Approved on October 4, 2022 Empire Planning Commission

Village of Empire Empire Transportation Plan

Lindate 2022

Update 2022



ACKNOWLEDGEMENTS

The updating of this Transportation Plan spanned several different Village Councils and Planning Commission Members. All deserve acknowledgement.

Village Council (2018–2020)

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Special Thanks

Dr. Christopher Grobbel, Zoning Administrator/Planner Frank C. Clements, FASLA (*for many of the illustrations*)



ABOUT THE 2015 PLAN—HISTORY

ABOUT THE 2015 TRANSPORTATION PLAN

The foundation of this update stems from the Village's Transportation Plan from 2015. That plan involved Empire Village Residents throughout its development.

Prior to establishing a vision, goals and objectives for its transportation systems, the Village of Empire reached out to the community to help identify concerns, questions and ideas during a public input meeting held May 7, 2013.

In August of 2013, a two-day public workshop was held where consultants working with the Planning Commission were available to review and discuss the preliminary recommendations with interested residents.

The first day was spent touring the Village with officials and other interested residents who had the opportunity to share their thoughts on areas of concern. The day concluded with a public presentation regarding some initial ideas and considerations of possible solutions.

On the second day, the consultants met with the public throughout the day and verified their findings one last time before presenting a set of preliminary recommendations to the Planning Commission, the Transportation Plan committee, and the public.

Goals Worksheet. During the two day event, a comment form was provided. Participants were invited to view preliminary ideas presented by the Village's consultants, and to provide their feedback regarding the initial goal statements for the plan.

Follow up Survey. To gain additional input regarding the more specific list of projects that were likely to be recommended, the Village created a survey that was posted on the website and available in print. This survey provided one more opportunity for Village residents to share their opinions, thoughts and concerns.

The Planning Commission spent considerable time reviewing the feedback from the public workshop, compiling survey results, considering recommendations and comments from the public to establish the vision, goals and objectives, and a final set of recommendations.



INTRODUCTION

Empire is nestled amidst some of Michigan's most notable attractions. Both year-round and seasonal residents are attracted by the area's beauty, small town living and proximity to nearby destinations. Those features bring with them some challenges to meet the transportation needs in a way that retains the Village's charm. This updated Transportation Plan is intended to help guide investment and decisions for improvements and changes to the Village's system of roads and off-road trails. This includes areas located within the road rights-of-way throughout the Village, but also areas where off-road trails may be needed for non-motorized mobility.

The main point of transportation activity in the Village of Empire occurs where the two state trunk lines, M-22 and M-72, intersect just east of downtown Empire. These trunk lines are mostly designed to carry vehicular and motorized traffic, and generally divide the Village into three distinct areas.



The Gateway Corridor (along M-22) offers wider road shoulders and sidewalks along M-22, street trees, and other traffic calming devices. More can be considered to accommodate the non-motorized community. One of the key tenets of the Transportation Plan is to consider safety and flow of traffic not just for cars and trucks, but for all people – all users – of all ages and abilities – traveling by any means (bicycle, foot, stroller, etc). This concept is generally referred to as "complete streets". or the consideration of travelers of all types when making transportation decisions.

Another factor in planning for the transportation system is the presence of the Sleeping Bear Heritage Trail. This twenty-seven mile trail currently terminates north of the Village limits on Voice road in Empire Township. A component of this plan ways to accommodate traffic, especially non-motorized traffic, that enter the Village.

Wayfinding remains a consistent focus in the area. Travelers along M-22 and M-72 are often unaware of the presence of downtown Empire or other key Village assets. Assisting visitors in locating the public beach, the boat launch, local shops and the farmers market as well as the Sleeping Bear Heritage trail makes a case for improved wayfinding.

Large volumes of tourists, and many area residents frequent the beach during the summer season. While the attention increases business for local merchants, it leaves the Village with the dilemma of traffic congestion, pedestrian access and parking related issues that come with such an attractive asset. While this plan sets forth the ideas, vision and recommendations for the Village of Empire, many of the changes discussed cannot be completed without support from other road agencies.

