LYNWOOD ACTIVE TRANSPORTATION PLAN





OCTOBER 2016

LYNWOOD ACTIVE TRANSPORTATION PLAN

9

INTRODUCTION	3
1.1 Introduction	4
1.2 Benefits of Active Transportation	5
1.3 Lynwood Today and Its Vision for Tomorrow	6
1.4 Planning Process	7
1.5 How to Use this Plan	8

EXISTING CONDITIONS

	~~~
2.7 Existing Programs and Policies	22
2.6 Community Engagement	20
2.5 Previous Planning Studies	18
2.4 Crashes	16
2.3 Transportation Network	13
2.2 Demographics and Equity	11
2.1 Overview	10

## ACTIVE TRANSPORTATION NETWORK 23

3.1 Active Transportation Network	24
3.2 Bicycle Network	26
3.3 Pedestrian Improvements	35
3.4 Intersection Improvements	37

ACTIVE TRANSPORTATION TOOLBOX	41
4.1 Overview	42
4.2 Bicycle Tools	43
4.3 Pedestrian Tools	45
4.4 Intersection Tools	48
POLICIES & PROGRAMS	<b>59</b>
5.1 Overview	60
5.2 Policy Recommendations	61
5.3 Program Recommendations	64
IMPLEMENTATION	67
6.1 Overview	<b>67</b> 68
IMPLEMENTATION 6.1 Overview 6.2 Prioritization Analysis	<b>67</b> 68 69
IMPLEMENTATION 6.1 Overview 6.2 Prioritization Analysis 6.3 Project Funding	<b>67</b> 68 69 94
IMPLEMENTATION 6.1 Overview 6.2 Prioritization Analysis 6.3 Project Funding 6.4 Implementation and Oversight	<b>67</b> 68 69 94 100
<ul> <li>IMPLEMENTATION</li> <li>6.1 Overview</li> <li>6.2 Prioritization Analysis</li> <li>6.3 Project Funding</li> <li>6.4 Implementation and Oversight</li> <li>APPENDIX</li> </ul>	67 68 69 94 100 <b>103</b>
IMPLEMENTATION6.1 Overview6.2 Prioritization Analysis6.3 Project Funding6.4 Implementation and OversightAPPENDIXAppendix A: Design Guidance	67 68 69 94 100 <b>103</b> 104
IMPLEMENTATION6.1 Overview6.2 Prioritization Analysis6.3 Project Funding6.4 Implementation and OversightAPPENDIXAppendix A: Design GuidanceAppendix B: Policy Resources	67 68 69 94 100 <b>103</b> 104 105

## Acknowledgements

## ACTIVE TRANSPORTATION PLAN STEERING COMMITTEE

This plan represents the combined vision and goals of the steering committee that guided its development as well as residents and other key stakeholders. Thank you to these community representatives for donating time to this project.

#### STEERING COMMITTEE MEMBERS:

- Jerry Jones, Village Trustee
- Bill Lebetter, Village Trustee
- Kelly Miller, Resident
- Willie Sims, Village Trustee
- Rich Stephens, Village Trustee
- Satina Thompson, Resident
- Carl Toren, Resident
- Caroline Toren, Resident
- Margaret Toren, Resident
- Janet Uza, Resident
- Gene Williams, Mayor

Karen Wingfield-Bond, Village Clerk and Collector

#### ABOUT THE HEALTHY HOTSPOT INITIATIVE

This project was supported by the Healthy HotSpot Initiative.



Healthy HotSpot is an initiative led by the Cook County Department of Public Health that aims to build healthy places in suburban Cook County through community partnerships. For more information, visit **healthyhotspot.org**.

#### ABOUT THE CONSULTANTS

The mission of Active Transportation Alliance is to make walking, bicycling, and public transit so safe, convenient, and fun that we will achieve a significant shift from environmentally harmful, sedentary travel to clean, active travel. We advocate for transportation that encourages and promotes safety, physical activity, health, recreation, social interaction, equity, environmental stewardship, and resource conservation.

We are both Chicagoland's voice for better biking, walking, and transit and a premier consultancy. Our staff includes planning, policy, and education experts who developed many of the best practice programs and recommendations included in this plan. By partnering with us on this project, you not only get the best plan possible, you also support our mission to improve active transportation throughout the Chicagoland region.

## ACTIVE TRANSPORTATION ALLIANCE PROJECT TEAM

Jacque Henrikson Paul Needham Leslie Phemister Heather Schady

# INTRODUCTION

Creating an Active Transportation Plan for Lynwood

CHAPTER 1 | INTRODUCTION

## 1.1 Introduction

Developing a plan to make walking and biking a safe and convenient form of travel in Lynwood.

The Village of Lynwood received an Active Transportation Plan technical assistance grant from Active Transportation Alliance via the Healthy HotSpot Initiative. Lynwood's goal is to develop a holistic approach to making the community safer and more accessible to people travelling on-foot or by bike that considers existing development patterns and opportunities for future growth.

This is the first plan developed by the Village that focuses solely on non-motorized transportation improvements, though the recommendations build off of improvements included in its 2014 Comprehensive Plan.









## LYNWOOD ACTIVE TRANSPORTATION PLAN

## **1.2 Benefits of Active** Transportation

Better health and safety are among the many reasons for communities to support active transportation.

HEALTH: Walking and biking are easy, affordable and convenient ways to not only get exercise, but also to travel. With sedentary lifestyles and obesity on the rise, promoting walking and biking is more important than ever. People are encouraged to get at least 30 minutes of physical activity per day, which can easily be achieved by substituting one short car trip with a trip on a bike or on foot.

EQUITY: About 1/3 of our population either cannot drive or does not have reliable access to a car. This includes children, seniors, people with disabilities, and people with limited means. These groups depend on walking, bicycling, and transit, but often do not have a safe and efficient network of sidewalks, bikeways, and transit amenities to reach destinations like work, school, and grocery stores. SAFETY: Active transportation facilities have safety benefits for all roadway users. Many of the built environment changes that support biking have positive safety benefits for all roadway users by creating a safe place for cyclists, and by encouraging more cautious driver behavior though complete street design.

ECONOMIC: Walking and biking are affordable ways to travel. The cost to an individual who owns, maintains and drives a car on a regular basis is about 12 times higher than transportation costs for a person who relies on biking. A complete and well-connected bicycle and pedestrian network also has a positive effect on property values and local spending.

SOCIAL: People who walk and bike have more opportunities to connect with each other. More connections encourage people to be active, happy and socially engaged.

ENVIRONMENTAL: Shifting motor vehicle trips to walking, biking or transit reduces greenhouse gas emissions and contributes to cleaner air.

## Lynwood Today and its Vision for Tomorrow

Lynwood is a developing community with multiple opportunities for improving walking and biking connections.

The Village of Lynwood in southern Cook County, bordered by the Indiana boundary and the communities of Glenwood, Lansing, Sauk Village, Chicago Heights, and Ford Heights. Lynwood's serene landscape, quiet residential streets, and access to regional trails makes it an ideal place to consider active transportation improvements.

This plan will help guide Lynwood across that "last mile" — place-based economic development, active lifestyle options and sensible environmental stewardship—just as much as it guides the community to improve local connectivity, providing better access to the Thorn Creek Trail, its future downtown, and between subdivisions. Indeed, closing one gap helps to cross the other. The Lynwood Active Transportation Plan provides practical recommendations to support livability in the Village. These recommendations will help focus the Village's transportation investments on the places that matter to the community. The plan also communicates the Village's priorities to regional and state transportation entities like the Illinois Department of Transportation (IDOT), Metra, Pace, and the Cook County Department of Transportation and Highways (CCDOTH).

As such, the Village developed the following vision for this plan:

Lynwood will continue to lay the building blocks for a long-term walkable, bikeable, sustainable community. As it builds and develops, the Village will prioritize nonmotorized transportation options that safely connect to local and regional destinations and incorporate active transportation into daily life.

## **1.4 Planning Process**

The vision and recommendations featured in this plan are the result of a multi-step public engagement process.

The project team engaged members of the public in a variety of ways to ensure that the plan reflects the priorities of the community.

#### ESTABLISHED A STEERING COMMITTEE

A group of residents, local elected officials, and municipal staff came together to create the plan steering committee. They guided the work of the consultants as they fashioned public input, field research, and data analysis into a prioritized list of infrastructure, policy, and program recommendations. Their time, insight, and unique and informative perspectives shaped the recommendations included in this plan. A complete list of steering committee members is available in the Acknowledgements section. Steering committee members contributed in the following ways:

Developed the vision and goals for the plan.

Identified planned and existing bicycle and pedestrian projects.

Engaged the communities they represented in the planning process by distributing information about meetings and events for this plan, posting electronic flyers on their organization's websites, and distributing flyers and links to an online survey.

Reviewed the research and recommendations made by the consulting team to ensure that the plan was reflective of their group's priorities for walking and bicycling.

## DEVELOPED A DEEP UNDERSTANDING OF THE COMMUNITY AND ITS TRANSPORTATION NETWORK

The project team conducted an existing conditions analysis which involved creating a system of maps to analyze bicycle crashes, existing and planned bicycle and pedestrian infrastructure, roadway jurisdiction, roadway width, average daily traffic, and local and regional transportation plans. Using this analysis, the consultants developed a draft network of bicycle and pedestrian priority streets and recommended context sensitive design solutions for Lynwood to implement. Based on public engagement and steering committee feedback the project team also prepared policy, program and implementation recommendations. The steering committee reviewed the recommendations and provided valuable feedback that guided the final plan.

## ENGAGED THE PUBLIC

About 50 residents provided helpful suggestions on places that they like to walk and bike, challenging intersections, and ideas for improvements. Engagement activities included a request to fill out an online survey and a community meeting at the Lynwood Village Hall.

## **1.5 How to Use This Plan**

This plan is organized into 5 chapters, each of which has a specific focus on strategies, tools, or implementation steps to create a more walkable and bikeable community.

CHAPTER 1: Discover Lynwood's goals and priorities for creating a more walkable and bikeable community.

CHAPTER 2:Look here for an analysis of existing and planned conditions and input from the community.

CHAPTER 3: Find out which streets and intersections are targeted for specific infrastructure improvements to prioritize the use of active transportation.

CHAPTER 4: Learn specific details about the benefits and features of the bicycle and pedestrian tools, facilities, and amenities recommended in Chapter 3.

CHAPTER 5: Construct a list of policies and programs to be implemented that facilitate and support the use of active transportation in the community.

CHAPTER 6: Create a framework for implementing plan that addresses project feasibility and funding.



RESIDENTS PARTICIPATE IN AN EXPLORATORY BIKE RIDE TO Assess existing conditions in lynwood



RESIDENTS IDENTIFIED BARRIERS TO ACTIVE TRANSPORTATION DURING LYNWOOD'S COMMUNITY WORKSHOP

## EXISTING CONDITIONS

A Snapshot of Lynwood's Current Transportation System

CHAPTER 2 | EXISTING CONDITIONS

## 2.1 Overview

Existing data sets, plans, and community engagement informed the recommendations in this plan.

Prior to preparing recommendations, the project team set out to understand Lynwood's current roadway network, important community destinations, and the goals, priorities, and characteristics of the people that live here. The purpose of this existing conditions assessment is twofold:

To analyze and understand the barriers and opportunities to walking, biking, and transit in Lynwood

To identify high priority populations that are most in need of better access to pedestrian and bicycle facilities. The project team implemented the following process to reach these goals:

Assembled a Steering committee of community experts and stakeholders to discuss goals, priorities, and existing conditions

Engaged members of the broader community through an online survey and a public meeting

Analyzed US Census data

Reviewed existing plans and studies for relevant information

Reviewed Illinois Department of Transportation roadway and crash data

Conducted on-bike fieldwork to gain first-hand observational on-the-ground information on what it's like to walk and bike in Lynwood

Reviewed Village code and development guidelines

Through this process, the following questions were considered:

Who Lives in Lynwood and who will most benefit from a multi-modal transportation system?

What are Lynwood's existing roads like?

What active transportation projects have local and regional plans prioritized in previous studies?

What priorities did the community articulate in this planning process?

## **Demographics and Equity**

Lynwood is a diverse community with unique needs to consider when developing an active transportation plan. Lynwood is home to more than 9,000 people. The majority of residents are black or African American (65%), followed by white or Caucasian (29%). Lynwood's median household income is slightly lower than the county average - \$46,984 compared to \$54,828. In order to ensure that the highest priority populations have access to active transportation facilities, the project team conducted a demographic equity analysis, focusing on the unique populations that make up the community. The following variables were included: age (younger than 18 or older than 65), median household income, and population density. A combined map of these variables is featured below, that shows the community "hot spots" for priority populations.



CYCLISTS WAITING TO CROSS ON THORN CREEK TRAIL

## FIGURE 2A: DEMOGRAPHIC EQUITY



## ²³ TransportationNetwork

The roadway network within Lynwood is a mixture of calm residential streets that are comfortable for pedestrians and cyclists and high-speed arterials with limited facilities and amenities for non-motorized transportation users. Each road type will warran different recommendations to ensure the comfort and safety of all users of the road. Lynwood's arterials are barriers to active travel due to their high speeds and high traffic volumes. They include Stony Island Avenue, Torrence Avenue, Glenwood Dyer Road, Glenwood Lansing Road, Burnham Avenue, and Lincoln Highway. These roads are controlled by Cook County Department of Transportation and Highways (CCDOTH) and the Illinois Department of Transportation (IDOT), which means that inter-governmental coordination will be required to ensure that this plan's recommendations are carried out over time. Intersections along these roads will also require improvements such as crosswalks and countdown signals to ensure that non-motorized users can safely get across the street.

Joe Orr Road was recently realigned and is planned to be extended into Indiana. If these plans are implemented, the Village aims to develop a new downtown near the intersection of Joe Orr Road and Torrence Avenue. This project should include considerations for pedestrians and cyclists.

#### **ROADWAY NETWORK**

On the following page is a map that details the relevant jurisdictional authority over each street in the community, speed limit, and average daily traffic. The project team used each of these factors to determine the recommended facilities for pedestrians and cyclists in this plan.

Lynwood's local roads are already walkable and bikeable due to their low traffic volume and low speeds. However, some of the residential streets, like Lake Lynwood Drive, 198th Street, and 201st Street, are wide and encourage traffic to move faster than the speed limit.



FAST MOVING TRAFFIC, NO SIDEWALKS, AND UNSIGNALIZED CROSSINGS MAKE GLENWOOD LANSING ROAD AND A FADED CROSSWALK ARE A BARRIER TO ACCESSING THE THORN CREEK TRAIL.

## FIGURE 2B: ROADWAY JURISDICTION AND AVERAGE DAILY TRAFFIC



The number of vehicles that travel on a street each day, its speed limit, number of vehicle lanes, and agency that controls it all influence the types of pedestrian and bicycle facilities that are appropriate for a road. Higher speed, higher traffic arterials like Torrence, Glenwood Dyer Road, and Glenwood Lansing Road were frequently cited as barriers to active transportation during the planning process.

