Walk & Roll

WESTLAND

2021

# PEDESTRIAN AND BICYCLE SAFETY ACTION PLAN

## CITY OF WESTLAND

WESTLAND
An All AMERICAN City
WILLIAM R. WILD
MAYOR

# Table of Contents

## 06 INTERSECTION IMPROVEMENTS



## 06 IMPLEMENTATION PLAN

WESTLAN

# 01

# Introduction

# 01

# INTRODUCTION

## Why This Project?

Walk and Roll Westland, the City's Pedestrian and Bicycle Safety Action Plan identifies and prioritizes potential future non-motorized infrastructure projects for the City of Westland. The Plan, through technical analysis and public input, presents a feasible set of projects aimed at improving bicycle and non-motorized connectivity, safety, and comfort for Westland residents. An implementation plan was developed to help guide the City of Westland through the design and engineering process and will include information such as total capital cost, right-of-way needs, and design options.

The City of Westland is a suburb of Detroit, located in Wayne County, Michigan. It is one of the larger cities in the Detroit Metro area. Westland is well connected to the surrounding suburban communities through the major roadway system, but few non-motorized connections exist. Westland consists of a development pattern that is typical of postwar suburbs with gridded residential streets interspersed between larger arterial roads. Most people in Westland choose to travel by car, but a growing number of residents are looking to complete their shopping, medical, school, social, and other daily trips using non-motorized transportation modes. However, the current conditions in Westland are not entirely favorable to those looking to walk or bike due to the lack of safe and comfortable non-motorized infrastructure.

### Plan Goals

The Pedestrian and Bicycle Safety Action Plan identifies concepts for the non-motorized projects that are most needed in the City and which could be implemented over the next five to ten years. The overall goal of the Plan is to better connect the City of Westland, improve safety conditions, and encourage residents to bike and walk more often. The projects identified in this Plan are those that connect the areas of the City most in need of non-motorized connections, help connect to the Rouge River trails on the north and south sides of the City, and provide the best access to popular destinations in Westland. Through the planning process, the community, stakeholders, and City staff were engaged and able to provide input on recommended facilities.


Ann Arbor Trail
Edward N Hines Dr
Warren Rd
N Newburgh Rd
Ford Rd
N Venoy Rd
Cherry Hill Rd
S Wayne Rd
Merriman Rd
Middlebelt Rd
Inkster Rd
Palmer Rd
Michigan Ave
12
Van Born Rd
0 1200 2400 4800 Feet

WESTLAN

# 02

## Discovery

# 02

# DISCOVERY

# Demographic Conditions

The existing demographic conditions in Westland provide valuable insight into the transportation needs of the community and can help determine where in the City new non-motorized facilities would be most valuable. An analysis of the population, employment, equity areas, and demand areas was completed and mapped for the study area.

## WESTLAND DEMOGRAPHIC STATISTICS

The City of Westland, approximately 18 miles away from downtown Detroit, is located along the western boundary of Wayne County, MI. With a population of just over 83,000, Westland's median age of 40.1 is roughly 2 years older than that of Wayne County at 38.1. Household size in Westland is 2.3 persons per household, which not only is smaller than Wayne County at 2.5 but is also smaller than Michigan and U.S. averages. Compared to Wayne County, Westland is generally less racially diverse, even though on average it compares rather closely to Michigan averages. Median household income and median property values are slightly higher than the average Wayne County statistics, with most of the housing stock in the area built between 1950 and 1980. According to ESRI Business Analyst, the typical resident types in Westland are married couples with younger children, with some higher-level education, generally in the services, professional, and administrative industries. Figure 1 shows some general demographic stats for the City of Westland.


*FIGURE 1: City of Westland Demographics. Source: ESRI Business Analyst*

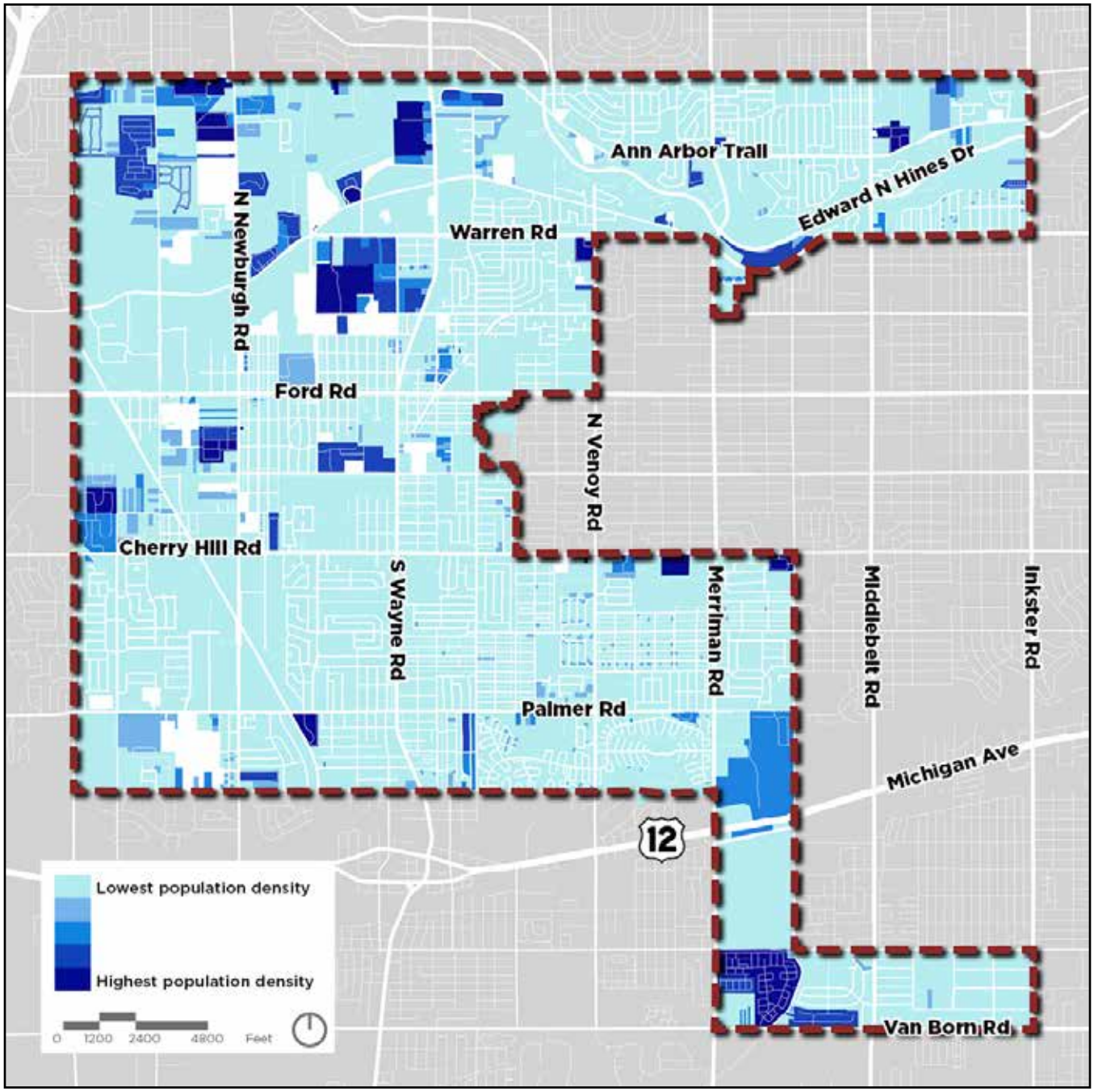



*FIGURE 2: Population Density, Source: US Census Bureau, ACS 2019*

## Population Density

Westland's population centers cover all corners of the community. Of the approximately 83,000 residents in the City of Westland, the pockets of higher density are located around the City in multi-family housing complexes, as well as in the neighborhoods with smaller building footprints and more compact subdivision layouts. Most of the multi-family housing in Westland is located north of Ford Rd along or off of Wayne Rd. Other denser areas of population along Cherry Hill Rd and Palmer Rd are typically newer subdivisions and/or multifamily complexes. In the southern portion of Westland, a mobile-home park also accounts for a denser cluster within city limits. Figure 2 shows the population density in Westland.

## Population Proximity

In addition to population density, it is important to analyze the degree of connectivity between population groups. Figure 3 depicts population centers, their 10-minute proximity to other centers of population, and then scores their access. The metric not only considers current pedestrian and bicycle infrastructure, but proximity to public transit as well. The results shows that older neighborhoods in the northern portion of the city and between Cherry Hill and Palmer are where residents are best connected to each other. Residents around current employment centers by Wayne and Warren are also well connected.

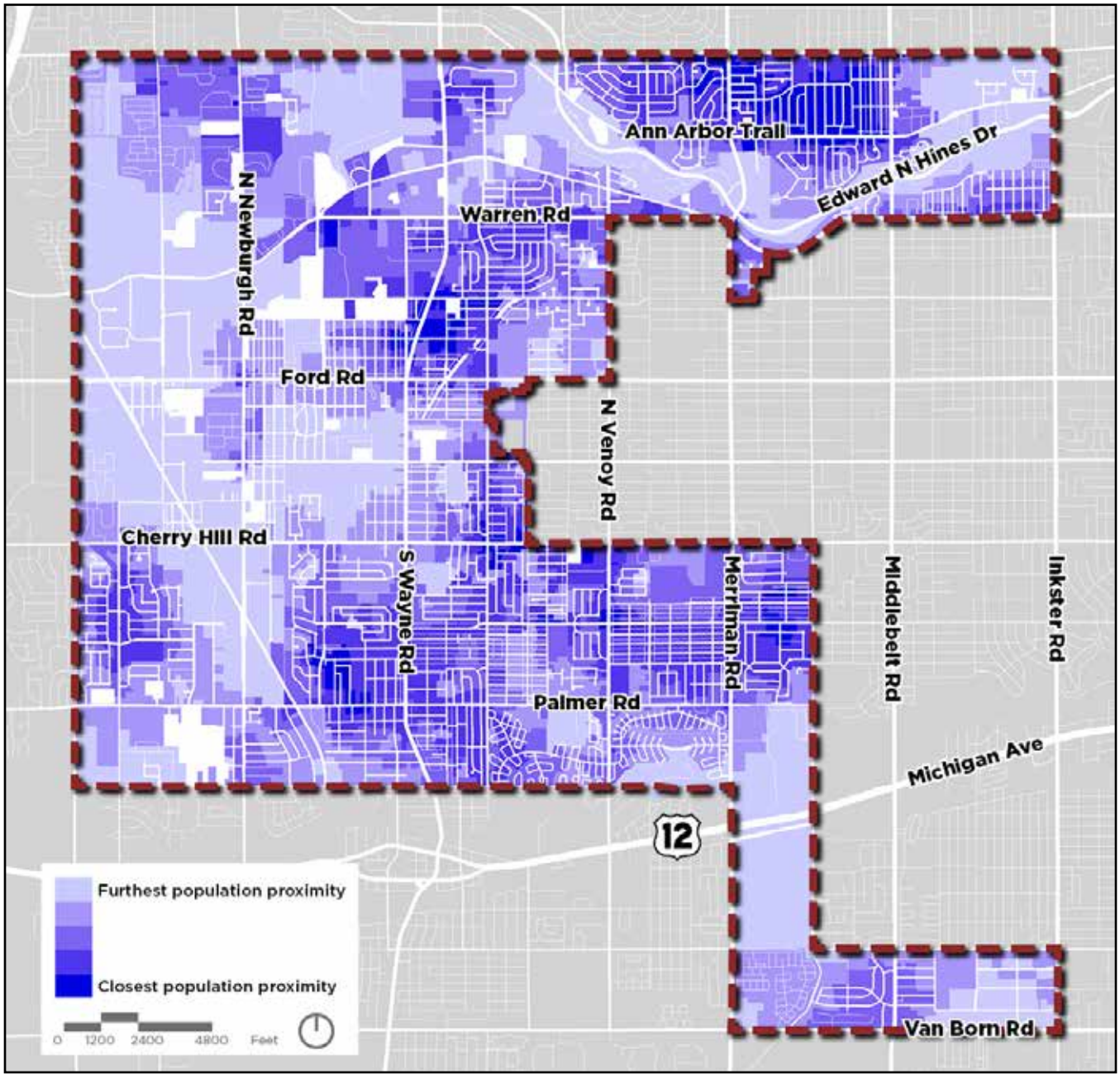



*FIGURE 3: Population Proximity, Source: Urban Footprint*

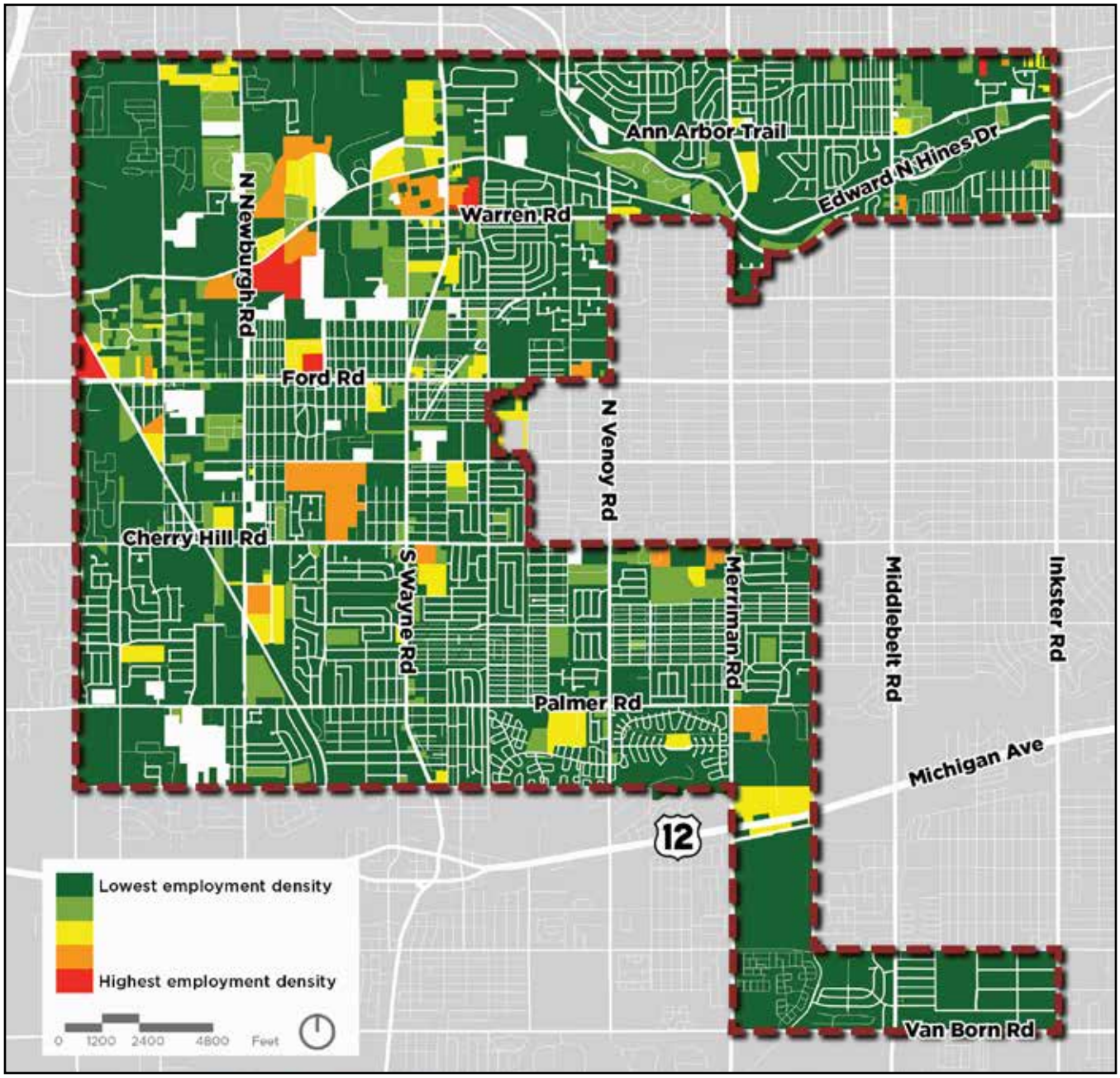



*FIGURE 4: Employment Centers, Source: UrbanFootprint*

## Employment

Of the communities in the SEMCOG region, Westland ranks in the middle for total jobs (27,207) and job density (2.08 per acre). Jobs are spread throughout the community and range between 500 and 1,500 total jobs in most of the Transportation Analysis Zones (TAZs) in the city. There are two employment hot spots in Westland and both are in the northwestern portion of town. The larger of the two is around the Westland Shopping Center on Warren Road at Wayne Road. This area includes the Westland Mall, some big box stores, City Hall, and local businesses. The other hot spot is at Ford Road and Hix Road, at the Westland city border, and is another collection of big box stores and local businesses. Some of these businesses are in Canton Township and some in Westland.

Figure 4 shows how employment density ranges in the City of Westland.

## Areas of Equity and Demand

In order to ensure that the geographic areas that are most in need of walking and biking facilities are targeted for new non-motorized infrastructure, programs, and planning, SEMCOG performed a set of analyses to identify equity area concentrations and demand areas in the region. More information about this analysis can be found on SEMCOG's website, here: https://semcog.org/bicycle-and-pedestrian-mobility

### Concentration of Equity Populations

SEMCOG identified populations (and areas) of the region through an equity lens based on socioeconomic factors that may impact their mobility. This includes the proportion of children, low-income populations, minority populations, seniors, and transit-dependent households.

## Bicycle and Pedestrian Demand Areas

Walking and biking infrastructure can lead to many positive benefits for a community, and this analysis can be used to ensure that the system is accessible for people of all ages, abilities, and backgrounds. The analysis is based on the connectivity and demand for short trips in specific areas of each community.

These data were consulted to better understand the areas in Westland that are in greatest need for walking and biking infrastructure. The analysis categorizes locations by Very High, High, Moderate, and Low. The Very High and High area are deemed Equity Emphasis Areas.

## Equity Area Analysis

The purpose of the equity analysis is to determine where there are high concentrations of residents who rely more heavily on walking and biking. Within Westland, there are a few areas of High and Very High concentrations of equity populations. The area north of City Hall has a large area of Very High equity concentration. The Norwayne Neighborhood and the area south of Michigan Avenue also consist of Very High equity populations. The other Equity Emphasis Areas in Westland consist of High equity concentrations. Nearly all of these areas have limited access to bicycle infrastructure, however most have access to pedestrian infrastructure. Figure 5 shows the results of the Equity Analysis in Westland.

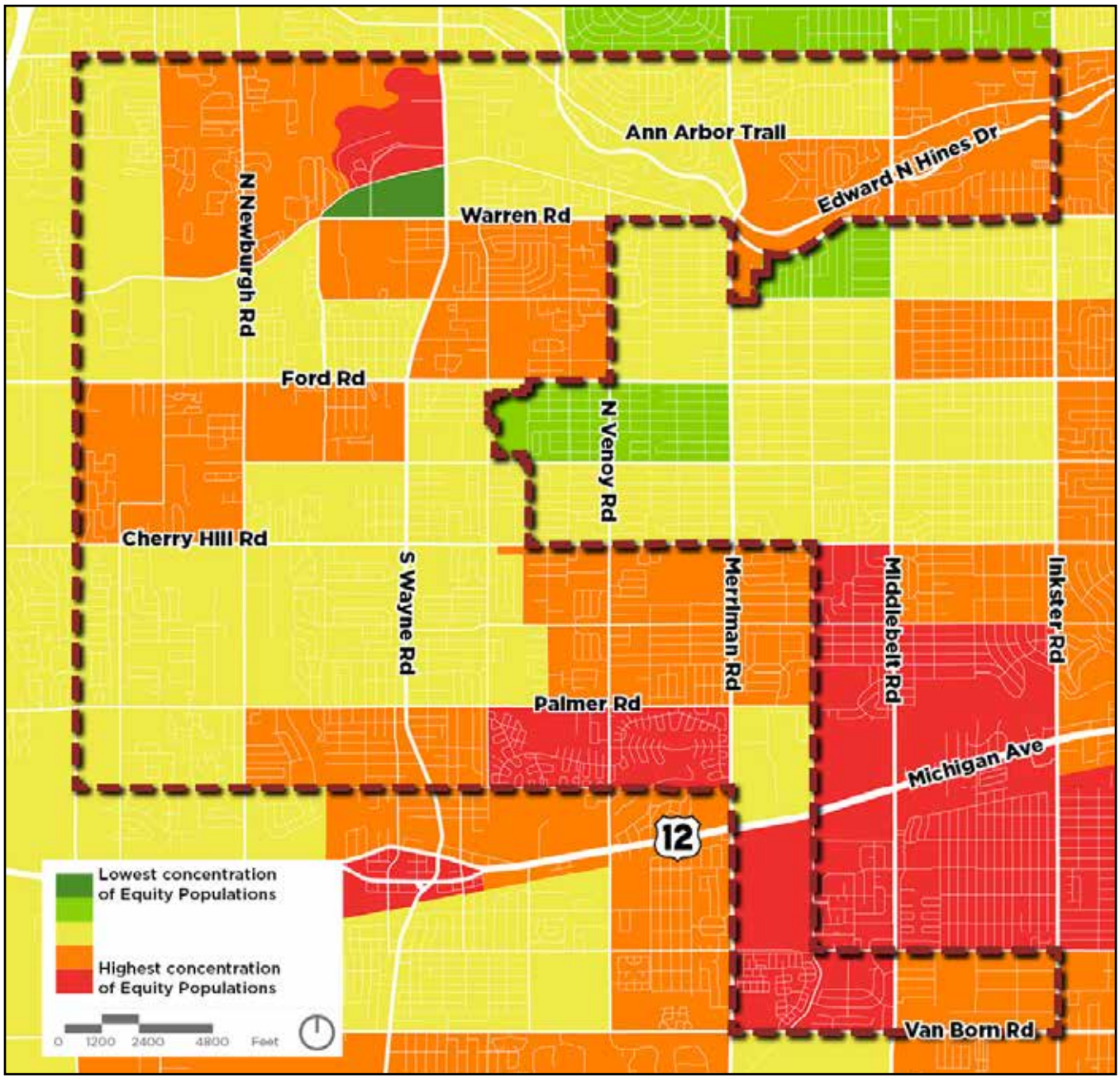



*FIGURE 5: Equity Areas, Source: SEMCOG*

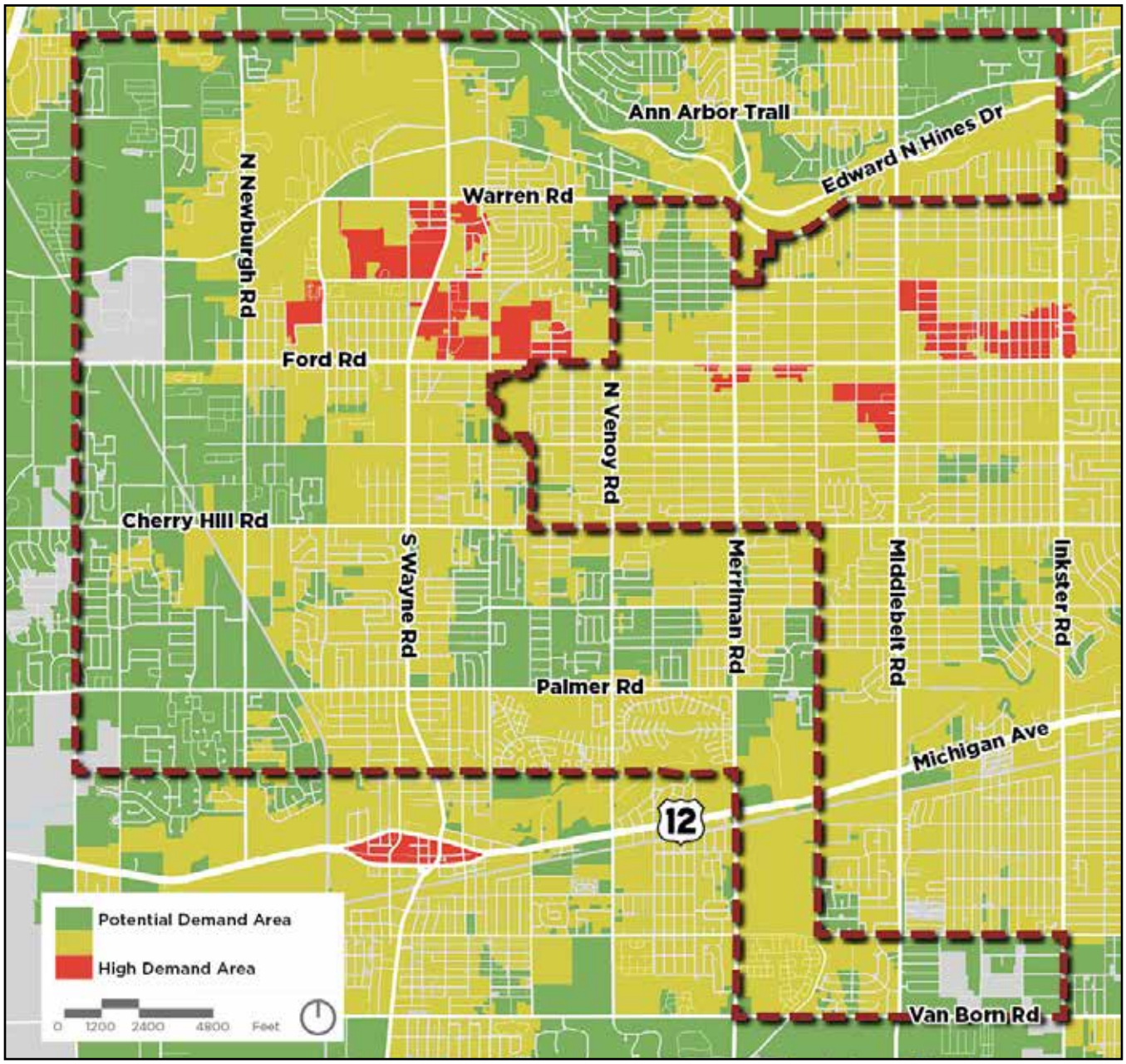



*FIGURE 6: Short Trip Demand Areas, Source: SEMCOG*

## Areas of Demand

The purpose of the Demand Analysis Area analysis is to better understand which areas are most likely to support walking and biking infrastructure. These areas are based on trip demand, specifically the demand for short trips. High Demand Areas have the highest demand for short trips and the most likely to serve those trips with walking and biking. These areas typically have greater right-of-way competition and should receive planning, programming, and policy support to encourage more non-motorized trip making. Moderate Demand Areas are typically adjacent to the High Demand Areas and are primarily residential. These areas can support walking and biking, but driving is still necessary for many trips. Potential Demand Areas are the least densely populated of the analysis areas, but could support biking and walking with additional infrastructure, including additional roadway connections. Figure 6 shows the demand for walking and biking in the City.

In Westland, much of the City is categorized as either a Moderate or High Demand area. There is an uninterrupted corridor of Moderate and High Demand along Wayne Road from Glenwood Rd to the northern city border (Joy Road). Many of the residential areas on the east side of Westland are also Moderate Demand Areas. The west side of Westland consists more of Potential Demand Areas, likely due to the reduced population and development density in the area.

Few areas of Westland are lacking access to pedestrian infrastructure, as shown in Figure 10. A few residential areas on either side of Wayne Road do not have sidewalks, as well as much of the Norwayne neighborhood. Sidewalks are more consistently absent in the Potential Demand Areas on the west side of the City. However, nearly all of Westland is over a half mile from bicycle infrastructure. A small portion in the northeast portion of the city, as well as a section north of Glenwood Ave are within a half mile of trails along the Upper and Lower Rouge Rivers.

## Summary of Demographic Conditions

Areas in Westland with high population density are scattered throughout the City. The two areas of highest density are located near Wayne and Warren Roads, near City Hall and at Merriman and Van Born Roads. The older developed areas of Westland are also more connected to one another mainly due to a higher overall housing density and land use standards that focused on developing a street grid. This allows residents to move through the city using all modes more easily when compared to newer developments. Areas with high equity population concentration match up with the many of the areas with either a Moderate of High Demand for bike and pedestrian trips.

# LAND USE

## Activity Centers

The main activity centers in Westland follow some of the more prominent corridors within the city. The activity centers not only are denser with multifamily and commercial uses, but also various institutional and open/natural space. There are 3 primary corridors that drive activity in the area, with various other intersections and minor corridors following suit. Warren Rd between Newburgh and Wayne is a corridor that not only contains multifamily, various services, and amenities, but also contains the Westland Shopping Center. Wayne Rd from the northern to the southern portion is a heavily traveled commercial corridor as well, that intersects with Ford Rd, another of Westland most traveled roads.

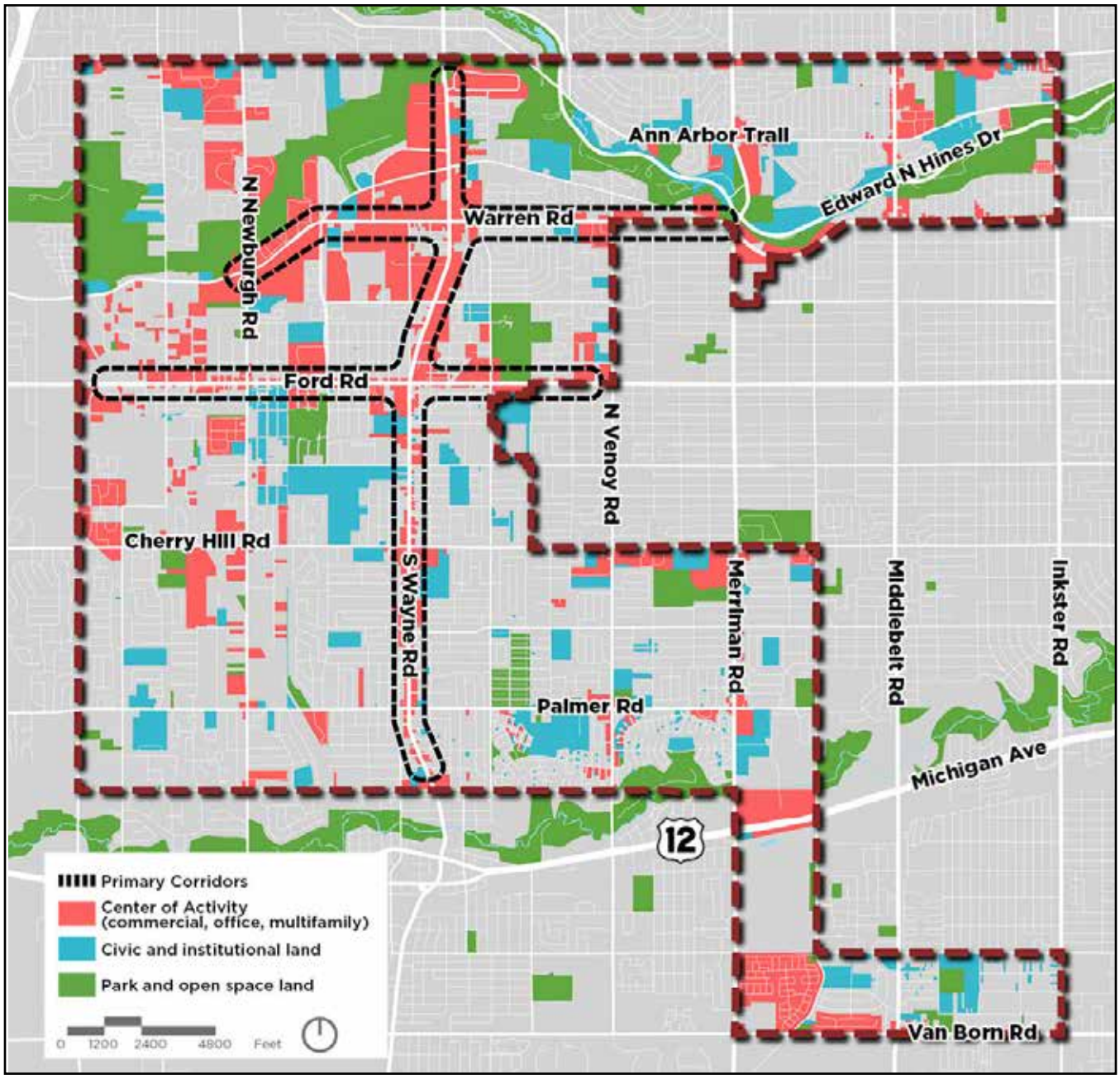



*FIGURE 7:* Activity Centers, Source: UrbanFootprint

## Parks

Park and open space in Westland is primarily concentrated to the northern and southern boundary of the city. The Hines Park area along the Middle Branch of the Rouge River is home to the Perrin Recreation Area, Sherwood Recreation Area, Hines Park, Elm Grove Recreation Area, and the Nankin Mills Recreation Area. The Lower Rouge Parkway area provides access to trails and parks outside of city limits to the south. Neighborhood parks and school grounds serve Westland's more centrally located residents, with Central City Park being the largest.


*FIGURE 8: Parks and Open Space, Source: SEMCOG*

## Summary of Land Use Conditions

Westland has very opportunistic land uses today, as major commercial corridors connect regional open space, with a concentration of multifamily complexes, older residential neighborhoods, public/private schools in between. Just outside of city limits, I-275 and I-96 offer local and regional access to additional amenities in Wayne County and beyond. Strong connections to these diverse set of land uses is possible using the existing vehicle network. However, some residents may be disconnected from the greater community because they lack access to a vehicle and may not feel safe walking or biking without dedicated routes.

# TRANSPORTATION

As one of the larger cities in Metro Detroit, Westland has an extensive road network that includes large arterial roads, state trunkline road, and local neighborhood streets. Many of the neighborhoods in Westland are highly connected to the arterial roadway system and offer redundancy to the system on slower speed streets. These streets area present an opportunity for low speed, low stress non-motorized focused routes that can offer connections to much of the City. Much of Westland is auto oriented with few options for bikes to travel in their own space. Sidewalks are found throughout the city, however crossing the large arterial streets can be difficult, uncomfortable, and unsafe.

Existing Transportation Network

The existing transportation network in Westland consists of state owned, county owned, and locally owned roadways which provide the backbone of the transportation system. The Suburban Mobility Authority for Regional Transportation (SMART) transit routes travel through the City providing essential bus service to residents and employees. Additionally, sidewalks can be found through much of Westland. These facilities make up the transportation network but could be connected better to allow for a more efficient system.

## Existing Non-Motorized Facilities

### Bike Facilities

Westland currently does not have any on-street bicycle facilities. However, the Hines Drive shared-use path travels through Westland between Joy Road and Inkster Road. This pathway is part of a larger trail that extends into Dearborn. Plans for additional connections to the Upper Rouge River parks system is in process now and may include feeder non-motorized route connecting to

Hines Drive. A bike lane is planned for implementation on Wildwood Avenue, extending from Warren Rd to Glenwood Rd. This will be the City's first bike lane and part of a larger bicycle and non-motorized system in the community. Figure 9 shows the location of the existing and planned bike facilities in Westland and the surrounding communities.

Two kayak launch areas are planned for the Lower Branch of the Rouge River. One will be located at Venoy Rd and the other at Merriman Rd and will be directly accessible by a planned non-motorized pathway along the Lower Branch of the Rouge River. The site along Venoy Rd would be located in Wayne, while the site accessible from Merriman Rd would be located in Westland.


*FIGURE 9:* *Non-Motorized Facilities, Source: SEMCOG*

## Sidewalks and Crosswalks

Most of Westland's streets have sidewalks. As most of the neighborhoods in Westland were constructed in the 1950s, prior to widespread automobile use, sidewalks were essential to the mobility of the community. Many of the neighborhood streets are arranged in a grid or loose grid pattern that improves pedestrian connectivity in the City, as shown in Figure 10. At many of the large intersections around the City of Westland, there are marked crosswalks to improve pedestrian visibility. However, there are several major intersections lacking crossing infrastructure including Wayne Road at Ford Road, Avondale Avenue and Wildwood Street, and at Ford Road and Central City Parkway. Improving crossing conditions at all intersections and adding additional pedestrian access points will help improve safety, comfort, and ease of travel for all pedestrians.