The Village works with the Leelanau County Road Commission on maintenance of local roads. The M-72 and M-22 trunk lines are both under control of MDOT. Therefore, a large factor in the success of this plan will be cooperation with road agencies. MDOT and other agencies can be a resource for valuable information and knowledge. Understanding latest practices, research and data can help everyone come to an informed decision.

Other community partners, including Empire Township, the Sleeping Bear National Lakeshore (SBNL), the Leelanau Conservancy, Networks Northwest, the Traverse Area Recreational Trails (TART) and the State of Michigan (Shore-to-Shore Trail) may play a role in development of future streets and trails. Many trails follow routes along state trunk lines (M-72 and M-22) in Empire. Therefore, streets play a larger role than just providing for vehicles.

In the Village, many residents and visitors use local streets to make nonmotorized connections. They represent important connections within a community, provide routes for travel and commerce, and project the first impression that will shape the community's image. Roads should still be preserved for their intended function, but they should also be designed to accommodate all expected users of the road. This means considering the needs of non-motorized users in addition to those of motorists. To support this concept, a Complete Streets Resolution on the following page was adopted by the Village Council in 2013.





COMPLETE STREETS RESOLUTION

RESOLUTION OF THE COUNCIL OF THE VILLAGE OF EMPIRE, MICHIGAN

Supporting a "Complete Streets" Policy for the Village of Empire Adopted October 22, 2013

WHEREAS, "Complete Streets" are defined as a design framework that enables safe and convenient access for all users, including pedestrians, bicyclists, transit riders, and drivers of all ages and abilities; and

WHEREAS, "Complete Streets" are achieved through planning, design, construction and maintenance of a transportation system that improves travel conditions for bicyclists, pedestrians, transit, and freight in a manner that preserves local character; and

WHEREAS, development of pedestrian, bicycle, and transit infrastructure offers long-term cost saving alternatives to costly road widening or reconstruction; and

WHEREAS, a transportation system that supports safe, active, and ample space for vehicles, pedestrians, and bicycles are more conducive to the public life and efficient movement of people than streets designed primarily to move automobiles; and

WHEREAS, increasing active transportation (e.g., walking, bicycling and use public transportation) offers the potential for improved public health, economic development, a cleaner environment, enhanced community connections, and more livable communities; and

WHEREAS, fluctuations in motorized and non-motorized traffic patterns, as a result of seasonal tourism, has created additional transportation needs and unique considerations that can, in part, be addressed by providing safe and efficient transportation routes for all users; and

WHEREAS, in response to the "Complete Streets" Initiative, the State of Michigan adopted an amendment to the Planning Enabling Act in 2010 stating that a community's master plan shall include all components of a transportation system and their interconnectivity including streets and bridges, public transit, bicycle facilities, pedestrian ways, freight facilities and routes, port facilities, railroad facilities, and airports, to provide for the safe and efficient movement of people and goods in a manner that is appropriate to the context of the community and, as applicable, considers all legal users of the public right-of-way; and

WHEREAS, the Planning Commission has adopted a Transportation Plan for the Village, in part to comply with the elements required under Public Act 134 of 2010 Section 33(b)(i) and to prepare a document that will help the Village plan for projects that will improve the travel environment for all users.

NOW, THEREFORE, THE VILLAGE OF EMPIRE RESOLVES, the Empire Village Council hereby declares its support of "Complete Streets" policies, as generally suggested in the Empire Transportation Plan; and

BE IT FURTHER RESOLVED, it is the intent of the Village of Empire to work cooperatively with any agency that can assist with or whose approval is necessary to implement this policy, including but not limited to the State of Michigan Department of Transportation, the Leelanau County Road Commission, Network Northwest and the Sleeping Bear Dunes National Lakeshore.



VISION, GOALS, OBJECTIVES 2022 UPDATE

VISION STATEMENT

"The Village of Empire will maintain a transportation system that first and foremost focuses on safety and quality of life for village residents, supports economic vitality and protects the environment and safety for all types of travel. The system will provide necessary travel options while complimenting the character of all areas of the Village". The following goals were used to drive the recommendations of this plan:

GOALS AND OBJECTIVES

Goal 1: Develop a coherent plan to meet short, medium and long-term transportation and parking issues

- 1.1 Encourage the Village to set aside monies for the purchase of property and rights-of-way for future transportation needs and anticipated parking issues.
- 1.2 Establish short term parking to serve year-round residents.

Goal 2: Maximize the efficiency of the transportation system

- 2.1 Improve wayfinding to make it easier for visitors to travel to parking facilities, local points of interest and available parking.
- 2.2 On major roads, encourage consolidated driveways on existing development and mandate consolidated driveways on new construction to reduce the number of curb cuts, improve traffic flow and reduce the potential for crashes.
- 2.3 Where alleys are available, encourage ingress and egress from alleys.
- 2.4 Require new residential developments to connect to other adjoining streets; require stub streets for future connections.

Goal 3: Promote a safe transportation system

- 3.1 Investigate design improvements at intersections.
- 3.2 Improve key pedestrian crossings with pavement markings, landscaping and other elements to slow down vehicular traffic and increase motorist awareness of crossing pedestrians and bicyclists.
- 3.2 Promote Village-wide traffic calming.
- 3.3 Promote pedestrian walkways throughout the Village.
- 3.4 Encourage the establishment of a fixed schedule Empire Village stop(s) on the BATA transit system with at least one public transit shelter.

Goal 4: Design streets to fit the character of their environment and minimize impacts on land uses

4.1 Improve the appearance of the streets, entryways to the village, and routes to activity centers.

Goal 5: Address temporary surges in traffic due to tourism season and lessen impacts on the community

5.1 Develop better pedestrian and bicycle connections from the Beach Park to other parts of the Village.



IMPROVING THE NON-MOTORIZED ENVIRONMENT

Historically, transportation decisions were made in the interest of motorized safety. While this has resulted in improved safety on Michigan roads, it has also resulted in degraded environments for pedestrians, bicyclists and transit riders. For years, road right-of-way's have served their function of moving vehicular traffic; however they are a tremendous public asset that can be used for much more. Careful planning for non-motorized facilities includes an assessment of the existing environment, review of possible alternatives or opportunities that can improve that environment, and a set of recommendations that could be implemented and studied in further detail. In Empire, non-motorized facilities were considered an important component of the system for the following reasons:

- They improve pedestrian and cyclist safety, especially during the tourist season, by reducing potential crashes between motorized and non-motorized users.
- They provide alternative options to the vehicle for people who may want to park and walk into downtown, to the beach, to regional trails, etc. This in turn can help alleviate parking and congestion concerns when traffic volumes are especially heavy.
- They provide connections between homes, parks, public transportation, offices, and retail destinations. Providing such connections can improve the quality of life for area residents.



Not all non-motorized users are comfortable using all types of facilities, so the Transportation System needs to provide travel options for a wide range of people of various ages traveling with various skill and confidence levels, at a variety of speeds. The system should also accommodate those with temporary and long-term physical and cognitive challenges, or those using mobility assistance devices (scooters, segways, etc.) or pushing strollers and wheelchairs. The behavior of the different types of bicyclists, studied by Roger Geller, Bicycle Coordinator of the Portland Office of Transportation, can aptly describe the typical mix of comfort levels:

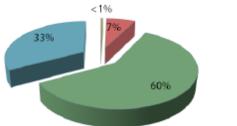
Strong & Fearless (<1%)

- Always biking
- Any road regardless of condition

Enthused & Confident (7%)

- Frequently bike
- Like designated facilities such as bike lanes Interested but Concerned (60%)
- Occasional rider
- Prefer local roads and trails

No Way, No How (33%)



Types of Bicyclists:

Strong & Fearless
 Enthused & Confident
 Interested but Concerned
 No Way, No How

BIKEWAYS

A bikeway is a route or path which in some manner is specifically designed and/or designated for bicycle travel. A "complete street" addresses the needs of all users, including people of all ages and ability, so a variety of facilities are needed. For example, less experienced riders may prefer an off-road route, whereas more advanced riders may prefer the speed allowed by riding on the road. Both riders, as well as those whose preferences fall in between, need to be accommodated by the system.

Riding bicycles on sidewalks can be a safety issue. The speed differential between a pedestrian and bicyclist is great enough to create a safety hazard. In some instances, however, there is not enough room to accommodate separate facilities. In such cases, use of the sidewalk as a bicycle facility may still be safer for some riders than riding in the motorized portion of the street.





Shared Road: A "standard" width travel lane that is shared by motor vehicles and bicycles. Indicated by a "sharrow" pavement marking, shared roads often help complete a signed Bike Route. They are helpful on local roads with on-street parking and wider pavement, where bicycles can generally ride comfortably in the vehicle travel lane.

Separated Pathway: Also known as "Class 1" bikeways or "multi-use pathways," a separated path accommodates both bicycle and pedestrian traffic. It is physically separated from motorized vehicular traffic by an open space or barrier that can be located either within a road right-of-way or within an independent easement. Two-way pathways should be at least 10 feet wide. Wider paths, up to 12 feet are recommended where high bicycle or pedestrian traffic is expected.

Wide Paved Shoulder: Wider pavement to the right of the edge stripe designed to serve bicyclists. Road shoulders are an economical way to accommodate bicyclists, especially in rural areas. Shoulders as narrow as one to two feet in width can accommodate more advanced riders, but preferably, shoulders should be a minimum of 4 feet wide when designed to accommodate bicycle travel. Wider, 6 foot shoulders are recommended along roadways where vehicle speeds exceed 40 mph.

BIKEWAY RECOMMENDATIONS

- **BIKE 1.** Continue to consider installing bike racks downtown to replace on-street spaces
- **BIKE 2.** Monitor and accommodate the use of Lake, South Lacore, Wilco and/or Wood Streets as shared roads to connect to the Empire Bluffs Trail and to the south
- **BIKE 3.** Accommodate the use of downtown streets as shared roads/complete streets
- **BIKE 4.** Continue evaluation of a clear, safe connection between the Sleeping Bear Heritage Trail and downtown Empire

SIDEWALKS AND CROSSINGS

Sidewalks consist of elements that define the character of public streets, sidewalks, and adjacent private property. The primary goal of designing pedestrian ways is to improve the safety and movement of pedestrians, illustrated by the following elements:

Sidewalk Connection: Several locations (shown on the Non-Motorized Map) were discovered where sidewalks are missing. Sidewalk gaps should be completed, especially along streets that already have sidewalks along the majority of its length. Typically, sidewalks are separated from the roadway by a narrow lawn, and are at least five feet wide. Sidewalks are usually constructed of concrete for durability reasons, but can also be constructed of other materials, like brick pavers, or other relatively flat surface. Care must be taken not to introduce materials that will pose challenges for those with disabilities.

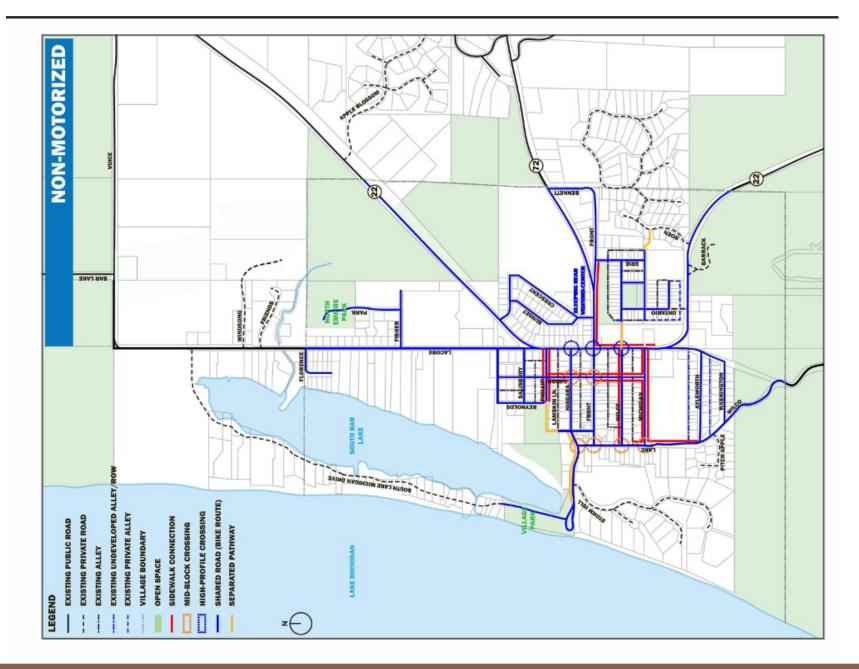
Wider Sidewalk: Wider sidewalks, generally 8 feet wide or more, should be considered in places where increased pedestrian activity exists or where it is desired, such as on downtown main streets. Wider sidewalks provide more room for pedestrians, and can even be used to accommodate minor activities like retail display, outdoor seating, or bicycle parking.

Road Crossings: Crosswalks can be designed to help improve visibility of pedestrians and calm traffic. Crosswalks that employ a variety of techniques to improve the visibility of pedestrians and bicyclists, such as pedestrian countdown signals, painted or alternative crosswalk material, district or heritage identity elements, lighting, landscaping, curb bump-outs and bollards, advance warning signs, variation of materials in the cross walk and/ or pavement markings in the roadway. Utilizing unique materials, visual clues and signage help to create a distinct boundary of the pedestrian way. The presence of these elements will not only distinguish between the pedestrian ways and vehicular ways, but can act as traffic calming measures as well.

SIDEWALKS AND CROSSINGS RECOMMENDATIONS

Specific recommendations for Empire include:

- **S & C 1.** Continue to work with M-DOT to ensure maintenance of safe pedestrian cross markings at M-22 and M-72
- **S & C 2.** Fill in sidewalk gaps (places where the sidewalk skips and then restarts)
- **S & C 3.** Continue to work with M-DOT to identify and improve high profile cross walks on M-72 and M-22
- **S & C 4.** Install a wider sidewalk along Niagara Street to the beach. Explore options for a walkway from Niagara Street to Johnson Park
- **S & C 5.** Aim to improve pedestrian ways by installing decorative sidewalk treatments, ornamental lighting, banners, decorative walls, land-scaping, street furnishings and other related elements



WAYFINDING

Wayfinding is a navigation tool that assists visitors in locating their destination without confusion. Simply put, it is knowing where you are in the village, where your destination is located, and knowing how to get there from your present location. The Village could benefit from additional wayfinding to assist visitors looking for the Beach Park, parking areas, or other local destinations.

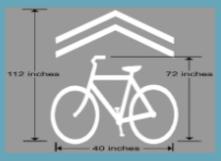
Current wayfinding issues in Empire include:

- Difficulty finding beach parking
- Guiding Sleeping Bear Heritage Trail users through town
- Wide streets attract mixed traffic, but there is no indication via signage
- Outside visitors are not aware of all of the Village's amenities



MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES:

The State of Michigan publishes a manual that identifies the standard size, font, and messages that may be placed on certain signs. The following signs are in the Michigan Manual of Uniform Traffic Control Devices (MMUTCD):



Sharrows

Are a new pavement marking in the MMUTCD Manual that are used to indicate streets where bicyclists and motorists are to use the same travel lanes



WAYFINDING RECOMMENDATIONS

- WAY 1. Install "sharrows" on low-volume, low-speed roads in the Village to indicate location of shared lanes rather than install bike lanes
- **WAY 2**. Continue to add wayfinding in the Village Core (see page 20 for examples)
- **WAY 3.** Continue to ensure that signs are located based on local circumstances and good judgment

General recommendations are provided for general guidance below:

BIKE ROUTE SIGNS	
Purpose	To confirm that a cyclist is on a designated bikeway. Bike Route signs can include destinations
	and their associated distances.
Location	 Mid-block or on the far-side of intersections
Standards	 At the beginning of each bikeway
	 Immediately following key junctions on streets that do not have sharrows
Specific	 Install signs along trail routes to direct traffic to
Recommendations	key connections, shared road segments, local
	destinations, etc.
	2. Space signs approximately one half to one
	mile apart, based on the number of cross
	streets, and driveways.
ENTRYWAY SIGNS	
Purpose	To identify where key roadways enter the Village limit.
Location	
	At the Village boundary, except where such
Standards	placement causes confusion or an unsafe
	situation.
Specific	1. Add "Downtown Empire X.X miles" and
Recommendations	"Empire Beach X.X miles" on M-72 from east
	and on M-22 from north and south

 To indicate where a bikeway route turns, either onto another street or onto an off-road trail. On the near-side of intersections to let cyclists know in advance where to change direction or turn. In advance of bikeway turns (near-side of the intersection) in the block immediately preceding the junction or turn and at least 25' past the preceding intersection.
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intersection) in the block immediately preceding the junction or turn and at least 25'
preceding the junction or turn and at least 25'
past the preceding intersection.
 Where shared roads are used as part of the
bike route, signs In advance of left-handed
bikeway turns will give the bicyclist adequate
notice so they can safely navigate vehicular
traffic to make the turn.
1. Install Vehicular "Overflow Beach Parking"
signs:
 On M-22 south of Front Street (to direct
west onto Front then north onto LaRue)
 On Niagara, west of Union (to direct north
to Lion's Club Park)
 At entrances to Lion's Club Park off
Reynolds and LaRue
2. Install Pedestrian "To Beach Park" signs:
 At Lion's Club Park overflow parking lot
 At north Village line along Heritage Trail
3. General wayfinding signs:
 Public parking locations (future locations
vary)
Empire Library
Township Hall
 Parks (Beach, Lion's Club Park and North
Empire Park)

TRAILS

A Trail is an off-road, multi-use path that is shared by cyclists and pedestrians. They are typically 10 ft wide, designed for regional travel as well as recreation and are maintained for use all year round.

The Village of Empire is fortunate to be located in an area that is central to a number of trail systems. The Sleeping Bear Dunes National Lakeshore is located to the north and south of the Village. The Sleeping Bear Heritage Trail is a hard-surfaced, non-motorized, multi-use trail that runs almost twenty-two (22) miles to the north from the Village. A future segment of the trail is planned to go south of Empire. The Michigan Shore to Shore Trail, created by the Michigan Department of Natural Resources and the U.S. Forest Service, is a hiking and equestrian trail. The trail spans between Empire on Lake Michigan to Oscoda on Lake Huron. The following recommendations were developed to focus our efforts on ways to promote those existing trails and improving non -motorized traffic patterns within the Village.

TRAIL RECOMMENDATIONS

- **TRL 1.** Sleeping Bear Heritage Trail. Connect the Heritage Trail north of the Village to Sleeping Bear Dunes National Lakeshore Headquarters and Visitors Center. Collaborate with the Leelanau Conservancy for possible northern M-22 crossing to Sleeping Bear Dunes National Lakeshore Headquarters and Visitor Center
- **TRL 2.** Establish a trail along the east side of South Bar Lake to Johnson Park and Front Street
- **TRL 3.** Collaborate with the Michigan Trail Riders Association to explore options for improving cooperation along the Michigan Shore to Shore Trail. This may include signage (wayfinding and trailhead), amenities and space within the Village for riders and hikers
- TRL 4. Establish a route from the Village to the Empire Bluff Trail



Sleeping Bear Heritage Trail (heading south toward Empire

(courtesy of the TrailLInk: https:// www.traillink.com/trail-gallery/ sleeping-bear-heritage-trail/) Shore to Shore Trail.

(courtesy of Michigan Shore to Shore Hiking and Trail Oscoda County Activities website: https:// www.oscodacountymi.or g/activities/shore-toshore-hiking-horse-trail)

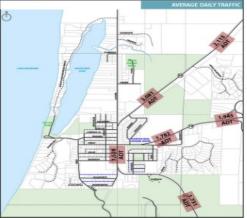




IMPROVING VEHICULAR CIRCULATION

The historic center of Empire contains a grid-street pattern, which has been maintained quite well. While some anomalies exist, such as some narrower rights-of-ways and skewed road intersection angles, general traffic operates well in and around the Village. As the Village grew both in permanent and seasonal residents, so did the amount of traffic. Convenient access via state routes M-22 and M-72, along with the Village's location along Lake Michigan and adjacent the Sleeping Bear Dunes National Lakeshore have made it a strong tourist and resident attraction.

M-22 and M-72 play a significant role in moving traffic within the region, and so their function should remain as such – a roadway generally designed to accommodate vehicular traffic. M-22 is also a designated State Heritage Route - the Leelanau Scenic Heritage Route. The more local streets within the Village are intended to provide a different function – to connect people to their homes and local businesses – with lower traffic volumes at lower speeds.



Average Daily Traffic Map

ROAD CONNECTIONS

With any new roadway development, roads should be required to tie into the existing road network, and use of cul-de-sacs and other dead end streets should be discouraged except in areas where natural features, such as wetlands, or existing adjacent development patterns precludes through streets. Connected streets are beneficial because:

- \Rightarrow They provide motorists with multiple routes, which help to reduce driving distances and diffuse traffic.
- ⇒ They allow for the movement between neighborhoods and businesses without the need to access major roads. This can shorten trips and reduce traffic impacts to the major road network.
- ⇒ They provide alternative travel options, where motorists can choose the most efficient and safest locations to access major roads.

ROAD CONNECTIONS RECOMMENDATIONS

- ROAD 1. Maintain pavement striping to define travel lanes and parking
- **ROAD 2.** Extend Erie from New Neighborhood north to M-72 (see also INT 1 on page 17 for one possible solution)
- **ROAD 3.** Find a way to extend Fisher Street to M22. to include an adjacent separated pathway
- ROAD 4. Continue Union Street south as development of land occurs

INTERSECTIONS

Intersection design can enhance mobility for all types of travelers. Intersection improvements should focus on reducing crashes, providing safe and comfortable crossings, and avoiding traffic backups. As a result of historic development and transportation decisions, the network of State Highways through Empire has created some unusual intersection alignments. While most residents have learned to safely navigate most of these, visitors are often confused. The 2015 Transportation Plan suggested intersections with higher volume roadways (such as M-72 and M-22) be redesigned to enable streets or driveways to intersect them at a 90-degree angle. Following the publishing of the 2015 Transportation Plan, changes were made to the intersection of Salisbury/Lacore and M-22 near the Village Office complex. As suggested in the attached images, additional opportunities for improvement are still present in the Village.

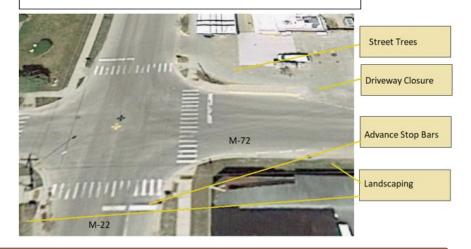
INTERSECTIONS RECOMMENDATIONS

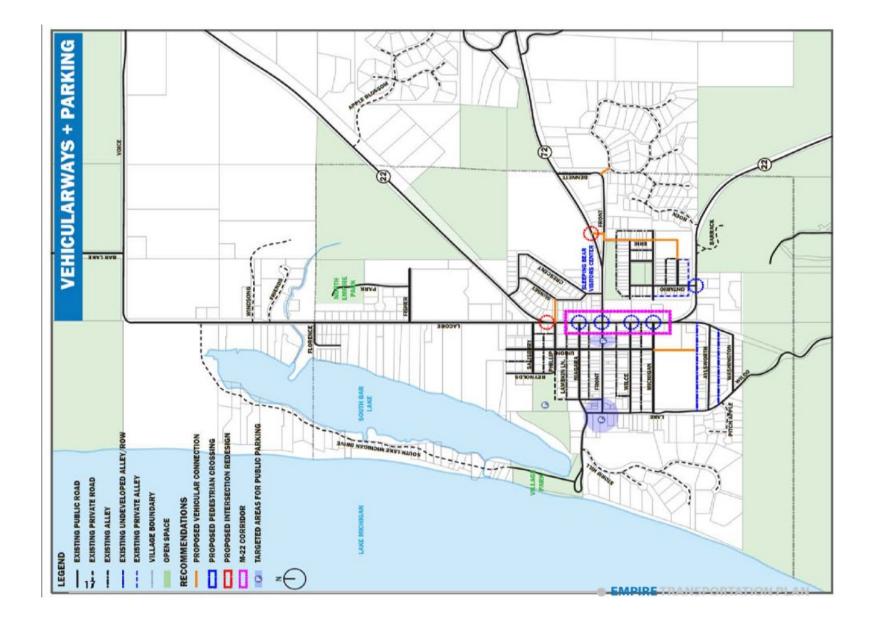
- **INT 1.** Redesign Erie at M-72 to remove the skewed angle, preserve landmark tree and discourage cut-through traffic
- **INT 2.** Continue to improve operations at M-72/M-22 by improving the intersection with landscaping and driveway closures
- **INT 3.** Consider improvements or redesign the intersection at S. Lake Street and Niagara for better pedestrian, bicycle and vehicular traffic flow

INT 1. Redesign Erie Street at M-72 to remove the skewed angle, preserve a landmark tree and discourage cut through traffic.



INT 2. Continue and maintain improvements at M-72/M-22 with landscaping and driveway closures. Work with M-DOT on Advance Stop Bars

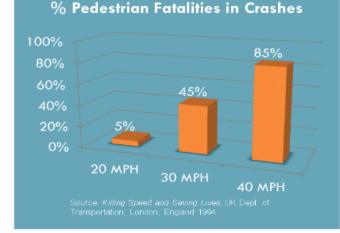




TRAFFIC CALMING

One of the biggest fears of a pedestrian or bicyclist is being hit by an automobile. Studies show that the speed of the vehicle is one of the biggest factors in whether the result of such a collision is a few scrapes, a serious injury or a fatality. Even a small increase in speed can result in more fatal crashes.

Research shows that a pedestrian or bicyclist hit by a vehicle traveling 20 mph or less has an 95% chance of survival while only about 55% survive as collision with a vehicle traveling 30 mph (and only 15% if 40 mph or greater).



Different design elements can be used to help reduce speeds along residential streets, in parking lots or near schools and parks. Traffic calming can include things like road narrowing, special pavement at pedestrian crossings, or other elements that attract attention, like landscaping or entryway features. Traffic calming at intersection can also include tighter turning radii so motorists are likely to turn at a slower speed, and curb bump outs to reduce the width that pedestrians must cross. This can actually benefit vehicular traffic too, since shorter crossing paths require less time for pedestrian time leaving more time for vehicular traffic.

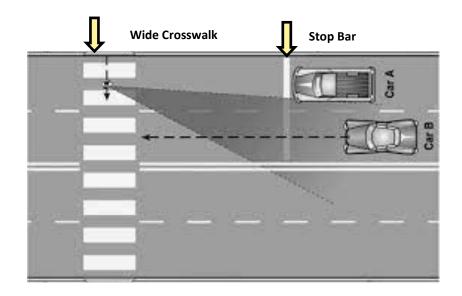


TRAFFIC CALMING RECOMMENDATIONS

Traffic calming design techniques should be considered especially for streets and intersections where there are relatively high volumes of pedestrians or bicyclists and where typical traffic speeds are notably higher than the target or posted speed limit. Specific recommendations for Empire include:

- **CALM 1.** Install wide crosswalk markings and advance stop bars at key intersections
- **CALM 2.** Install advance warning signs (not beacon signals) where unsignalized crossings along M-22 exist
- **CALM 3.** Install "Yield to Pedestrian" signs at key crossings downtown, like at Union Street and LaRue Street or at entrances to the Village's Core
- **CALM 4.** Add traffic calming features along M-22 (landscaping, lighting, pathways/sidewalks, improved crosswalks, etc.) north and south of M-72
- **CALM 5.** Reduce speed limit to 35 mph, with associated "Reduced Speed Limit" signs at Village limits
- **CALM 6.** