million rides – a 169% increase from its initial year (Chicago Sun-Times, 30 June 2018). It's growing, high ridership and planned expansion make it a success.

In 2016 the City of Aurora entered into a contract with Zagster, a bike sharing company, to provide a bike sharing program. Aurora, a city of approximately 200,000 people, has averaged 26 trips per week. However, Aurora also only has 3 stations in the downtown area in use. Fees are \$60 for an annual membership, \$20 for a monthly membership, and \$5 for a day pass. Divvy launched in Oak Park in July 2016. The bike share program was an extension of Chicago's system into neighboring suburb, and utilized the same payment and fee structure. There were 13 stations and 130 bikes located at popular destinations around Oak Park including CTA stations and downtown. In January 2018, the Oak Park trustees canceled their contract with Divvy and its parent company, Motivate. Trustees were concerned about the high annual cost and low ridership. The Village of Oak Park paid Motivate \$291,216 annually to operate the bike share, a taxpayer subsidy that amounted to \$17.48 for every ride. Only 34 people used Divvy daily in a village of approximately 52,000 people.

Bike Share in Highland Park

In spring 2017, City staff explored the possibility of implementing a bike share program within the City of Highland Park. The City reached out to Zagster, a bike sharing company in which users 18 years or older with an annual or monthly membership can check out a bike for short-term use. Zagster contracts with municipalities to set up a bike share program in return for an annual fee. In order to financially support bike share programs, municipalities typically find sponsorship funding. Staff reached out to potential sponsors and partners, but were not able to get sufficient interest to support a city-wide bike share system. Due to potential funding issues, it was determined that a bike share program was not feasible in the City of Highland Park at that time.

Adjacent Municipalities

Bicycle and pedestrian connectivity extends beyond municipal boundaries. Cities and villages adjacent to Highland Park contribute to City's regional mobility.

Northbrook

The Village of Northbrook, which borders Highland Park to the south, recently adopted a Master Bicycle and Pedestrian Plan (2018). The Plan establishes a strategy to support walking and bicycling as viable, accessible, and inclusive modes of transportation. A high-priority project includes a sidepath



Skokie Valley Path Extension Project Overview Map. Source: Village of Northbrook





Family-Friendly Bikeway shown at Brook Road, connecting Hill Street to Euclid Court

on Lake Cook Road from the North Branch Trail (Trumbell Woods Court) to Pfingsten Road. The project is estimated to cost \$ 3,837,000.

In addition, the Village is working with Lake and Cook Counties to develop Phase I Engineering design for the extension of the Skokie Valley Trail from Lake Cook Road along the ComEd right-of-way to Dundee Road. The path extension would include a bridge over Lake Cook Road and the projects is estimated at \$ 2,760,000.

Deerfield

As part of their 2004 Comprehensive Plan, the Village of Deerfield included recommendations for

bicycle routes and pedestrian improvements. The "highest priority" noted is the "sidewalk/bike path along the south side of Deerfield Road from Waukegan Road to the east border of Deerfield." Deerfield between Waukegan Road and Highland Park Road was reconstructed in 2016, but the design did not include a sidepath.

Lake Forest

The City of Lake Forest Bike Master Plan (2013) identifies Old Elm Road as a "Core Route." The recommended bicycle facilities are sharrows. Currently, the section of Old Elm Road that borders Highland Park includes Sharrows.

6. Public Outreach

Public Outreach is the cornerstone of any successful plan. It ensures that the policies and recommendations of the plan reflect the vision of the community. Along with the direction provided by the Steering Committee, the MoveHP process provides several opportunities for public outreach.

Public Workshop

On the evening of April 9, 2019, nearly two dozen residents attended an open house workshop for MoveHP. Participants provided input through a group mapping exercise, individual worksheets, and talking with staff about their concerns and aspirations for pedestrian and bicycle infrastructure in Highland Park.

The group mapping exercise involved participants placing a marker where they would like active infrastructure improvements on two separate maps, one for pedestrian infrastructure and the other for bicycle infrastructure. The individual worksheet allowed them to draw and annotate their desired bicycle and pedestrian routes, identify hazards in Highland Park, and leave specific comments.

Summary of Comments

A consistent feature of public comments was the need for improved east-west connections within Highland Park especially on Clavey Road and Deerfield Road. Many comments focused on Green Bay Road and US-41/Skokie Highway, and the difficulty of crossing these roadways on foot or bike; attendees felt scared crossing difficult intersections such as Half Day Road and Skokie Highway. The negative perception, danger, and difficulty of crossing these roadways may deter Highland Park residents from more pedestrian and cycling trips.

Attendees noted a desire for improvements in the Ravinia neighborhood, especially along Roger Williams Avenue. Several comments focused on the intersection of Roger Williams Avenue and Sheridan Road, perceiving the intersection as dangerous and intimidating. In the same area, the pedestrian access to Rosewood Beach was described as a "crum-





my experience" and in need of a safe crossing from Roger Williams Avenue. Improving the connection to Rosewood Park and Beach from the Ravinia neighborhood west of Sheridan Road would make this community asset welcoming for pedestrians and cyclists.

Multiple comments focused on improving access to Highland Park's off-street trail network. Several attendees were frustrated with the missing section of the Robert McClory Path between Vine Avenue and St. John's Avenue near the train station. Another supported improvements to the McClory Path south of downtown along St. Johns Ave, describing it as "creepy and isolated." One attendee mentioned the poor access from the Highlands to the Robert McClory Path. Several expressed a desire for connectivity to businesses along the Skokie Valley Bike Path, as well as connecting to other path systems such as Heller Park. A common theme was poor access to and from these paths and a desire to use them not only recreationally, but also for commutes and errands.

Improved connections to train stations were highlighted as well. The majority of comments seemed to focus on bicycle infrastructure, but none specified a preference for bicycle over pedestrian improvements.

Hazards

The worksheets reveal a number of commonly perceived hazards in Highland Park. The area around Deerfield Road and Old Deerfield Road (the Briergate District) was mentioned multiple times, as was Sheridan Road, St. Johns Avenue, Lake Cook Road, and Clavey Road along most of their length. The Sheridan Road and Roger Williams Avenue intersection was a popularly identified hazard, as was Walker Avenue.

