

CHAPTER 9

TRANSPORTATION

The efficient movement of goods and people through the Township depends on an integrated system of transportation services and infrastructure. A well functioning transportation system is integral to a community's local economy. It should provide dependable routes to work and efficient routes for delivery. In Waterford Township, the community's transportation system depends on coordination with several local and regional agencies including the Road Commission for Oakland County and the Michigan Department of Transportation, which have jurisdiction over local transportation assets. This chapter describes the Township's existing transportation system and identifies improvements needed to enhance the system in keeping with residents' and stakeholders' priorities.

ROAD NETWORK

As is the case in much of Southeast Michigan, automobile transportation is the primary mode of travel in the Township. The operation and maintenance of all public roads in Waterford Township is shared between the Michigan Department of Transportation (MDOT) and the Road Commission for Oakland County (RCOC). Maintaining coordination with each agency and working together to ensure all road reconstruction projects have been properly reviewed for potential infrastructure improvements is critical.

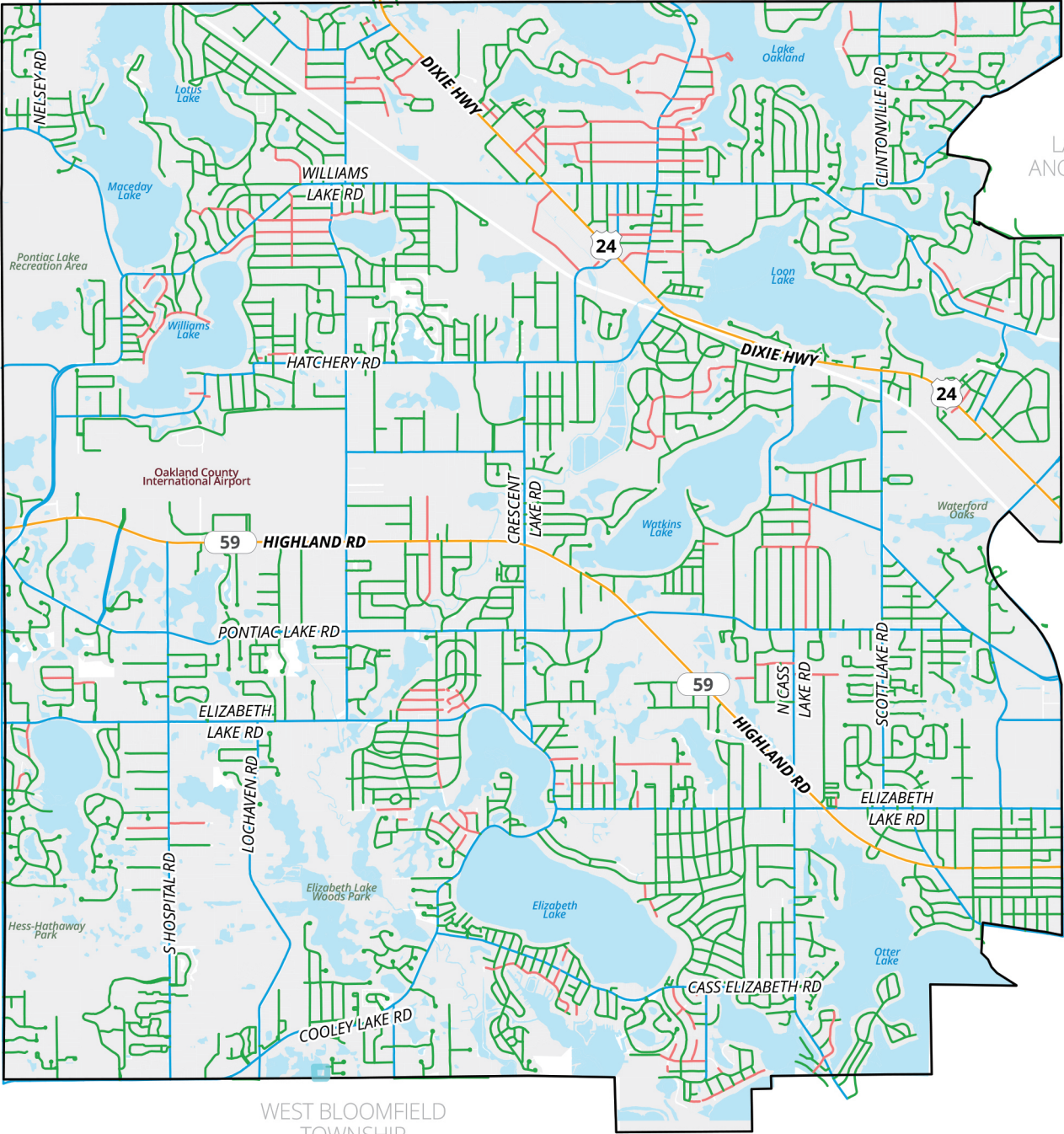
MDOT oversees approximately 15 miles of state highways in Waterford Township – Dixie Highway, M-59, and Telegraph Road – all of which are five-lane routes that cross the Township as shown on the road classification map. However, the numerous access drives to commercial properties from these highways, coupled with the use of the left-turn lane for acceleration, elevates the risk of car accidents. MDOT has begun implementing an active access management and traffic calming program along M-59, and continuing the program along other stretches of highway would mitigate these risks.

RCOC has jurisdiction over 278.28 miles of the Township's public roads, which includes 62.09 miles of primary roads and 184.19 miles of local subdivision roads. The RCOC employs an Intelligent Transportation System (ITS) called FastTrac to efficiently route vehicle traffic through the Township and surrounding areas using a responsive traffic signal system that monitors and adjusts timing based on the amount of traffic traveling through each intersection. Any proposed modifications or enhancements to roads under RCOC jurisdiction would require RCOC review and any work proposed within the right-of-way will require a permit.

Additionally, 46 miles of private roads exist in the Township and are maintained by property owners abutting these roads. Most arterials and public roads within developments are paved, although a few unpaved sections of road remain.

INDEPENDENCE
TOWNSHIP

LAKE
ANGELUS



WHITE LAKE
CHARTER
TOWNSHIP

PONTIAC

WEST BLOOMFIELD
TOWNSHIP

ROAD CLASSIFICATIONS

- MAIN
- PRIMARY
- SECONDARY
- SPLIT

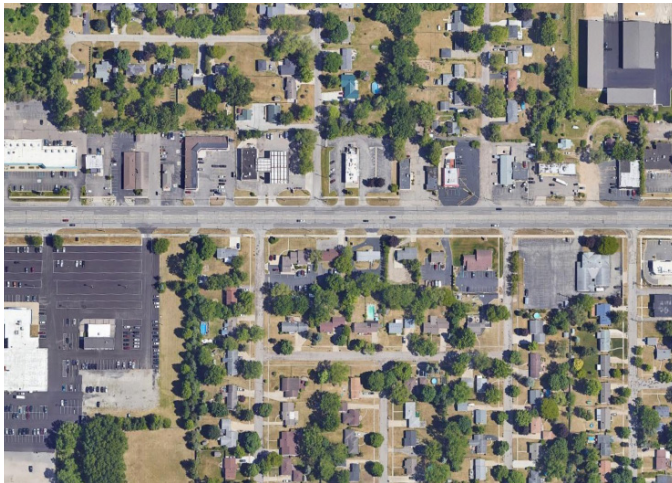
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Road Conditions

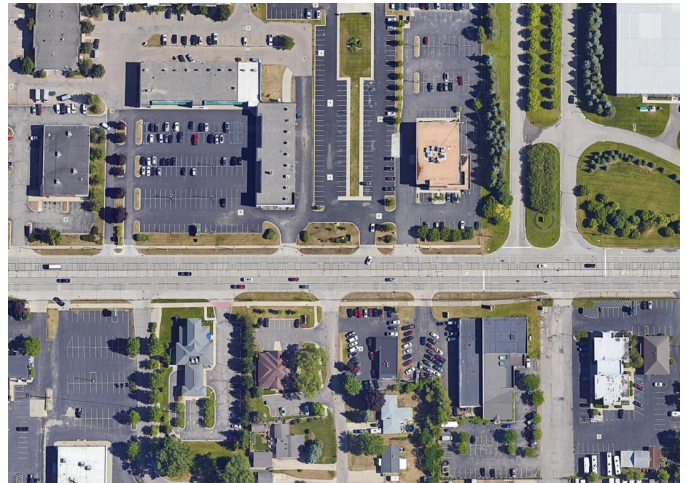
During community outreach, residents reported that deteriorating road conditions continued to present an issue throughout the Township and continued cooperation with MDOT and RCOC should be pursued to improve road conditions. Each of the transportation agencies has several planned roadway improvement projects within the Township.