#### **BICYCLE NETWORK**

The existing bicycle network within Lynwood is limited. The Village recently partnered with IDOT to build a sidepath along the newly constructed bridge on Lincoln Highway. While the facility does not yet connect to the broader community, the foresight to request these improvements means that it will be easier to extend a sidepath along Lincoln Highway in the future.

Thorn Creek Trail lies just north of Lynwood's border. This multi-use trail is popular with local pedestrians, runners, and cyclists, but it is uncomfortable to access for many due to the width of Glenwood Lansing Road and the speed of traffic. Intersections and crossings can be improved along this road to ensure that users feel safe and comfortable accessing the trail on foot or by bike.

#### **PEDESTRIAN NETWORK**

Many of Lynwood's residential streets have a complete or near complete network of sidewalks, which enables people to easily walk within their neighborhoods. However, some of its older neighborhoods, like Lake Lynwood, do not have curb ramps with updated tactile pads. These streets should be prioritized for updates to comply with ADA accessibility guidelines.

There is limited connectivity between residential neighborhoods in Lynwood, which requires non-motorized users of the road to venture onto arterials to travel between neighborhoods. Installing paths that connect neighborhoods could incentivize active transportation in a couple of ways – it can reduce the distances people need to travel to get to destinations and it would provide a more pleasant and comfortable experience. Lynwood's arterials have little to no existing sidewalks, discouraging many from choosing to walk to the library, Southland Center, bowling alley, or school. For those who are dependent on non-motorized transportation or the 358 bus, travelling through the community can be a challenging experience.



WHILE THERE ARE NO EXISTING ON-STREET BICYCLE FACILITIES IN LYNWOOD, ITS QUIET RESIDENTIAL STREETS ARE ALREADY GREAT PLACES TO BIKE. MANY OF ITS NEIGHBORHOODS ALSO HAVE SIDEWALKS FOR PEDESTRIANS.

## 2.4 Crashes

Roads and intersections with pedestrian and bicycle crashes can indicate that there is a need for improved facilities.



LYNWOOD HAS A LOW RATE OF BICYCLE AND PEDESTRIAN CRASHES WHEN COMPARED TO OTHER COMMUNITIES IN SUBURBAN COOK COUNTY. HOWEVER MANY RESIDENTS REMARKED THAT A LACK OF BICYCLE AND PEDESTRIAN FACILITIES ON ARTERIALS MAKE WALKING AND BIKING A DIFFICULT AND STRESSFUL EXPERIENCE.

IDOT pedestrian and bicycle crash data between 2009 and 2013 were analyzed to understand what crashes are occurring in Lynwood. In 2010, 2 pedestrians were killed in a hit and run on Glenwood-Dyer Road. In addition, 4 pedestrians have been injured in crashes in Lynwood between 2009 and 2013, and 4 cyclists have been injured. The majority of crashes involving pedestrians and cyclists have occurred on arterials, though a handful have taken place on local roads.

While the number of people hit in Lynwood on bike or on foot is statistically lower than national and local averages, it is a priority for Lynwood to ensure that no one is killed or seriously injured on its roads.

On the following page is a map illustrating the bicycle and pedestrian crashes that occurred in Lynwood between 2009 and 2013.

## FIGURE 2C: BICYCLE AND PEDESTRIAN CRASHES



## Previous Planning Studies

Local and regional plans were reviewed to ensure consistency across recommendations.

#### VILLAGE OF LYNWOOD COMPREHENSIVE PLAN (LYNWOOD, 2014)

Lynwood's comprehensive plan lays out principles, goals, and priorities for the community over the next few decades. The transportation section of the plan includes recommendations for the bicycle and pedestrian networks. The plan proposes a bike network, which includes Glenwood Lansing Road, Glenwood Dyer Road, portions of Joe Orr Road, Burnham Avenue, and along the ComEd right of way. The plan also recommends creating a comprehensive pedestrian network to ensure that people can walk within the community.

#### SOUTH SUBURBAN BICYCLE PLAN (SSMMA, 2008)

SSMMA's 2008 bike plan was developed to create a regional bike network for the communities in the south suburbs. The plan's goals include the following: complete the regional trail network, develop a network of signed bicycle routes, and create a network of regional on-street routes. Several routes within Lynwood are recommended for on-street facilities, including Torrence Avenue, Stony Island Avenue, Burnham Avenue, and Glenwood Dyer Road. The plan also includes off-street routes, such as Lincoln Highway and extending the Thorn Creek Trail along Glenwood Lansing Road. While Lynwood's Active Transportation Plan bike network includes these recommended bike routes, we are recommending that the aforementioned corridors be considered for sidepaths in order to be consistent with current standards and best practices.

### IL ROUTE 394/ROUTE 1 CORRIDOR: CORRIDOR PLAN (SSMMA, 2015)

This plan identifies transportation and economic development improvements to the 394 corridor within a 3-mile boundary between I-80 and the Will-Kankakee County Line. The plan includes recommended design standards for pedestrians and cyclists within the study area, and identifies pedestrian and bicycle priority routes.

Within Lynwood, Glenwood Lansing Road between Stony Island Avenue and Torrence Avenue, Stony Island Avenue between Glenwood Lansing Road and Glenwood Dyer Road, Joe Orr Road, and Lincoln Highway are identified as potential pedestrian routes and the Old Plank Trail extension is included among the potential bike routes.

## FIGURE 2D: RECOMMENDATIONS FROM PREVIOUS PLANNING STUDIES



Planned Bikeways

Existing Trails

## Community Engagement

Approximately 50 residents and stakeholders gave input on the plan, through either participation in the steering committee, an interactive workshop, or an online survey.

In general, the community responded positively to the plan. Many of the participants in the planning process either walk or bike regularly in Lynwood, and were instrumental in identifying critical opportunities and challenges.

Some common themes emerged from resident feedback, which can be categorized as barriers to active transportation and destinations:

## THORN CREEK TRAIL

Better access to Thorn Creek Trail was noted by many participants in the planning process. In particular, the intersections of Torrence Ave and Lake Lynwood Drive at Glenwood Lansing Road at Torrence were noted. People also wanted a sidewalk along the south side of Glenwood Lansing Road to ensure safe access from Lynwood to the trail.

#### LOCAL ROADS

Participants noted that the local roads are primarily good for bicycling, but 198th Street and 201st Street have a lot of cut-through traffic that travels faster than the speed limit.

## MAKE IMPROVEMENTS TO THE 358 BUS ROUTE

Sidewalks, sidepaths, crossing improvements, bus shelters, and bike racks are among the improvements that people want to see along Torrence Avenue to create better access to the 358 bus.

## IMPROVE ACCESS TO THE LIBRARY AND SOUTHLAND CENTER

Both destinations are currently only accessible by car. Participants in the planning process wanted to see a better connection from neighboring communities to avoid having to travel on Stony Island Avenue.

## CREATE A SAFE ROUTE TO SANDRIDGE SCHOOL

Though Sandridge is not located within Lynwood's boundary, many students attend the school and walk down Glenwood Dyer Road to get there. The community noted the need for sidewalks, an improved crossing at the school, and a realignment of the intersection of Glenwood Dyer Road and Burnham Avenue.

## **CREATE NEW TRAILS**

Workshop participants identified a couple of trail projects that could enhance Lynwood's network. The Old Plank Trail extension is a project that has been included in a number of plans for the community. In addition, residents noted that the ComEd rightsof-way running through the community could be developed to include trails in the future.

## DEVELOP NEW PROGRAMS AND POLICIES

Themed bike rides, adult and youth bike education classes, and a Complete Streets policy rose to the top of the community's list of bicycle and pedestrian programs and policies.

## FIGURE 2E: COMMUNITY ENGAGEMENT RESULTS



The above map summarizes all of the input received from the community.

## 2.7 Existing Programs and Policies

Creating a pedestrian and bicycle friendly community is not just about building bike lanes and sidewalks. Programs and policies can inspire and help more people walk and bike for transportation.



COMMUNITY WORKSHOP PARTICIPANTS WEIGHED IN ON PROGRAMS AND POLICIES THAT THEY WOULD LIKE TO SEE IN LYNWOOD.

## MUNICIPAL CODE

The Village of Lynwood regularly inspects sidewalks and prioritizes segments that are in disrepair. It also encourages residents to report sidewalks in need of replacement. It pays for replacement of sidewalks that meet its guidelines in full.

There are currently no local ordinances that specifically impact cyclists in the Village code. The Village uses the Illinois Vehicle Code as its basis for traffic enforcement for pedestrians, cyclists, and motorists.

#### PROGRAMS

The Village has a number of enforcement related programs in place that relate to walking and biking. First, police officers receive regular training that about laws that impact pedestrians and cyclists. This program ensures that officers are aware of the rights and responsibilities of all users of the road, and are able to enforce violations where needed.

In 2010, the Village installed red light cameras at Lincoln Highway and Glenwood Dyer Road. The 24-hour enforcement camera tickets drivers for failing to stop before turning right on red or for making an illegal right turn on red. In conjunction with the cameras, the Village conducted an analysis of crashes at the intersection, finding that crashes decreased 53% overall. While at the moment, this initiative has a minimal impact on pedestrians and cyclists, in the future, as Lynwood's active transportation network is developed, the presence of red light cameras will create a safer intersection for pedestrians and cyclists. Additionally, this type of crash analysis can be implemented by the Village as other improvements to its network are made.

## ACTIVE TRANSPORTATION NETWORK

Ideas for developing a robust network of streets and trails to prioritize the use of active transportation.

## Active Transportation Network

The plan identifies a network of priority streets for the inclusion and/or enhancement of pedestrian and bicycle facilities. Once constructed, people of all ages and abilities will be able to access destinations on foot and by bike, both inside and outside of the community, and the Village will be a more sustainable place.

As Lynwood works to maintain and improve the streets in this network, this section should be referenced to ensure that, wherever possible, adequate bicycle and pedestrians facilities are constructed. See Chapter 4 Toolbox for additional guidance on bicycle and pedestrian facility design.

## THE NETWORK DEFINED

The Lynwood active transportation network is designed to make biking and walking trips from residents' homes to neighborhoods, trails, schools, parks, jobs, shopping centers, destinations, and transit stops a safe, convenient experience. A well-connected network will provide residents the choice to make local and regional trips without a car. With older adults choosing to age in place, youth seeking independence, the ever increasing cost of car travel and the environmental impacts, a complete active transportation network is designed to accommodate the residents of Lynwood as the community continues to develop.

The foundation for the network and its recommendations was laid by true Lynwood biking and walking experts: the residents themselves. These recommendations provide an initial framework for Lynwood to make active transportation a viable choice for many typical daily trips.

Lynwood will implement some of these recommendations at the local level. Many, however, will require coordination with Cook County Department of Highway (CCDOTH) and the Illinois Department of Transportation (IDOT), as well as neighboring municipalities. For these projects, this plan communicates the priorities of the Village and its residents to those agencies and the region.

This section provides a full network map for all the recommendations. The following sections break down the network into three components:

#### **Bicycle Network**

Pedestrian Improvements

Intersection Improvements

The map on the following page depicts the full recommended active transportation network for the Village of Lynwood. Bicycle priority streets are those that make up the recommended bicycle network, and pedestrian priority streets are areas with high pedestrian activity that would benefit from additional enhancements or areas that are currently lacking safe accommodations for people on foot. Specific corridor recommendations

## LYNWOOD ACTIVE TRANSPORTATION PLAN

## FIGURE 3A: PROPOSED ACTIVE TRANSPORTATION NETWORK



are detailed in the remaining sections of this chapter.

## **3.2 Bicycle Network**

The bike network provides context-sensitive recommendations for bike facilities that connect residents to key destinations based on an analysis of existing conditions and community engagement.



JUST NORTH OF LYNWOOD, THE THORN CREEK TRAIL IS A POPULAR DESTINATION FOR WALKERS, RUNNERS, AND CYCLISTS.

Lynwood's proposed bicycle network is designed to provide a low-stress experience for people to access destinations both within and outside of the community and access regional trails. It features a combination of off-street trails through open space, sidepaths on roads with high speeds and high traffic volumes, and bike lanes on residential streets with low vehicle volumes and low speeds. Much of the proposed network includes sidepaths because many of the roads that provide the most direct and convenient connections across the community are higher volume, higher speed roadways that required separated facilities to facilitate safe cycling for all ages and abilities. However, within residential neighborhoods, it is currently much more comfortable to bike on-road. Bike lanes are sufficient and there is ample space within the curb-to-curb pavement to include them. Including bike lanes on these roadways will narrow the vehicle travel lanes, which will in turn slow down traffic, making it a safer environment for both bicyclists and pedestrians.

The following section breaks out the bikeways by facility type and includes maps of each. Design specifications for each facility type are included in Chapter 4.

The map on the following page includes the complete proposed bicycle network for Lynwood.

## FIGURE 3B: PROPOSED BICYCLE NETWORK



## **BIKE LANES**

Bike lanes give bicyclists a designated space to ride that is separated from the vehicle travel lanes by a painted stripe. They raise the visibility of bicyclists and help bicyclists and drivers behave predictably. They are appropriate for streets with sufficient right-of-way and higher traffic volumes. Streets with bike lanes have been found to lower motor vehicle speeds, which results in fewer crashes and lower crash severity for all users. Bicycle lanes require regular sweeping to clear road debris.

The recommended bike lanes in Lynwood are mostly on low traffic streets through residential areas. Two of the streets are classified as collectors and the others are local. While bike lanes are typically recommended on higher traffic volume roadways, they are recommended on these lower traffic volume local streets in Lynwood, such as Lake Lynwood Drive, because the vehicle lanes are wider than necessary for the residential land use, which encourages speeding. According to community engagement, two of the recommended bike lanes below, 198th and 201st, have cut-through vehicle traffic that travels higher than the posted speed limit. The presence of these bike lanes will visually narrow the roadway and slow down traffic. Upon completion, the proposed bike lanes will provide connections between the recommended and existing network of off-street trails, sidepaths, and residential areas. Bike lane design recommendations are detailed in Chapter 4.

Bike lane recommendations include:

**198TH STREET:** This municipally-controlled street classified as a minor collector provides an east/west connection across the community from Torrence Avenue to Burnham Avenue through a residential neighborhood. In order for bike lanes to go on this roadway, parking would need to be restricted on one side of the street. This route will connect people from this residential area to two major arterials, ball

#### 201ST STREET AND PRESTON LN/ QUEENSBRIDGE DR/BILSTONE DR: These

municipally-controlled streets provide an additional east/west connection across Lynwood. It will connect the residential neighborhood east of Torrence Avenue to the neighborhood to the west. This bike lane route will also connect with the proposed neighborhood connection trail from Hampshire to Stony Island. It will provide an important connection across the whole community in conjunction with the proposed trail. The bike lane passes by Terrace Community Park, Living Grace Church, Lakeview Community Park, and Torrence Avenue Pace bus stops. It may be necessary to restrict parking on one side of the street to build it.

LAKE LYNWOOD DRIVE: This route provides a north/south connection through a major residential area of Lynwood. It will connect people in this residential area to Eagle Academy Christian School and to the Thorn Creek Trail. It may be necessary to restrict parking on one side of the street to build this bike lane.



LYNWOOD'S WIDE RESIDENTIAL STREETS COULD BE ENHANCED BY ADDING BIKE LANES.

## FIGURE 3C: PROPOSED BIKE LANES



## SIDEPATHS

Sidepaths provide a dedicated, off-street space parallel to the street for both pedestrians and cyclists. They are a good solution for corridors that have higher traffic counts, higher vehicle speeds, and few driveway entrances and curb cuts. They can provide a pleasant riding experience for a wide range of cyclists, including those with a low tolerance for sharing the road with motorized traffic. They tie in well with regional trail networks. Driveway entrances and street intersections are particularly dangerous conflict points for cyclists; sidepath applications should minimize both, where possible. For sidepaths with a high volume of pedestrians and cyclists, the Village should educate users about etiquette, rights, and responsibilities.

Once the network is fully built out, Lynwood will have a comprehensive network of lowstress, off-street bike facilities that will connect residents to all reaches of the community. Sidepaths along major arterials in Lynwood and neighboring communities will be an important component of this network.

Sidepath recommendations include:

TORRENCE AVENUE: This sidepath provides an important north/south connection through the heart of the community, from Glenwood Lansing Road to the Village limits or Lincoln Highway. It would connect residents to schools, Pace bus stops, residential areas and the Thorn Creek Trail. Special considerations should be made at the intersection of Glenwood Lansing Road, where a lot of cyclists will be entering the trail. The sidepath is recommended for the east side of the roadway. The Village should coordinate with Cook County in building it.

GLENWOOD LANSING ROAD: This minor arterial would provide an important east/ west route across the northern part of the community. It would connect residents to key destinations, such as the Thorn Creek Trail and Eagle Academy Christian School. The sidepath would be located on the south side of the roadway. Coordination with Lansing and Chicago Heights will need to be considered. There is also a recommended sidepath on the north side of the road to connect the Thorn Creek Trail to the commercial area a block east. In the short-term, remove rumble strip and install a wider paved shoulder when the roadway is resurfaced.

STONY ISLAND AVENUE: This major collector provides a north/south route across the whole western edge of the community. It will connect residents to the Glenwood-Lynwood Public Library and the Southland Center Sports Complex. The sidepath is recommended for the east side of the road. During community engagement residents said that the library and sports complex currently are only safely accessible by car.

**GLENWOOD-DYER ROAD:** A sidepath is already programmed on this minor arterial roadway from Stony Island Avenue to Torrence Avenue on the south side of the street. This sidepath could be continued on the south side of the street up until the Sandridge School area. Due to space available along the right-of-way, it is recommended that the sidepath is on the north side of the roadway southeast of Sandridge School, connecting to the existing bridge sidepath in the southern portion of the community. This route is a vital component of the network spanning across the community, connecting residents to Sandridge School, Lynwood Sports Center Roller Rink, commercial areas and Village Hall.

BURNHAM AVENUE: This minor arterial will provide an important north/south connection along the eastern edge of the community. It connects to the Lansing Municipal Airport, Heritage Middle School, Sunnybrook School, and residential areas. The sidepath is proposed on the west side of the roadway. The Village should consider using updated development guidelines for new intersections to make bicycling safer along this corridor.

## FIGURE 3D: PROPOSED SIDEPATHS



#### CHAPTER 3 | ACTIVE TRANSPORTATION NETWORK

JOE ORR ROAD: The planned expansion of Joe Orr Road provides an opportunity for a sidepath. As this is built, the Village should coordinate with Cook County in the design phase. When constructed it should also be extended to the existing Joe Orr Road.

LINCOLN HIGHWAY: This sidepath is recommended for the north side of the roadway to connect Lynwood to its neighbor, Frankfort. Coordination with Frankfort would be needed.

SAUK TRAIL: Coordination would need to happen with Chicago Heights, Sauk Village, the County and State to build this sidepath. However, if built it would provide an important connection to many schools, municipal neighbors and the planned extension of the Old Plank Trail.

#### TRAILS

When right-of-way is available, a trail should be constructed to provide additional connectivity for the active transportation network. Trails can provide important connections to regional greenways and offer trail users opportunities for recreation, regional bike commuting, and other longer distance active transportation inside and out of Lynwood. Trails can be built through open space or under-utilized areas in coordination with future developments. Participants during the community engagement process expressed interest in adaptive reuse projects that would turn ComEd right-of-way and an old rail line into trails. This plan includes recommendations for utilizing future development opportunities to increase access to key destinations, proposed bike facilities and the Thorn Creek Trail.

Trail recommendations include:

COMED RIGHT-OF-WAY: There is a large stretch of ComEd land going north/south and east/ west through Lynwood that would provide an ideal place to locate a trail in the center of the community. ComEd has been amenable in the past to trails being built on their land. Longterm consideration should be given to building a pedestrian bridge over I-294 to continue the trail.

OLD PLANK TRAIL: The trail could be extended through Lynwood on old railroad right-of-way. This would provide a great regional connection to the Lynwood active transportation network, connecting to the current endpoint of the Old Plank Trail in Chicago Heights and the planned extension of the Pennsy Greenway in Indiana.



THE VILLAGE COULD PARTNER WITH COMED TO DEVELOP FUTURE TRAILS CONNECTING GLENWOOD DYER ROAD TO GLENWOOD LANSING ROAD.

### FIGURE 3E: PROPOSED TRAILS AND NEIGHBORHOOD CONNECTION ACCESS PATHS



#### NEIGHBORHOOD CONNECTION ACCESS PATHS:

Due to traditional cul-de-sac suburban subdivision design, places that are actually geographically close as the crow flies are disconnected due to lack of street connectivity between subdivisions. Short, car-free paths between these subdivision developments will connect residential neighborhoods and give residents an alternative walking adn biking route without having to go on higher speed, higher traffic volume arterial roadways. These trails are recommended through open space, which is sometimes free for development, but sometimes may require and easement. It is easiest to implement these neighborhood connection access paths when working with developers on upcoming projects through development guidelines. However, it is also feasible to work with land owners to obtain an easement by communicating the economic benefits of trails. Research and coordination with the land

owners or developers would be needed.

Recommended neighborhood connection access paths include:

HAMPSHIRE TO STONY ISLAND AVENUE: This would connect the residential neighborhood to the Southland Center Sports Complex.

DEWEY AVENUE TO PRESTON LANE: This will allow residents to walk and bike between neighborhoods without going out onto Torrence Avenue. It will also shorten walking and biking distances.

SAVOY TO NASH: This will allow residents to walk and bike between neighborhoods without going out onto Torrence Avenue. It will also shorten walking and biking distances.

#### SPRING MEADOWS LANE TO NICHOLS DRIVE:

This is a new development zoned commercial. Since it is still under construction, working with the developer to pave it could be feasible.
## ^{3.3} Pedestrian Improvements

Installing facilities and amenities that enhance the environment in pedestrian priority areas and complete gaps in the sidewalk network can greatly improve the pedestrian experience.

Several of the gaps in the sidewalk network that were identified in this plan are located on busy, high speed corridors and are recommended with sidepaths on the other side of the roadway. Also, in some cases there are sidewalks within residential neighborhoods, but not on the roadways leading up to them, such as on Crescent Avenue. While residents could enjoy leisure walks within their neighborhoods, the lack of sidewalk connectivity creates an impediment to walking for transportation to destinations outside of subdivisions.

Where possible, the Village should prioritize completion of the proposed pedestrian facilities in conjunction with roadway reconstruction projects. Safe Routes to School funding from the Illinois Department of Transportation would be a good option for pedestrian facilities near schools, such as the sidewalk proposed near Sandridge School on Glenwood-Dyer Road, because it could cover 80% of the cost of the project. The sidewalks proposed near this school are particularly important because many students from Lynwood attend it. Finally, there are many other sidewalk gaps identified in this plan, included in the map. The Village should strive to have pedestrian facilities, whether a sidewalk or sidepath, on each side of every roadway to provide a safe and convenient walking environment. While it would be difficult to install them all overnight, the Village should work to complete the network over time as roadways are resurfaced and new ones are built. A prioritization map is included in Chapter 6.



GLENWOOD LANSING ROAD CROSSWALK THAT DOES NOT CONNECT TO A SIDEWALK OR PATH.

#### FIGURE 3F: PROPOSED PEDESTRIAN IMPROVEMENTS



Sidepath, Planned

Trail, Planned

LYNWOOD ACTIVE TRANSPORTATION PLAN

### ^{3.4} Intersection Improvements

Providing solutions for barriers to walking, biking and access to transit at key intersections and crossings is critical to improving active transportation in Lynwood.

Safe, passable intersections are vital to a wellfunctioning active transportation network that serves all users and all modes of travel. Many intersections in Lynwood today, especially where two busy roads meet, are designed to prioritize moving vehicles rather than people traveling on foot or by bike. Improving intersections is key to making people feel that walking and biking is a good choice for them and their family. When implementing many of the corridor pedestrian and bike facilities, such as sidepaths and bike lanes, intersection improvements will also be necessary to construct in tandem.

Of particular note from community engagement are intersections that provide access to the Thorn Creek Trail, such as Torrence Avenue and Lake Lynwood Drive as well as Glenwood Lansing Road and Torrence Avenue. Crossing improvements along the Torrence corridor are also important so residents can safely access the Pace bus stops. An improved crossing at Sandridge School is also a priority because although it is outside the Lynwood boundaries, many residents attend this school. For intersections along Torrence, Glenwood Dyer, Burnham and Lincoln Highway, the Village will need to coordinate improvements with IDOT. For Glenwood Lansing, Stony Island, and Joe Orr, the Village should coordinate with Cook County.

Intersection improvements include:

#### TRAIL CROSSINGS

Where trails meet major roadways the treatments should reflect the increased presence of pedestrians and cyclists. Targeted crossing improvements are detailed below. Each recommendation is numbered. Refer to the map on page 39 to see the location of each intersection.

THORN CREEK TRAIL AND GLENWOOD LANSING RD: Remove fencing at the school, move trail crossing to this location, add crosswalk, RRFB, buffer area. Fix broken street lights. Coordination with the Forest Preserve and Eagle Academy Christian School would be needed.

2 IL-394 AND COMED ROW: Install bike/ped bridge over 394 to connect ComEd trail

**3** GLENWOOD DYER RD AND COMED ROW: Add trail crossing signage, crosswalk, RRFB and loop detector

#### **MAJOR INTERSECTIONS**

All major street crossings should include push buttons, countdown signals, and high visibility crosswalks, decreased vehicular turn radii where possible, and pedestrian access through pork chops and curbs. The following intersections should be targeted for these additional improvements:

4 GLENWOOD LANSING RD AND STONY ISLAND AVE: Move guard rail, add crosswalks, pedestrian countdown timer on north and east legs

#### 5 GLENWOOD LANSING RD AND TORRENCE

AVE: Add crosswalk, pedestrian countdown signal, and bus shelter to south leg of intersection

6 STONY ISLAND AVE AND GLENWOOD DYER RD: Close driveway on northeast corner, install pork chop islands, crosswalks, pedestrian countdown signals at all legs. Install gateway signage.

#### **Z**STONY ISLAND AVE AND JOE ORR RD:

Reduce turning radii, install pedestrian countdown signals, crosswalks

B GLENWOOD DYER RD AND TORRENCE AVE: Add pedestrian access through pork chops, crosswalks, and pedestrian signals. Increase pedestrian crossing time. Reduce radii on southwest and northeast corners. Install bus shelter.

**9** TORRENCE AVE AND 201ST: Near-term: install crosswalk, bus shelter, and RRFB. Long-term: install signal

#### **U** BURNHAM AVE AND LINCOLN HWY:

Close Subway's north drive on Lincoln. Add crosswalk, pedestrian countdown signal, & median cut-through to north side of Glenwood-Dyer. Add a pork chop, pedestrian countdown signals, & crosswalks to the northwest side of Glenwood-Dyer and southwest side of Lincoln

#### D

#### 11 BURNHAM AVE AND GLENWOOD DYER

RD: In the short-term, close the driveway on northwest corner of Burnham. In the longerterm, install roundabout, create a gateway

#### 12

13

12 198TH ST AND TORRENCE AVE: Install bus shelter

13 TORRENCE AVE AND JOE ORR ROAD: Install bus shelter

#### MIDBLOCK AND UNSIGNALIZED CROSSINGS

In some cases, to create a convenient active transportation network, people need to cross busy roadways at places with no traffic signals. If people have to walk or bike half a mile to reach the nearest safe intersection, they will be dissuaded from choosing active transportation. Treatments can heighten driver awareness of the presence of pedestrians and cyclists at midblock crossings so the network can remain well-connected and safe. Some targeted improvements include:

#### GLENWOOD LANSING RD AND OAKWOOD

AVE: Reduce turning radii, extend sidewalk on northeast leg to connect to the street

**I** GLENWOOD DYER RD AND SANDRIDGE SCHOOL: Install school crossing, RRFB, use flashing beacons during arrival and dismissal times. The Village can coordinate with the school and IDOT in applying for a Safe Routes to School grant to cover 80% of the cost of these improvements.

6 GLENWOOD-DYER RD AND VALERIE DR: Install mid-block crossing using median as a pedestrian island. Add crosswalk and pedestrian crossing signage.

#### FIGURE 3G: PROPOSED INTERSECTION IMPROVEMENTS



Major Intersection

Midblock or Unsignalized Crossing

Trail Crossing



#### LYNWOOD ACTIVE TRANSPORTATION PLAN

# ACTIVE TRANSPORTATION TOOLBOX

Specifications and guidance for bicycle and pedestrian facilities and amenities

## 4.1 Overview

This chapter includes best practices for designing and constructing bicycle and pedestrian facilities and amenities and for intersection improvements. These tools are tested, widely supported, and used throughout the country. Facility descriptions and resources are included. While most of the facilities included in this section are recommended in the previous chapter of the plan, a few additional tools have been included should future projects warrant them.



BIKING ON 202ND ST

## **42 Bicycle Tools**

There are many different types of bikeways. This section summarizes the facilities recommended for Lynwood.



**BIKE LANE** 

#### **BIKE LANE**

Bike lanes are appropriate on streets with heavy traffic. Bike lanes are indicated by onstreet markings, which can be supplemented with signage. At minimum, bike lanes should be 5 feet wide; where possible, 6-foot-wide lanes are preferred, as they allow cyclists to ride further away from parked cars. Bike lanes reinforce proper roadway etiquette, raise the visibility of cyclists, and help both cyclists and drivers behave predictably when sharing road space. They also reduce motor vehicle speeds, lowering the risk of severe crashes. Bicycle lanes require regular sweeping to remain acceptably free of road debris.

Colored pavement bike lanes improve visibility and identity, and help reduce the perceived width of the vehicular travel way. Paint can be used to mark the lanes if the roadway surface is pretreated to avoid slipperiness; colored asphalt or a thermoplastic coating provide a higher level of traction. These lanes are often used to bridge short areas where there is higher potential for vehicular conflicts; cost permitting, however, they are a viable option on an entire corridor. Green has become the standard choice for colored pavement bike lanes in the United States.

Treatment Type	Dimensions				
	MIN	Target	MAX	Notes	
Signed Routes	9	10	14	Can be used on shared lanes or in combination with bicycle facilities.	
Bike Lanes	4	5	6	Include bike lane marking.	
Colored Pavement Bike Lanes	4	5	6	Pavement color should be green. Include bike lane marking and signs.	
Sidepaths	8	10	12	Replaces the pedestrian zone. Can be 6 ft. with engineering judgment. Also called a sidepath.	
Trails	8	10	12	Replaces the pedestrian zone. Can be 6 ft. with engineering judgment. Also called a sidepath.	

#### TABLE 4A BICYCLE WAYS

#### SIDEPATH

Sidepaths are off-street facilities shared with pedestrians and recreational users. These paths are a good option for high-speed, high-volume corridors with wider block spacing, providing access for users who are not comfortable riding bicycles in heavy traffic. These paths also can link regional trail networks. Sidepaths should be at least 8 feet wide; widths of 12 to 14 feet are preferred. Paths can be provided on both sides of a street; if a sidepath is on one side only, adequate crossing accommodations must be provided to access land uses on the other side of the roadway. Special care should be taken to design driveway and intersection crossings to reduce potential conflicts. Adequate separation from the curb face can be created by a tree row, shoulder, or parking lane.

#### TRAIL

Trails are off-street facilities that can enhance network connectivity, filling in gaps where the street network is not complete or cannot accommodate bike facilities. Trails should meet the same design criteria as shared-use paths. They function best on exclusive rights-of-way, such as along waterways, utility corridors, or railroad corridors. Although trails are more expensive to build than on-street bike facilities and generally offer only limited access points, they provide important connections to regional trail systems and great opportunities for recreational cycling.



SIDEPATH



## **43 Pedestrian Tools**

Sidewalks and lighting are the backbone of a pedestrian network.

#### SIDEWALK

Sidewalks should be standard practice in residential neighborhoods. A well-designed residential sidewalk has a minimum 5-foot unobstructed width, allowing two people to walk comfortably side-by-side. A residential sidewalk should also provide separation from the street. If possible, a width of 6 to 8 feet is preferable.

Table 4B on the following page summarizes recommended sidewalk designs.



**COMMERCIAL SIDEWALK** 



**RESIDENTIAL SIDEWALK** 

#### TABLE 4B PEDESTRIAN WAYS

Treatment Type	Dimensions				
	Min	MAX	TARGET		NOTES
Residential Sidewalks	Curb Zone	1	1.5	2	Clear zone for utility and Street furniture, not applicable if there is no curb.
	Furniture Zone	2	6	10	A tree lawn separation area is desired.
	Pedestrian Zone	4	5	8	Unobstructed walking area required.
Commercial Sidewalks	Curb Zone	1	1.5	2	Clear zone for utility and furnishings.
	Furniture Zone	4	5	6	Furnishing zone for benches and transit shelters etc. Ideally 6 ft. allow for 6 ft. x 6 ft. tree grates.
	Pedestrian Zone	5	5	10	Consider tree grate surfaces in pedestrian zone.
	Frontage Zone	1	5	10	Larger frontage zone allows for café seating.

#### PEDESTRIAN SCALE LIGHTING

Pedestrian-scale lighting is essential for creating safe street environments. Conventional street lighting, designed primarily to light the vehicle way, often is inadequate for pedestrian needs, leaving unlit areas and dark shadows on walkways. Pedestrian-scale lighting is especially important in cold-weather climates with long winter nights. Pedestrian-scale lighting illuminates potential tripping hazards, helps to deter crime, and makes pedestrians more visible to drivers. Pedestrian-scale lighting also can illuminate bikeways near walking areas. Retrofits of existing streetlights and new installations should provide lighting on sidewalks and multiuse paths. Pedestrian-scale lighting should be coordinated with building and property owners to include building-mounted lighting for sidewalks, alleys, paths, and stairways where poles would obstruct the pedestrian zone. Land use context should be considered to achieve optimum lighting levels in pedestrian areas, and care must be taken to avoid light trespass into the windows of nearby residential units. Common examples of pedestrian-scale lighting include acorn, globe, and lantern lamps.



PEDESTRIAN SCALE LIGHTING

## **4.4 Intersection Tools**

There are many ways to improve an intersection for pedestrians and cyclists. Here is a summary of the tools recommended for Lynwood and the appropriate design considerations.

#### **CROSSWALK VARIATIONS**

All crosswalks not controlled by signals or stop signs should have longitudinal markings, per the 2009 Manual of Uniform Traffic Control Devices (MUTCD). These markings are significantly more visible to drivers than standard crosswalks. Crosswalks in special districts may have custom designs, but these must comply with ADA standards for smoothness and visibility. When signalized intersections include an exclusive pedestrian phase, diagonal crossing can be permitted; this is sometimes called a pedestrian scramble.



HIGH VISIBILITY CROSSWALK



STAMPED CONCRETE CROSSWALK



STANDARD CROSSWALK

#### TABLE 4C CROSSWALKS

Crosswalk Type	Dimensions	Design Considerations	Guideline	Notes
Standard	Lines 6 to 24 in. Wide. Spacing 6 ft. wide minimum. Should be as wide as approaching sidewalk.	Extend lines across entire roadway. Lines can connect to intersecting roadways crosswalk. Use at signalized and controlled intersections on minor roadways to indicate proper crossing location. Can be used at uncontrolled and midblock crossings as determined by study. Locate markings to center curb ramps within the crosswalk.		Edgelines are the minimal crosswalk treatment.
High Visibility	Lines 12 to 24 in. wide with 12 to 60 in. gaps. Spacing 6 ft. wide minimum. Should be as wide as approaching sidewalk.	Gap between lines should not exceed 2.5 times the width of the line. Gaps should be placed to align with wheel base of vehicles.	Use at signalized and controlled intersections on major roadways to indicate proper crossing location. Can be used at uncontrolled and midblock crossings. Locate markings to center curb ramps within the crosswalk.	Longitudinal markings are the preferred crosswalk treatment. 24 in. wide markings do not need a supplemental edge line.
Custom	Spacing 6 ft. wide minimum. Should be as wide as approaching sidewalk.	Crosswalks can be created with bricks, pavers, or thermoplastic.	Use at signalized and controlled intersections to indicate proper crossing location. Can be used at uncontrolled and midblock crossings as determined by study. Locate markings to center curb ramps within the crosswalk.	Supplement custom designs with a 24 in. wide edge line to improve visibility. Line can be implied through color variations by using complementary materials.
Pedestrian Scramble	Same as for transverse lines. Custom designs can be created to inscribe the entire intersection.	Interior transverse lines should not connect, but be angled at curb ramps to support the diagonal crossing movement. Inside markings and custom designs are permitted.	Signal must include an exclusive pedestrian phase timed for the longest crossing distance at 3.5 ft. per second. 3 ft. per second may be used in pedestrian priority areas.	_
Stop Signs	Standard R1-1 stop sign as defined by MUTCD.	Use at unsignalized intersections within signalized areas.	Use at unsignalized intersections within signalized areas, intersections of minor roads with major roads or designated highways. Also consider on minor roads where multimodal volumes exceed 2000 units per day, sight is limited or obstructed, and crashes are caused by failure to yield (3 within 5 yrs. Or 2 within 3 yrs.).	
Signed Crossing	Preferred signs include R1-5b, R1-6a, and W11-15 with W16- 7p and W16-9p as defined by MUTCD.	Pedestrian crossing warning signs and must stop for pedestrian signs are considered a controlled crossing. Place R1-5b where vehicles are expected to stop, W11-15/W16-7p where pedestrians and cyclists are expected to cross, and W11-15/W16- 9p within 300 ft. of the crossing.	Use where transit routes or pedestrian destinations support crossings, or where residents have requested crossing improvements but signal or stop sign warrants/ guidance has not been met.	Crosswalks are encouraged but not required.
Mid-Block Crossing	Same as crosswalks and/or signed crossings.	Include crosswalks at mid-block crossings and median crossing islands on 4-lane roads. Can be signed or even signalized if warrants are met.	Use in combination with transitional infrastructure features to heighten driver awareness. Do not use alone on 4 lane roadways where vehicle speeds exceed 40 mph and ADT exceeds 12,000 or 15,000 with a raised median/crossing island.	Conduct an engineering study. Consider number of lanes, pedestrian volumes, roadway speed, potential to accommodate crossings, medians, geometry and lighting.
Crossing Islands	Varies; minimum 5 to 6 ft. in width to allow for a wheel chair to sit in the island.	Can be used on bus routes. Requires clear bicycle accommodations on bike routes.	ADT $<$ 20,000 Speed limit of $\leq$ 30 mph	Can be designed with offset entrances to encourage drivers and pedestrians to face each other.

#### COUNTDOWN SIGNAL

Countdown pedestrian signals show how much time remains before the traffic signal changes and are designed to reduce the number of pedestrians who start crossing when there is not enough time to complete their crossing safely. Countdown pedestrian signals are now required by the MUTCD for all new and rehabbed pedestrian signal installations.

Signal timings at crossings should be set at 3.5 feet per second to allow adequate time for pedestrians to cross; timings of 3 feet per second may be needed to allow safe crossings for older people and those with disabilities.

#### RECTANGULAR RAPID FLASHING BEACON (RRFB)

RRFBs are extremely visible, using flashing yellow LED lights to supplement standard pedestrian crossing warning signs at mid-block and other unsignalized crossing locations. These user- activated beacons are FHWAapproved and promote increased yield rates and improved pedestrian safety.

#### ACCESSIBLE PEDESTRIAN SIGNAL (APS)

APS provides audio and vibro-tactile cues to identify the push button location and indicate the WALK interval for pedestrians with visual disabilities. To ensure ease of use, these devices must be installed in accessible locations, immediately adjacent to the sidewalk at the crosswalk area.



**COUNTDOWN SIGNAL** 



**RECTANGULAR RAPID FLASHING BEACON (RRFB)** 



ACCESSIBLE PEDESTRIAN SIGNAL

#### LYNWOOD ACTIVE TRANSPORTATION PLAN

#### TABLE 4D MULTIMODAL SIGNALS

Signal Type		Design Considerations	Guidance	Notes
Pedestrian Indicators	Pedestrian Signal Heads	Use to assist pedestrians in determining when to safely begin crossing.	Use in conjunction with vehicle signals where the MUTCD pedestrian volume warrant (Section 4C.05) or the School Crossing Warrant is met (Section 4C06).	—
	Countdown Pedestrian Signals	Consider using for all crossings with pedestrian signal heads.	Must be included on all pedestrian signal heads where the pedestrian change interval is more than 7 seconds.	
	Timing	Signal timing is typically designed based on an average walking speed. Assuming a lower walking speed will accommodate more users.	Signal must be timed for the crossing distance at 3.5 ft. per second. 3 ft. per second should be used in high volume pedestrian areas.	
Rectangular Rapid Flash Beacons		Can be used to emphasize midblock crossings or signed crossings. Can be used when driver compliance to stop for pedestrians (or bicyclists) at crossing location is low.	Beacons actuated by pedestrians or bicyclists are appropriate for any unsignalized crossing to provide additional warning to vehicles approaching the designated crossing. Beacons should remain dark until activated.	
Accessible Pedestrian Signals		APS should have audible and vibrotactile indications. Push buttons should be placed in the direction of the crossing next to the curb ramps	The accessible walk indication should last for the first 7 seconds of the walk interval but be triggered at any point when there is enough time left during the signal phase to cross safely.	Should be designed to meet the standards outlined in the MUTCD.

#### **REFUGE ISLAND**

Refuge islands or crossing islands reduce crossing distance and allow pedestrians to cross only one direction of traffic at a time. Crossing islands are most beneficial at unsignalized pedestrian crossings, but they also can be useful to shorten crossing distances at signalized intersections.

#### PORK CHOP ISLANDS

A right-turn corner island, or "pork-chop" island, creates a refuge between a right-turn lane and the through lanes, splitting up the crossing movement. Right-turn corner islands can be used to retrofit existing intersections with large turning radii that promote higher vehicle speeds.



**REFUGE ISLAND** 



PORK CHOP ISLAND, CREDIT: MODERN TRANSIT SOCIETY

#### TABLE 4E MEDIANS AND ISLANDS

Island Type	Dimensions	Design Considerations	Guideline
Medians and Refuge Islands	Varies; depends on roadway constraints, minimum 4 ft. wide	Can be used on bus routes and emergency routes. Requires clear bicycle accommodations on bike routes.	ADT < 20,000 Speed limit of ≤ 30 mph
Right-turn Corner Islands	Varies; depends on under utilized space between right turn lane and thru lanes. Includes a pedestrian refuge area.	Includes pedestrian refuge areas; crossings should be placed so as to shorten the crossing distance and maximize vehicle visibility. Crossings should include a stop bar placed 4 ft. from the cross walk. Can be used on bus routes and emergency routes.	Appropriate tool to retrofit any roadway that has been designed with wide turning radii and excessive pedestrian crossing distances.

#### **MODERN ROUNDABOUTS**

Roundabouts direct users through intersections in a predictable manner at slow speeds. Roundabouts provide simple pedestrian crossings, set a tone of cautious driving, reduce injury severity, and reduce all crashes by 50% or more compared to traffic signals.

Single-lane roundabouts can process up to 25,000 vehicles per day. Single-lane roundabouts can vary in inscribed circle diameter from 80 to 180 feet.

Multilane roundabouts can process up to 45,000 vehicles per day. Multiple lane roundabouts can vary in diameter from 130 to 300 feet.

Single-lane roundabouts can be quite pedestrianfriendly, because they break the street crossing into two short single-lane crossings. Crosswalks should be clearly marked and the design should incorporate splitter islands, which act as pedestrian refuges. Because multi-lane roundabouts have multi-lane entries, they are more problematic for pedestrians, especially those who have visual impairments.

Generally, properly sized roundabouts work well for bicyclists because traffic in the circle moves at speeds compatible with bicycling, allowing shared use with motor vehicles. A few bicycle-friendly techniques can improve safety for bicyclists in modern roundabouts:

SIGNS Placing appropriate MUTCD signs at approaches to roundabouts can alert motorists to the presence of bicyclists. Bike signs should be used only at roundabouts where there are documented safety concerns, such as high crash rates.

BIKE RAMPS At roundabouts with multiple lanes or high traffic volumes and speeds, it is common practice to place bike ramps on the roundabout approach to allow novice bicyclists access to the sidewalk. In this case, the bicyclist can use pedestrian accommodations to cross the intersection.



SINGLE LANE ROUNDABOUT



SINGLE LANE ROUNDABOUTS



MULTILANE ROUNDABOUTS

#### TABLE 4F MODERN ROUNDABOUTS

Roundabout Type		Dimensions	Design Considerations	Guideline	Notes
Single Lane		Diameter ranges between 80 and 180 ft.	Minimum design radius of 50 ft. for bus routes. Not used on neighborhood streets.	ADT ≤ 25,000. Entering speed ≤ 45 mph.	_
Multi-Lane		Diameter ranges between 130 and 300 ft.	Can be used for higher speed and higher volume roadways. Can be used on bus routes.	ADT ≤ 45,000. Entering speed ≤ 45 mph.	
Pedestrian Accommodations		Same designs as crosswalks	Multi-lane roundabouts should be discouraged in areas with high pedestrian counts.	Included at all roundabouts with sidewalk approaches.	Consider if will be a future need for sidewalks if designing a roundabout for an area without existing sidewalks.
Bicycle Accommodations	Signage	MUTCD Bike signs are appropriate.	Avoid over signing roundabouts. When signing, place bike route signs on the approach to the roundabout.	Consider at roundabouts with documented bicycle crashes.	
	Bike Ramps	Minimum of 6 ft. width for ramp.	Roundabouts with bike ramps require crossing designs that meet specs for sidepaths. Bicyclists who are comfortable can ride with traffic through the roundabout.	Bike ramps should be provided for roundabouts on roadways with current or planned bicycle accommodations.	Grade ≤ 6% for bike routes.

#### TRANSIT SHELTER

Transit shelters should be provided in any area prioritized for transit, especially in districts that are major regional destinations. Transit shelters should be designed to fully shield waiting passengers from inclement weather; prevailing winds and storm directions must be considered in design and siting. While custom designs can be developed, all designs should meet the specifications of the servicing transit agencies. Generally, shelters should be at least 5 feet deep and long enough to provide space for a minimum of three seats, plus wheelchair accessibility. Bus transit shelters typically are placed in the furniture zone, so patrons can board more readily; if the furniture zone is not wide enough, the frontage zone may be used. Transit shelter placement should never limit the pedestrian way to less than 5 feet. Pace can assist communities in the design of transit shelters and provides funding for them.

#### GATEWAYS

Gateways identify entrances to communities and districts. Gateways can be bold statements, such as arched entryways, or can be more simply marked by signs and landscaping. Gateway areas are good places to site wayfinding signs and other identity features, such as banners and public art installations.



TRANSIT SHELTER



**GATEWAY SIGNAGE** 

#### STREET SIGNS

Best practices for street signs are included in the MUTCD. When placing signs for multimodal transportation corridors, the following principles should be considered:

Signs for motor vehicles should also be visible and usable by bicyclists and pedestrians, where appropriate; for example, street name signs should face both directions at intersections of one-way streets, for pedestrian use.

Pedestrian warning signs are important at unsignalized crossings, to caution drivers to look for people crossing the street.

Bicycle signs can be used for wayfinding and regulatory purposes, and also help to raise motorists' awareness of cyclists. Bicycle wayfinding signs should include the destination, distance, and direction. Regulatory signs inform cyclists, pedestrians and motorists about rules and regulations for safe cycling and shared use. The MUTCD includes specifications for bicycle wayfinding, regulatory, and warning signs.



**BIKE LANE SIGNAGE** 



IN ROAD MUST STOP FOR PEDESTRIANS SIGN



**BICYCLE WAYFINDING SIGNAGE** 



## POLICIES & PROGRAMS

Initiatives that Support Active Transportation

CHAPTER 5 | PROGRAMS & POLICIES

## 5.1 Overview

Policies and programs help create a supportive and welcoming environment for pedestrians and cyclists and are easy to implement in advance of infrastructure improvements.



CYCLIST ON LAKE LYNWOOD DRIVE.

### 52 Policy Recommendations

Policies that help shape how roads are designed, developed, and maintained are an important part of a community's approach to active transportation.

In order to create a comprehensive approach to active transportation in Lynwood, this plan recommends that policies be considered related to local development, roadway construction, and around safety.

#### SAFE PARK ZONES POLICY

As havens for physical activity and recreation, parks are priority destinations for all community members, especially children. Traffic safety can be a major barrier for children walking and biking to parks, and Lynwood can improve access to parks by adopting Safe Park Zones.

Similar to Safe School Zones, Safe Park Zones are streets adjacent to parks where traffic safety is prioritized with lower speed limits and higher fines for speeding and disobeying stop signs and stoplights when children are present. Under Illinois Vehicle Code section 5/11-605.3, revenue from the higher fines can be used to establish and maintain safety infrastructure within the zone and to fund safety programming. Safe Park Zone streets must be designated by local ordinance and marked with signs.

#### ELIMINATE YIELD SIGNS

The most recent edition of the Manual on Uniform Traffic Control Devices (MUTCD) recommends converted yield intersections to stop intersections. Stop signs send a clear signal to drivers to come to a full stop and yield the right-of-way to bicyclists and pedestrians.

#### **COMPLETE STREETS POLICY**

Following accepted best practices, the design recommendations throughout this plan are based on a Complete Streets philosophy. Complete streets are designed to enable safe access for all users of the transportation network regardless of age, ability or travel mode. A complete street has no predefined facilities requirements, but is optimized within its surrounding context to promote safe, convenient active transportation options for the community.

To ensure that these principles play a lasting role in the development of the local transportation network, Lynwood should adopt a Complete Streets policy. This means committing to the accommodation of bicyclists, pedestrians and transit users as well as motor vehicles in all new transportation construction and maintenance projects whenever appropriate.

#### **BIKE PARKING ORDINANCE**

Bicycle parking is an essential amenity for any non-motorized transportation network. Residents will not use bikeways to reach businesses unless they can safely lock their bikes at their destinations. To promote the use of the network and to boost local commerce, the Village of Lynwood should adopt a zoning ordinance to require bike parking at key commercial, residential and industrial sites. See the appendix for links to sample ordinance language and formulas for bike parking design guidance.

#### **BIKE LANE ORDINANCE**

As Lynwood develops its active transportation network, bikeways will be installed on local streets. In order for these facilities to be safe for cyclists, they must be kept clear of motor vehicle traffic. The Village of Lynwood should consider the establishment and enforcement of meaningful penalties for motorists driving or parking in bike lanes, or blocking marked shared lanes with their vehicles.

This plan sets forth an ambitious schedule to create a comprehensive biking network. In addition to completing the network, the Village must be committed to ensuring the network is maintained. Lynwood should adopt a policy ensuring that bicycle facilities on property owned or managed by the Village will be maintained at the same level as facilities for motorized vehicles. This will ensure that bikeways and sidewalks are free of snow, ice, debris, potholes, and other obstacles to active transportation.

#### **VISION ZERO STRATEGY**

The Vision Zero is the Swedish approach to road safety thinking. Founded on the belief that loss of life is not an acceptable price to pay for mobility, Vision Zero takes a systems approach to enhancing safety. Rather than exclusively faulting drivers and other users of the transportation system, Vision Zero places the core responsibility for crashes on the overall system design, addressing infrastructure design, vehicle technology, and enforcement. The Village of Lynwood should develop a Vision Zero Action Plan to reduce all crashes within its border.



DEVELOPING A VISION ZERO STRATEGY WILL REQUIRE INVOLVEMENT FROM POLICE, PUBLIC WORKS, AND OTHER DEPARTMENTS IN LYNWOOD.

#### WALKING AND BICYCLING FRIENDLY DEVELOPMENT CODE

Facilities within private developments play a significant role in whether they can be accessed by active transportation. Lynwood should consider updating the zoning code to ensure connectivity and access for pedestrians, cyclists and transit users in all new developments. Examples include:

Allow for greater integration of land use types, thereby decreasing distance barriers for walking and bicycling.

Give priority to continuous sidewalks adjacent to large developments and require connectivity to building entrances.

Require a maximum setback distance for building entrances, ensuring shorter trips through parking lots for cyclists and pedestrians. Require street connectivity for housing developments in order to improve the directness of routes, again decreasing distance barriers for walking and bicycling.

Increase flexibility on the required number of car parking spaces in order to limit parking lot size.

Create minimum standards for bicycle parking accommodations at commercial areas and workplaces

Develop guidelines for planting trees, installing benches, including pedestrian scale lighting, and installing awnings at business districts.

Poles placed in sidewalks should allow a 5' minimum clear passageway for pedestrians to comply with ADA.

Developers proposing plans that meet these criteria can receive expedited permits or reduced costs by allowing for reduced parking



ALL NEW DEVELOPMENTS SHOULD INCLUDE BIKE PARKING

## Program Recommendations

Programs help educate all users of the road of their rights and responsibilities, encouragement activities engage local residents in activities designed to get more people to walk and bike, and enforcement activities promote safe travel behaviors on local streets. through the following means:

Use local media outlets such as the Village website, cable access station, local newspaper and online social networks to broadcast videos and publish articles on bike and pedestrian safety.

Arrange for bicycle and pedestrian information to be reprinted and/or distributed by partner agencies, utility companies and the private sector.

Work with local doctors at St. Margaret Health Center to distribute information on the health benefits of walking and biking.

Offer bike maintenance and traffic skills classes to adults and teens through the Lynwood Police Department, Village Hall, schools and other community groups

#### **BICYCLE EDUCATION**

The Village of Lynwood should offer bicycle and pedestrian training for adults, teens and youth at Lynwood Village Hall. Youth will benefit from classes on bicycle and pedestrian safety and skills building. Bicycle mechanics classes, education related to the variety of transportation options, and on-bike education classes (such as Traffic Safety Skills 101) can be made available for middle and high school students and adults.

#### COMMUNITY EDUCATION CAMPAIGN

The Village of Lynwood can distribute information about safety and the active transportation network to the community



BICYCLE EDUCATION CAN HELP INFORM PEOPLE OF ALL AGES ON SAFE CYCLING SKILLS. IMAGE: BLACKSTONE BICYCLE WORKS

#### MUST STOP COMMUNITY EDUCATION

Regularly educate residents on the Must Stop for Pedestrians law. Lynwood residents can sign a pledge through newsletters, board meetings, businesses, events and local social media outlets. Providing yard signs, city stickers, water bills, posters, and enforcement events will bring more awareness of this law. Additionally, other topics can include walking & biking rules of the road, tricks and tips, educatomg drivers about sharing the road with non-motorized users, promoting local cycling and walking events and issues for discussion or action.

#### **COMMUNITY BIKE RIDES**

Large scale bike ride events are a great way to feature the active transportation network in Lynwood. Select a route that features local businesses and any new or planned network improvements. Large events can also serve as fundraisers for local projects and bring visitors from neighboring communities.

#### **BIKE & DINE EVENTS**

Invite cyclists to enjoy a progressive dinner by bike at local restaurants. A select bicycle tour of these establishments for groups of 30 or less can garner media attention for local businesses and raise the profile of cycling as a way to encourage and enjoy local patronage. The route can also highlight new or potential community improvements to the bike route network.

#### LOCAL BIKE MAP

A user-friendly bike network map would encourage use of the improved pedestrian and bicycle network and patronage of the key places identified in this plan. Lynwood should work with the Active Transportation Plan Steering Committee or a contractor to produce and distribute a free active transportation network map that includes safe bicycling and walking routes to key places and safety tips. Large employers and local businesses could be approached for sponsorship of the map.

#### **CAR-FREE DAYS**

Car-Free Days are fun events that promote car-free travel for local errands and trips. The Active Transportation Plan Steering Committee can work with several partner agencies, including places of worship and the chamber of commerce to designate one day each year for special programming that encourages residents to leave their car at home.

#### **OPEN STREETS EVENTS**

Open Streets events occur anytime the local streets are closed to vehicles and open for walking, biking and informal play. The Village of Lynwood can adopt Open Streets as an annual event to complement farmer's markets or other road closing events, or it can designate special times or days for stand-alone Open Streets events.



GROUP RIDES ARE A GREAT WAY FOR NEWCOMERS TO TRY BICYCLING ON ROADWAYS

#### HOLD TARGETED ENFORCEMENT EVENTS

No police department can aggressively enforce all laws in all locations at all times. The Village of Lynwood can use existing crash data to identify the most dangerous locations and target enforcement at those sites. Stings focused on reckless behavior by motorists have proven particularly successful in other communities. Glenwood-Dyer Road has had 3 pedestrian crashes, including a fatality. Lynwood should target its police enforcement efforts in these locations and review these efforts on an annual basis to ensure appropriate allocation of enforcement resources.



PARTNERING AND COLLABORATING WITH THE LOCAL POLICE DEPARTMENTS TO PROVIDE PROGRAMMING

#### CAUGHT BEING GOOD PROGRAM

Lynwood Police should reward children for good walking and biking behaviors. When officers observe these behaviors they should reward children by "pulling them over" and giving them a reward "ticket." Working with local businesses to donate rewards provides sustainability to this program and encourages children to walk and bike safely around Lynwood.

## **IMPLEMENTATION**

Framework for Plan Implementation

CHAPTER 6 | IMPLEMENTATION

## 6.1 Overview

This chapter creates a framework for implementing plan recommendations that addresses project cofeasibility, funding, and partners.

The following chapter summarizes priorities and implementation strategies for the Village of Lynwood to pursue as they advance recommendations in this plan. Implementation prioritization was determined based on a variety of factors, including an equity analysis; access to destinations (such as the Thorn Creek Trail. Pace bus, schools, and parks); community engagement; roadway jurisdiction; crashes; and future planned roadways and development opportunities for the area. Although the prioritization analysis provides a guide for phasing implementation of the plan, opportunities should also be considered as they arise from the Capital Improvement Plan; IDOT, Cook County or neighboring municipality roadway projects; and available funding sources. The end of the chapter also provides recommendations for funding, oversight, and performance measures to promote implementation.



PUBLIC WORKS CREW APPLIES FRESH GREEN PAINT TO A BIKE LANE

## Analysis

Scoring proposed routes and intersection improvements based on local priorities, demographics, and project feasibility provides a framework for project prioritization, plan implementation, and funding prioritization. Each of the maps on the following pages illustrates a spatial analysis that was conducted in GIS on the proposed route and intersection recommendations in the plan. The purpose of the analysis was to score each of the recommendations based on various criteria, including community engagement, local priority destinations, safety, feasibility, and equity. The scores were weighted to determine low, medium or high priority based on each of the criteria, described in more detail below.

Many of the below prioritization criteria may be used as support in federal grant applications. For more information, see the Funding section of this chapter.

#### COMMUNITY ENGAGEMENT PRIORITY SCORE

Key destinations, intersection and crossing barriers, and roadways that would be ideal candidates for pedestrian and bike improvements were identified by the steering committee and community members in meetings and the survey. These data were collected as points and lines and weighted in the analysis by number of votes. A route or intersection receiving a high priority score in the analysis was mentioned often during the community engagement process. Low priority routes were either mentioned less often or not at all. Although all residents weren't reached during the community engagement process, and in some cases further communication and cooperation with adjacent residents and land owners would be needed to build the facilities, this score can help indicate how a facility would be received by the community.

## FIGURE 6A: COMMUNITY ENGAGEMENT SCORE FOR ROUTES



#### **Community Engagement Priority Score**

Low Medium
# FIGURE 6B: COMMUNITY ENGAGEMENT SCORE FOR INTERSECTIONS



#### **Community Engagement Priority Score**



# DESTINATIONS PRIORITY SCORE

Creating a comprehensive network of active transportation facilities that get residents to key destinations they will need to reach for either daily or recreational needs is important as the network is built out. This analysis scored routes and intersections that connect to the highest concentration of destinations. Destination data analyzed included parks; schools; Pace bus stops; trail access points; and CMAP land use data classified as commercial, office, mixed use, cultural/entertainment, hotel/motel, medical, educational, government administration and services, and recreational open space.

A high priority route or intersection provides a vital link in the network to connect residents to key destinations. A low priority route or intersection will be the furthest from these destinations, but may still be important in the long-term to create a complete network. High priority destination areas may be good candidates for destination-based federal grants, such as the Safe Routes to School program that targets pedestrian and bike improvements around schools. For more information, see the Funding section of this chapter.



LOCAL PARKS ARE AMONG THE PRIORITY DESTINATIONS IN LYNWOOD



LAKEVIEW COMMUNITY PARK

# FIGURE 6C: DESTINATIONS SCORE FOR ROUTES



#### **Destinations Priority Score**



CHAPTER 6 | IMPLEMENTATION

# FIGURE 6D: DESTINATIONS SCORE FOR INTERSECTIONS



#### **Destinations Priority Score**



## SAFETY AND FEASIBILITY PRIORITY SCORE

This map includes an analysis of all injury or fatal crashes within 200 feet of a proposed route or intersection recommendation, all bicycle and pedestrian crashes in the community, and roadway jurisdiction (municipal, township, county or state). Routes or intersections that are locally controlled received the highest ranking and roadways that are state controlled received the lowest because it is much simpler and requires less coordination to make improvements to a municipal roadway than coordinating with other agencies. Routes or intersections with the highest concentration of crashes received a higher priority score. The crash and jurisdiction data were combined and analyzed together to determine overall safety and feasibility scores. Higher priority scores are assigned to routes and intersections that most closely fit these criteria. It is important to note that roadways not included in this plan could also have a high number of crashes, so it is recommended that the Village keep a pulse on upcoming roadway projects and use this plan as a leveraging tool to engage in the design process.

In addition to pedestrian and bike crashes, vehicle only injury and fatal crashes were also considered in the analysis. In some cases, the absence of pedestrian and bike crashes on a roadway does not mean that the roadway is safe for non-motorized users of the road. It could also mean that it is so unsafe that people do not feel comfortable walking and biking there, which is the case with many high speed arterials that provide key transportation connections in the community.

# FIGURE 6E: SAFETY AND FEASIBILITY SCORE FOR ROUTES



#### Feasibility and Safety Priority Score

Low Medium

# FIGURE 6F: SAFETY AND FEASIBILITY SCORE FOR INTERSECTIONS



#### Safety and Feasibility Priority Score



## **EQUITY PRIORITY SCORE**

This map analyzes route and intersection priority based on Census 2014 American Community Survey 5 year estimates. The variables included are median household income, population density, and percent of total population under 18 and over 64 by block group. Routes and intersections scored as higher priority connect to the highest population density places where the most low-income residents, youth and senior citizens live. Lack of alternative modes of transportation have the greatest impact on families where automobile ownership is a financial burden or on those who are too young or beyond their driving years. Routes and intersections with a higher score will have the greatest impact on mobility choices and provide more transportation independence for these residents. Low priority score routes or intersections may be the furthest from equity target areas but may still be important in providing a comprehensivelyconnected network in the long term.

High equity priority areas may also be good candidates for different kinds of demographically targeted grant programs, such as the Cook County Community Development Block Grants that require applications to be in low or moderate income areas. More information on this grant is in the Funding section of this chapter.

# FIGURE 6G: EQUITY SCORE FOR ROUTES



#### **Equity Priority Score**

Low

Medium

# CHAPTER 6 | IMPLEMENTATION

# FIGURE 6H: EQUITY SCORE FOR INTERSECTIONS



#### **Equity Priority Scoring**



## **OVERALL PRIORITY SCORE**

Overall priority is a combined score of all the previous maps, including: community engagement, destinations, safety and feasibility, and equity. The routes and intersections with the highest priority scores received the highest ranking among all the variables and should be the road map for initial roadways that are critical to building out the active transportation network. The highest ranked routes and intersections could also provide compelling support in federal funding applications or when coordinating improvements with IDOT and Cook County on roadway projects.



NEWLY INSTALLED BIKE LANE

#### **CHAPTER 6 | IMPLEMENTATION**

# FIGURE 61: OVERALL SCORE FOR ROUTES



#### **Overall Priority Score**



# FIGURE 6J: OVERALL SCORE FOR INTERSECTIONS



#### **Overall Priority Score**



CHAPTER 6 | IMPLEMENTATION

## ROUTES AND INTERSECTIONS PRIORITY SCORES

The following charts summarize the priority scores (low, medium, high) for each of the recommended route and intersection facilities. The charts also provide other considerations for the recommendations, such as interagency coordination and applicable grants.



COMMUNITY MEMBERS IDENTIFY PRIORITY ROUTES AND INTERSECTIONS DURING THE COMMUNITY MEETING



RUNNER ON LAKE LYNWOOD DRIVE.

## TABLE 6A BICYCLE AND PEDESTRIAN ROUTES IMPLEMENTATION

Road Name	From/To	Facility Type	Status	Jurisdiction	Notes
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
198th St	Torrence Ave/ Burnham Ave	Bike Lane	Planned	Municipal	Analysis of parking usage and coordination with residents along this street needed. Construct in conjunction with intersection improvement.
201st St	Burnham Ave/ Preston Ln	Bike Lane	Planned	Municipal	Analysis of parking usage and coordination with residents along this street needed. Construct in conjunction with intersection improvement.
Bilstone Dr	Queensbridge Dr/Preston Ln	Bike Lane	Planned	Municipal	Analysis of parking usage and coordination with residents along this street needed
Preston Ln	Queensbridge Dr/Bilston Dr	Bike Lane	Planned	Municipal	Analysis of parking usage and coordination with residents along this street needed
Queensbridge Dr	Preston Ln/ Bilston Dr	Bike Lane	Planned	Municipal	Analysis of parking usage and coordination with residents along this street needed
Lake Lynwood Dr	Glenwood Lansing Rd/201st Pl	Bike Lane	Planned	Municipal	Construct bike lane in conjunction with scheduled resurfacing. Analysis of parking usage and coordination with residents along this street needed.
Burnham Ave	Glenwood Lansing Rd/ Glenwood Dyer Rd	Sidepath	Planned	State	Coordinate with IDOT and Lansing
Future Joe Orr Road	Torrence Ave/ Glenwood- Dyer Rd	Sidepath	Planned	County	Coordinate with Cook County in the design and engineering process for this future roadway
Future Joe Orr Road	Glenwood-Dyer Rd/state line	Sidepath	Planned	County	Coordinate with Cook County in the design and engineering process for this future roadway
Glenwood Lansing Rd	Thorn Creek Trail/ Wildwood Ave	Sidepath	Planned	County	Pursue Safe Routes to School funding through IDOT. Coordinate with Cook County Dept Transportation and Hwys. Eagle Academy Christian School, and Cook County Forest Preserve District
Glenwood Lansing Rd	Stony Island Ave/ Burnham Ave	Sidepath	Planned	County	Coordinate with Cook County, Chicago Heights and Lansing
Glenwood-Dyer Rd	Stony Island Ave/ Torrence Ave	Sidepath	Programmed	State	Coordinate with IDOT and Chicago Heights
Glenwood-Dyer Rd	Sandridge School/Chillon Dr	Sidepath	Planned	State	Coordinate with IDOT and Sandridge School. Safe Routes to School Funding.
Glenwood-Dyer Rd	Torrence Ave/ Sandridge School	Sidepath	Planned	State	Coordinate with IDOT and Sandridge School. Safe Routes to School Funding.
Joe Orr Rd	Stony Island Ave/ Torrence Ave	Sidepath	Planned	County	Coordinate with Cook County and Chicago Heights
Lincoln Hwy	Glenwood- Dyer Rd	Sidepath	Planned	State	Coordinate with IDOT and Chicago Heights
Sauk Trail	Lincoln Highway/ Bishop Ford Expwy	Sidepath	Planned	County and State	Coordinate with Cook County, IDOT and Chicago Heights

# TABLE 6A BICYCLE AND PEDESTRIAN ROUTES IMPLEMENTATION (CONTINUED)

Road Name	From/To	Community Engagement Priority	Destinations Priority	Safety and Feasibility Priority	Equity Priority	Overall Priority
198th St	Torrence Ave/ Burnham Ave	Medium	High	Medium	Medium	Medium
201st St	Burnham Ave/ Preston Ln	Medium	High	Medium	High	Medium
Bilstone Dr	Queensbridge Dr/Preston Ln	High	High	Medium	Medium	Medium
Preston Ln	Queensbridge Dr/Bilston Dr	High	High	High	Medium	High
Queensbridge Dr	Preston Ln/ Bilston Dr	Medium	High	Medium	Low	Medium
Lake Lynwood Dr	Glenwood Lansing Rd/201st Pl	High	High	Medium	High	Medium
Burnham Ave	Glenwood Lansing Rd/ Glenwood Dyer Rd	Medium	High	Low	Medium	Medium
Future Joe Orr Road	Torrence Ave/ Glenwood- Dyer Rd	Low	High	Low	Medium	Low
Future Joe Orr Road	Glenwood-Dyer Rd/state line	Low	Medium	Low	High	Low
Glenwood Lansing Rd	Thorn Creek Trail/ Wildwood Ave	High	High	Medium	Medium	High
Glenwood Lansing Rd	Stony Island Ave/ Burnham Ave	High	High	Medium	Medium	Medium
Glenwood-Dyer Rd	Stony Island Ave/ Torrence Ave	Medium	High	Medium	Low	Medium
Glenwood-Dyer Rd	Sandridge School/Chillon Dr	Medium	Medium	High	High	Medium
Glenwood-Dyer Rd	Torrence Ave/ Sandridge School	Medium	High	Medium	Medium	Medium
Joe Orr Rd	Stony Island Ave/ Torrence Ave	Low	High	Low	Medium	Low
Lincoln Hwy	Glenwood- Dyer Rd	Low	Medium	Low	Medium	Low
Sauk Trail	Lincoln Highway/ Bishop Ford Expwy	Low	Low	Low	Low	Low

# CHAPTER 6 | IMPLEMENTATION

# TABLE 6A BICYCLE AND PEDESTRIAN ROUTES IMPLEMENTATION, CONTINUED

Road Name	From/To	Facility Type	Status	Jurisdiction	Notes
Stony Island Ave	Glenwood Lansing Rd/ Joe Orr Rd	Sidepath	Planned	County	Coordinate with Cook County and Chicago Heights
Torrence Ave	Glenwood Lansing Rd/ Village limits	Sidepath	Planned	State	Coordinate with IDOT
201st St	Preston Ln/ Park Ave	Sidewalk	Planned	Municipal	Coordinate with intersection improvements
Crescent Ave	Glenwood Lansing Rd/ Logan Ln	Sidewalk	Planned	Municipal	Pursue Safe Routes to School funding through IDOT
Glenwood-Dyer Rd	Stony Island Ave/ Sandridge School	Sidewalk	Planned	State	Pursue Safe Routes to School funding through IDOT. Coordinate with Sandridge School and IDOT
Glenwood-Dyer Rd	Sandridge School/Sauk Trai	Sidewalk	Planned	State	Coordinate with IDOT
Torrence Ave	Glenwood Lansing Rd/ Village limits	Sidewalk	Planned	State	Coordinate with IDOT
ComEd ROW	Glenwood- Dyer Rd/Hope	Trail	Planned	ComEd	Coordinate with ComEd
ComEd ROW	Glenwood Lansing Rd/ Glenwood Dyer Rd	Trail	Planned	ComEd	Coordinate with ComEd
ComEd ROW	Норе	Trail	Planned	ComEd	Coordinate with ComEd, Glenwood and Chicago Heights
neighborhood connection	Dewey Ave/ Preston Lane	Trail	Planned	NA	Research and coordination with the land owners or developers would be needed.
neighborhood connection	Spring Meadown Ln/Nichols Dr	Trail	Planned	NA	Research and coordination with the land owners or developers would be needed.
neighborhood connection	Hampshire/ Stony Island Ave	Trail	Planned	NA	Research and coordination with the land owners or developers would be needed.
neighborhood connection	Savoy/Nash	Trail	Planned	NA	Research and coordination with the land owners or developers would be needed.
Old Plank Trail	Railroad ROW/ Railroad ROW	Trail	Planned	RR	Coordinate with railroad and Chicago Heights

# TABLE 6A BICYCLE AND PEDESTRIAN ROUTES IMPLEMENTATION, CONTINUED

Road Name	From/To	Community Engagement	Destinations Priority	Safety and Feasibility	Equity Priority	Overall Priority
		Priority		Priority		
Stony Island Ave	Glenwood Lansing Rd/ Joe Orr Rd	Medium	Medium	Medium	Low	Low
Torrence Ave	Glenwood Lansing Rd/ Village limits	High	High	High	Medium	High
201st St	Preston Ln/ Park Ave	High	High	High	High	High
Crescent Ave	Glenwood Lansing Rd/ Logan Ln	High	High	Medium	High	High
Glenwood-Dyer Rd	Stony Island Ave/ Sandridge School	Medium	High	Medium	Medium	Medium
Glenwood-Dyer Rd	Sandridge School/Sauk Trai	Medium	Medium	High	High	Medium
Torrence Ave	Glenwood Lansing Rd/ Village limits	High	High	High	Medium	High
ComEd ROW	Glenwood- Dyer Rd/Hope	Medium	High	Medium	Medium	Medium
ComEd ROW	Glenwood Lansing Rd/ Glenwood Dyer Rd	Low	High	Low	Low	Low
ComEd ROW	Норе	Low	Medium	Low	Medium	Low
neighborhood connection	Dewey Ave/ Preston Lane	High	High	High	Medium	High
neighborhood connection	Spring Meadown Ln/Nichols Dr	High	High	Medium	Medium	High
neighborhood connection	Hampshire/ Stony Island Ave	Medium	High	Low	Low	Low
neighborhood connection	Savoy/Nash	Low	High	Low	Low	Low
Old Plank Trail	Railroad ROW/ Railroad ROW	Low	Low	Low	Medium	Low

# TABLE 6B INTERSECTION IMPLEMENTATION

Number	IntersectionName	Typology	Recommendation	Coordination	Notes
1	Thorn Creek Trail and Glenwood Lansing Rd	Trail Crossing	Remove fencing, move trail crossing to this location, add crosswalk, RRFB, buffer area. Fix broken street lights.	Cook County Dept Transportation and Hwys, Eagle Academy Christian School, Cook County Forest Preserve District	Pursue Safe Routes to School funding through IDOT. Construct improvements in conjunction with proposed sidepath, if possible.
2	IL-394 and ComEd ROW	Trail Crossing	Install bike/ped bridge over 394 to connect ComEd trail	IDOT, ComEd	Coordinate with ComEd and IDOT.
3	Glenwood Dyer Rd and ComEd ROW	Trail Crossing	Add trail crossing signage, crosswalk, RRFB and loop detector	IDOT, ComEd	Construct improvements in conjunction with proposed sidepath, if possible.
4	Glenwood Lansing Rd and Stony Island Ave	Major Intersection	Move guard rail, add crosswalks, pedestrian countdown timer on north and east legs	Cook County Dept Transportation and Hwys, Cook County Forest Preserve District	Construct improvements in conjunction with proposed sidepath, if possible.
5	Glenwood Lansing Rd and Torrence Ave	Major Intersection	Add crosswalk, pedestrian countdown signal, and bus shelter to south leg of intersection	IDOT, Cook County Dept Transportation and Hwys, Cook County Forest Preserve District	Construct improvements in conjunction with proposed sidepath, if possible.
6	Stony Island Ave and Glenwood Dyer Rd	Major Intersection	Close driveway on northeast corner, install pork chop islands, crosswalks, pedestrian countdown signals at all legs. Install gateway signage.	Cook County Dept Transportation and Hwys	Construct improvements in conjunction with proposed sidepath, if possible.
7	Stony Island Ave and Joe Orr Rd	Major Intersection	Reduce turning radii, install pedestrian countdown signals, crosswalks	Cook County Dept Transportation and Hwys	Construct improvements in conjunction with proposed sidepath, if possible.
8	Glenwood Dyer Rd and Torrence Ave	Major Intersection	Add pedestrian access through pork chops, crosswalks, and pedestrian signals. Increase pedestrian crossing time. Reduce radii on southwest and northeast corners. Install bus shelter.	IDOT, Pace	Construct improvements in conjunction with proposed sidepath and sidewalk, if possible.
9	Torrence Ave and 201st	Major Intersection	Near-term install crosswalk, bus shelter, and RRFB, long- term install signal	IDOT, Pace	Construct improvements in conjunction with proposed sidepath and bike lane, if possible.
10	Burnham Ave and Lincoln Hwy	Major Intersection	Close Subway's north drive on Lincoln. Add cw. ped heads, & median cut-through to north side of GlenwoodDyer. Add a pork chop, pedheads, & cws to the NW side of GlenwoodDyer and SW side of Lincoln	IDOT, Subway	Construct improvements in conjunction with proposed sidepath, if possible.
11	Burnham Ave and Glenwood Dyer Rd	Major Intersection	Short-term: Close driveway on NW corner of Burnham, Long-term: Install roundabout, create a gateway	IDOT	Construct improvements in conjunction with proposed sidepath, if possible.

# TABLE 6B INTERSECTION IMPLEMENTATION, CONTINUED

Number	IntersectionName	Community Engagement Priority	Destinations Priority	Safety and Feasibility Priority	Equity Priority	Overall Priority
1	Thorn Creek Trail and Glenwood Lansing Rd	High	High	Low	High	High
2	IL-394 and ComEd ROW	Low	Low	Medium	Medium	Low
3	Glenwood Dyer Rd and ComEd ROW	Low	Medium	Medium	Low	Medium
4	Glenwood Lansing Rd and Stony Island Ave	Low	Low	Low	Low	Low
5	Glenwood Lansing Rd and Torrence Ave	High	Medium	Medium	High	High
6	Stony Island Ave and Glenwood Dyer Rd	Medium	Medium	Medium	Low	Medium
7	Stony Island Ave and Joe Orr Rd	Low	Low	Low	Medium	Low
8	Glenwood Dyer Rd and Torrence Ave	High	Medium	High	Medium	High
9	Torrence Ave and 201st	High	Medium	High	High	High
10	Burnham Ave and Lincoln Hwy	Low	Low	High	High	Medium
11	Burnham Ave and Glenwood Dyer Rd	Medium	Medium	Medium	High	High

# TABLE 6B INTERSECTION IMPLEMENTATION, CONTINUED

12	198th St and Torrence Ave	Major Intersection	Install bus shelter.	IDOT, Pace	Construct improvements in conjunction with proposed sidepath and sidewalk, if possible.
13	Torrence Ave and Joe Orr Road	Major Intersection	Install bus shelter.	IDOT, Pace	Construct improvements in conjunction with proposed sidepaths and sidewalk, if possible.
14	Glenwood Lansing Rd and Oakwood Ave	Unsignalized Crossing	Reduce turning radii, extend sidewalk on northeast leg to connect to the street	Cook County Dept Transportation and Hwys, Lansing	Construct improvements in conjunction with proposed sidepath, if possible.
15	Glenwood Dyer Rd and Sandridge School	Midblock Crossing	Install school crossing, RRFB, use flashing beacons during arrival and dismissal times	IDOT, Sandridge School	Pursue Safe Routes to School funding through IDOT. Construct improvements in conjunction with proposed sidepath and sidewalk, if possible.
16	Glenwood-Dyer Rd and Valerie Dr	Unsignalized Crossing	Install mid-block crossing using median as a pedestrian island. Add crosswalk and pedestrian crossing signage.	IDOT	Construct improvements in conjunction with proposed sidepath, if possible.

# TABLE 6B INTERSECTION IMPLEMENTATION, CONTINUED

12	198th St and Torrence Ave	Medium	Medium	High	Medium	High
13	Torrence Ave and Joe Orr Road	Low	Medium	Low	Medium	Medium
14	Glenwood Lansing Rd and Oakwood Ave	Medium	High	Low	Medium	Medium
15	Glenwood Dyer Rd and Sandridge School	Low	Medium	Low	High	Medium
16	Glenwood-Dyer Rd and Valerie Dr	Low	Low	Medium	High	Low

# **63** Project Funding

There are multiple funding sources for transportation programs in Cook County that are applicable to Lynwood. Most programs are both highly competitive and require a local match, but provide grant funding opportunities for active transportation projects. The majority of federal transportation funding can be used for pedestrian and bike projects.

This section provides information and guidance on the following funding sources:

Programs Administered by the Illinois Department of Transportation (IDOT)

Program Administered by the Illinois Department of Natural Resources (IDNR) Programs Administered by the Chicago Metropolitan Agency for Planning (CMAP)

Program administered by Cook County

Summary chart

#### PROGRAMS ADMINISTERED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT)

Most federals funds are controlled at the state DOT level and distributed as block grants. IDOT administers these federal pass-through funds for local and regional bicycle and pedestrian projects and safety initiatives. The funds are authorized by the current federal transportation bill passed in December 2015, Fixing America's Surface Transportation Act, or FAST Act. FAST Act maintains a lot of the changes from MAP-21, the previous bill. MAP-21 combined a number of previous stand-alone pedestrian and bicycle funding programs (including Safe Routes to School, Recreational Trails and Transportation Enhancements) into a single pot of money: The Transportation Alternatives Program (TAP). With the passing of FAST Act, the TAP funding was moved within the Surface Transportation Block Grant Program (STBG), as a set-aside. However, the structure, competitive process, and flexibility of the program remains the same as TAP.

IDOT has committed to a new program (coming soon) under FAST Act Section 405 that awards money to states where over 15% of all traffic fatalities in 2013 were cyclists and pedestrians. This grant funds 80% of the cost for education and enforcement related programs to reduce pedestrian and bicycle fatalities, including training law enforcement about state pedestrian and bicycle laws and campaigns or education for pedestrians, bicyclists and motorists. This program is unique because it is just for pedestrian and bicycle related projects.

#### ILLINOIS SAFE ROUTES TO SCHOOL PROGRAM (SRTS)

The SRTS program, administered by the IDOT Bureau of Safety Engineering, uses both infrastructure and non-infrastructure approaches to improve conditions for students who walk or bike to school. The program is designed to enable and inspire children to walk and bike to school through improvements to the local active transportation network within two miles of schools and through programs and initiatives. The local match is 20%. Eligible project sponsors include schools, school districts, and governmental entities. The program encourages applicants to form a local coalition of stakeholders.

Lynwood could consider the sidepath, sidewalk and crossing improvements near Sandridge School on Glenwo0d-Dyer Road as well as the sidepath, sidewalk and Thorn Creek Trail crossing improvements on Glenwood Lansing Road as candidates for this grant. Many of the other recommendations in the plan are within two miles of school. Lynwood could target recommendations that receive a high score for safety and feasibility priority in the previous section.

#### ILLINOIS TRANSPORTATION ENHANCEMENT PROGRAM (ITEP)

ITEP was designed to promote and develop non-motorized transportation options and streetscape beautification. Through ITEP, IDOT awards a portion of federal STBG set-aside funds competitively. Any local or state government with taxing authority is eligible to apply. Local governments are required to provide 20% matching funds and work must begin on the projects within three years of receipt of the award. This program is administered by the IDOT Bureau of Programming in the Office of Planning and Programming.

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

The goal of HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. It requires states to set performance measures and targets for reducing traffic-related fatalities and serious injuries for all modes of transportation. HSIP funds both infrastructure and non-infrastructure solutions (like public safety campaigns) and is administered by IDOT's Bureau of Safety Engineering. The program funds preliminary engineering, land acquisition, construction, and construction engineering. A minimum 10% local match is required.

Routes and intersections that received a high priority score for safety and feasibility in the previous section could be great candidates for this grant in Lynwood.

#### SECTION 402 STATE AND COMMUNITY HIGHWAY SAFETY GRANT PROGRAM

The Section 402 program, administered by the IDOT Bureau of Safety Engineering, provides grants to states to improve driver behavior and reduce deaths and iniuries from motor vehicle-related crashes. There are several subprograms in IDOT's program, but the most pertinent to bicycle and pedestrian issues is the Injury Prevention Program. Section 402 funds do not support infrastructure projects. Eligible applicants include local civic organizations, schools and universities, hospitals, health departments, local governmental agencies, and nonprofit groups. 402 funds are considered seed funding and are not for ongoing or sustained support. These funds are considered very limited and no local match is required.

## PROGRAM ADMINISTERED BY THE ILLINOIS DEPARTMENT OF NATURAL RESOURCES (IDNR)

#### RECREATIONAL TRAILS PROGRAM (RTP)

The Recreational Trails Program provides funding for land acquisition, development, restoration, and maintenance of trails. The program requires a 30% local match.

This funding could be used for the crossing improvement or extension to the commercial area for the Thorn Creek trail recommendations. It could also be considered for the trails recommended through the ComEd right-of-way and the trail through soon-to-be developed land linking the residential neighborhood west of Torrence Avenue to Stony Island Avenue.

#### PROGRAMS ADMINISTERED BY THE CHICAGO METROPOLITAN AGENCY FOR PLANNING (CMAP)

CMAP administers federal pass-through money that funds bicycle and pedestrian facilities: the Congestion Mitigation and Air Quality Improvement Program and the regional allocation of the Surface Transportation Block Grant (STBG) program set-aside (formerly Transportation Alternatives Program or TAP). The STBG funds are programmed in two ways: through CMAP for regional projects and through the Councils of Mayors (COMs) for local surface transportation projects. For their allocation, CMAP funds bike facilities that provide regional connections. CMAP will typically only program pedestrian facilities if they provide access to transit. The other allocation of funding is divided amongst the COMs. The COMs will program these funds to more local and granular pedestrian and bike projects.

# CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ)

The CMAQ program is a flexible funding source that targets projects and programs

to help meet the congestion mitigation and air quality reduction requirements of the federal Clean Air Act.

Bicycle and pedestrian facilities, transit improvements, and traffic flow enhancements make up some of the eligible projects. CMAP will give priority to projects that reduce ozone emissions and particulate matter. The local match is 20%.

#### SURFACE TRANSPORTATION BLOCK GRANT PROGRAM (STBG)

Under FAST Act, the Transportation Alternatives Program is now a set-aside within the STBG program, however the program structure and competitive process did not change under the new act. CMAP's allocation of this program has focused its funding on bicycle projects. Higher scores are assigned to projects that provide for low-stress bicycle facilities. Some eligible projects include connecting two existing trails, installing sidepaths or buffered bike lanes, and extending an existing regional trail.

For this competitive program, 50% of the funding is allocated by a formula based on population and the other 50% is discretionary. The local match is 20%.

CMAP generally gives priority to projects that are a part of the Regional Greenways and Trails Plan, have a high population density near the trail or facility, and have a facility that is well-designed. Additional points are given to projects that are "shovel ready" and have a local match above the 20% minimum.

The target of this program are bikeways that provide connections to the regional trail network. Many of the recommended sidepaths along arterials and trails (such as the Old Plank Trail and the trail proposed through the ComEd right-of-way) in Lynwood would provide regional connections and could be candidates for this grant.

#### PROGRAMMED BY THE SUBREGIONAL COUNCILS OF MAYORS (COMS)

#### SURFACE TRANSPORTATION BLOCK GRANT PROGRAM (STBG)

Formerly called the Surface Transportation Program (STP), under FAST Act, it is now a set-aside within the STBG program with no structural changes from MAP-21. This program provides flexible funding that may be used by municipalities for projects to preserve or improve conditions and performance on any Federal-aid highway, bridge projects on any public road, facilities for non-motorized transportation, transit capital projects, and public bus terminals and facilities. The program is administered by CMAP. CMAP approves the allocation of this funding to each of the subregional Council of Mayors (COMs).

The six Councils of Mayors in Cook County program these funds. Each of the Councils of Mayors have different project eligibility, application processes, and match requirements. Communities can direct apply through the COMs. This program will fund more granular surface transportation pedestrian projects. All of the COMs in Cook County fund bicycle and pedestrian projects with a 20-30% local match requirement. A matrix from CMAP summarizing these requirements and guides to the project selection criteria for each of the Councils of Mayors are located at the CMAP website. http:// www.cmap.illinois.gov/about/involvement/ committees/advisory-committees/councilof-mayors/surface-transportation-program

Routes and intersections with a high priority score for either Community Engagement or Destinations in Lynwood could be great candidates for this application and the scores from the analysis could serve as supporting materials.

## PROGRAM ADMINISTERED BY COOK COUNTY

#### COMMUNITY DEVELOPMENT BLOCK GRANTS (CDBG)

Administered by Cook County's Bureau of Economic Development, CDBG grants provide flexible funding for a variety of community development purposes. The program provides capital improvement funding that can be applied to bicycle and pedestrian facilities that benefit low and moderate income residential neighborhoods. The CDBG program offers funds for several project types, including street improvements, sidewalk improvements, and accessibility improvements to public facilities. Projects eligible for funding must serve primarily residential neighborhoods with low to moderate income populations. The application was recently updated to provide additional scoring for projects that consider complete streets principles, provide greater connectivity, and promote walking, biking and transit access. These funds can be used in creative ways. Skokie used CDBG to fund the homeowner match in a 50/50 sidewalk repair program for income eligible households.

This program has specific income requirements that Lynwood would need to consider further, however routes and intersections that scored high in the equity prioritization analysis in the previous section could be a good starting points when determining which recommendations to apply for this grant. This grant could be especially useful in filling in sidewalk gaps and making crossing improvements on locally-controlled roadways in Lynwood. The prioritization analysis from the previous section could be supporting documentation for the grant application.

The below chart summarizes all of the programs relevant to Lynwood described above.

## TABLE 6C SUMMARY OF AVAILABLE STATE FUNDING PROGRAMS

Program Name	Program	Program	Eligible	Key Project	Application	Local	Who Can
	Purpose	Administrator	Projects	Requirements	Process	Match	Apply
Transportation Enhancements (ITEP)	To foster cultural, historic, aesthetic and environmental aspects of our transportation infrastructure	IDOT	Bike/ped facilities, safety education programs and encouragement incentives.	Must relate to surface transportation.	Next anticipated call for projects Spring 2018.	Required Typically 20%	Local governments
Safe Routes to School (SRTS)	To enable and encourage children to walk and bike to school through the 5 Es.	IDOT	Bike/ped facilities, safety education programs and encouragement incentives.	Can only be spent within 1 ½ miles of a school.	Irregular schedule at call of IDOT.	20%	Any governmental entity
Highway Safety Improvement Program (HSIP)	To fund highway infrastructure safety projects aimed at reducing fatalities and serious injuries.	IDOT Division of Traffic Safety	Bike lanes, paved shoulders, Trail/Highway intersection improvements, crosswalks, signal improvement, and curb cuts as well as safety education and awareness programs.	Must address goals written in State Highway Safety Plan.	Generally there is an annual update to the Plan at call of IDOT Division of Traffic Safety.	10%	Any governmental entity or non-profit
Section 402- State and Community Highway Safety Grant Program	To create safety programs aimed at reducing traffic crashes.	IDOT Division of Traffic Safety	Enforcement campaigns to improve bike/ped safety, helmet promotion, educational materials, and training.	Must address goals written in State Highway Safety Plan.	Generally each spring at call of IDOT Division of Traffic Safety.	No match required	Any governmental entity or non-profit
Recreational Trails Program (RTP)	To develop and maintain recreational trails and facilities for both motorized and non- motorized users.	IDNR	Trails, Trail/ Highway intersection improvements, trailheads, educational materials, and training.	30% allocated to non-motorized trail project, 30% for motorized, 40% for diversity of trail use.	Irregular schedules at call of Illinois Department of Natural Resources.	Typically 20%, some 50%	Any governmental entity or non-profit

#### TABLE 6D SUMMARY OF AVAILABLE REGIONAL AND COUNTY FUNDING PROGRAMS

Program Name	Program Purpose	Program Administrator	Eligible Projects	Key Project Requirements	Application Process	Local Match Required	Who Can Apply
Surface Transportation Block Grant Program (STBG)	To fund state and local road and transportation projects.	Cook County Councils of Mayors	Bike/ped facilities. Road projects that include sidewalks receive additional points.	<ol> <li>Must reduce single occupancy vehicle trips and positively impact air quality.</li> <li>Must be applied toward projects on collectors or arterials.</li> </ol>	Varies depending upon sub- regional council of government	Typically 20- 30% for bike/ ped projects	Local governments in Cook County
Community Development Block Grants (CDBG)	To fund community development projects in low- and moderate income communities.	Cook County Bureau of Economic Development	Accessibility projects, sidewalk improvements, street improvements, and other neighborhood facilities.	Must be in predominantly residential neighborhoods with populations identified as low- or moderate-income per application criteria.	Varies, depending on funding availability.	No match required	Local governments
Congestion Mitigation and Air Quality (CMAQ)	To improve air quality and reduce traffic congestion in areas that do not meet air quality standards.	СМАР	Bike/ped facilities, safety education programs and encouragement incentives, active transportation plans, bike/ ped maps, bike/ ped coordinator position.	<ol> <li>Must be spent in non-attainment and maintenance areas.</li> <li>Will be evaluated on air quality emissions.</li> </ol>	Generally, an annual call for proposals.	Typically 20%	Local or state government agencies
STBG Program Set-Aside (formerly TAP)	To support non- motorized modes of transportation.	CMAP	Bicycle and pedestrian facilities, streetscaping,	<ol> <li>Phase I engineering must be nearly complete.</li> <li>Project must be included in a local, sub-regional or regional plan that was formally adopted.</li> </ol>	Generally, an annual call for proposals in tandem with CMAQ announcement.	20%	Local governments

# Implementation and Oversight

Plans require continuous oversight to ensure effective implementation in building out the network as roadway project opportunities and funding sources become available.



NUMBER OF MILES OF NEW BICYCLE FACILITIES IS ONE WAY TO TRACK IMPLEMENTATION OF THIS PLAN

It's important to periodically revisit the plan and stay updated on roadway projects within other agencies and municipal neighbors to make the community a more pedestrian and bike friendly place. The following steps can be taken to assist and track progress of the plan.

## CONTINUE THE PLAN STEERING COMMITTEE AS A STANDING BICYCLE AND PEDESTRIAN ADVISORY COUNCIL

The heart and soul of this plan came from local Lynwood residents who participated in public engagement events hosted by the steering committee. These residents' visions and goals are expressed throughout the recommendations of this plan. Lynwood can continue to benefit from the wisdom of these advocates by inviting them to join a standing bicycle and pedestrian advisory council.

The Advisory Council will monitor implementation of the plan, promote events celebrating active transportation in Lynwood, stay updated on potential grant opportunities, reach out to Active Transportation Alliance with questions or for plan implementation assistance, and encourage residents and visitors to use the improved active transportation network. The key stakeholders who comprised the steering committee for this plan would make idea members of the proposed council. As plan implementation progresses, other community champions may also join the council.

### BICYCLE AND PEDESTRIAN COORDINATOR

Users of the active transportation network and the new Advisory Council would benefit from having access to a single municipal staff contact. The bicycle and pedestrian coordinator would serve as a liaison to the Advisory Council, monitor implementation of the plan by municipal staff, and serve as a point of contact for residents and visitors. This person could also be charged with seeking funding for implementation of the plan and creating partnerships with likeminded governments in the region. These could be roles assigned to a current Village staff champion of the plan. The person could be listed as a contact on the Village website and other communication materials as someone to reach for active transportation related questions.

# **PERFORMANCE MEASURES**

Assessing the impact and tracking projects of the active transportation plan is easiest when reliable data is available. Many free and low cost datasets are available to assist with evaluation. The staff member spearheading the plan can collect baseline data and evaluation data on an annual basis.

Lynwood can use Bicycle Friendly Community data from the League of American Bicyclists, traffic crash reports from Illinois Department of Transportation and the data compiled by the consultants for this plan. Lynwood could also conduct bicycle and pedestrian traffic counts on an annual basis. The National Center for Safe Routes to School offers a free student traffic count tool and free analysis.

Some performance measures to track include:

Miles of bicycle network implemented

Linear feet of new pedestrian accommodations

Number of new ADA compliant curb ramps installed along village streets

Annual school crossing guard walking counts

Annual bike counts on bike routes

Pedestrian and bicycle friendly policies adopted

Educational events and encouragement opportunities offered

Enforcement events held

Review and analyze crash data annually along routes and at intersections before and after recommended improvements are implemented



# LYNWOOD ACTIVE TRANSPORTATION PLAN

# **APPENDIX**

CHAPTER 7 | APPENDIX

# Appendix A: Design Guidance

## BIKEWAY AND PEDESTRIAN FACILITIES DESIGN

Guide for the Planning, Design, and Operation of Pedestrian Facilities American Association of State Highway and Transportation Officials (AASHTO), 2004 HTTP://WWW.TRANSPORTATION.ORG

Designing Sidewalks and Trails for Access U.S. DOT Federal Highway Administration HTTP://WWW.FHWA.DOT.GOV/ ENVIRONMENT/BICYCLE_PEDESTRIAN/ PUBLICATIONS/SIDEWALKS/INDEX.CFM

Guide for the Development of Bicycle Facilities, 4th Edition American Association of State Highway and Transportation Officials (AASHTO), 2012 HTTP://WWW.TRANSPORTATION.ORG

Urban Bikeway Design Guide National Association of City Transportation Officials HTTP://NACTO.ORG/CITIES-FOR-CYCLING/DESIGN-GUIDE/

Urban Street Design Guide National Association of City Transportation Officials HTTP://NACTO.ORG/PUBLICATION/ URBAN-STREET-DESIGN-GUIDE/

Complete Streets Complete Networks: A Manual for the Design of Active Transportation Active Transportation Alliance, 2012 WWW.ATPOLICY.ORG/DESIGN

# **BIKE PARKING**

Bicycle Parking Design Guidelines Association of Pedestrian and Bicycling Professionals HTTP://WWW.APBP.ORG/?PAGE=PUBLICATIONS

# **OTHER RESOURCES**

Manual on Uniform Traffic Control Devices Federal Highway Administration, 2009 HTTP://MUTCD.FHWA.DOT.GOV/

Bicycle and Pedestrian Accommodations Bureau of Design & Environment Manual Illinois Department of Transportation, 2011 Edition HTTP://WWW.DOT.STATE.IL.US/DESENV/ BDE%20MANUAL/BDE/PDF/CHAPTER%20 17%20BICYCLE%20AND%20PEDESTRIAN.PDF

Interagency Transit Passenger Information Design Manual Regional Transportation Authority HTTP://WWW.RTAMS.ORG/PDF/PLANNING/ SIGNAGEDESIGNMANUAL.PDF

Transit Street Design Guide National Association of City Transportation Officials HTTP://NACTO.ORG/PUBLICATION/ TRANSIT-STREET-DESIGN-GUIDE/

Transit Supportive Guidelines Pace HTTP://PACEBUS.COM/GUIDELINES/INDEX.ASP

Parking Strategies to Support Livable Communities Chicago Metropolitan Agency for Planning HTTP://WWW.CMAP.ILLINOIS.GOV/ DOCUMENTS/20583/C224C06F-2735-4400-8281-D3C263CE5BA6

# Appendix B: Policy Resources

This appendix provides resources to implement the policy recommendations in this plan.

## COMPLETE STREETS POLICY RESOURCES

The materials referenced below can assist with formulating policy, structuring implementation, and developing performance criteria.

#### ACTIVE TRANSPORTATION ALLIANCE

Active Transportation Alliance has created a policy resource micro-site, WWW.ATPOLICY. ORG, with free access to Complete Streets policy briefs, local policy examples, and implementation materials. The site also includes PDF versions of local complete streets policies and links to reports from national partners on the benefits of complete streets.

# COMPLETE STREETS: BEST POLICY AND IMPLEMENTATION PRACTICES

McCann, Barbara, and Suzanne Rynne, Chicago: American Planning Association, 2010. This publication of the American Planning Association's Planning Advisory Service includes case studies, model policies, and development strategies revolving around Complete Streets.

#### NATIONAL COMPLETE STREETS COALITION

NCSC has a very informative website. accessible at WWW.COMPLETESTREETS. ORG Among others, the following NCSC documents can be considered a good "jumping off" point for those unfamiliar with Complete Streets policy and design. "Complete Streets Policy Elements." National Complete Streets Coalition. HTTP://WWW. COMPLETESTREETS.ORG/CHANGING-POLICY/ POLICY-ELEMENTS/. Provides a framework by which Complete Streets policy can be designed and a basic outline of the elements of robust Complete Streets policies.

"Federal Policy Resources." National Complete Streets Coalition. HTTP://WWW. COMPLETESTREETS.ORG/FEDERAL-POLICY/ FEDERAL-POLICY-RESOURCES/. Knowing the trends in national policy concerning Complete Streets can help reinforce local policy initiatives. The NCSC website details past federal activity concerning Complete Streets, features legislative language, and has tips for getting the attention of lawmakers at the federal level.

# "MODEL BIKE PARKING ORDINANCE (WITH ANNOTATIONS)"

This annotated model policy for bike parking was developed through the Public Health Law and Policy (name changed to ChangeLab Solutions) HTTP://WWW.CHANGELABSOLUTIONS. ORG/PUBLICATIONS/BIKE-PARKING

# CHAPTER 7 | APPENDIX

# Appendix C: Programming Resources

## EDUCATION RESOURCES

There are many organizations who offer free and low-cost resources to educate people about the benefits of active transportation. These include:

#### ILLINOIS BIKE SAFETY QUIZ CHALLENGE

#### HTTP://WWW.BIKESAFETYQUIZ.COM/

Encourage cyclists and drivers to test their bike safety and share the road knowledge in this online test designed by Ride Illinois.

# NATIONAL SAFE ROUTES TO SCHOOL PARTNERSHIP

#### WWW.SAFEROUTESPARTNERSHIP.ORG

Offer an annotated bibliography of traffic safety curricula and other educational resources.

#### ENCOURAGEMENT RESOURCES

Marketing and promotion efforts are essential to any successful bikeways plan. These organizations provide resources to help encourage more cycling:

#### LEAGUE OF AMERICAN BICYCLISTS

#### WWW.BIKELEAGUE.ORG

Sponsor the Bicycle Friendly Community program and offer resources for encouragement campaigns. It also certifies instructors to provide bike mechanic and traffic safety skills courses.

#### ALLIANCE FOR BIKING AND WALKING

#### WWW.PEOPLEPOWEREDMOVEMENT.ORG

Provide trainings to help develop a movement for cycling in your community.

#### ASSOCIATION OF PEDESTRIAN & BICYCLE OFFICIALS

#### WWW.APBP.ORG

Offer webinars and other resources for professionals who implement education and encouragement campaigns.

#### ENFORCEMENT RESOURCES

#### ACTIVE TRANSPORTATION ALLIANCE

#### WWW.ACTIVETRANS.ORG

Provide training for the law enforcement community including police, judges and prosecutors. The training focuses on best law enforcement practices to ensure traffic safety and an overview of current Illinois traffic safety laws. Active Transportation Alliance also provides free support services for victims of bicycle crashes.

#### **VISION ZERO NETWORK**

#### HTTP://VISIONZERONETWORK.ORG/

Give support, guidance, and trainings for communities interested in reducing all traffic fatalities.