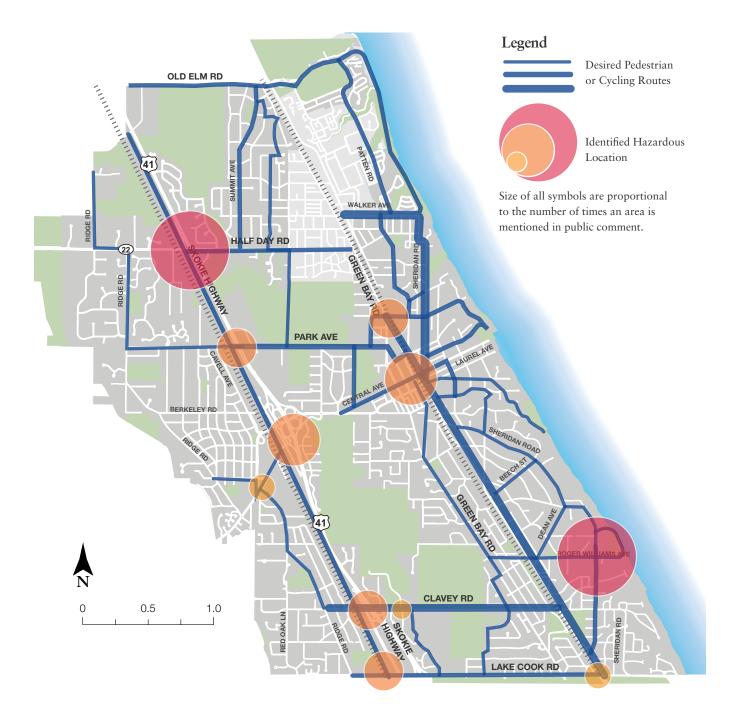
Infrastructure Improvements

Bicycle:

Attendees focused on the following areas for desired bicycle improvements:

- Central Business District
- Roger Williams Avenue
- Clavey Road
- Deerfield Road
- A desired connection between Old Elm Road and Trail Way

Public Comment Summary



Pedestrian:

Attendees focused on the following areas for desired pedestrian improvements:

- Roger Williams Avenue and Sheridan Road; access to Rosewood Park and Beach
- Clavey Road and Skokie Highway
- Deerfield Road
- Lake Cook Road
- Connection between Heller Nature Center and Skokie Valley Bike Path
- Other crossings over Skokie Highway: Park Avenue, Half Day Road
- Additional areas: Park Avenue Boathouse, Millard Park, Sheridan Road

Online Survey

City staff hosted an online survey on Google Forms from mid-March to May 1st, 2019. The survey was advertised on the city's website and on promotional materials around the city. Nineteen respondents participated in the 7-question survey. The questions focused on the respondents' reasons and frequency for walking and cycling, major reasons that prevent them from doing so more often, and areas of Highland Park they would want to see pedestrian or cycling infrastructure improvements.

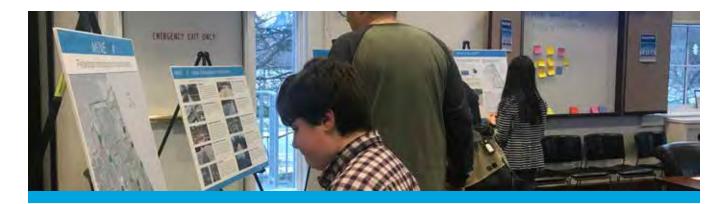
Responses

The most common reason for respondents to walk daily was exercise (12 respondents). Another 5 re-

spondents walked for exercise weekly. Eight respondents walked weekly for errands or shopping. The most common reason for cycling was also exercise (10 respondents); however, respondents only cycled once a week on average and few respondents cycled daily.

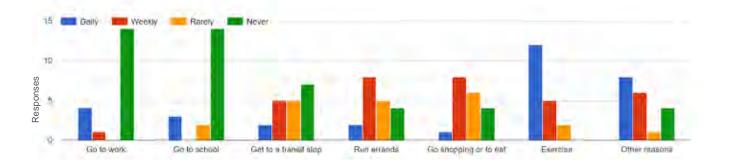
Cycling seems complementary to pedestrian travel in Highland Park. Furthermore, both cycling and walking are highly recreational in Highland Park. This trend is supported by other aspects of the survey; the most popular reason that respondents do not walk or bicycle more frequently is the "Destination is too far away" (10 respondents), followed by "Bad weather" (9 respondents). However, 8 respondents said that "No sidewalks/bike lanes" were a major reason they do not walk or cycle more frequently. This result indicates that a fair number of residents may walk or cycle more if appropriate infrastructure were in place.

When asked about pedestrian infrastructure projects that should be prioritized, the most frequent response was to have safer crossings over US-41 (4 respondents). Respondents listed Park Ave and the pedestrian bridge as specific crossings to be improved. The second project that should be prioritized was improved pedestrian infrastructure downtown (3 respondents). Similar to pedestrians, the most common cycling priority was safer crossings over US-41 (5 respondents). The second most common priority was improved bicycle infrastructure on Green Bay Road (3 respondents). The above results confirm that east-west crossings over US-41 should be a priority improvement, followed by improvements to downtown and major streets such as Green Bay Road.

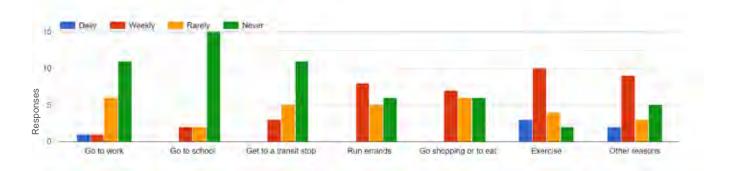


Online Survey Results (March - May 2019)

How often do you walk outside for the following reasons?

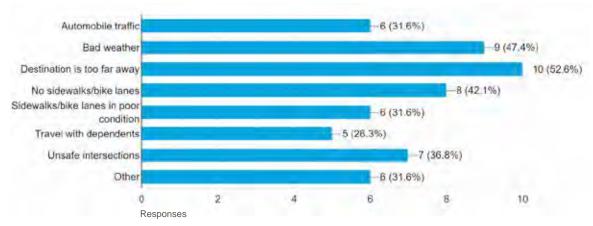


How often do you bicycle outside for the following reasons?