In 2023, RCOC rehabilitated W Walton Road, east of Clintonville Road, and has planned for the replacement of a bridge on Pontiac Lake Road, east of Airport Road, as well as the replacement of culverts in other locations throughout the Township. As of 2023, MDOT is planning the resurfacing of several segments of M-59, from Elizabeth Lake Road to Telegraph Road, Pontiac Lake Road to Airport Road, and Airport Road to Elizabeth Lake Road. RCOC's planned improvements are released on an annual basis. The Township should seek to partner with RCOC and MDOT to maintain an annual review process for evaluating the capital needs of roads throughout the Township to ensure that necessary improvements are integrated into each agencies' plans.



Cross Access

Throughout the Township, adjacent properties are often not connected with one another in a way that facilitates navigation between them. Individuals seeking to navigate between properties on the south side of M-59 between Irwin Drive and Dundee Drive would have to turn back out onto M-59 to access the adjacent lot. Though the Township's Zoning Ordinance currently requires cross-access easements between adjacent lots, the provisions could be strengthened to encourage orderly access at slow speeds. Many communities specify through their zoning that cross-access infrastructure and speed reduction measures, such as chicanes and curb extensions, be employed to increase connectivity and reduce speeds. Often, these regulations occur when redevelopment or new development occurs and typically specifies minimum dimensions that new infrastructure should meet. The Township should consider strengthening its requirements to require cross-access infrastructure for pedestrians and motorists.



Streetscaping Improvements

During community outreach, residents emphasized that streetscaping projects are needed to enhance the aesthetic appeal of the Township's major corridors. The community suggested that boulevards with landscaping and raised medians should be pursued to enhance the streets as a place for residents and visitors to walk and spend time. The Township will need to continue to work with MDOT and RCOC to implement these streetscaping and traffic calming improvements over time.

Dixie Highway Roadway Improvements

A good example of a prominent location that could be enhanced by streetscaping improvements is Dixie Highway through the Drayton Plains subarea. The street design in this area is focused on vehicular travel, with limited attention paid to non-motorized transportation in the area. The highway features four vehicle travel lanes and one center turn lane throughout much of its extent. Sidewalks are present along much of the corridor, however, they are not wide enough to ensure pedestrian comfort and are not buffered from Dixie Highway by an adequate quantity of street trees. Adding pedestrian-friendly elements, including the improvements listed below, would enhance the street's feel and function and make the environment more attractive to potential commercial tenants and residents:

- Replace center turn lanes with raised medians with landscaping and vegetation
- Reduce the width of vehicle travel lanes
- Add pedestrian refuge islands and signalized mid-block crossings
- Off-street multi-use pathways
- Reduce the width of parkways and add pedestrian-scaled lighting and vegetation
- Provide street trees where possible
- Improve intersections with landscaping and visible crosswalks at prominent locations such as at Dixie Highway and Frembes Road

These improvements to the Dixie Highway streetscape will require extensive coordination with MDOT, as the State maintains the roadway. Refer to the Drayton Plains subarea plan on Page 57 for additional details and recommendations on the reconfiguration of Dixie Highway.

Dixie Highway Curb Cut Consolidation

In addition, the Township should improve access management by consolidating curb cuts throughout the Dixie Highway Corridor. The area currently contains an abundance of curb cuts to access individual properties. For example, much of the frontage on the south side of Dixie Highway between Sashabaw Road and Frembes Road is occupied with curb cuts. This impedes the walkability of the area by creating more points of conflict between motorized travelers and pedestrians using sidewalks along the roadway. The abundance of curb cuts can also impede safety for motorists by creating more potential conflicts between vehicles entering and exiting properties onto roadways. The Township should work with property owners and MDOT to reduce the number of curb cuts in the Dixie Highway area over time. The reduction in curb cuts should be pursued through the site plan approval process as redevelopment occurs and as roadway improvements are undertaken.

M-59 Roadway Improvements

M-59 currently features four vehicle travel lanes and one center turn lane as it travels through the Township. This automobile-oriented street inhibits any sense of place found in new commercial nodes such as the Waterfront Commercial site at Pontiac Lake, west of the intersection with Williams Lake Road. The Township should work with MDOT to implement improvements along M-59, which should include the following:

- Raised medians containing trees and landscaping
- Pedestrian refuge islands and signalized mid-block crossings
- Reconfiguration of sidewalk on the south side to add a parkway
- Parkway with landscaping and street trees between the sidewalk and street along M-59

These improvements will be particularly impactful at the western gateway adjoining White Lake Charter Township, as this location forms a key gateway to the community. Such improvements will contribute to the Township's efforts to beautify the area, enhance placemaking, and develop a Waterfront Commercial node along Pontiac Lake.

Consider Potential Road Connections

In Waterford, many subdivisions end before connecting with their neighbors and main roads often have few connecting roads between them. This forces more traffic onto fewer roads and reduces accessibility across the Township. New road connections could be needed to support future development. However, this may not always be possible due to sensitive wetlands throughout Waterford Township. That being said, several sites in the Township could intensify over time with new residential growth occurring on sites such as the Oakland Community College campus. The Township should work with RCOC and property owners to consider installing road connections between main thoroughfares and existing subdivisions to provide better service and connectivity while acknowledging the need to preserve wetlands where possible.

NONMOTORIZED TRANSPORTATION

Multimodal travel for pedestrians and bicyclists has been a topic of growing interest for residents in recent years. During the Master Plan process, members of the community emphasized the need to improve its multimodal assets.

Sidewalks

The Township boasts 199 miles of sidewalks and bike paths, but there are gaps that hinder nonmotorized transportation. As the Pathway System Condition map shows, many areas with sidewalk segments do not connect. This includes south of Dixie Highway and east of Hatchery Road, south of Highland Road and west of Airport Road, and along Crescent Lake Road. To help close some of the gaps, for the past three decades, the Township has been implementing a requirement that new sidewalks must be installed as part of all new development.

In 2017, the Township commissioned a sidewalk condition assessment to determine the state of the existing sidewalk and pathway system. The map shows that many existing sidewalks are only in a "fair condition" along major thoroughfares and are absent in many neighborhoods. Due to deficiencies in the current sidewalk system, the Township is focusing more on maintaining and improving the existing nonmotorized infrastructure rather than constructing additional sidewalks or bike paths.

Continue to Consider a Sidewalk Millage

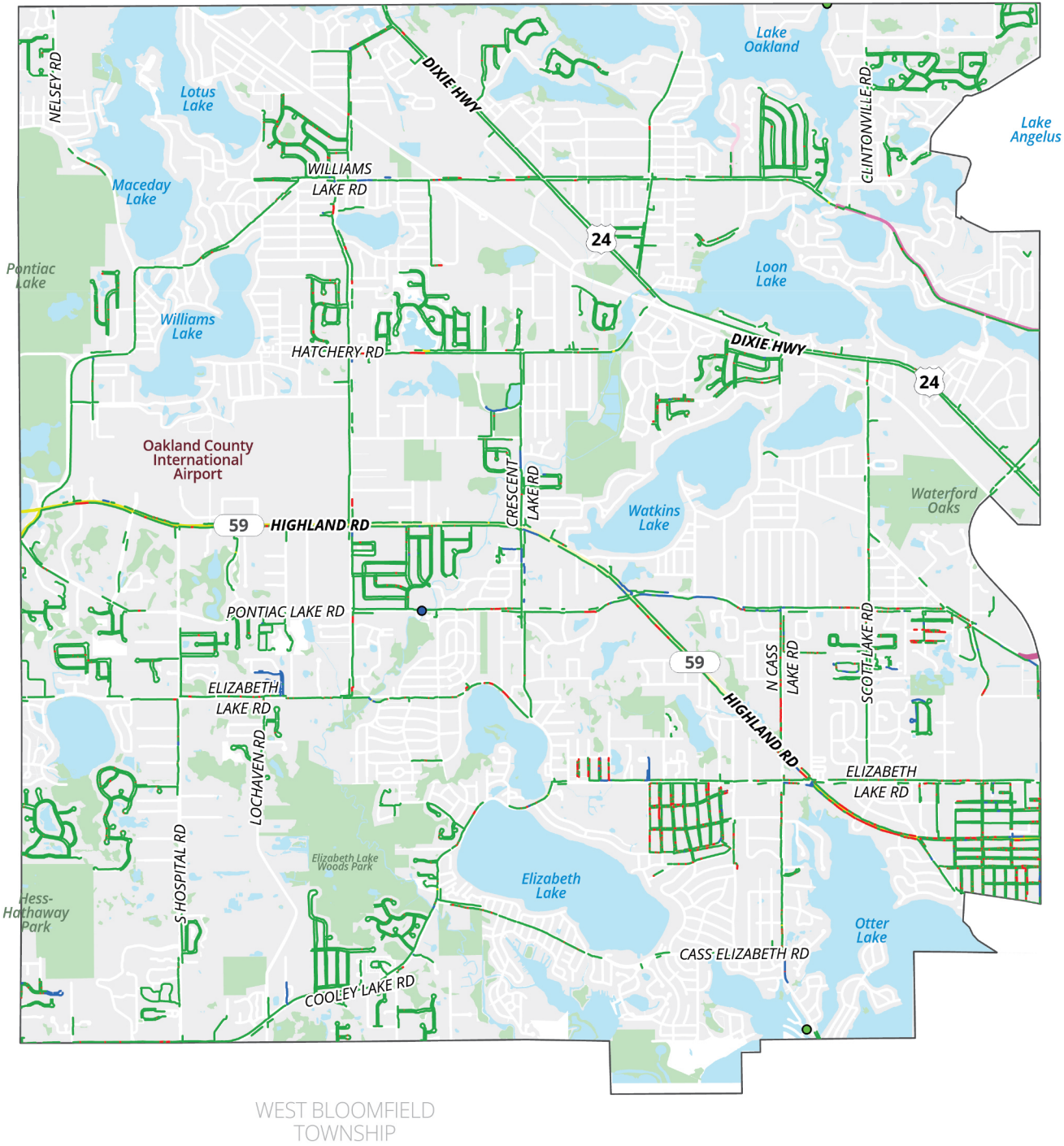
In most communities, a sidewalk millage is implemented to maintain and improve the sidewalk system. Waterford Township has not had a sidewalk millage since 1986. The current funding in place for the township to maintain the sidewalk network is not sufficient to keep the network in its existing condition, much less to improve upon it. To improve the existing sidewalk and pathway network, the Township should consider putting a dedicated sidewalk millage on the ballot for residents to vote on.

Implement New Sidewalk Improvements

As the Township continues to pursue funding sources to improve the existing sidewalk system, it should continue to prioritize improvements to the network in key locations as described in this section. Expanding the network for pedestrian travel will form connections between key locations and points of interest in the community.

Connect Neighborhoods with Institutional and Recreational Uses

Throughout the Township, major institutional facilities are not connected with the surrounding neighborhoods or nearby recreational amenities. For instance, connections are missing in the neighborhood surrounding Huntoon Lake near Waterford Kettering High School, which adjoins many possible sites for future nonmotorized improvements such as along Williams Lake Road. In addition, the neighborhood around Knudsen Elementary School, which adjoins potential nonmotorized trails along Crescent Road and the Clinton River, does not have any nonmotorized trails. The Township should consider adding sidewalk connections in these areas to promote connection between community assets.



PATHWAY SYSTEM CONDITION

PASER Study Rating

- 1; 2; 3; 4
- 5; 6; 7
- 8; 9
- No Value

Drayton Plains Subarea Sidewalk Connections

The Township should create trail connections, specifically between primary pedestrian centers like the Drayton Plains Subarea and the Waterford Riverwalk trail to the southwest and other points of interest and destinations. The riverwalk has seen significant improvements and includes a trail connection with additional wayfinding that will allow visitors greater access to the Drayton Plains Subarea. A trail connection along Frembes Road, with connections along the Clinton River, would provide a non-motorized connection between Shell Park and the existing Nature Center at Drayton Plains, allowing bikers and hikers access to the Nature Center from the park.

Develop a Nonmotorized Maintenance Plan

As of 2023, the Township does not have a master non-motorized transportation plan that proposes and prioritizes improvements to the system over time. The Township should seek to develop a master nonmotorized transportation plan to catalogue these types of improvements over time. Developing and adopting this type of plan will be a key step to prioritize different improvements to the nonmotorized system and will allow the Township to strategically apply for external funding for the projects identified in the plan.

RAILROAD

The Canadian National Railway intersects major arterial roads at six points within the Township, but there are no immediate plans to separate road and railroad crossings at these intersections. The six points are along Scott Lake Road, Watkins Lake Road, Hatchery Road, Frembes Road, Williams Lake Road, and Airport Road. The 31,000 feet of track operated by Canadian National Railroad line is devoted to freight traffic, and is anticipated to continue for the foreseeable future.

The railroad passes through most of the industrially zoned properties within the Township. Potential exists for the railroad to be better utilized as a benefit to industrial users.

PUBLIC TRANSPORTATION

Waterford Township currently lacks a mass transit system since it opted out of the SMART regional bus system in the mid-1990s, but is currently working to accommodate more riders timers, and day for both WOTA and SMART. The recent passing of the Oakland County transit millage will bring SMART stops on Highland Road in the near future. Van transport is available for senior citizens and disabled residents through the Western Oakland Transportation Authority.



OAKLAND COUNTY INTERNATIONAL AIRPORT

The Oakland County International Airport (OCIA), a prominent general aviation airport, ranks as Michigan's second busiest airport with 142,535 takeoffs and landings annually (Oakland County Airports, 2022 data). The OCIA supports international business travel through its U.S. Customs office and contributes over \$1 billion to the County's economy each year. Nevertheless, there are no ongoing proposal to introduce scheduled commercial passenger service at OCIA. The airport is open 24 hours a day and offers:

- Paved runways and taxiways, effective lighting and taxiway identification, and excellent approaches to its 6520-foot instrument runway
- Charter contract passenger service
- Air freight operations
- Fuel services and maintenance, as well as the entire range of aircraft services are available from several Fixed Base Operators (FBO)
- New and used aircraft sales operations and flight training schools offer resources for current and future pilots in Oakland County
- A Federal Aviation Administration-staffed control tower provides complete air traffic control services including Tower Advisory Radar
- User-fee U.S. Customs Service is available 7:00 am to 8:00 pm, Monday through Friday, and "on call" at all other times. This service improves convenience and saves time for international travelers by eliminating the need for an additional stop to clear customs.
- Restaurant and banquet facilities, car rental and many other services are within easy reach of the comfortable terminal lobby and waiting areas.

In recent years, the OCIA facility accommodated events, conventions, entertainment, and other temporary uses. The Township should partner with the County airport to encourage similar temporary uses of the site and consider more permanent cohesive commercial uses, such as an airport restaurant or local art exhibit, that may bridge this unique amenity with the rest of the Township.



RECOMMENDATIONS

During community outreach, members of the community stressed that continued maintenance of the Township's roads is a priority and the implementation of new sidewalks and bicycle lanes should form a cohesive nonmotorized transportation network. To achieve this the Township should take the following actions:

- Cooperate with MDOT as it continues to implement its active access management and traffic calming program along M-59.
- Coordinate with MDOT and RCOC on future road improvements and resurfacing including the resurfacing of M-59.
- Work with RCOC and MDOT to develop and maintain an annual review process to evaluate the capital needs for roads within the Township.
- Work with RCOC to assess the feasibility of filling gaps in the sidewalk network and install streetscaping improvements along M-59 as planned improvements are made to the roadway, with priority given to the area adjacent to Pontiac Lake.
- Encourage the consolidation and/or removal of curb cuts in the Drayton Plains subarea to improve the pedestrian environment and reduce traffic conflicts.
- Undertake streetscape improvements along Dixie Highway as shown in the Drayton Plains Subarea chapter including the addition of raised medians, parkways, street trees, and multi-use trails to enhance the area's sense of place, promote pedestrian access, and calm traffic speeds.
- Work with RCOC and property owners to consider installing a road connection between thoroughfares to serve new development in the area.
- Continue to engage residents about a potential sidewalk millage to improve the condition of the Township's sidewalks and fill gaps in the network over time.
- Consider strengthening the cross-access provisions in the Zoning Ordinance to require the construction of cross-access infrastructure with traffic calming measures when development or redevelopment occurs and specify minimum dimensions.
- Consider prioritizing sidewalk connections in neighborhoods that connect between schools, recreational amenities, and other assets as new sidewalks are added over time.
- Establish a nonmotorized transportation plan to further prioritize projects to maintain and enhance the Township's nonmotorized assets.
- Create trail connections between areas of high pedestrian activity and nearby recreation areas, such as between the Drayton Plains Subarea and the Waterford Riverwalk to the southeast.
- Create a trail connection along Frembes Road, with connections along the Clinton River to provide a connection between Shell Park and the Nature Center at Drayton Plains.
- Coordinate with OCIA to encourage innovative temporary uses of the airport site including events, conventions, and entertainment.