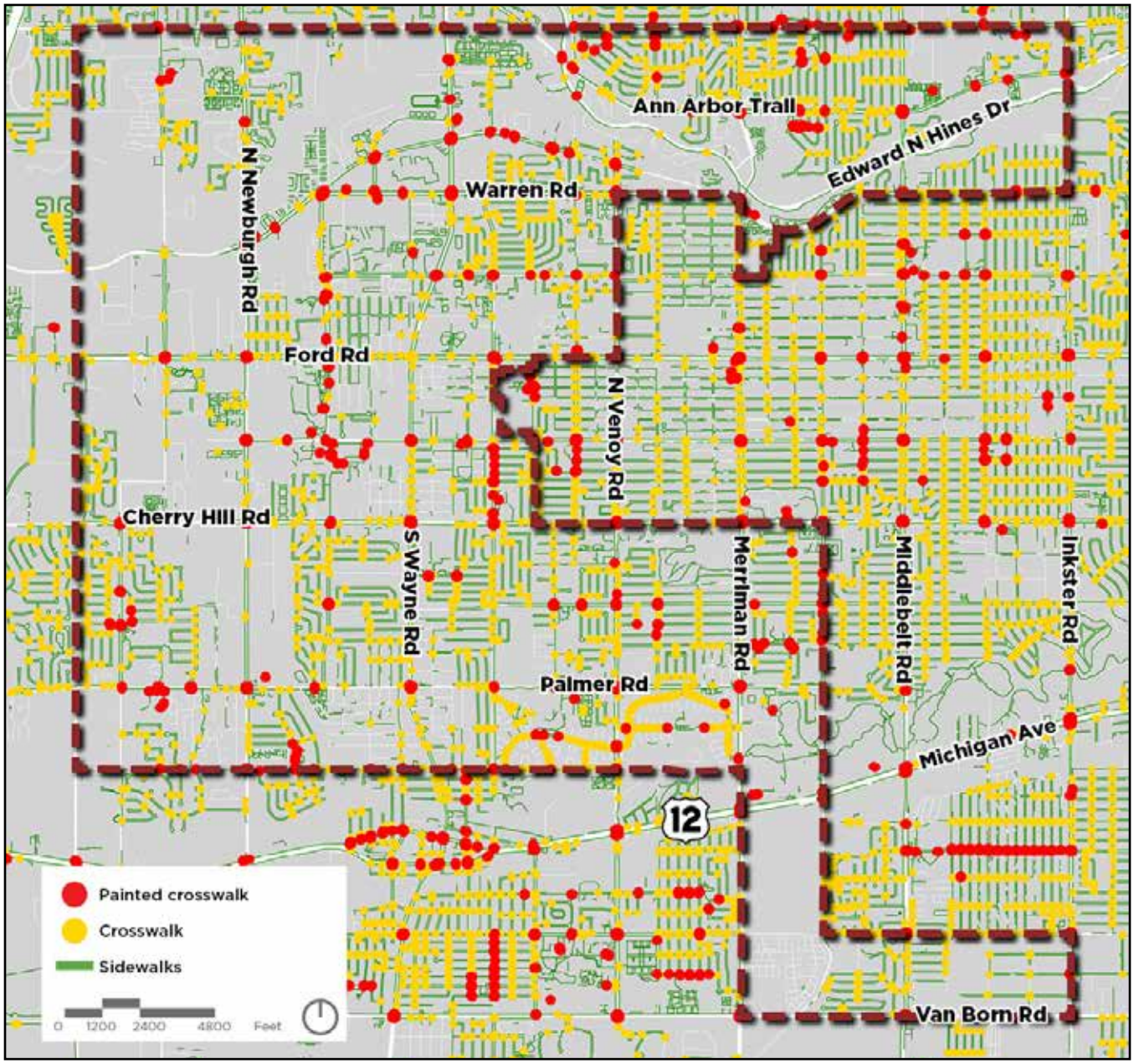



*FIGURE 10: Sidewalks and Crosswalks, Source: SEMCOG*

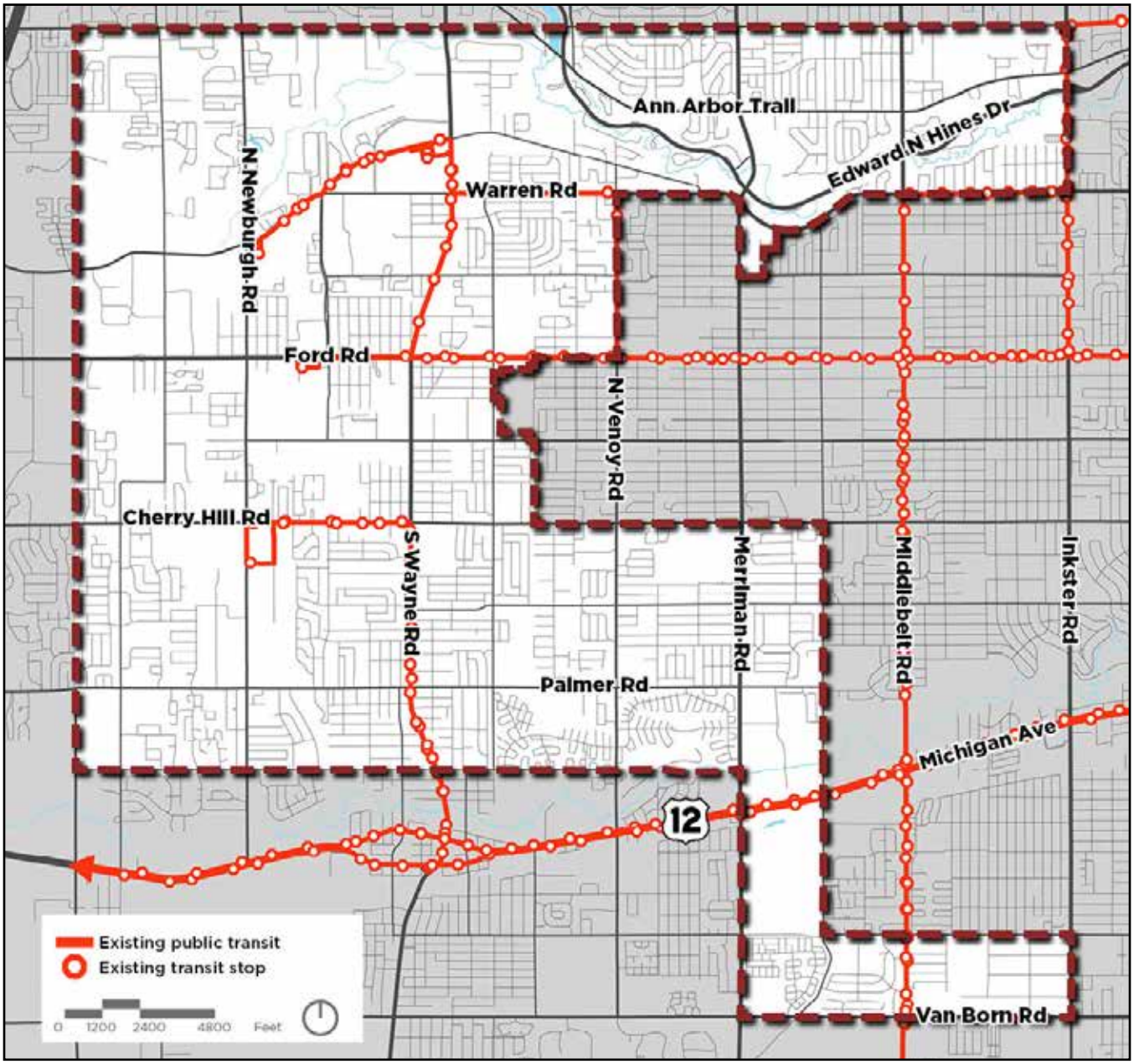



*FIGURE 11: Existing Public Transit, Source: SMART*

## Existing Transit

The Suburban Mobility Authority for Regional Transportation (SMART) operates four routes in the City of Westland, as well as regional demand response paratransit service. Route 250 – Ford Road, Route 255 – Ford Road Express, Route 200 – Michigan Avenue Local, and Route 261 – FAST Michigan all provide service to the community. These routes travel along the state trunklines in Westland, Ford Road and Michigan Avenue. Transit stops in Westland average between 10 and 50 boardings and alightings per stop. The highest ridership stops in the City are located at Newburgh Rd and Warren Rd (terminus of Route 250), Ford Rd and Central City Pkwy (Route 255 terminus, at Cherry Hill Rd and Newburgh Rd (terminus of Route 200), and at Merriman Rd and Michigan Ave (FAST Michigan). Westland's transit routes are shown in Figure 11.

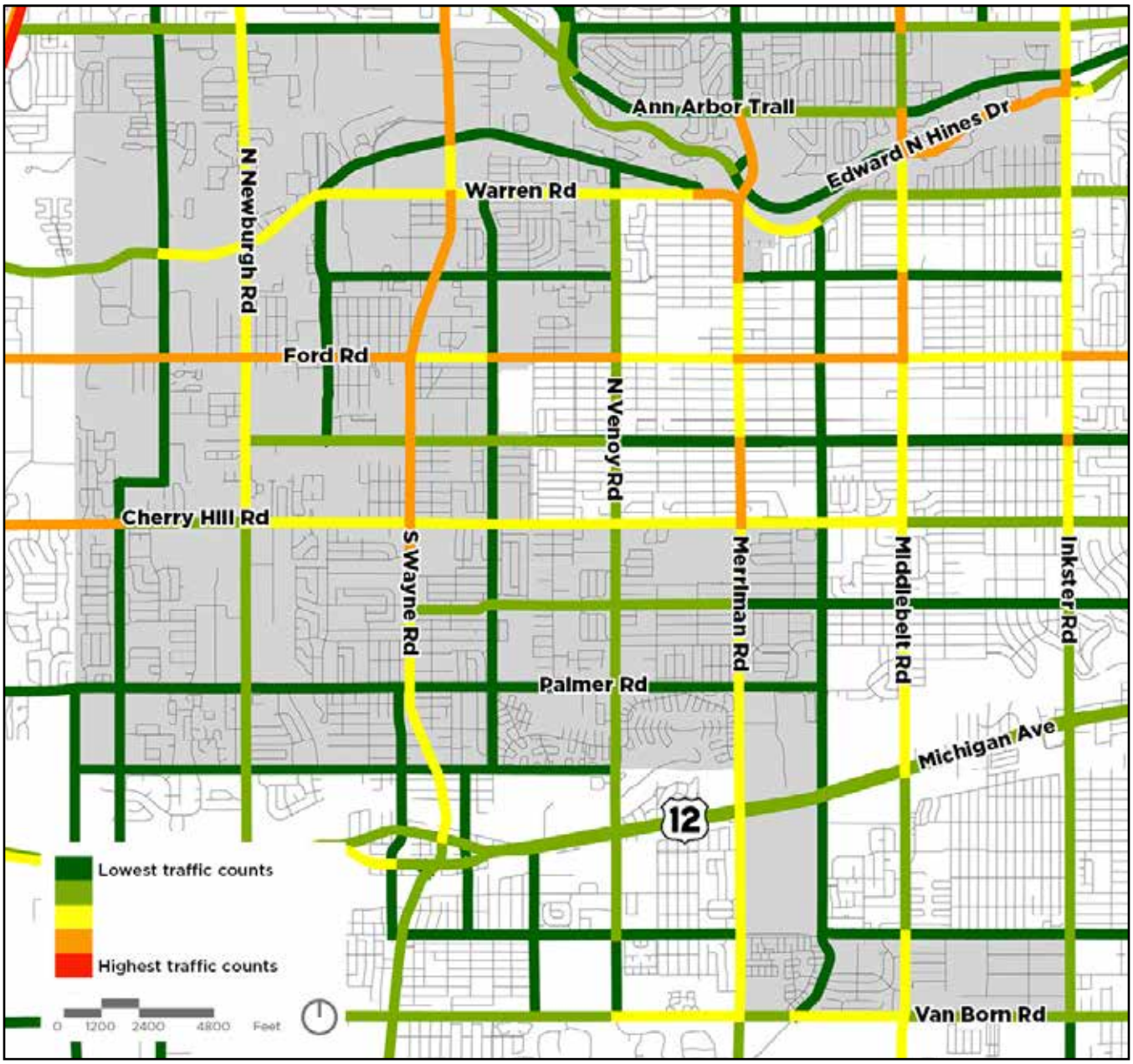



*FIGURE 12: Traffic Volume, Source: SEMCOG*

## Traffic Volume

Average Annual Daily Traffic on the major Westland city streets varies from 2,500 vehicles per day to over 46,000 vehicles per day. Ford Road, Warren Road, Wayne Road, Merriman Road, and Cherry Hill Road all carry about 30,000 vehicles per day. Newburgh Road is another high utilization road with over 20,000 vehicles per day using the street. Hines Drive and Middle Belt Road carry over 46,000 vehicles per day. Most of these streets run north to south and travelers are seeking access to the highways in the area (I-94 and I-96). Figure 12 shows the traffic levels on Westland streets.

The remaining streets in Westland carry less than 15,000 vehicles per day, with many carrying 10,000 or less on average. Hix Road, Wildwood Avenue, Glenwood Avenue, Joy Road, and Henry Ruff Road may all be potential candidates for on-street bicycle routes or infrastructure that can carry riders from border to border.

## Summary of Transportation Conditions

Westland's existing transportation and development patterns has challenges in providing safe and comfortable areas for non-motorized travelers due to the large arterial streets that cross the City. However, the local, neighborhood streets provide a great opportunity to add low street bicycle routes through Westland. The availability of SMART transit service, the planned facilities in Garden City and other nearby communities, and the regional trail network to the north and south of the City are other assets that can be connected to with future non-motorized infrastructure. The optimal placement of potential new facilities will need to balance the stress level of the street, connections to other modes, and space available for dedicated facilities.

# PREVIOUS PLANNING

## 2017 Master Plan

Completed in 2017, the Master Plan lays out recommendations for citywide policy, land use, and non-motorized transportation. The non-motorized transportation section of the plan provided a high-level strategy to further develop the City's non-motorized network. The following goals are the key recommendations related to mobility in Westland:

1. Create Destination Connections through installation of safe and connected infrastructure.
    a) Sidewalk Installation at intersection of Warren and Merriman Road
    b) Sidewalk Installation at intersection ¼ mile radius from City Hall
    c) Sidewalk Installation at intersection ¼ mile radius from Westland Farmer's Market
    d) Sidewalk Installation at intersection ¼ mile radius from Faust Public Library
    e) Sidewalk Installation at intersection ¼ mile radius from Stottlemeyer School
    f) Safety Study of Wayne Road from Warren to Ford Road
    g) Safety Study of Wayne Road from Canyon Drive to Glenwood Road
    h) Safety Study of ford Road from Newburgh Road to Wildwood Road
    i) Safety Study of Warren Road from Merriman to Inkster Road
    j) Safety Study of S. Carlson Street and Cherry Hill Road
    k) Bike Feasibility Study of Central City Parkway
    l) Bike Feasibility Study of Wildwood
2. Launch a 3 E's Campaign
    a) Walking Program
    b) Bike/Walk Event
    c) Bicycle Safety Program
    d) Law Enforcement Training

3. Expand Wayfinding to Bicycle Facilities
    a) Bicycle Wayfinding Study
4. Adopt Supportive Policies and Programs
    a) Complete Streets
    b) ADA Transition Plan
    c) Safe Routes to School
    d) Zoning Code
5. Install Biking Amenities
    a) Bike Racks

As part of the planning process, a community survey on non-motorized transportation was conducted. The following statements represent key findings from the survey.

- The majority of respondents walk, jog, and cycle on a weekly basis and utilized paved sidewalks/ crosswalks/paths
- The typical nature of non-motorized travel was for leisure
- Parks were the top destination for non-motorized travel
- The largest barrier to walking or bicycling more frequently was personal safety

## SEMCOG Bike Plan

Completed in March of 2020, the SEMCOG Bicycle and Pedestrian Mobility Plan for Southeast Michigan works to establish a common vision for bicycling and walking in the region and to provide guidance on increasing the connectivity, use, and safety of the non-motorized network for all residents in the seven county SEMCOG region (Wayne, Oakland, Macomb, Washtenaw, Monroe, Livingston, and St. Clair Counties). The plan includes regional recommendations such as connecting and expanding the network of walking and biking infrastructure, ensuring equitable access, increasing safety, promoting healthy lifestyles and vibrant communities, public education, and sustainability.

Through a current conditions analysis and public engagement, the following relevant findings were discovered for the SEMCOG region:

- There has been an increase in bicycle and pedestrian trips from 2005 to 2015.
- Southeast Michigan biking trips on average is two miles, while the average walking trip is a half mile.
- The majority of individuals (who participated in the bicycle and pedestrian survey) traveled to parks and recreation, then shopping, dining, etc. when walking or biking.
- Protected bike lanes and shared-use paths were among the highest priorities for infrastructure improvement investment.
- Physical barriers and gaps, safety issues, and problems related to maintenance or condition, were among the most commonly cited impediments to walking and biking around the region.
- Approximately 52 percent of households in the region are within one-half mile of some type of bicycle infrastructure.

Within Westland, the following findings were noted:

- Hines Park was identified as a major regional park with a high level of interest for walking or biking.
- A large portion of the City of Westland was identified as a “high and moderate demand area” without bicycle infrastructure within one-half mile.
- The City of Westland contains areas of potential and moderate demand for bicycle and pedestrian infrastructure.
- The city also has a range in concentration of equity populations, the southern portion of the city trending towards a higher concentration.

## Connecting the Rouge Plan

Connecting the Rouge is an ongoing, regional community planning effort that seeks to connect the trails along Hines Drive to the Lower Rouge and downriver portions of the Rouge River Gateway Greenway. The goals of the project include economic growth, supporting healthy lifestyles, developing a regionally connected system that links to key destinations, safety and accessibility for all users, integration of art and culture, implementation of funding to advance trail improvement and maintenance, and to collaborate with existing trail entities, and finally to connect people to nature. The framework plan is set to be complete in April of 2021.

SMART Park and Ride Design Plan

Beginning in 2020, SMART, the suburban transit provider, began the process of identifying potential sites along the three FAST bus corridors for the purpose of designing and building park and ride facilities to serve customers. The FAST corridors are Gratiot Avenue, Woodward Avenue, and Michigan Avenue. The overall goal of the project is to construct a park and ride or mobility hub facility along the three corridors to build ridership on FAST, elevate the visibility of transit in SMART communities, and to serve as areas to improve transit operations.

Since Michigan Avenue travels through Westland and through the adjacent communities, connections to these facilities with bicycle and pedestrian facilities will be important to improving their value. Regardless of the preferred site for the facility, this plan will look for ways to connect Westland residents to this important regional asset.

# KEY FINDINGS

The existing conditions analysis helps to shed light on the potential non-motorized infrastructure needs of Westland. The land use, demographic, transportation, and demand analyses show where residents may need to travel, how they might get there, and which areas of the City are most in demand for new facilities. The previous planning completed in the City and Region provide a base for recommendations and a framework for implementation. The following Key Findings will inform the non-motorized recommendations developed for the Westland Pedestrian and Bicycle Safety Action Plan:

## Key Findings

**Distributed High Density Residential**

- Pockets of high-density residential areas are scattered throughout Westland and few are connected to areas of high employment density.

**Pockets of Neighborhood Connectivity**

- An area of low connectivity exists between Cherry Hill Rd and Ford Rd. However, the neighborhoods north of Ford Road and south of Cherry Hill Rd are well connected.

**Consistent Equity and Demand Areas**

- Much of Westland is comprised of areas with medium to high concentrations of equity populations. These areas overlap with areas of medium and high non-motorized trip demand. However, much of Westland is not within a half mile of a bike facility.

**Few Existing and Planned Bicycle Facilities**

- The Hines Drive shared use path travels through the northern portion of Westland but is relatively disconnected to the City due to the topographical location of the road. There is only one planned non-motorized facility for Westland along Wildwood Rd.

**High Sidewalk Density**

- Sidewalks exist through much of Westland. Neighborhoods in the southeastern portion of the city have the highest concentration of sidewalk and bike lane demand but are also furthest from activity centers and transit.

**Transit Connectivity**

- SMART operated four routes through Westland, mostly on the major streets in the City. These routes provide service to cities east of Westland, including Dearborn, Detroit, Garden City, Dearborn Heights, Inkster, and Wayne.

**Demand for Safe, Comfortable Facilities**

- Both the City of Westland Master Plan and the SEMCOG Regional Bike Plan asked community members about their preferences for non-motorized infrastructure. In both documents, residents said that safe and comfortable infrastructure would encourage them to walk and bike more.

WESTLAN

# 03

## Community Engagement

# 03

# COMMUNITY ENGAGEMENT

# Public Engagement Summary

## STEERING COMMITTEE MEETING SUMMARY

The project Steering Committee consists of Westland City staff members, local planning agency staff members, Westland residents, and other community stakeholders. The goal of the Steering Committee is to help guide the project and provide input on the project's recommendations. The first Steering Committee meeting was held on April 14th, 2021.

The goals and priorities from the Steering Committee include the following:

- Fill sidewalk gaps around the City improving conditions for pedestrians, and enhancing crosswalks.
- Use new non-motorized facilities to help connect the trail system to the regional network.
- Provide wayfinding to specific regional trails.
- Ensure that trails and new non-motorized facilities are not negatively impacting the environment
- Prioritize safety for all users.
- Connect new facilities to planned and existing greenways and blueways.

## PUBLIC MEETING SUMMARY

The first public meeting was held on May 11, 2021 at 5:30 pm through Zoom. Members of the public, City leadership, neighborhood organizations, residents, and bicycle and walking advocates were in attendance. The meeting began with an overview on the project, its purpose, and existing conditions. Meeting participants then were led through a discussion, centered around the following questions.

1. Where do you currently walk and bike in Westland?
    - Neighborhoods
    - Warren Ave
    - Westland south of Ford
    - Westland Mall
    - Northville
    - Plymouth
    - Norwayne
    - Marquette
    - Central City (x3)
    - Cowan (x2)

- Parks in General (x2)
- Hines Drive/Park (x2)

2. Which areas of Westland are most UNSAFE for bicyclists and pedestrians?

- Grand Traverse
- Central City Parkway
- Hix road between Ford and Joy
- Ford and Wayne
- Newburgh
- Fountain and Joy Intersection
- Merriman and Venoy Intersection
- Cherry Hill and Wayne Intersection
- Warren and Merriman Intersection
- Wayne and Ford Road Intersection
- Wayne and Hunter Intersection

3. Where would you like to be able to walk and bike in Westland?

- Tattan Park
- Ann Arbor Trail
- Shop and dine district
- Meijer
- Henry Ruff
- Central City Parkway
- Hines Park
- Library

4. What other walking and biking improvements would you like to see come out of this study?

- Road and sidewalk improvements would benefit more people. If it's out of the scope of this project and all you want to do is make bike lanes, then this has very limited benefit at least to me.
- Sidewalk gaps
- Safety Information and Skills Workshops (x2)
- Crossing walk enhancements, timing, equipment, paint
- Public bike racks (x2)
- Clear crosswalks and signage
- Lighting, education, and bike racks (x2)

The second and final public meeting was held in person at Westland City Hall on October 14th, 2021. Members of the public, City Staff, and City Council members showed up to learn about the recommendations of the plan. Overall most were pleased with the direction of the plan and were excited to see new non-motorized infrastructure added to Westland. Some members of the public were skeptical that the specific recommendations were needed in the City and may need additional outreach to convince them otherwise. Future engagement efforts should focus on the benefits bike infrastructure can bring to Westland.

## COMMUNITY SURVEY FINDINGS

With a total of 45 responses, the Walk and Roll Westland Community survey was launched on the week of April 12th and was made available online for 6 weeks. The following statements describe the majority of those who walk and bike in Westland.

- The majority of respondents walk and/or bike in Westland a few times a week for the purpose of personal fitness or exercise. A great number of people also travel for leisure.
- Respondents typically walk more than bike in Westland.
- Most respondents ride their bicycle on the street and walk on the sidewalk most often.
- Respondents most like biking and walking in Westland for the opportunity to enjoy nature and because they live near places to ride their bike
- When biking in Westland, the top challenges bikers face are not enough pathways and bike lanes, and heavy or speeding traffic.
- When walking in Westland, the top challenges walkers face are not enough sidewalks and pathways and poor sidewalk quality.
- A number of respondents felt that better lighting, more sidewalks, improved crosswalks, designated bike lanes would make them feel more comfortable walking and/or biking in Westland.
- When walking and/or biking in Westland, the majority of respondents travel to parks, civic buildings, and shopping. Specific destinations include places such as City Hall, Hines Park, Meijer, Library, Tattan Park, the Shop and Dine District, and Central City Park.
- Many would like to see Newburgh, Warren, Merriman, Ford, and Wayne Road become more pedestrian or bicycle friendly.


INTERSECTION TREATMENTS

WESTLAN

# 04

# Non-Motorized Route Identification

# 04

# NON-MOTORIZED ROUTE IDENTIFICATION

## Route Identification Process

Utilizing the input collected from the community and project stakeholders, and the existing conditions analysis, potential routes were identified. The consultant team performed an internal route brainstorming exercise, and a similar exercise was held with the Stakeholder Committee. Routes and corridors identified by the public through the public meeting and online survey were also collected.

### Project Team Brainstorming

Utilizing the existing conditions analysis, OHM Advisors was able to begin to identify primary and secondary routes, along with intersections that could benefit from improvements. The understanding of traffic volume, existing activity centers, equity population distribution, and other important factors from the existing conditions analysis allowed the project team to identify potential non-motorized routes. These connections include the northern and southern portions of Westland along Central City Pkwy from Warren Rd, through Central City Park and John Glenn High School, down to Palmer Rd. Important east-west connections include from Central City Pkwy to the Westland city boundary along Hunter Ave and Marquette St. Other important connections along Venoy Rd and Avondale St also have the potential to be important neighborhood connections. Additional secondary connections highlighted include potential connections to other important neighborhoods in the southeast of the city, as well as a connection to regional trails such as the I-275 Metro Trail. Intersections highlighted as needing improvements were largely identified along main roads such as multiple Wayne Rd intersections, as well as access points to Hines Dr and other important neighborhood entry points along Venoy Rd.

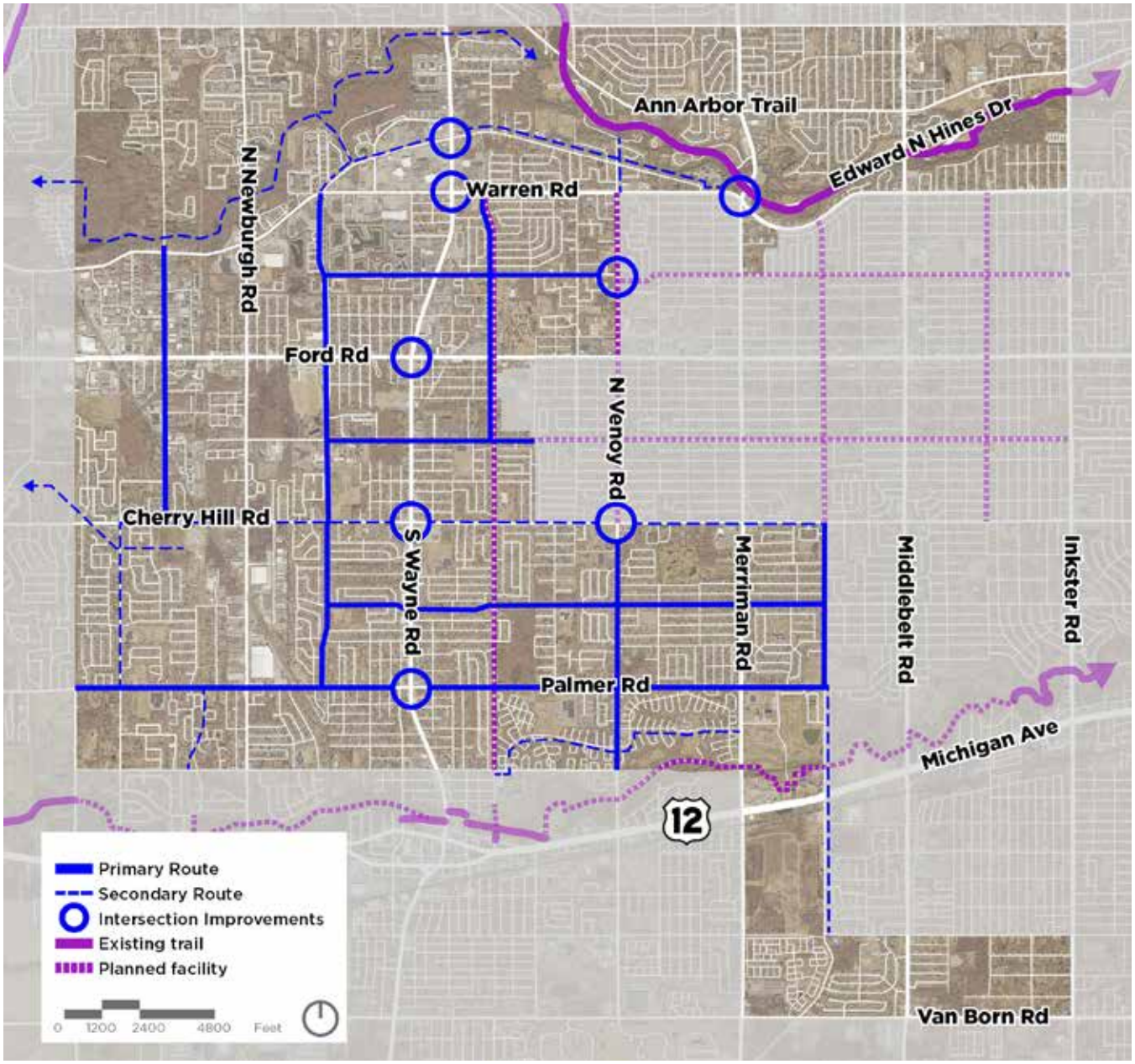



*FIGURE 13: Potential Non-Motorized Route Identified by Project Team*

## Steering Committee Route Identification Discussion

A similar exercise was conducted with the Steering Committee, and the group was also able to identify some important routes and intersections given their knowledge of the community and as local pedestrians and cyclists. The Steering Committee identified similar routes as the project team, such as the primary connection from Hines Dr, along Cowan Rd, and along Central City Pkwy down to Palmer Rd. A similar east-west connection was identified along Marquette St. Routes through the Norwayne neighborhood and connecting to the commercial centers along Ford Rd and Wayne Rd were also identified. Potential intersection improvements were concentrated along the Central City Pkwy route, as well as intersections along Merriman Rd and within the neighborhoods.


*FIGURE 14: Potential Non-Motorized Route Identified by Project Steering Committee*


*FIGURE 15: Potential Non-Motorized Route Identified at Public Meeting 1*

## Public Meeting 1 Route Identification Results

Community members that attended the first public meeting received an overview of the existing conditions and were able to provide input on the routes and intersections they walk and bike on. Local insight was consistent with the Steering Committee and project team, as the connection from Hines Dr, along Cowan Rd, then along Central City Pkwy down to Palmer Rd was the most discussed and desired primary route. Other routes include connecting Henry Ruff Rd to Annapolis Ave and Marquette St to Central City Pkwy. Intersections that were identified as needing improvement included the corners of Central City and Warren, Ford and Wayne, and the entrance to Hines Dr.

## Community Survey Route Identification Results

The community survey reinforced previous routes such as the Hines-Cowan-Central City connection, but also brought to light potential routes along Newburgh Rd and Cherry Hill Rd. Warren Rd, which was identified as a secondary route in previous exercises, was identified as a potential primary route. Connections to Annapolis Ave and the southeastern portion of the city were also reinforced through survey results. The Hines Dr intersection, as well as intersections along Venoy and Wayne, were noted as needing improvement.


*FIGURE 16: Potential Non-Motorized Route Identified from the Community Survey*

# COMBINED ROUTE IDENTIFICATION RESULTS

When combining the results from the various brainstorming sessions and feedback methods, the popular primary and secondary routes begin to emerge. The intersections most in need of safety improvements also appear.

## Primary and Secondary Corridors

Primary and secondary routes identified are results of the brainstorming exercises and the consensus built around important city connections. Routes include north-south and east-west connections that connect Westland's neighborhoods to important community assets such as city parks, regional trails, shopping and retail districts, and local schools. Important intersections are cross streets identified as needing improvements based on proximity to primary routes and relation to regional routes.

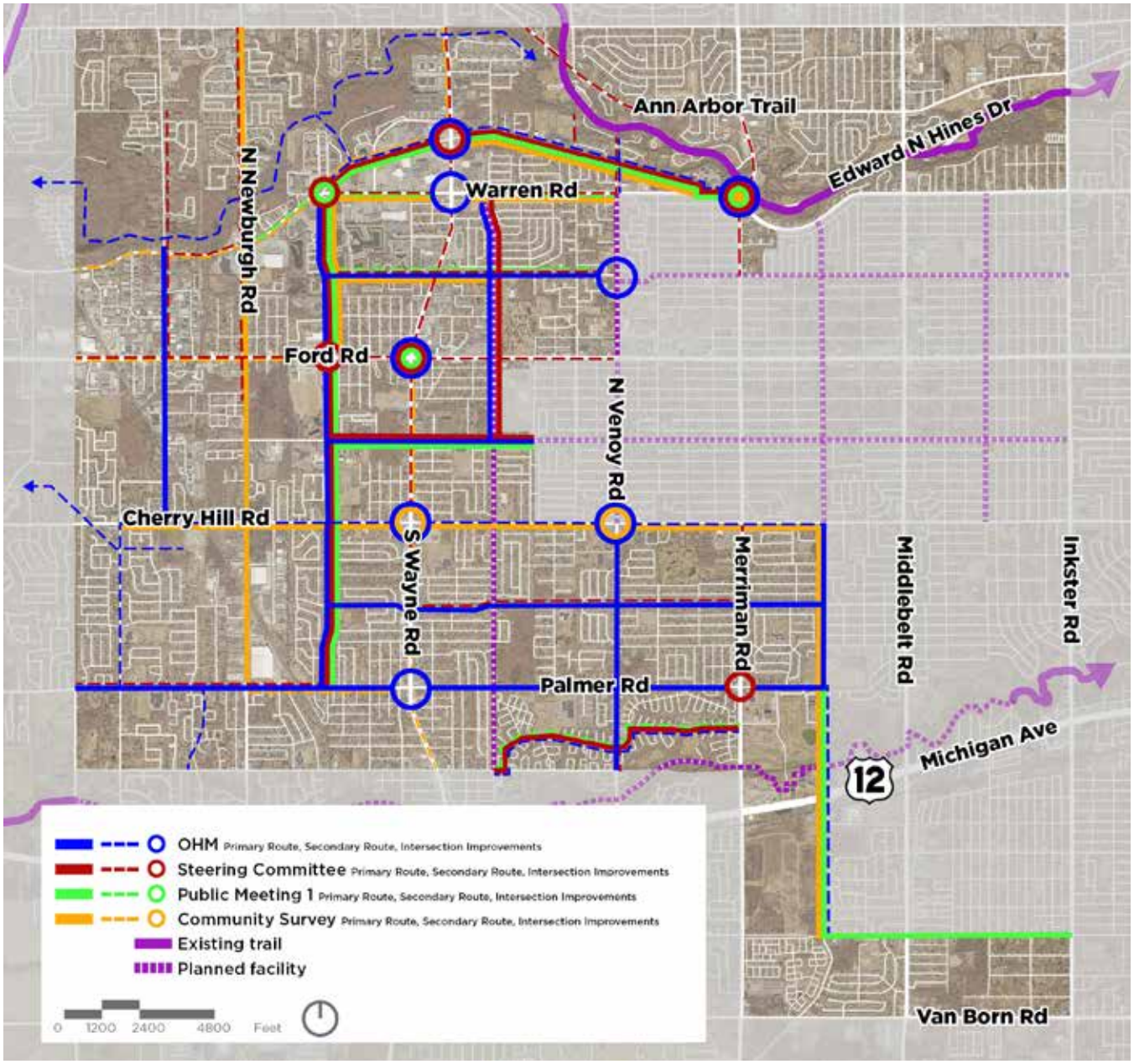



*FIGURE 17: Potential Non-Motorized Route Identified from the Community Survey*

The details of the Primary and Secondary Routes, as well as intersections in need of improvement, are listed below:

*TABLE 1: Primary and Secondary Route Details*

| | Route Name | Total Distance | Start/Stop Point | Current Configuration |
|---|---|---|---|---|
| Primary Routes | Warren Rd | .26 mi | Cowan Rd to Merriman Rd | 5 lanes (4 travel lanes, 1 turn lane) |
| | Cowan Rd | 1.6 mi | Warren Rd to Wayne Rd | 2 lanes (2 travel lanes) |
| | Central City Pkwy | .8 mi | Wayne Rd to Warren Rd | 5 lanes (4 travel lanes, 1 turn lane) |
| | Central City Pkwy | 1 mi | Warren Rd to Ford Rd | 5 lanes (4 travel lanes, 1 turn/median) |
| | N Carlson St | .5 mi | Ford Rd to Marquette St | 2 lanes (2 travel lanes) |
| | John Glenn High School Connection | .5 mi | Marquette St to Cherry Hill Rd | Parking Lot and Multi-use Path |
| | S Carlson St | 1 mi | Cherry Hill Rd to Palmer Rd | 4 lanes (2 travel lanes, 2 parking lanes) |
| | Hunter Ave | 1.7 mi | Central City Pkwy to Venoy Rd | 2 lanes (2 travel lanes) |
| | Marquette St | 1.2 mi | Central City Pkwy to Radcliff St | 2 lanes (2 travel lanes) |
| | Venoy St | 1.5 mi | Cherry Hill Rd to Glenwood Rd | 2 lanes (2 travel lanes) |
| | Palmer Rd | 4.5 mi | Hannan Rd to Henry Ruff Rd | 2/3 lanes |
| | Palmer Rd | 4.5 mi | Hannan Rd to Henry Ruff Rd | 2/3 lanes (2 travel lanes, 1 turn lane) |
| Secondary Routes | Warren Rd | 1.6 mi | Cowan Rd to Central City Pkwy | 5 lanes (4 travel lanes, 1 turn lane) |
| | Cherry Hill Rd | 4.5 mi | Superior Pwky to Henry Ruff Rd | 2/5 lanes (4 travel lanes, 1 turn lane) |
| | Henry Ruff Rd | 2.5 mi | Cherry Hill Rd to Annapolis Ave | 2/3 lanes (2 travel lanes, 1 parking lane) |
| | ITC Corridor | .75 mi | Cherry Hill Rd to City Border | N/A (Transmission Line Corridor) |
| | Annapolis Ave | 1.5 mi | Henry Ruff Rd to Inkster Rd | 2 lanes (2 travel lanes) |
| | Wildwood St | .35 mi | Warren Rd to Cowan Rd | 2 lanes (2 travel lanes) |
| | N Farmington Rd | .3 mi | Cowan Rd to Ellsworth Trail Boardwalk | 2 lanes (2 travel lanes) |

TABLE 2: *Priority Intersection Improvements*

| | North-South Cross Street | East-West Cross Street | Current Configuration |
|---|---|---|---|
| **Intersection Improvements** | Merriman Rd | Warren Rd | Painted crosswalks and sidewalks |
| | Wayne Rd | Central City Pkwy | Painted crosswalks and sidewalks |
| | Central City Pkwy | Warren Rd | Painted crosswalks and pedestrian landings |
| | Hunter Ave | N Venoy Rd | Painted crosswalk across Hunter only |
| | Central City Pkwy | Ford Rd | Painted crosswalk, pedestrian landings, sidewalks |
| | Wayne Rd | Ford Rd | Painted crosswalks, pedestrian landings, sidewalks |
| | S. Carlson St | Cherry Hill Rd | Painted crosswalks and sidewalks |
| | Venoy Rd | Cherry Hill Rd | Painted crosswalks and sidewalks |
| | S. Carlson St | Palmer Rd | Sidewalks along Carlson and south side of Palmer |
| | Venoy Rd | Palmer Rd | Painted crosswalks and sidewalks |

WESTLAN

# 05

# Primary Non-Motorized Routes

# 05

# PRIMARY NON-MOTORIZED ROUTES

The primary routes identified for the Walk and Roll Plan are those routes that were most preferred by the community and which will have begin to form the backbone of a non-motorized network around Westland. The Primary Routes are also those streets in the City that are well suited for new bicycle infrastructure based on the available right-of-way, traffic conditions, and roadway ownership.

A network of Secondary Routes are also included in the plan, but are longer term options for bicycle facilities that will will take more time and resources to implement. The Secondary Routes help to further connect the non-motorized network even more, but will likely require larger investments to make them safe and comfortable for cyclists to use.

In this section of the Walk and Roll Plan, the details of each route segment shown, including project limits, existing roadway conditions, project phasing, and cost estimates.

Most routes consist of two project phases that represent a near term, lower cost investment and a longer term, higher cost investment. Phase 1 is intended to build the network and establish dedicated cycling routes around the City. As people use these and the demand for higher quality facilities rises, the Phase 2 projects can be implemented. Phase 2 provide a greater amount of protection and safety for cyclists and will likely appeal to a larger subset of the population.

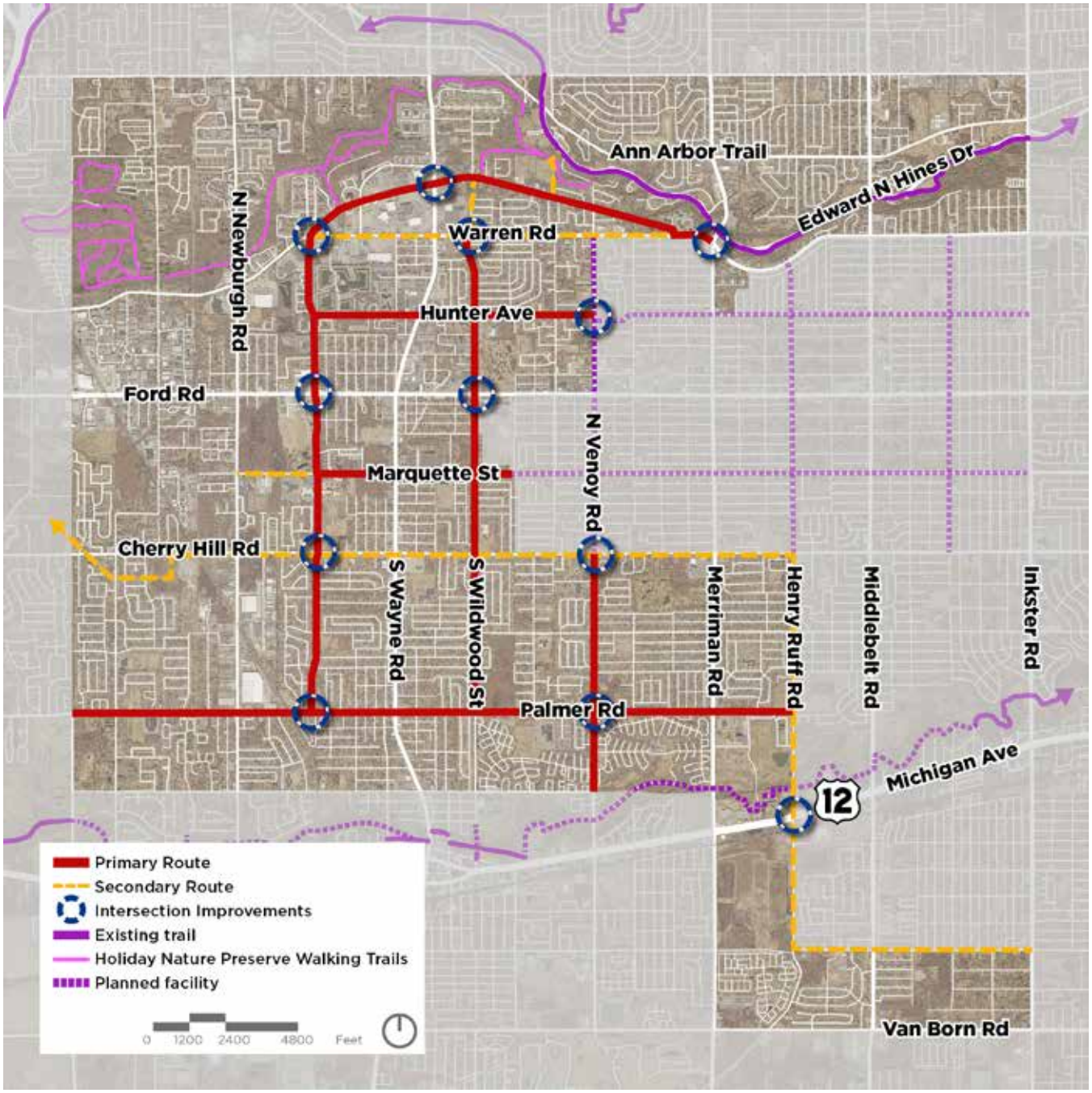



*FIGURE 18: Primary and Secondary Non-Motorized Routes and Priority Intersections*

# Cowan Road

Warren Road to Wayne Road

## Overview

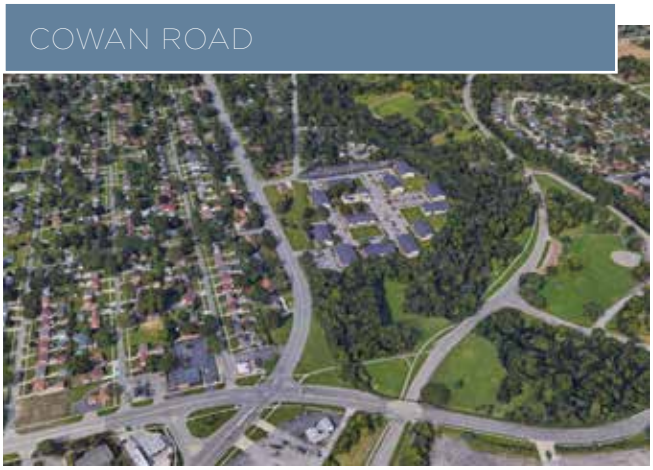
Cowan Road provides a safe, low-stress bicycle connection to the Hines Drive Trail entrance at the corner of Warren and Merriman Roads. Cowan Road travels through a residential neighborhood with low posted vehicle speeds and low amounts of traffic. Adding a bicycle facility to Cowan Road allows for residents who live in the surrounding neighborhood a way to easily travel to the Hines Drive Trail access via bike. Additionally, the route provides a connection to Wayne Road and Central City Parkway from Hines Drive.

*FIGURE 19: Cowan Road Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 36 Feet |
| **Number of Lanes** | 2 |
| **Adjacent Land Use(s)** | Single Family Residential |
| **On Street Parking** | Allowed, but not signed |
| **Existing Facilities** | Sidewalks |

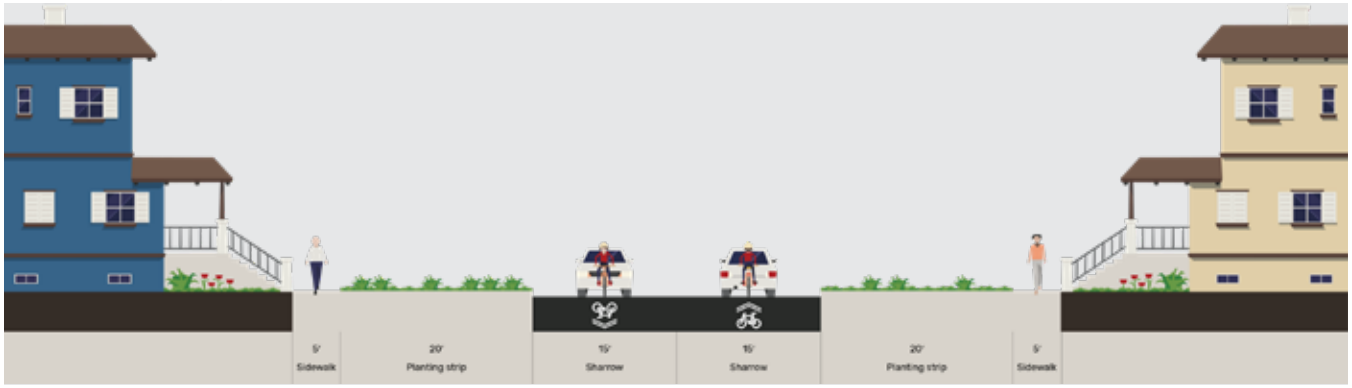
COWAN ROAD



## FACILITY PHASING

Cowan Road is recommended for only a single phase of implementation due to the land use context on either side of the street. The existing on-street parking, high driveway density, and relatively low traffic mean that a sharrow lane with signage is the preferred route for Cowan Road. A facility of higher intensity would likely cause more conflicts with other street uses.

### Phase 1 - Signed Sharrow Route




### Cost Estimates*

| | | |
|---|---|---|
| A | **Signed Sharrow Route** | $18,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Central City Parkway

Wayne Road to Warren Road

## Overview

Central City Parkway between Wayne and Warren Roads provides access to the north side of the Westland Mall and a number of big box stores. The roadway at this point and time is likely overbuilt and could be subjected to a road diet which would replace the two outside vehicle lanes with bike lanes. This portion of Central City Parkway provides an important connection from Cowan Road to City Hall, shopping areas, and higher density residential developments.

*FIGURE 20: Central City Parkway Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 62 Feet |
| **Number of Lanes** | 5 |
| **Adjacent Land Use(s)** | Commercial |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | Sidewalks |

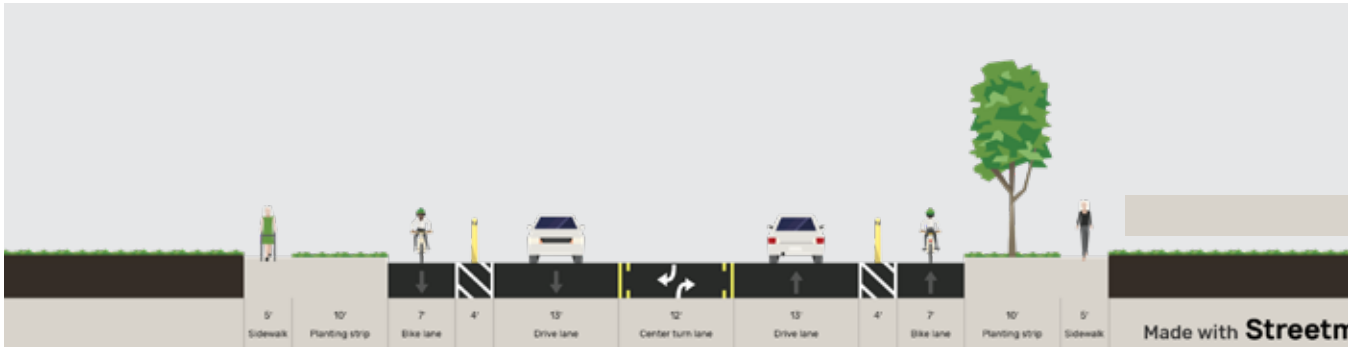
CENTRAL CITY PARKWAY

## FACILITY PHASING

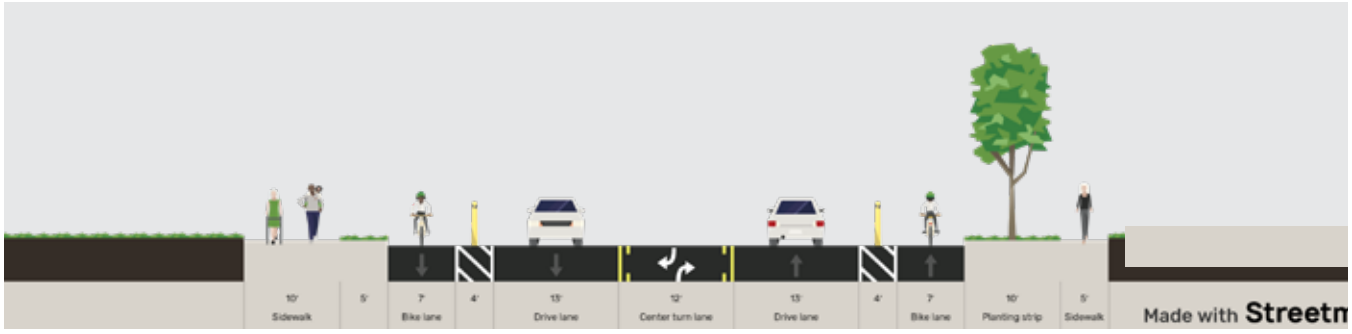
Two phases have been identified for Central City Parkway. The first, lower cost option is to add bike lanes in the existing outside vehicle lanes. Since these lanes are much wider than a standard bike lane, a striped buffer and/or bollards are recommended to be installed for traffic calming. Phase 2 would require a greater investment and would add a 10 foot shared use path to the south side of the road for cyclist and pedestrian use. If the bike lanes are still working as intended, they should remain as an option for more confident cyclists.

It should be noted that in the 2020 Westland City Centre District Plan, a road diet with on-street parking is recommended for Central City Parkway. This is still a feasible option and could potentially be combined with the recommendations shown in this plan. Phase 1 however is a low cost solution that could be implemented in the short term before the need for additional parking arises.

### Phase 1 - Protected Bike Lanes




### Phase 2 - Additional Shared Use Path




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Buffered/Protected Bike Lanes** | $20,000 |
| 2 | **10 Foot Shared Use Path** | $340,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Central City Parkway

Warren Road to Ford Road

## Overview

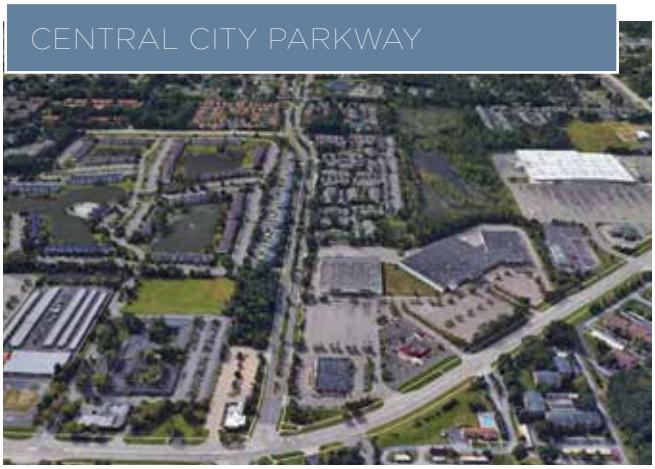
When Central City Parkway crosses Warren Road, a landscaped central median is introduced. This median helps keep traffic operating slower, but reduces the amount of space available for cyclists. This section of Central City Parkway also does not carry a significant amount of traffic and recommeded to be subjected to a road diet with protected bike lanes added. This bike lane would add a direct connection to Hine Drive, along the previous recommended routes, for the residents along either side of the street.

*FIGURE 21: Central City Parkway Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 70-110 Feet |
| **Number of Lanes** | 4 with center median |
| **Adjacent Land Use(s)** | Multi-family residential, Commerical |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | Sidewalks |

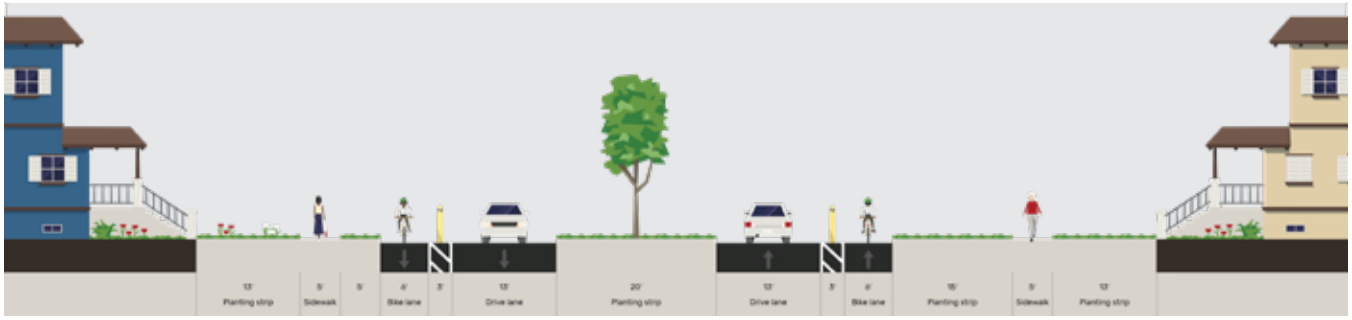
CENTRAL CITY PARKWAY



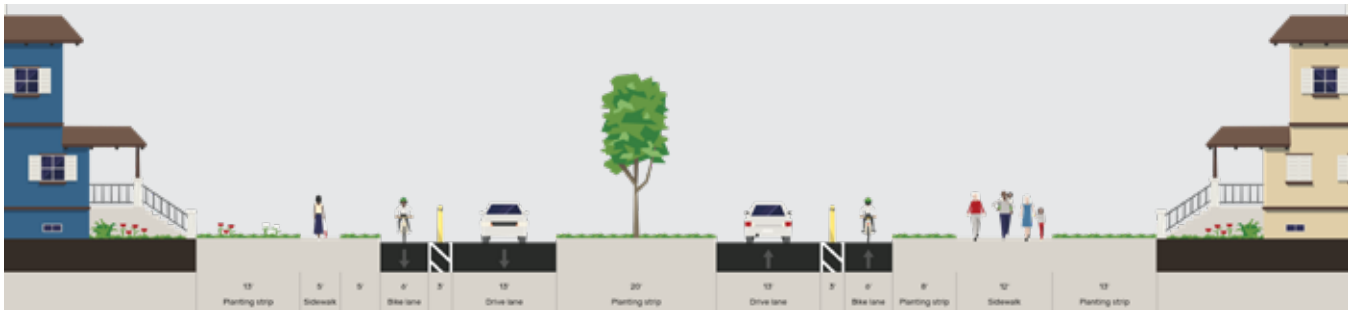
## FACILITY PHASING

Phase 1 of this section of Central City Parkway would add buffered or protected bike lanes to the street, utilizing the outermost lanes in both directions. As the existng lanes are already narrow, the drive lanes could be expanded a few feet to make motorists more comfortable. Phase 2 would keep the bike lanes from Phase 1 (as long as they are still working as intended) and add a 10 foot shared use path to the east side of the street for cyclists and pedestrian use.

### Phase 1 - Protected Bike Lanes



### Phase 2 - Additional Shared Use Path



### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Buffered or Protected Bike Lanes** | $25,000 |
| 2 | **10 Foot Shared Use Path** | $385,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Carlson Street

Ford Road to Marquette Street

## Overview

Central City Parkway transitions into Carlson Street after crossing Ford Road. Carlson Street is a lower speed, lower stress street that provides direct access to Tattan Park and a few neighborhoods. This street also connects John Glenn High School and the William Ford Career Tech Center to the northern portion of Westland. As much of the west side of the street is part of Tattan Park, a shared use path may be possible for use by park users and non-motorized travelers alike.

*FIGURE 22: Carlson Street Route*



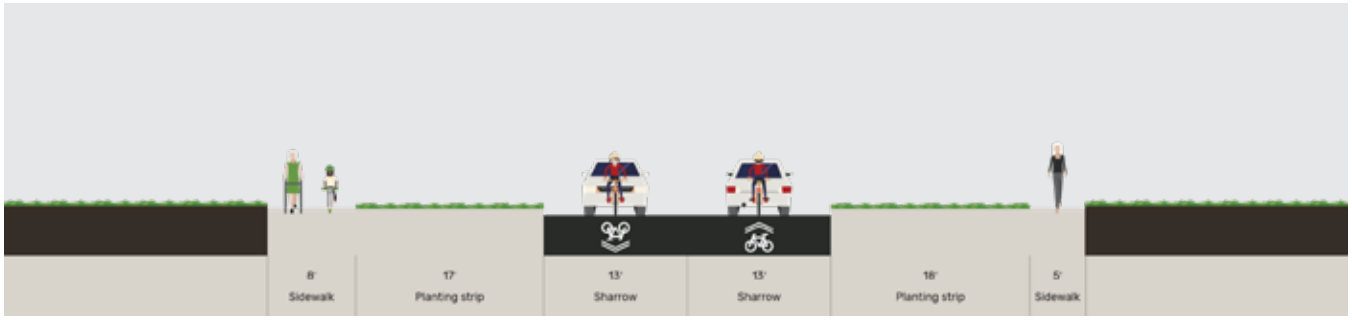
## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 24 Feet |
| **Number of Lanes** | 2 |
| **Adjacent Land Use(s)** | Park, Single Family Residential, Multi-family Residential |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | Sidewalks on West side of Street |

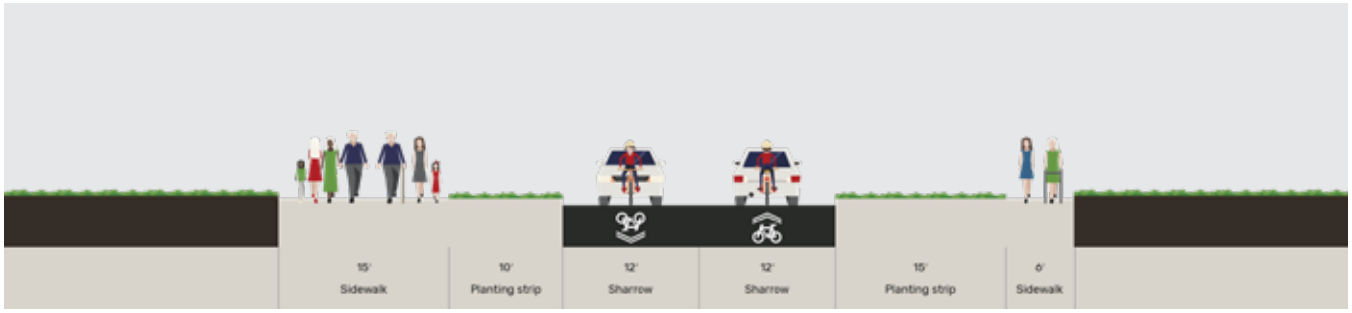
## FACILITY PHASING

The existing lack of space along Carlson Street means that Phase 1 of the facility phasing will need to be a sharrow lane with signage. Although traffic is low on this street, signage informing motorists of the potential for bikes is important as overall space is limited. Phase 2 would add a 15 foot shared use path that would connect into the existing Tattan Park trail. This path could be utilized by cyclists and pedestrians using either the park or traveling along Carlson.

### Phase 1 - Protected Bike Lanes




### Phase 2 - Addition of Shared Use Path




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Sharrow Lane** | $6,000 |
| 2 | **15 Foot Shared Use Path** | $300,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

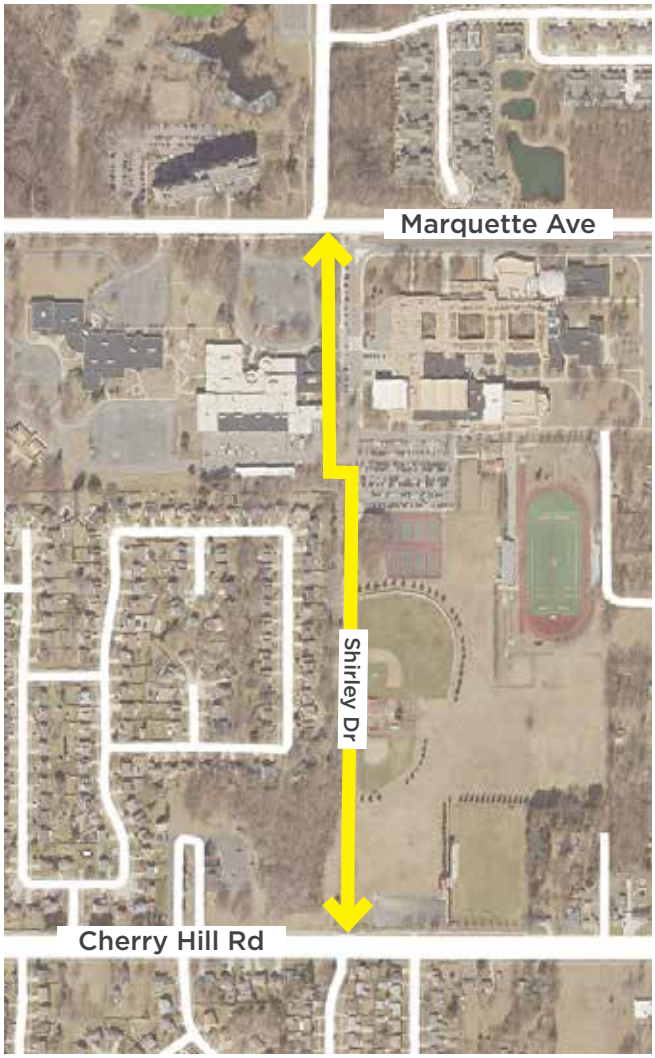
# Shirley Drive

Marquette Street to Cherry Hill Road

## Overview

The Shirley Drive non-motorized route does not exist along any roadway, but connects through the John Glenn High School campus. The first portion would travel through the shared parking area between the High School and the William Ford Career Tech Center and designs for safety will be needed. The second half of the route is currently a shared use path that provides access to the sports fields, however it is not wide enough to safely accommodate cyclists and pedestrians.

*FIGURE 23: Shirley Drive Route*





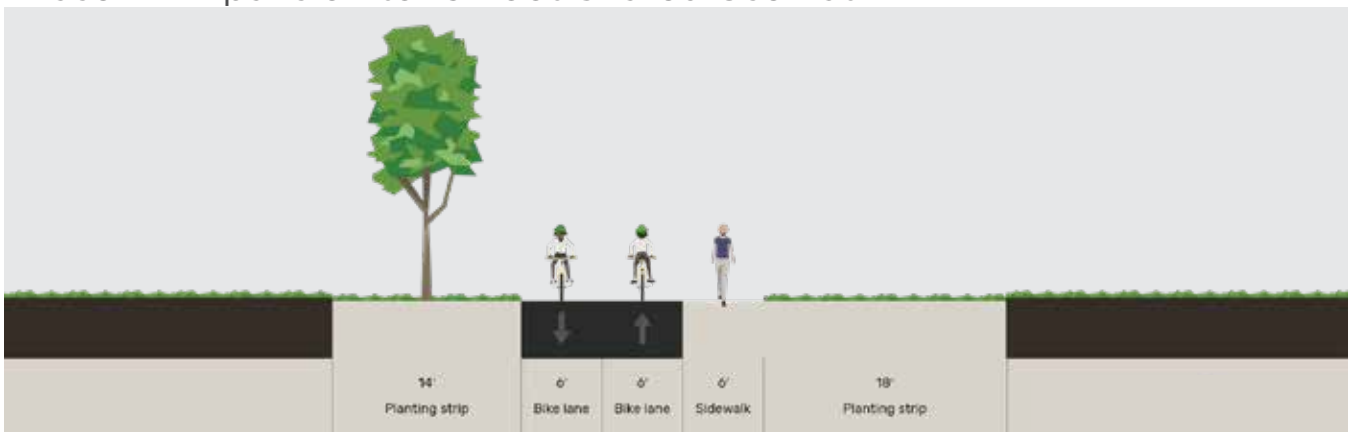
## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | N/A |
| **Number of Lanes** | 0 |
| **Adjacent Land Use(s)** | Institutional |
| **On Street Parking** | Allowed, but not signed |
| **Existing Facilities** | Sidewalks |

## FACILITY PHASING

The recommendation for Shirley Drive is to expand the existing shared use path, where present, to 18 feet and add a new connection through the High School parking area. This would all be accomplished in a single phase and will provide cyclists and pedestrians a connection from the neighborhoods south of Cherry Hill to Marquette Street.

### Phase 1 - Expansion to 15 Foot Shared Use Path




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **15 Foot Shared Use Path** | $355,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# S. Carlson Street

Cherry Hill Road to Palmer Road

## Overview

S. Carlson Street begins south of Cherry Hill Road and travels though a relatively dense neighborhood of single family homes. S. Carlson is a low stress street carrying mostly residents to their homes, however the street connects all the way through to Palmer Road, making it an ideal neighborhood bicycle route. Upon design and implementation of this facility, care should be taken to engage residents early on in the process to explain the benefits of adding bicycle facilities to their street.

*FIGURE 24: S. Carlson Street Route*



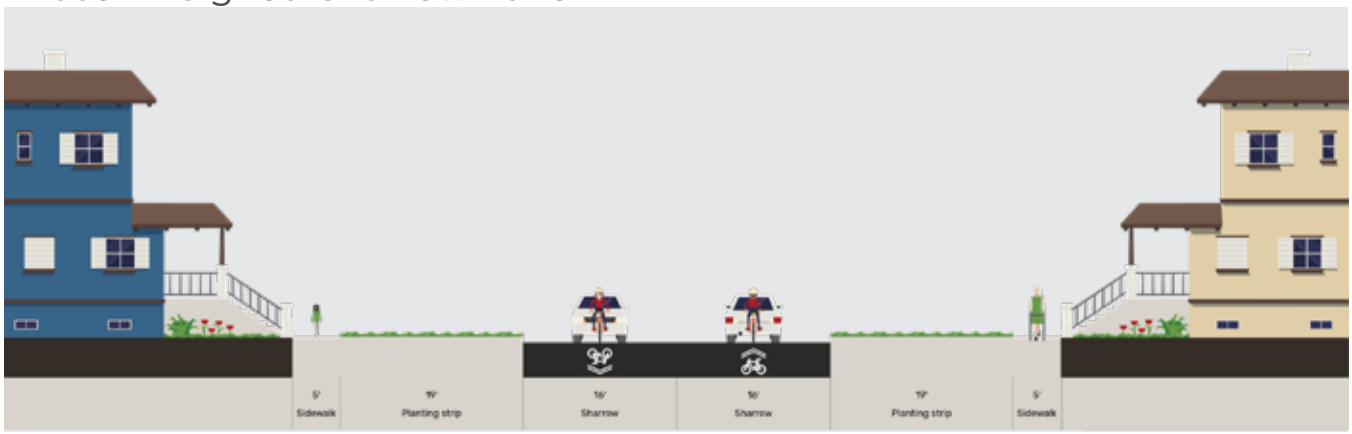
## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 32 Feet |
| **Number of Lanes** | 2 |
| **Adjacent Land Use(s)** | Single Family Residential |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | 8 Foot Shared Use Path |

## FACILITY PHASING

As S. Carlson Street is a purely residential street with many potential conflict points, it is recommended a sharrow route with signage is added and maintained into the future. There is no Phase 2 planned for S. Carlson Street becuase the existing driveways and on-street parking limit the amount of space available for a dedicated bike lane. This street carries a low amount of traffic at a low enough speed to make it comfortable as a sharrow.

### Phase 1 - Signed Sharrow Lane




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Signed Sharrow Route** | $12,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Venoy Road

Cherry Hill Road to Glenwood Road

## Overview

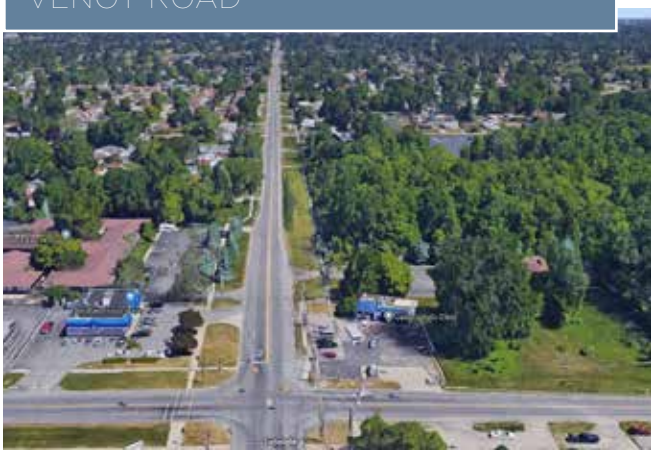
Venoy Road is the easternmost north-south primary non-motorized route identified as part of the Walk and Roll plan. Venoy connects to Garden City on the north end and the City of Wayne on the south end. Garden City is planning for a bicycle facility on Venoy north of Cherry Hill Road, which would extend the utility of the route for both Garden City and Westland residents. Special design consideration will need to be taken at the major intersections where the roadway transitions from 2 lanes to three lanes.

*FIGURE 25: Venoy Road Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 30 Feet |
| **Number of Lanes** | 2 - 3 |
| **Adjacent Land Use(s)** | Commercial, Muti-Family Residential, Single Family Residential |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | Sidewalks |

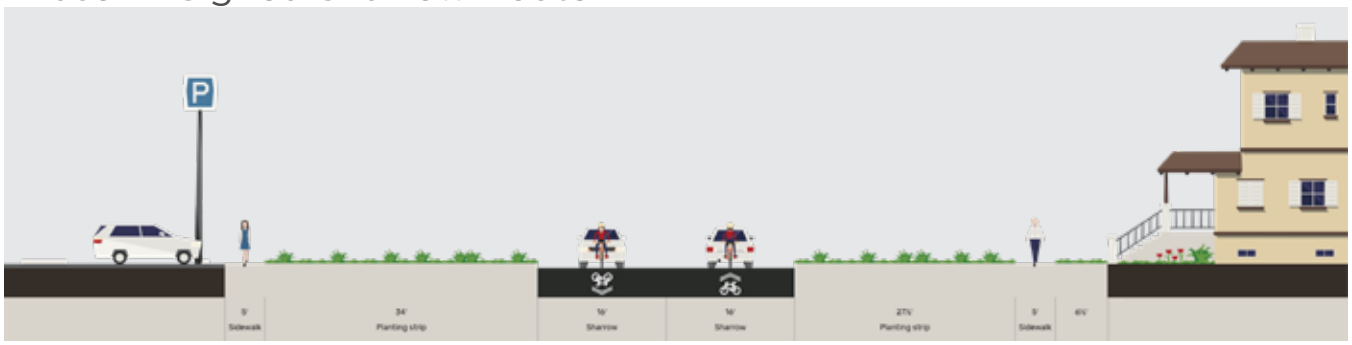
VENOY ROAD



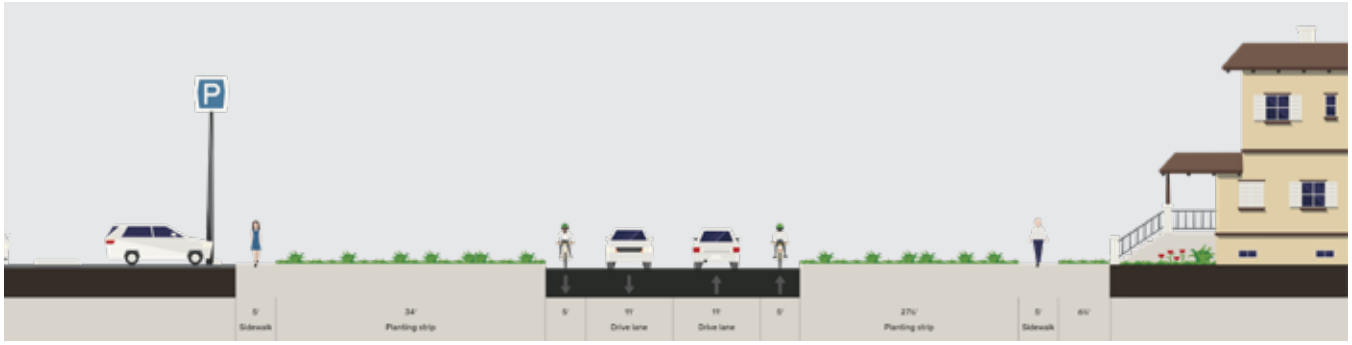
## FACILITY PHASING

As S. Carlson Street is a purely residential street with many potential conflict points, it is recommended a sharrow route with signage is added and maintained into the future. There is no Phase 2 planned for S. Carlson Street becuase the existing driveways and on-street parking limit the amount of space available for a dedicated bike lane. This street carries a low amount of traffic at a low enough speed to make it comfortable as a sharrow.

### Phase 1 - Signed Sharrow Route



### Phase 2 - Painted Bike Lane



### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Signed Sharrow Route** | $20,000 |
| 2 | **Painted Bike Lane** | $25,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Hunter Avenue

Central City Parkway to Radcliff Avenue

## Overview

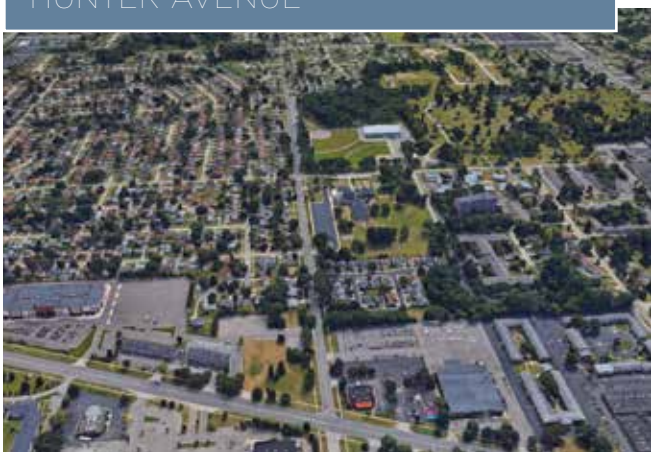
Hunter Avenue provides the opportunity for an east-west crossing of Westland that connects many of the higher density residential areas. Currently the street is a wide two lane roadway with minimal driveway entrances and a prime candidate for the addition of bike lanes. Hunter Avenue also provides direct access to the Edison Elementary School, Jaycee Park, and the Mike Modano Ice Arena.

*FIGURE 26: Hunter Avenue Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 36 Feet |
| **Number of Lanes** | 2 |
| **Adjacent Land Use(s)** | Multi-Family Residential, Single Family Residential, Commerical |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | Sidewalks |

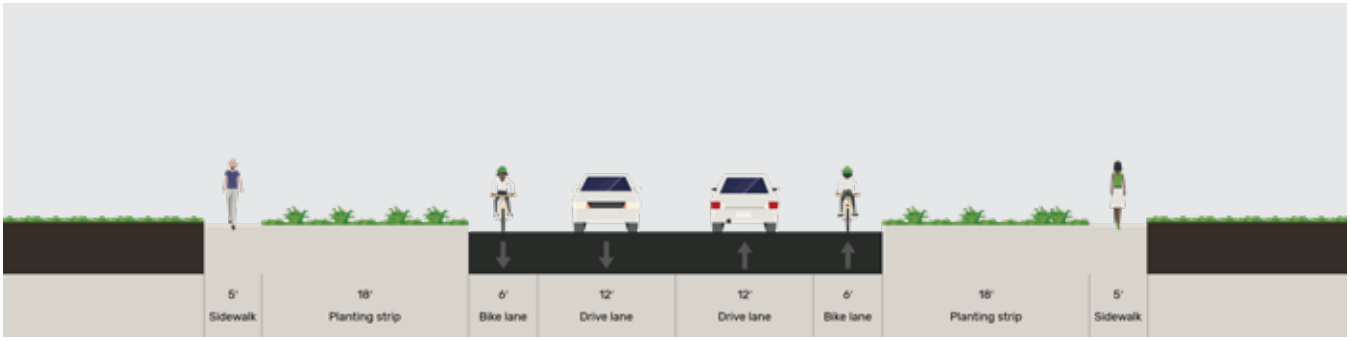
HUNTER AVENUE



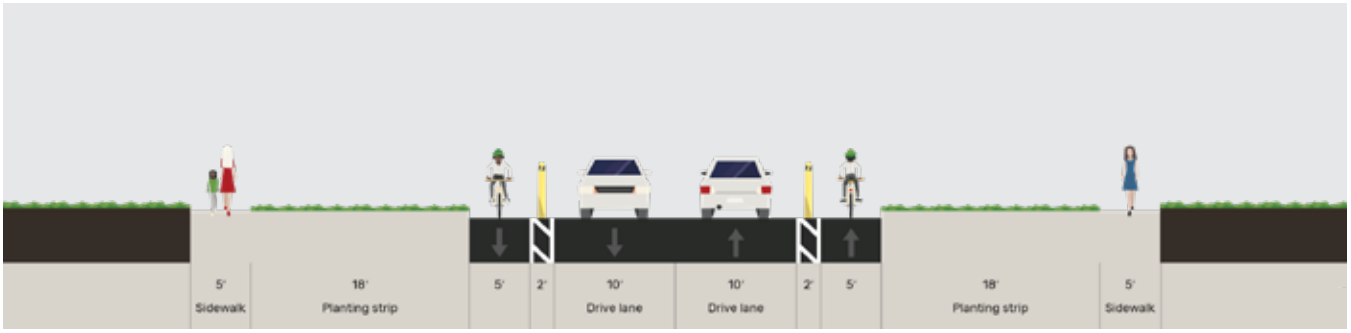
## FACILITY PHASING

Hunter Avenue's greatest asset is fact that it is a wide two lane roadway with no on-street parking allowed. This makes it a prime candidate for a "right-sizing" of the street. In Phase 1, standard painted bike lanes are recommended as a quick and easy way to build out the network. In Phase 2, a striped buffer and bollards (if warranted) are recommended to improve safety and comfort for the cyclists using this route.

### Phase 1 - Painted Bike Lane




### Phase 2 - Buffered or Protected Bike Lane




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Painted Bike Lane** | $18,000 |
| 2 | **Buffered or Protected Bike Lane** | $25,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Hunter Avenue

Radcliffe Avenue to Venoy Road

## Overview

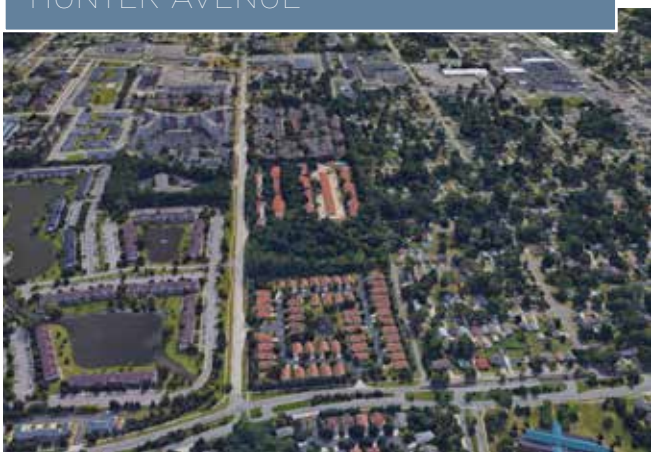
Hunter Avenue transitions at Radcliffe to a more residential street with on-street parking and more driveways, which limits the amount of available space for on-street bicycle facilities. This section of Hunter will connect to the neighborhoods on either side and provide a route to and from Garden City. To facilitate the connection to Garden City, an improved crossing at Venoy Road should be developed in collaboration between Westland and Garden City staff.

*FIGURE 27: Hunter Avenue Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 36 Feet |
| **Number of Lanes** | 2 |
| **Adjacent Land Use(s)** | Single Family Residential |
| **On Street Parking** | Allowed, but not signed |
| **Existing Facilities** | Sidewalks |

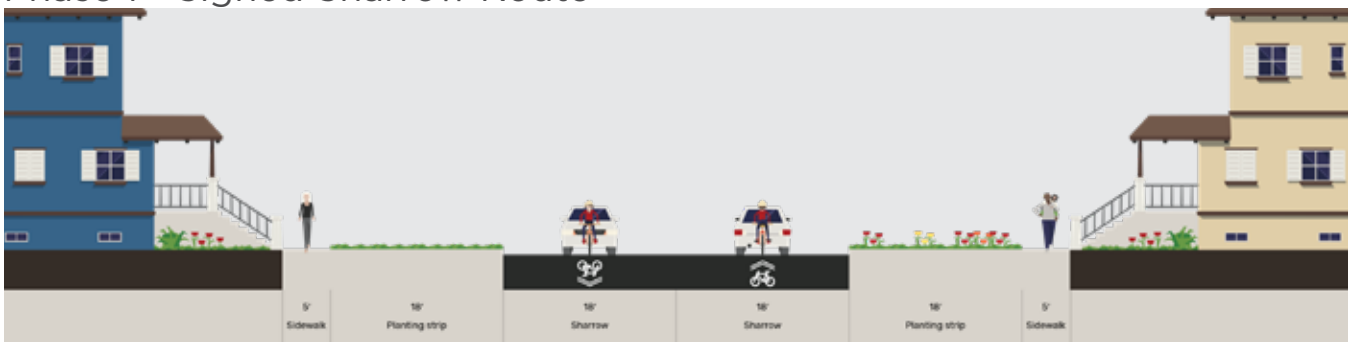
HUNTER AVENUE



## FACILITY PHASING

Since Hunter Avenue transitions to a standard residential street east of Radcliffe Avenue, the recommended facility is a signed sharrow lane. This section of Hunter allows on-street parking and has a high density of driveways, making the addition of a higher intensity facility, like a bike lane, more challenging. It is recommended that this section of Hunter remain a sharrow lane.

### Phase 1 - Signed Sharrow Route




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Signed Sharrow Lane** | $7,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Marquette Avenue

Newburgh Road to Carlson Street

## Overview

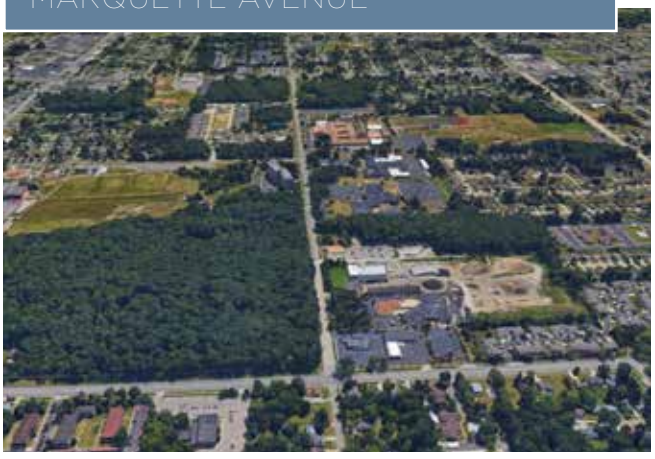
Marquette Avenue is the next east-west street in the bicycle network and the central portion of the City of Westland. The westernmost portion is a two lane roadway with paved shoulders on either side of the street and minimal curb cuts for driveways. Connections to the William Ford Career Tech Center, the Humane Society, and Tattan Park are available via Marquette Avenue. Connections north and south via Carlson Street and Shirley Drive would also be available upon completion of this plan.

*FIGURE 28: Marquette Avenue Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 42 Feet |
| **Number of Lanes** | 2 |
| **Adjacent Land Use(s)** | Commercial, Institutional, Muti-Family Residential |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | Paved Shoulder, Sidewalks on South Side |

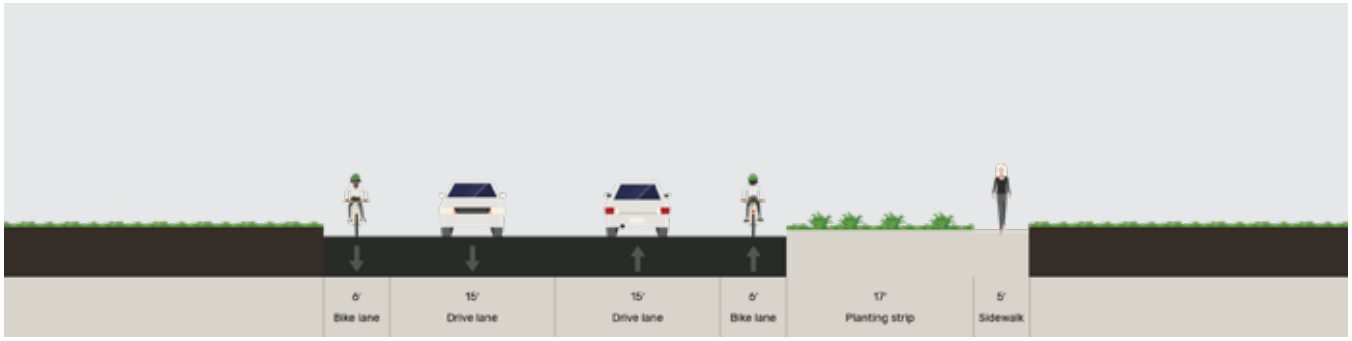
MARQUETTE AVENUE



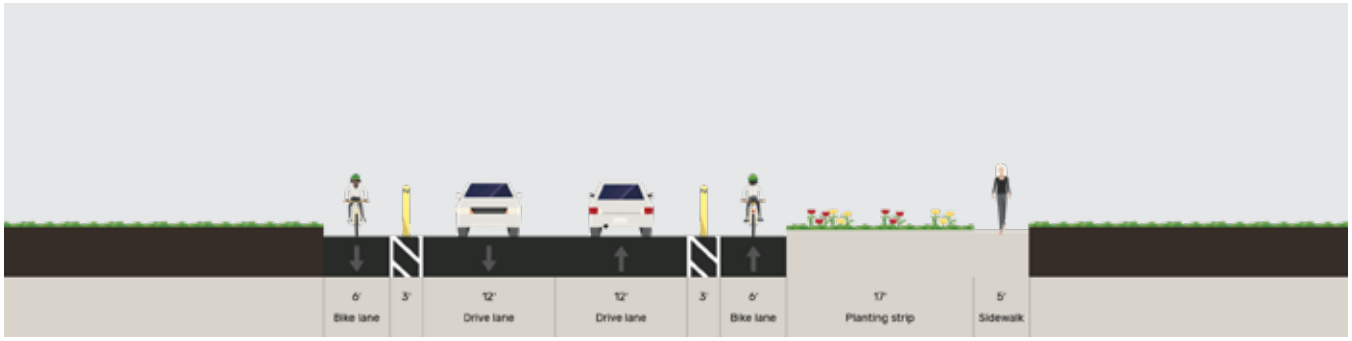
## FACILITY PHASING

Marquette Avenue has ample roadway space to introduce bike lanes in the space that is the current location of the paved shoulder. However, in some places the shoulder may need to be repaved to make it suitable for cyclists. Phase 1 of the Marquette Avenue improvements is to add a painted bike lane to the shoulder area. Phase 2 would add more protection in the form of a striped buffer or protective bollards to increase cyclist safety and comfort.

### Phase 1 - Painted Bike Lane




### Phase 2 - Buffered or Protected Bike Lane




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Painted Bike Lane** | $8,000 |
| 2 | **Buffered or Protected Bike Lane** | $10,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Marquette Avenue

Carlson Street to Radcliff St (City Limit)

## Overview

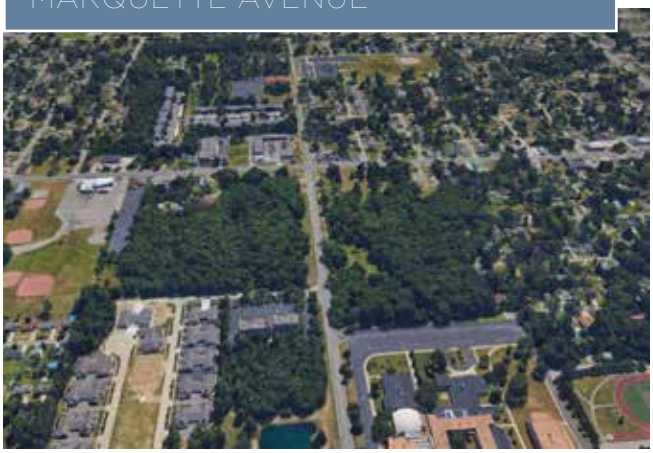
Bicycle facilities on Marquette Avenue continue east of Carlson Street into a more residential portion of the area. This section of Marquette transitions from a three lane roadway between Carlson Street and Wayne Road to a two lane roadway east of Wayne. The amount of available space for on-street bicycle facilities, however, remains the same. Marquette Avenue serves a variety of different residential land uses as well as some parks, schools, and churches.

*FIGURE 29: Marquette Avenue Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 42-26 Feet |
| **Number of Lanes** | 3-2 |
| **Adjacent Land Use(s)** | Single Family Residential, Muti-Family Residential, Institutional |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | Sidewalks on South Side |

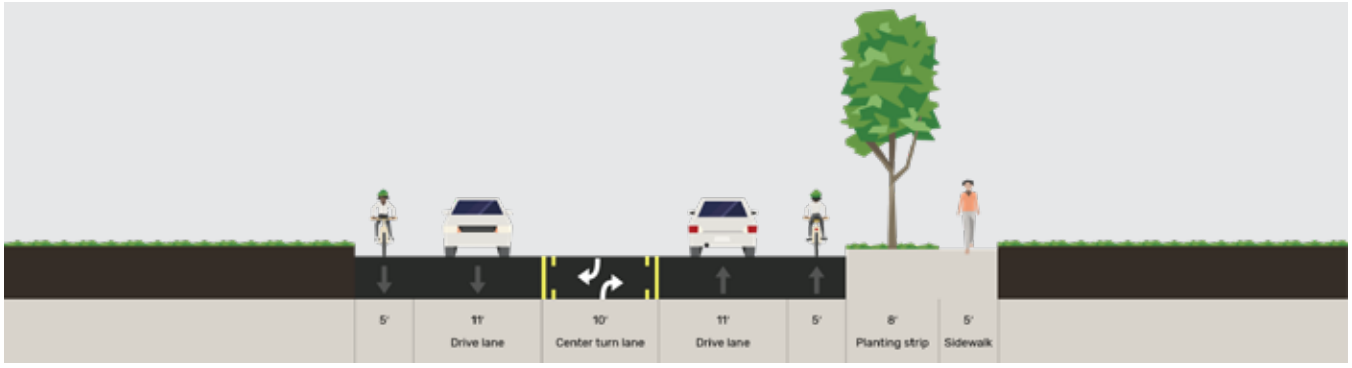
MARQUETTE AVENUE



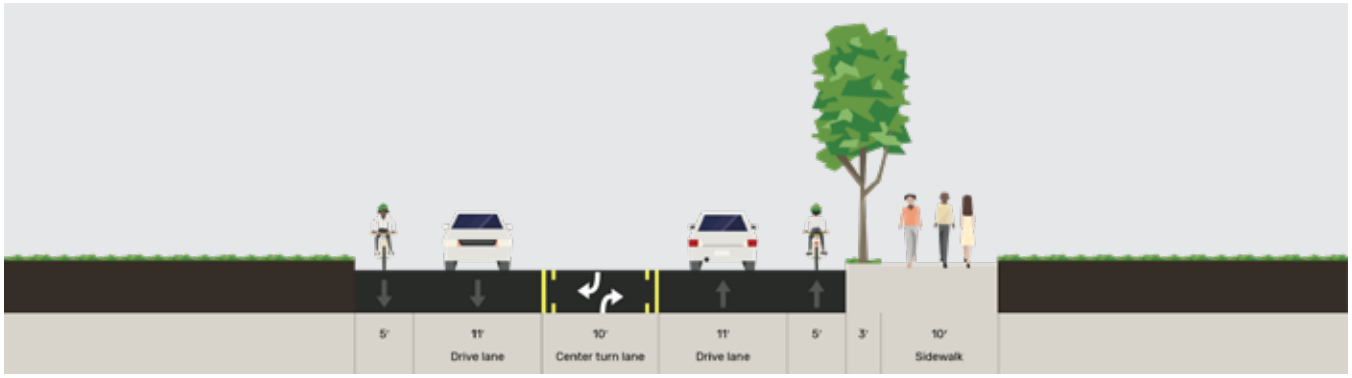
## FACILITY PHASING

Introducing bike lanes to this section of Marquette Avenue, as is recommended in Phase 1, will require the existing travel lanes to be narrowed slightly to accommodate painted bike lanes in the existing paved shoulder area. Phase 2 recommends the addition of a 10 foot shared use pathway on the south side of the road to accommodate both pedestrians and cyclists. A transition from the previous section's bike lane to the shared use path would be required at Carlson Street.

### Phase 1 - Painted Bike Lane




### Phase 2 - Addition of Shared Use Path




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Painted Bike Lane** | $20,000 |
| 2 | **10 Foot Shared Use Path** | $505,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Palmer Road

Hannan Road to Treadwell Avenue

## Overview

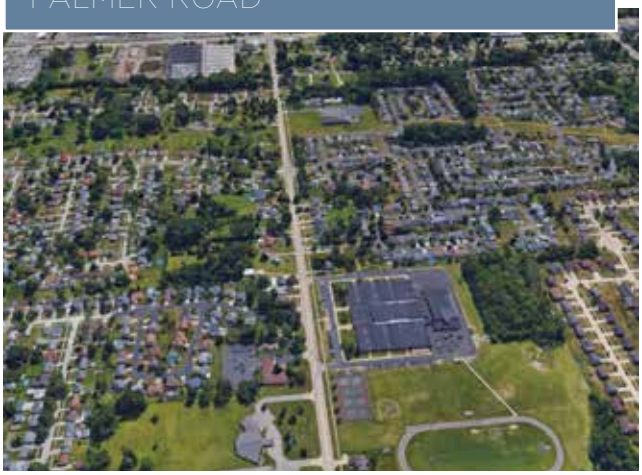
This section of Palmer Road starts at the western boundary of Westland and continues to the railroad tracks near Treadwell Street. Connections to a number of single family neighborhoods, Stevenson Middle School, and multiple places of worship are available along this section of Palmer. The road is currently three lanes (two travel lanes with a continuous center turn lane) but may be a candidate for a street redesign that dedicates space for non-motorized users.

*FIGURE 30: Palmer Road Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 40 Feet |
| **Number of Lanes** | 3 |
| **Adjacent Land Use(s)** | Single Family Residential, Muti-Family Residential, Commercial |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | Intermittant Sidewalks |

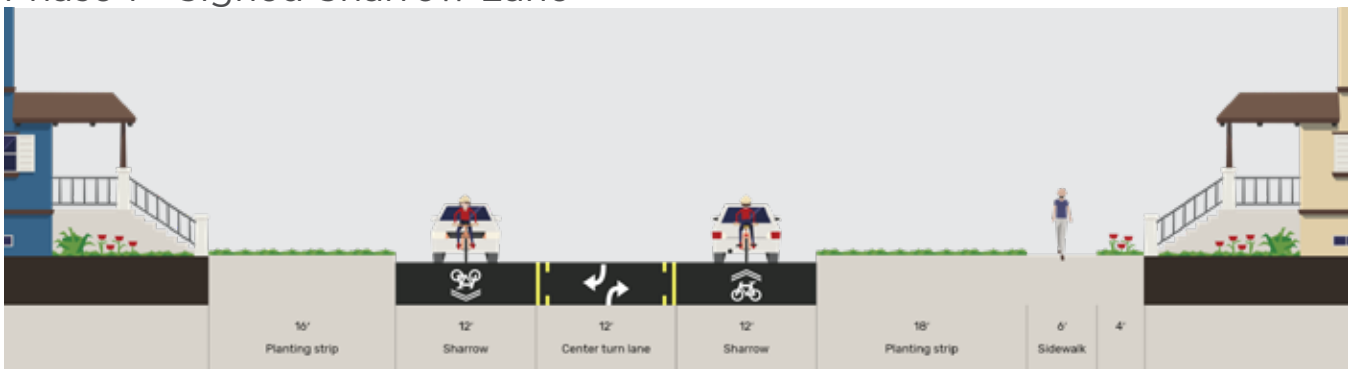
PALMER ROAD



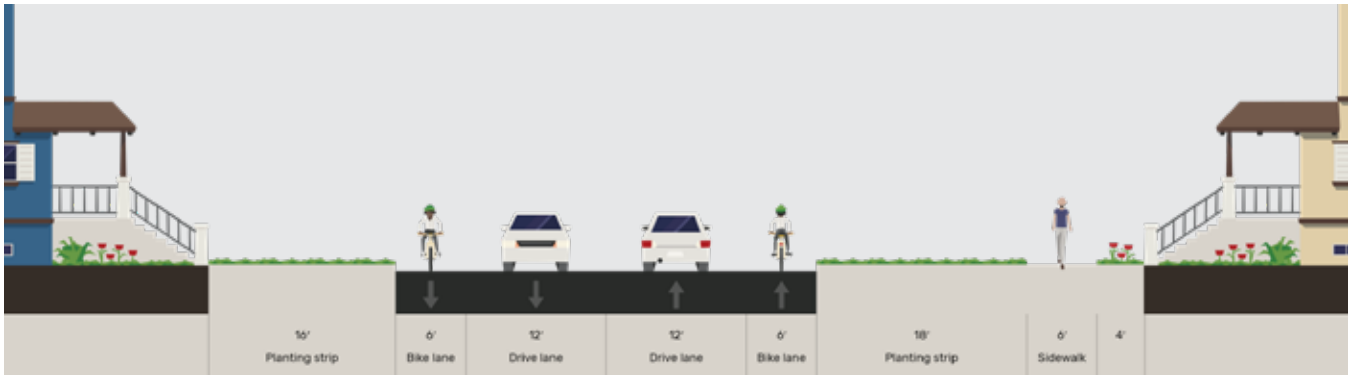
## FACILITY PHASING

Palmer Road is currently a low speed street with a continuous center turn lane that may not be warranted. Phase 1 of this section's bicycle improvements is recommended as a signed sharrow route to get motorists use to seeing more cyclists. Phase 2 would require a redesign of Palmer but would add painted bike lanes to the street and would keep center turn lanes at targeted intersections along the route.

### Phase 1 - Signed Sharrow Lane




### Phase 2 - Painted Bike Lanes




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Signed Sharrow Lane** | $15,000 |
| 2 | **Painted Bike Lanes** | $17,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

# Palmer Road

Treadwell Avenue to Henry Ruff Road

## Overview

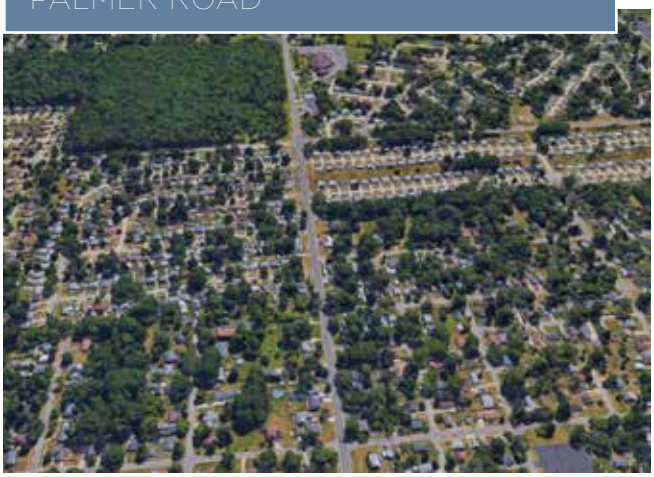
The eastern portion of Palmer Road extends from the railroad tracks all the way to the eastern city limits at Henry Ruff Road. This section of Palmer travels through a variety of land uses, but mostly serves the single family neighborhoods on either side of the street. Since Palmer runs the entire width of Westland, there are multiple options to connect to the north and south bicycle routes identified in this plan, including S. Carlson Street, Venoy Road, and the forthcoming Wildwood Avenue bike route.

*FIGURE 31: Palmer Road Route*


## Existing Roadway Conditions

| | |
|---|---|
| **Road Right of Way** | 40 Feet |
| **Number of Lanes** | 2 |
| **Adjacent Land Use(s)** | Single Family Residential, Muti-Family Residential, Commercial |
| **On Street Parking** | Not Allowed |
| **Existing Facilities** | Intermittant Sidewalks |

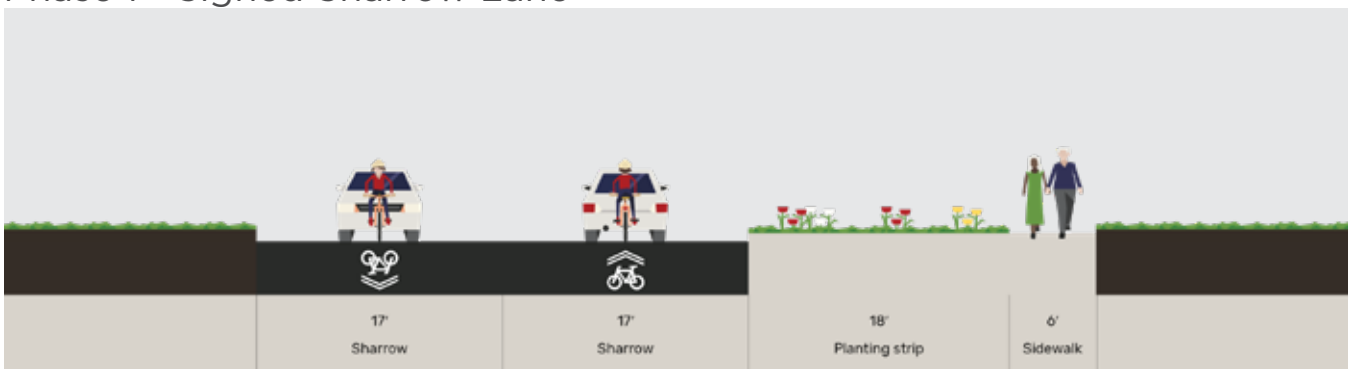
PALMER ROAD



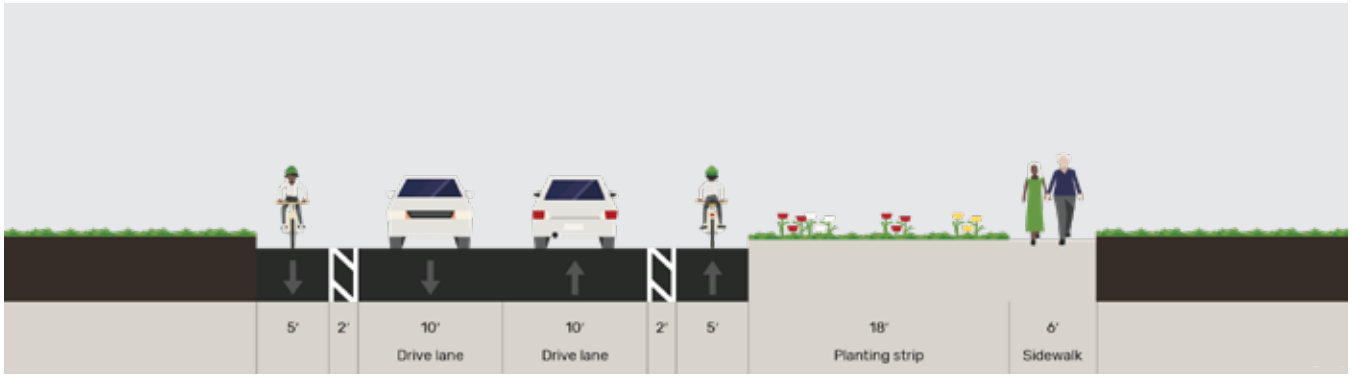
## FACILITY PHASING

This section of Palmer Road has more space to dedicate toward new on-street bicycle infrastrucure. To maintain consistency with the western section of Palmer, Phase 1 is recommended as a signed sharrow lane until it is established as a bike route. Phase 2 would increase the investment and add a buffered bike lane to Palmer Road when funding becomes available. This would also maintain a consistent facility with the western portion and transition easily at Treadwell Avenue.

### Phase 1 - Signed Sharrow Lane




### Phase 2 - Buffered Bike Lanes




### Cost Estimates*

| | | |
|---|---|---|
| 1 | **Signed Sharrow Lane** | $45,000 |
| 2 | **Buffered Bike Lane** | $60,000 |

**Cost estimates are for construction only and do not include associated design and engineering costs*

WESTLAN

# 06

# Intersection Improvements

# 06

# INTERSECTION IMPROVEMENTS

Many of the intersections in Westland are unsafe and uncomfortable for bicyclists and pedestrians who are attempting to cross the street. Wider streets that carry more traffic at a faster speed should have additional infrastructure intended to make non-motorized travelers more visible and more protected from vehicles. The improvements recommended for the Walk and Roll Plan are not tied to any specific intersection in Westland and City staff will need to identify which investments are most feasible and which will have the greatest benefit to the community. All of the crosswalk improvements could be installed on each of the priority intersections and can be implemented on their own or in tandem with each other. The benefits increase exponentially as more of these measures are added.

## High Visibility Crosswalks

Crosswalks around Westland should be updated to offer as much comfort and protection to pedestrians as possible. Most crosswalks in the city and region were implemented using narrow striping that is difficult to see, setbacks and deviations from the pedestrian walkway, and considerable crossing distances.

Intersection crossings should be kept as compact and as visible as possible, facilitating eye contact by moving pedestrians directly into the driver's field of vision. Using wide 'zebra crossing' or decorative crosswalks, motorists are alerted to the potential of a pedestrian crossing the street and tend to pay greater attention to those users.


## Crossing Signage

Crossing signage can come in a variety of different types and applications, including static signs on the side of the road, flexible, in-road signs, and on-road painted messages, and overhead signs. These are helpful in alerting motorists that pedestrians will be crossing and can help to reduce risk for pedestrians. Signage also helps provide a clearly defined crossing point where pedestrians are expected.

When crossing signs are combined with a raised crossing platform and/or in-road sign, they can help to slow approaching traffic speeds and improve safety for non-motorized users. Additionally, pedestrian crashes can be reduced if installed at appropriate locations. Thes are a low cost and low disruption solution to improving safety outcomes for walkers and cyclists.

## Improved Pedestrian Lighting

Lighting at intersections plays a major role in pedestrian safety at night. Many intersections are l0it to ensure that vehicles and motorists are able to see clearly traveling through the intersection. Additional lighting can be added that illuminates the sidewalks on either side of the intersection and the crosswalk to improve the visibility of pedestrians and bicyclists crossing the street as well as making these roadway users more visible to motorists.


## Pedestrian Countdown Signals

Countdown signal heads can be located at signalized intersections and are a more advanced options compared to traditional pedestrian signals. The countdown signal heads add a display showing the remaining crossing time available to help pedestrians judge whether there is sufficient time to cross safely. They are especially helpful on longer crossings and for pedestrians with mobility challenges. Countdown signals are now required by the MUTCD at intersections with pedestrian signals, so as Westland upgrades its signals around the city these will be need to be installed.

## Pedestrian Crossing Islands

A pedestrian safety island is a concrete refuge in the middle of a street that helps reduce the amount of time a pedestrian must spend in the intersection. Pedestrian islands are typically located in place of a dedicated center turn lane or directly adjacent to it and roadway designs would need to be able to accommodate the extra space associated with this.

While safety islands may be used on both wide and narrow streets, they are generally applied at locations where speeds and volumes make crossings prohibitive, or where three or more lanes of traffic make pedestrians feel exposed or unsafe in the intersection.

## Curb Bump Outs

Curb bump outs visually and physically narrow the roadway, creating safer and shorter crossings for pedestrians. By narrowing the roadway, bump outs slow vehicles traveling through the intersection and turning by narrowing motorist's field of vision. They also increase the available space for street furniture, benches, plantings, and street trees. They may be implemented on all streets including commercial and residential streets, large and small. The most important element of curb bump out is allowing pedestrians to cross the street as quickly as possible.

Curb bump outs have multiple applications and may be segmented into various sub-categories, ranging from traffic calming to bus bulbs and midblock crossings.

## Midblock Crossings

Midblock crosswalks facilitate pedestrian crossings in places that people want to go but are not well served by the existing traffic network. These crossings, which commonly occur at schools, parks, and other destinations, have historically been overlooked, creating unsafe or unpredictable situations for both pedestrians and vehicles. In Westland, midblock crossings could be installed on busier streets where traffic stop controls can be located up to one mile apart.

The City of Westland should identify the areas where pedestrian crossings are highest currently. Midblock crossings can also be used to safely bring both pedestrian and cycling traffic across busy streets by providing a refuge for crossing. This is especially helpful on wider roads that may take longer to cross.


## Leading Pedestrian Intervals

A Leading Pedestrian Interval (LPI) is a type of pedestrian crossing signal that typically gives pedestrians a 3–7 second head start when entering an intersection with a corresponding green signal in the same direction of travel. LPIs help enhance the visibility of pedestrians in the intersection particularly with right-turning vehicles. LPIs are especially effective in locations with a history of pedestrian crashes and conflicts.

LPIs can be installed in both higher traffic and lower traffic intersections that are signalized. They have been shown to reduce pedestrian-vehicle collisions as much as 60% compared to intersections with the standard countdown signals.

## PRIORITY INTERSECTIONS

The intersections shown in Figure 17 were identified by the project team, project Steering Committee, and Public as those that are in greatest need for improve crossing conditions. Many feel that these intersections are too unsafe to cross and limit their mobility within the City of Westland. Enhancing conditions at these locations will provide major benefits to the community when paired with the planned bicycle facility enhancements from this plan and ongoing sidewalk improvements. The overall goal is to create a complete non-motorized network in Westland and eliminate as many barriers as possible.


*FIGURE 32: Priority Intersections In Need of Improvements*

WESTLAN

# 07

# Implementation Plan

# 07

# IMPLEMENTATION PLAN

## PRIORITY ROUTES

The Walk and Roll Westland Plan includes an implementation plan that identifies and prioritizes the projects recommended through this process. The implementation plan was developed through a combination of input gathered from the community, previous planning, ease of implementation, cost to construct, and the level of contribution each makes to non-motorized mobility in Westland.

It is recommended that all of the Phase 1 facilities are implemented prior to the addition of the Phase 2 projects. This helps to spread limited resources around the City as much as possible and allows for a quicker non-motorized network development. More resource intense projects, such as the shared use pathways, are identified as the lowest priority due to the investment needed and impacts to the surrounding community.

*TABLE 3: Westland Bike Infrastructure Implementation Plan*

| Priority | Route | From | To | Phase | Facility | Cost |
|---|---|---|---|---|---|---|
| 1 | Cowan Rd | Warren | Wayne | Phase 1 | Sharrow | $18,000 |
| 2 | Central City Pkwy | Wayne | Warren | Phase 1 | Protected Bike Lane | $20,000 |
| 3 | Central City Pkwy | Warren | Ford | Phase 1 | Protected Bike Lane | $25,000 |
| 4 | Carlson St | Ford | Marquette | Phase 1 | Sharrow | $6,000 |
| 5 | Marquette Ave | Carlson | Radcliff | Phase 1 | Bike Lane | $20,000 |
| 6 | S. Carlson St | Cherry Hill | Palmer | Phase 1 | Sharrow | $12,000 |
| 7 | Hunter Ave | Central City | Radcliff | Phase 1 | Bike Lane | $18,000 |
| 8 | Hunter Ave | Radcliff | Venoy | Phase 1 | Sharrow | $7,000 |
| 9 | Marquette Ave | Newburgh | Carlson | Phase 1 | Bike Lane | $8,000 |
| 10 | Palmer Rd | Hannan | Treadwell | Phase 1 | Sharrow | $15,000 |
| 11 | Palmer Rd | Treadwell | Henry Ruff | Phase 1 | Sharrow | $45,000 |
| 12 | Venoy Rd | Cherry Hill | Glenwood | Phase 1 | Sharrow | $20,000 |
| 13 | Shirley Dr | Marquette | Cherry Hill | Phase 1 | Shared Use Path | $300,000 |
| 14 | Marquette Ave | Newburgh | Carlson | Phase 2 | Protected Bike Lane | $10,000 |
| 15 | Palmer Rd | Hannan | Treadwell | Phase 2 | Bike Lane | $17,000 |
| 16 | Hunter Ave | Central City | Radcliff | Phase 2 | Protected Bike Lane | $25,000 |
| 17 | Carlson St | Ford | Marquette | Phase 2 | Shared Use Path | $300,000 |
| 18 | Venoy Rd | Cherry Hill | Glenwood | Phase 2 | Bike Lane | $25,000 |
| 19 | Palmer Rd | Treadwell | Henry Ruff | Phase 2 | Buffered Bike Lane | $60,000 |
| 20 | Central City Pkwy | Wayne | Warren | Phase 2 | Shared Use Path | $340,000 |
| 21 | Central City Pkwy | Warren | Ford | Phase 2 | Shared Use Path | $385,000 |
| 22 | Marquette Ave | Carlson | Radcliff | Phase 2 | Shared Use Path | $505,000 |

# FUNDING SOURCES

As of November 2021, a number of funding sources are available for communities in Southeast Michigan to use in developing non-motorized infrastructure projects. Transportation funding is always changing and other sources may be available in the future. Westland staff should work with SEMCOG and MDOT to ensure they are aware of new funding options.

## TAP Grants

The Transportation Alternatives Program (TAP) offers funding opportunities for a number of transportation improvements including:

Facilities for Pedestrians and Bicyclists

- Shared-use paths, on-road, and off-road bicycle facilities;
- Amenities that increase usability and safety of bicycle and pedestrian facilities;
- Pedestrian safety improvements, including traffic calming & improved accessibility.
- Sidewalk projects that provide safe routes for non-drivers, to access core services and daily needs.

Safe Routes to School (SRTS)

- Projects that improve the ability of K-8 students to walk or bicycle to school.

Green Stormwater Infrastructure

- Projects that reduce environmental impacts of roadway runoff and improve water quality

Communities can apply to both SEMOCG and MDOT via a joint application any time.

## CMAQ Grants

Congestion Mitigation and Air Quality (CMAQ) improvement program funds transportation projects that contribute to improved air quality. Funding is provided by the US Department of Transportation and SEMCOG issues and manages CMAQ grant funds.

## League of Michigan Bicyclists

The Leagues of Michigan Bicyclists (LMB) Micro-Grant Program helps to foster the growth of bicycling around Michigan by supporting the implementation of creative projects that promote cycling and cycling safety. The Micro-Grants range from $200-$2000 and are intended to support groups that have limited resources toward development.

LMB has a targeted interest in:

- Projects focused on bicycle safety.
- Campaigns focused on efforts to increase ridership – especially among youth, women, and underserved communities.
- On-the-ground advocacy efforts that stimulate community action and policy change.
- Innovative projects that demonstrate creativity and that serve as a model for other bicycle advocates and communities across Michigan.

## Safe Routes to School

The Michigan Safe Routes To School (SRTS) program is administered by the Federal Highway Administration (FHWA) Office of Planning, Environment, and Realty. The purpose of the SRTS program are as follows:

- To enable and encourage children, including those with disabilities to walk and bike to school;
- To make bicycling and walking to school safer and a more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age, and;
- To facilitate the planning, development, and implementation of projects and activities that will improve safety while reducing traffic, fuel consumption, and air pollution in the vicinity of schools.

## Local Funding

Westland can use local money from their general fund to implement smaller projects identified in this Plan. The City should budget for these and include them in updated Capital Improvement Plans.