Major reasons that you do not walk or bicycle more frequently

19 responses



Steering Committee

As part of the MoveHP kick-off process, Steering Committee members were asked to provide what they believe to be the top three pedestrian or bicycle gaps in the City's network, or other project that would significantly improve the system. The suggestions included the following:

- Install a bike corral in Downtown*
- Install a bike lane on Green Bay Road*
- Sheridan Road/Rosewood Beach pedestrian access*
- Improve intersections by installing inductive-loop detectors for cyclists
- Improve Pace bus routes
- Robert McClory Path improvements:
 - At Highland Park/Highwood border near Highland Park High School
 - Between the Highland Park Metra Station and Highland Park High School

- Intersection and crossing improvements, including the use of HAWK (High-intensity Activated crossWalK beacon):
 - Intersection improvement at Vine and Green Bay Road*
 - Pedestrian crossing at Trail Way and Half Day Road
 - Mid-block crossing at Central between Green Bay Road and Hickory Avenue
 - Improved crossing at Park Avenue West between Wolters Field and the trail just east of the Highland Park Country Club Parking Lot
 - Clavey Road and Park Avenue crossings at US 41

*Consistently ranked high among Steering Committee input.

7. Next Steps

This Existing Conditions Report (ECR) provides the foundation for the final Move-HP plan. Information from the ECR will be used to update policies and recommendations from Bike-Walk HP 2030.

Based on the plan process, the following steps are needed to move MoveHP forward:

- *Steering Committee Review.* The Steering Committee will review and provide comment to the ECR, ensuring it accurately reflects the current state of pedestrian and bicycle infrastructure and policies in the City.
- *City Council Update*. City staff will present the Existing Conditions Report to members of City Council. The presentation, anticipated to occur with the Committee of the Whole in June 2019, will include a project update and outline next steps.
- *Bicycle and Pedestrian Network Analysis /Draft Recommendations.* City staff will review input from the public workshop, steering committee, and Council and reconcile that with the findings from the Existing Conditions Report. From this, staff will create a list of draft recommendations. This will include policy changes and key projects.

- *Steering Committee Meeting*. The Steering Committee will convene to review the Draft Recommendations. The meeting will be used to gather feedback and prioritize project recommendations. This meeting is tentatively planned for late summer 2019.
- *Draft Plan.* City staff will integrate all previous material and feedback from the draft recommendations to develop a draft plan.
- *Open House*. The Draft Plan will be presented to the public in an open house format. Members of the public will be invited to view the plan and ask questions.
- *Final Plan & Approval Process.* City staff will utilize feedback from the Steering Committee and Open House to create a Final Plan document that meets the needs of the community and stakeholders. This draft plan will be presented to the Committee of the Whole in late summer/early fall 2019. Following review, the Final Plan will be considered for adoption by the City Council.

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Appendix

- 1. Bike-Walk HP 2030 Status Document (table)
- 2. Bicycle Friendly Community 2018 Spring Report Card
- 3. 2018 People for Bikes Rating
- 4. 2019 People for Bikes Rating
- 5. Bike-Ped Count Data

Bike-Walk HP 2030 Policy & Infrastructure Recommendations

Goals & Policy Recommendations

1. The City of Highland Park will develop and adopt policies, plans and guidelines to assure that cycling and walking are an integral part of City life and will reach out to other agencies so that this goal is incorporated in their projects and facilities in the community.

IIIC C	ommunity.				
		Short-Term (0 – 2 Years)	Mid-Term (2 – 4 Years)	Long-Term (4+ Years)	2019 Status
1.1	Adopt the Complete Streets Policy.	√ (PW)			Plan adopted 2012
1.2	Accept the Complete Streets Matrix and Framework as a guideline for future road improvement projects.	√ (PW)			No Action
1.3	Develop and update a Complete Streets Improvement Master Plan program.	√ (PW)	Continue and Ongoing	Continue and Ongoing	Continue and Ongoing
1.4	Apply appropriate national model design standards for cycling, pedestrian and public transportation facilities.	Continue and Ongoing (PW)	Continue and Ongoing (PW)	Continue and Ongoing (PW)	Continue and Ongoing
1.5	Amend Chapter 75 Bicycle Regulations of the City Code.	$\sqrt{(PW and POL)}$			No Action
1.6	Incorporate bicycle parking requirements in the zoning code for all multiple family residential and commercial land uses and provide on-street bike parking throughout the community.	√ (CD)			No Action
1.7	Provide facilities for two levels of bicycle riders: basic and advanced.	Continue and Ongoing (PW)	Continue and Ongoing (PW)	Continue and Ongoing (PW)	Continue and Ongoing
1.8	Design, develop and operate sidewalks as pedestrian spaces first and as bicycle facilities for children.	Continue and Ongoing (PW and Pol)	Continue and Ongoing (PW and Pol)	Continue and Ongoing (PW and Pol)	Continue and Ongoing
1.9	Coordinate efforts with Pace and Metra to provide or improve appropriate bicycle and pedestrian facilities along bus routes and at train stations.	Continue and Ongoing (CD and PW)	Continue and Ongoing (CD and PW)	Continue and Ongoing (CD and PW)	Continue and Ongoing

		Short-Term (0 – 2 Years)	Mid-Term (2 – 4 Years)	Long-Term (4+ Years)	2019 Status
2.1	Regularly assess street, trail and sidewalk maintenance needs and make spot improvements as part of the City's asset management program.	Continue / Ongoing (PW)			Ongoing
2.2	Develop the bicycle and pedestrian system through implementation of capital improvements for new and retrofitted facilities including sidewalks, bicycle facilities, and intersections.	Continue / Ongoing (PW)			Ongoing
2.3	Develop the bicycle and pedestrian system through implementation of other improvements including street striping and signage.	Continue / Ongoing (PW)			Signs installed with sharrows 2017
2.4	Clear paved multi-use trails in winter as part of the City snow plowing program.	√ (PW)	Continue and Ongoing		Ongoing
2.5	Plan for and improve the arterial, collector streets, and primary residential streets as either capital or retrofit improvements when implementing roadway improvement projects, so that	(CD and PW)	Continue and Ongoing		Ongoing

2.6	they provide a primary cycling and walking system through the City. Plan for and improve the arterial, collector and primary residential streets with striping and signage as needed so that they provide a secondary cycling and walking system and a link to the primary system.	$\sqrt[]{(CD and PW)}$	Continue and Ongoing		Sharrows in 2017
2.7	Plan for and implement Shared-use path improvements at the same time as making street route improvements in order to provide riding and walking opportunities for all types of bicyclists and pedestrians.		(CD and PW)	Continue and Ongoing)	Ongoing
2.8	Work with the School and Park Districts to ensure that schools and parks are safely connected into the bicycle and pedestrian systems.	Continue and Ongoing (CD and PW)			BWAG has ongoing comm. 10-Minute Walk campaign with Park District

		Short-Term (0 – 2 Years)	Mid-Term (2 – 4 Years)	Long-Term (4+ Years)	2019 Status
3.1	Identify a dedicated funding source for implementation of capital improvement projects.	√ (Finance and City Council)	Continue and Ongoing		Ongoing
3.2	Identify and apply for grant funding for bicycle and pedestrian related improvement projects.	Continue and Ongoing(CD and PW)			10-Minute Walk campaign with Park District
3.3	Allocate and balance funding between projects designed to improve conditions for automobiles and those that accommodate cyclists and pedestrians.	Ongoing(PW, Fin and City Council)			Roadway improvemen projects consider bike and walking improvemen

		Short-Term (0 – 2 Years)	Mid-Term (2 – 4 Years)	Long-Term (4+ Years)	2019 Status
4.1	Establish a Non-Motorized Transportation Advisory Group of Transportation Commission members to support implementation of <i>Bike – Walk HP 2030.</i>	√ (Transportation Commission Chair to designate members)			BWAG established
4.2	Establish an on-going staff working group tasked with implementation of Bike – Walk HP 2030.	√ (CMO)			BWAG and Transportation Advisory Group role

4.3	Initiate a regular semi-annual bicycle count to establish base and on-going data on cycling in Highland Park.	√ (PW and CD)			Spring + Fall 2013 Spring + Fall 2014 Fall 2018 Spring 2019
4.4	Adopt requirements that property owners shovel snow and keep sidewalks clear for pedestrians.	√ (PW)			Public Works plows all sidewalks after 4" of snowfall. Residents are responsible for under 4".
4.5	Provide an annual update that tracks the implementation progress of the Non-Motorized Transportation Plan.		√ (PW and CD)		No Action
4.6	Collaborate with bicycle advocacy groups and other entities on the implementation of <i>Bike – Walk HP 2030</i> and other initiatives.	Continue and Ongoing (CD)	Continue and Ongoing (CD)	Continue and Ongoing (CD)	10-Minute Walk campaign with Park District
4.7	Pursue certifications as a Bicycle and Pedestrian Friendly Community.		√ (PW and CD)		Bronze certification awarded in 2017
4.8	Enforce motor vehicle and pedestrian laws at high volume intersections in downtown and other Highland Park locations on a regular basis.	Continue and Ongoing (Pol)	Continue and Ongoing (Pol)	Continue and Ongoing (Pol)	Ongoing
4.9	Once or twice per year, close off selected streets for a specific time period to automotive traffic to promote biking and walking.		√ PW and CD)	\checkmark	No Action
4.10	Promote cycling and walking in Highland Park through the Healthy Highland Park Task Force.	$\sqrt{(CD and CM)}$			Task Force est. 2005, ended 2014
4.11	Promote Pace bus service and the local routes in order to increase local awareness of bus transit options and ridership.	Continue and Ongoing (CD, PW and CMO)	Continue and Ongoing (CD, PW and CMO)	Continue and Ongoing (CD, PW and CMO)	Ongoing

5. The City of Highland Park will work with adjacent municipalities and regional transit agencies to promote and implement improved regional connections.

		Short-Term (0 – 2 Years)	Mid-Term (2 – 4 Years)	Long-Term (4+ Years)	2019 Status
5.1	Make improvements to corridors identified as regionally significant bicycle routes and coordinate planning and implementation with surrounding jurisdictions and through regional agencies, as necessary.		Continue and Ongoing (PW and CD)	Continue and Ongoing (PW and CD)	No Action "regionally significant" routes not identified in plan.
5.2	The City of Highland Park will seek to expand availability of and access to public transportation.		Continue and Ongoing (PW)	Continue and Ongoing (PW)	Ongoing
5.3	Improve bike and public transit connectivity by providing secure and improved protected bicycle storage at Metra Rail Stations.		Continue and Ongoing (PW)	Continue and Ongoing (PW)	No Action
5.4	Provide hard-surface and protected bus shelters at to be determined locations along Highland Park bus routes.		√ (PW)		No Action

5.5	Continue seeking opportunities to expand the service areas and hours of operation of the Senior Connector for persons 50 years or older and develop it as a Highland Park Connector that could be used by persons of any age.	√ (PW and CD)	Ongoing
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Infrastructure Improvement Recommendations

Tab	le 3: Initial Project Recommendations (Years 7			
	Location	Proposed Improvement	Estimated Cost	2019 Status
3.a	All On-Street bicycle routes	Signage only option: Install bike route signage in appropriate locations	\$27,000	Signs installed with sharrows project in 2017
3.b	Robert McClory Path On-Street connection from Lincoln Avenue to Vine Avenue/Highland Park High School	Improve routing utilizing bike lanes, shared lanes and signage	\$7,000 - \$12,000 (Sharrows) \$500 (Signage)	Bridge abutments over Mulberry PI was repaired in 2017 including additional bracing of the handrails.
3.c	Green Bay Road (entire length of City)	On-street route including bike lanes, shared lanes and signage and missing sidewalk segments	\$21,000 to \$23,000 (Bike Lane) \$1,000 (Signage) \$126,000 (Sidewalk)	Bike lanes will be considered where the road is wide enough.
3.d	Ridge Road/Richfield Road from Lake-Cook Road (s) to City limits on (n)	On-street route including bike lanes, shared lanes and signage and missing sidewalk segments	\$41,000 - \$67,000 (Sharrows) \$2,500 (Signage) \$240,000 (Sidewalk)	Sharrows and signs completed in 2017 Sidewalk gap remains
3.e	Clavey Road/Blackstone/ Burton Red Oak Lane (w) to Roger Williams (n)	Develop on-street route including shared lanes and signage and install missing sidewalk segments (may include sidepath)	\$10,000 to \$130,000 (Bike Lane & Sharrows) Low end = Bike Lane, Shared Lane markings and Signage, High end = Bike Lane, Sidepath and signage) \$1,000 (Signage)	Sharrows and signs completed in 2017 on Clavey (Red Oak to Green Bay)
3.f	Dean/Cedar/Linden from Roger Williams (s) to Maple Ave. (n)	Develop in-street route including shared lanes and signage and missing sidewalk on Cedar	\$1,100 (Signage) \$40,000 (Sidewalk)	No shared lanes. No sidewalk has been installed. Bike route signs have been installed throughout Dean/Cedar/Linden/ from Roger Williams to Maple
3.g	Pedestrian Bridge @ Old Deerfield Road & Old Skokie Road	Signage and appropriate street markings to lead cyclists and pedestrians to or from the bridge and the Skokie Valley Trail	\$9,000	City is applying for grant money to replace the Pedestrian Bridge.

Long-Term Projects

Tab	e 4: Shared-Use Paths Impro		1		1 .
	Location	Project Description	Project Length	Est Cost (to nearest \$1K) (2012 Cost Incl. 25% contingency)	2019 Status
4.a	Walker Avenue (north side of street)/(collector) from St. Johns Avenue to Oak Street	Sidepath (Work in cooperation with IDOT to extend existing sidepath to connect to Open Lands Lakefront Trail.)	1,500 feet (0.3 miles)	\$50,700	Completed
4.b	Skokie River Trail from Old Elm Road south to Half Day Road	Trail from Old Elm Road to Cuniff Park and on street route from south end of Sleepy Hollow Park to Half Day Road and road crossing improvements at Half Day Road. Coordination with Park District.	Trail: 1,800 feet On-street route: 850 feet	\$50,700	0.035 mile trail extension along Trail Way in 2018
4.c	Skokie River Woods to Highland Park Recreation Center at Park Avenue West (part of Skokie River greenway)	Shared-use path between Half Day Road and Park Avenue West in conjunction with the Park District of Highland Park	4,600 feet (0.86 miles)	\$129,000	No Action
4.e	Taylor Avenue/Park Avenue West Trail (part of Skokie River greenway)	Park Avenue West to Taylor Avenue and then on-street connection to Central Avenue. Bridge over Skokie River may be required depending upon specific trail routing. Coordination with IDOT, Army Corps and private property owners	2,800 feet	\$78,000 (exclude potential bridge cost)	No Action
4.f	Hidden Creek Aqua Park to Fink Park Trail (part of Skokie River greenway)	Hidden Creek Aqua Park along western edge of Sunset Valley G. C. and Bob O'Link C. C. to Edgewood Ave. right of way and Fink Park. Coordination w/Park Dist. and property owners incl. Country Clubs	10,000 feet (1.9 miles)	\$281,000	No Action
4.g	Northshore Sanitary District Trail (part of Skokie River greenway)	Route from Clavey Road to Lake- Cook Road (adjacent to NSSD facility) Coordinate with NSSD	2,800 feet (0.53 miles)	\$78,000	Ongoing discussion – Northshore Water Reclamation District – suggestion fo cut trail from Aspen Lane to Hiawatha Ct.
4.i	Old Elm Road	Develop sidepath or on-street route from Skokie River to the McClory Bike Path (possibly in conjunction with City of Lake Forest)	4,800 feet	\$135,000	Sharrows installed in 2017
4.j	Beech Street	Build shared path to lakefront Park District of Highland Park	1,400 feet	\$39,000	No Action
4.k	McClory Bike Path	Study feasibility (including soliciting community input) of redesigning the trail for enhanced year round functionality for cyclists and pedestrians.	12,300 feet	Not estimated at present time	No Action

Sidewalks

Tabl	le 5: Sidewalk Improvement F		1		
	Location/Street Classification	Project Description	Project Length	Est Cost (to nearest \$1K) (2012 Cost Incl. 25% contingency)	2019 Status
5.a	City-wide	Complete gaps in existing sidewalk system not herein identified	Dependent upon length of missing sidewalk segment	Not estimated at present time, based on extent of the length of the missing sidewalk segment	No Action
5.b	Sheridan Road /Arterial	Complete sidewalks on one side to fill in gaps, especially in Rosewood Beach area (coordination with IDOT required)	4,900 feet	Not estimated at present time due to site specific related physical conditions	Public meetings held Check w/PW for status/schedule
5.c	Green Bay Road	Complete gaps on west side of road between Lake Cook and Edgewood Roads	3,600	158,000	Complete
5.d	Park Avenue West/ Arterial	Complete sidewalk on south side from Ridge Road to Spruce Avenue	1,550 feet	\$68,000	No Action
5.e	Ridge Road/Collector	Complete sidewalks (2) Ridgelee to Lake Cook Road (west side), (3) Route 22 to Park Avenue West (west side), (4) Route 22 to City limits (west side)	Ridgelee to Lake-Cook: 735 feet North of Rte 22 to City Limits: 1,300 feet	\$90,000	Sidewalk on west side of Ridge Road from Ridgelee to Lake Cook to be completed in 2019.
5.f	Lake Cook Road (coordination with Cook County Highway Department required)	Build sidewalk on north side from Ridge Road to City limits	2,080 feet	\$91,000	Partially-built
5.g	Warbler Lane, Brook Road, Western Avenue from Old trail to Old Elm Road /Secondary Local	Build sidewalk connecting neighborhood to south to Old Elm Road	2,800 feet	\$123,000	No Action
5.h	Krenn Avenue from Hyacinth to Old Elm Road/ Secondary Local	Build sidewalk on east side of Krenn Avenue	600 feet	\$26,000	No Action
5.i	Cloverdale Avenue/ Primary Local	Complete sidewalk from Cloverdale Park to Berkeley Road	811 feet	\$35,000	No Action
5.j	Arbor Ávenue/Secondary Local	Complete sidewalk on east side from Midland to Berkeley Road (access to Sherwood Park)	1,300 feet	\$57,000	No Action
5.k	Crofton Avenue/Secondary Local	Build sidewalk on east side from Bob O'Link Road to Saxony Road	1,300 feet	\$57,000	No Action

Intersections, Crosswalks, Pedestrian Bridges

Tab	le 6: Intersection, Crosswalk, a	and Pedestrian Bridges Improvement Recon	nmendations	
	Location(s)	Project Description	Project Length	2019 Status
6.a	Central Avenue at Second Street; First Street; St. Johns and Sheridan Road	Examine signage and street markings	Not applicable	Marking completed in 2016
6.b	Elm Place and First Street	Examine signage and street markings	Not applicable	Signs have been installed throughout Elm PI. Pavement marks are maintained as required. (Milanesio)
6.C	Roger Williams Avenue and Sheridan Road	Improve crosswalk across Sheridan Road and sidewalk access to park and beach	Ravinia Business District and Rosewood Park and Beach	No Action
6.d	Crosswalks adjacent to parks and schools	On-going maintenance and restriping as needed	City-wide	No Action
6.e	Park Avenue and Illinois Route 41	Provide for grade separation between motorists and cyclist and pedestrians.	Not applicable	No Action
6.f	Half day Road and Illinois Route 41	Provide for grade separation between motorists and cyclist and pedestrians.	Not applicable	No Action

Implementation

Key Elements of Plan Implementation							
Project Description 2019 Status							
Development of Complete Streets Master Plan	PW and CD complete BLOS analysis	No Action					
Designate a Complete Streets Staff Coordinator and Oversight Committee	Staff member would participate in plan and project reviews to assure compliance with the Complete Streets Policy and Plan recommendations. City Council establish an Advisory Group of the Transportation Commission	No Action					
Pursue "Bicycle Friendly Community" Status	Achieve recognition as a Bicycle Friendly Community from the League of American Cyclists	Bronze certification awarded in 2017					



HIGHLAND PARK, IL

TOTAL POPULATION

POPULATION DENSITY

2.440

Highland Park

29,763 TOTAL AREA (sq. miles)

Average Silver

12.24

10 BUILDING BLOCKS OF A BICYCLE FRIENDLY COMMUNITY

	0	0
High Speed Roads with Bike Facilities	37%	0%
Total Bicycle Network Mileage to Total Road Network Mileage	45%	21%
Bicycle Education in Schools	GOOD	NEEDS IMPROVEMENT
Share of Transportation Budget Spent on Bicycling	12%	17%
Bike Month and Bike to Work Events	GOOD	ACCEPTABLE
Active Bicycle Advocacy Group	YES	YES
Active Bicycle Advisory Committee	MEETS EVERY TWO MONTHS	MEETS AT LEAST MONTHLY
Bicycle–Friendly Laws & Ordinances	SOME	NEEDS IMPROVEMENT
Bike Plan is Current and is Being Implemented	YES	SOMEWHAT
Bike Program Staff to Population	1 PER 100K	1 PER 60K

OF LOCAL BICYCLE O

OF LOCAL BICYCLE FRIENDLY UNIVERSITIES

CATEGORY SCORES

ENGINEERING Bicycle network and connectivity	3.1 /10
EDUCATION Motorist awareness and bicycling skills	2.7/10
ENCOURAGEMENT Mainstreaming bicycling culture	2.4/10
ENFORCEMENT Promoting safety and protecting bicyclists' rights	4.1/10
EVALUATION & PLANNING Setting targets and having a plan	3.4/10

KEY OUTCOMES	Average Silver	Highland Park
RIDERSHIP Percentage of Commuters who bike	2.6%	0.45%
SAFETY MEASURES CRASHES Crashes per 10k bicycle commuters	523	2,419
SAFETY MEASURES FATALITIES Fatalities per 10k bicycle commuters	5.8	0



» Continue to expand the bike network in Highland Park, and ensure stronger compliance with the Complete Streets policy. Take advantage of Highland Park's low-speed streets to develop a system of bicycle boulevards that create an attractive, convenient, and comfortable cycling environment welcoming to cyclists of all ages and skill levels.

» Adopt a bike parking ordinance for new and existing buildings that specifies standards for the amount and location of secure, convenient, APBP-compliant bike parking available.

Work with local bicycle groups and interested parents to expand and improve the Safe Routes to School program to all schools.

>> Host a League Cycling Instructor (LCI) seminar to increase the number of local LCIs in your community. Having several active instructors will enable you to expand cycling education for youth and adults, recruit more knowledgeable cycling ambassadors, deliver Bicycle Friendly Driver education to motorists, and have experts available to assist in encouragement programs. » Adopt a comprehensive road safety plan or a Vision Zero policy to create engineering, education, and enforcement strategies to reduce traffic crashes and deaths for all road users, including bicyclists and pedestrians. Road diets, lane diets, and traffic calming treatments are important engineering components for addressing safety.

» Adopt a target level of bicycle use (percent of trips) to be achieved within a specific timeframe, and ensure data collection necessary to monitor progress. Create a bicycle count program that utilizes several methods of data collection to create an understanding of current bicyclists and the effects of new facilities on bicycling.

» Begin the process of updating your 2012 *Bike Walk HP 2030* plan. Regularly updating your bicycle plan is key to improving conditions for bicycling, adhering to evolving best practices and national standards, and institutionalizing processes for continual evaluation and improvement.

SUPPORTED BY



HIGHLAND PARK, IL CITY SCORECARD



OVERALL SCORE



The overall score is based on Ridership, Safety, Network, Reach and Acceleration. It includes publicly available data and data gathered from our Community Survey, City Snapshot, and Bike Network Analysis.

SAFETY 🔁

Measures how safe it is and feels to ride a bike.

	1.8	
\star	****	

All mode fatalities and injuries	2.0
Bicycle fatalities and injuries	2.5
Perceptions of safety	‡

REACH 200

Measures how well the bike network serves everyone equally.



Demographic gap in BNA	‡
Bicycle commuting rates by gender	1.7

RIDERSHIP 5

Measures how many people are riding.



Bicycle commuting Recreational bike riding Perceptions of bike use

NETWORK |

Measures how well the bike network connects people to destinations.

0.1

3.8

±



Bicycle Network Analysis (BNA)2.0Perceptions of network quality‡

ACCELERATION 000

Measures the city's commitment to growing bicycling quickly.

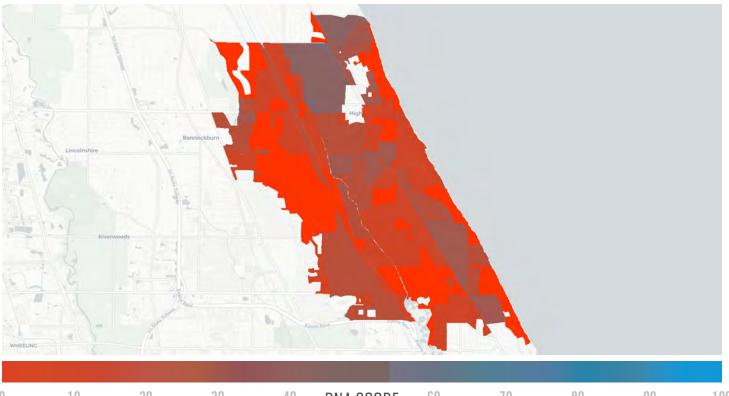


Growth in bike facilities and events Perceptions of progress

‡ Data unavailable

‡

‡



0 10 20 30 40 BNA SCORE 60 70 80 90 100

TEN WAYS TO IMPROVE YOUR SCORE

- 1 Hold a monthly social ride for new bikers. Choose flat, quiet routes and travel slowly. Count attendees.
- **2** Next 12-24 months: Launch or expand public bike share. Count rides.
- **3** 12-24 months: Create a Vision Zero policy with measurable goals and a clear timeline. Measure current safety to create a baseline.
- 4 12 months: Use a crowdfunding campaign to build community support for an easy, visible protected bike lane. Measure "before and after" data.
- **5** 12 months: Install a small network of neighborhood bikeways by improving a few residential streets. Count bikes before and after.
- **6** Review your resurfacing schedule for chances to cheaply install post-protected bike lanes. Aim for these in 30% of all resurfacing projects.
- 7 Implement one pop-up event or pilot bikeway project this year using temporary material: paint, planters, pallet furniture. Count attendees.
- **8** Choose one neighborhood, recruit local leaders and plan a full network of low-stress bikeways that can be built with interim materials in 24 months.
- **9** 12 months: Build a diverse mobility advisory team. Prioritize people in underserved or fast-changing areas. Identify those not at the table.
- **10** Map assets like businesses, parks and events to showcase the strengths of underserved areas. Focus attention on helping people access those assets.





Highland Park, IL CITY SCORECARD



2019 OVERALL SCORE



The overall score is based on Ridership, Safety, Network, Reach and Acceleration. It includes publicly available data and data gathered from our Community Survey, City Snapshot, and Bike Network Analysis.

SAFETY 🔁

Measures how safe it is and feels to ride a bike.

n	All mode fatalities and injuries	3.0
Η	Bicycle fatalities and injuries	2.5
0	Perceptions of safety	2.9
++		

REACH 2003

Measures how well the bike network serves everyone equally.



Demographic gap in BNA	1.6
Bicycle commuting rates by gender	‡

RIDERSHIP 5

Measures how many people are riding.



Bicycle commuting Recreational bike riding Perceptions of bike use

NETWORK	
---------	--

Measures how well the bike network connects people to destinations.

0.1

3.6

2.3



Bicycle Network Analysis (BNA)2.0Perceptions of network quality2.6

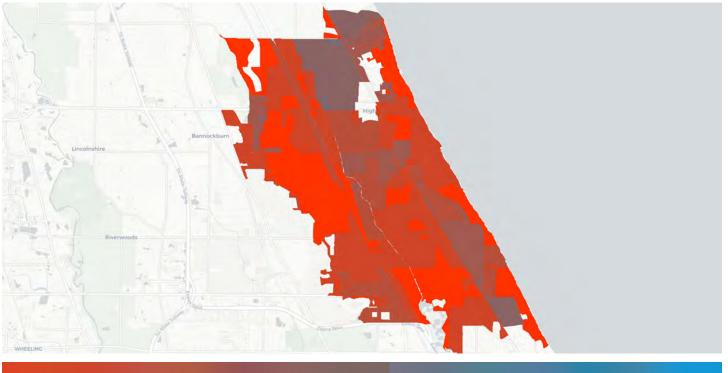
ACCELERATION 000

Measures the city's commitment to growing bicycling quickly.



Growth in bike facilities and events1.1Perceptions of progress2.1

‡ Data unavailable



0 10 20 30 40 BNA SCORE 60 70 80 90 100

TEN WAYS TO IMPROVE YOUR SCORE

- 1 Hold a monthly social ride for new bikers. Choose flat, quiet routes and travel slowly. Count attendees.
- **2** Next 12-24 months: Launch or expand public bike share. Count rides.
- **3** 12 months: Identify high crash corridors and work with locals to find infrastructure fixes. Measure baseline safety.
- **4** 12 months: Cut default residential speed limits to 20 mph or less. Catalog changes needed to bring streets to a 20 mph design speed.
- **5** Plan a bike network linking multiple districts. Use neighborhood bikeways on quiet streets, protected bike lanes on busy ones. Build in 24 months.
- **6** Improve bike/walk links to parks, trails & mountain bike areas. Make at least one new link each year, prioritizing areas with low recreation access.
- **7** 12 months: Build a diverse mobility advisory team. Prioritize people in underserved or fast-changing areas. Identify those not at the table.
- **8** Map assets like businesses, parks and events to showcase the strengths of underserved areas. Focus attention on helping people access those assets.
- **9** Implement one pop-up event or pilot bikeway project this year using temporary material: paint, planters, pallet furniture. Count attendees.
- **10** Choose one neighborhood, recruit local leaders and plan a full network of lowstress bikeways that can be built with interim materials in 24 months.





City of Highland Park Bike-Ped Count Data

20	13	-20	019

Weekday Average										
			Pedestrian		Bicyclist					
Intersection	May 2013	Sept 2013	May 2014	Sept 2018	May 2019	May 2013	Sept 2013	May 2014	Sept 2018	May 2019
Clavey @ Green Bay	23.0	17.3	11.5	9.8	7.8	6.5	7.0	3.3	5.8	3.5
Green Bay @ Clavey	20.3	10.5	10.1	11.3	9.8	11.3	11.5	5.6	11.8	4.3
McClory @ Lincoln	75.0	65.3	37.5	66.3	15.3	28.5	19.5	14.4	17.0	6.3
Lincoln @ McClory	46.3	31.0	23.1	7.3	8.0	11.8	11.0	5.9	6.3	3.3
St Johns @ Lincoln	8.0	11.8	4.0	6.8	8.8	15.0	17.0	7.5	23.5	4.0
Lincoln @ St. Johns	13.0	3.5	2.6	9.3	10.0	6.5	1.3	3.3	6.3	1.8
Laurel @ Green Bay	37.8	32.5	18.9	29.8	27.3	8.5	5.0	4.3	5.3	2.0
Green Bay @ Laurel	37.8	32.0	18.9	25.8	24.5	8.0	5.5	4.0	4.8	1.8
Sheridan @ Moraine	26.5	24.0	13.3	23.8	16.5	39.5	37.8	20.0	43.8	4.0
Moraine @ Sheridan	13.3	12.0	6.6	7.3	6.5	4.0	2.5	2.0	0.8	0.0
Summit @ Old Trail	27.0	19.0	13.5	24.0	21.3	7.0	10.0	3.5	5.3	2.3
Old Trail @ Summit	17.3	11.5	8.6	10.8	8.3	15.8	13.0	7.9	3.5	2.0
Total	345.0	270.3	168.6	231.8	163.8	162.3	141.0	81.5	133.8	35.0

Weekday Average (7-9 am)

	Pedestrian					Bicyclist				
Intersection	May 2013	Sept 2013	May 2014	Sept 2018	May 2019	May 2013	Sept 2013	May 2014	Sept 2018	May 2019
Clavey @ Green Bay	31.5	21.5	15.75	13	8.5	4.5	6.5	2.25	2.5	0.5
Green Bay @ Clavey	21.5	15.5	10.75	15	10.5	7.5	17	3.75	12	1.5
McClory @ Lincoln	69.5	78.5	34.75	14.5	7.0	13	17	6.75	18	0.5
Lincoln @ McClory	53	45	26.5	9.5	9.5	10.5	11	5.25	7	2.0
St Johns @ Lincoln	3.5	8.5	1.75	7	13.5	11	22.5	5.5	38	5.5
Lincoln @ St. Johns	18	0	1.25	6.5	11.5	2.5	0	1.25	5	2.5
Laurel @ Green Bay	27.5	25	13.75	30.5	24.0	2.5	3.5	1.25	4.5	0.0
Green Bay @ Laurel	27	26	13.5	31	23.5	0.5	5	0.25	4.5	0.0
Sheridan @ Moraine	25.5	34.5	12.75	32.5	24.5	34.5	50	17.75	61.5	4.0
Moraine @ Sheridan	15.5	13.5	7.75	9.5	8.0	2	3.5	1	0.5	0.0
Summit @ Old Trail	28.5	34	14.25	41.5	34.0	7	15	3.5	6	2.0
Old Trail @ Summit	17	20	8.5	16	13.0	10	14.5	5	4	1.0
Total	338	322	161.25	226.5	187.5	105.5	165.5	53.5	163.5	19.5
Weather	Partly Cloudy	Sunny, hot	Mostly cloudy	Sunny, humid	Rain, cold	Partly Cloudy	Sunny, hot	Mostly cloudy	Sunny, humid	Rain, cold
Avg Temp (°F)	63	86	58	81	47	63	86	58	81	47

Weekday Average (4-6 pm)

	Pedestrian					Bicyclist				
Intersection	May 2013	Sept 2013	May 2014	Sept 2018	May 2019	May 2013	Sept 2013	May 2014	Sept 2018	May 2019
Clavey @ Green Bay	14.5	13.0	7.3	6.5	7.0	8.5	7.5	4.3	9.0	6.5
Green Bay @ Clavey	19.0	5.5	9.5	7.5	9.0	15.0	6.0	7.5	11.5	7.0
McClory @ Lincoln	80.5	52.0	40.3	118.0	23.5	44.0	22.0	22.0	16.0	12.0
Lincoln @ McClory	39.5	17.0	19.8	5.0	6.5	13.0	11.0	6.5	5.5	4.5
St Johns @ Lincoln	12.5	15.0	6.3	6.5	4.0	19.0	11.5	9.5	9.0	2.5
Lincoln @ St. Johns	8.0	7.0	4.0	12.0	8.5	10.5	2.5	5.3	7.5	1.0
Laurel @ Green Bay	48.0	40.0	24.0	29.0	30.5	14.5	6.5	7.3	6.0	4.0
Green Bay @ Laurel	48.5	38.0	24.3	20.5	25.5	15.5	6.0	7.8	5.0	3.5
Sheridan @ Moraine	27.5	13.5	13.8	15.0	8.5	44.5	25.5	22.3	26.0	4.0
Moraine @ Sheridan	11.0	10.5	5.5	5.0	5.0	6.0	1.5	3.0	1.0	0.0
Summit @ Old Trail	25.5	4.0	12.8	6.5	8.5	7.0	5.0	3.5	4.5	2.5
Old Trail @ Summit	17.5	3.0	8.8	5.5	3.5	21.5	11.5	10.8	3.0	3.0
Total	352.0	218.5	176.0	237.0	140.0	219.0	116.5	109.5	104.0	50.5
Weather	Partly Cloudy	Sunny, hot	Mostly cloudy	Sunny, humid	Rain	Partly Cloudy	Sunny, hot	Mostly cloudy	Sunny, humid	Rain
Avg Temp (°F)	63	86	58	81	47	63	86	58	81	47

Weekend Count (10 am - 12 pm)

	Pedestrian					Bicyclist					
Intersection	May 2013	Sept 2013	May 2014	Sept 2018	May 2019	May 2013	Sept 2013	May 2014	Sept 2018	May 2019	
Clavey @ Green Bay	13	8	13	14	18	3	17	3	22	11	
Green Bay @ Clavey	20	18	20	10	16	13	30	13	36	21	
McClory @ Lincoln	69	110	64	No data	46	23	78	23	No data	12	
Lincoln @ McClory	No Data	37	0	No data	15	0	20	0	No data	1	
St Johns @ Lincoln	21	No data	22	No data	7	74	No data	74	No data	103	
Lincoln @ St. Johns	36	No data	36	No data	7	7	No data	7	No data	0	
Laurel @ Green Bay	41	123	41	No data	26	3	13	3	No data	5	
Green Bay @ Laurel	41	99	41	No data	31	3	21	3	No data	5	
Sheridan @ Moraine	13	33	13	24	17	135	122	135	135	124	
Moraine @ Sheridan	5	19	5	3	7	1	6	1	3	4	
Summit @ Old Trail	22	26	22	21	17	12	13	12	3	8	
Old Trail @ Summit	13	15	0	14	11	12	7	13	11	13	
Total	294*	488*	277	86*	218	286	327*	287	210*	307	
Weather	Mostly cloudy	Partly Cloudy	Partly Cloudy	Cloudy	Light Rain	Mostly Cloudy	Partly Cloudy	Partly Cloudy	Cloudy	Light Rain	
Avg Temp (°F)	52	77	72	65	49	52	77	72	65	49	

* = incomplete data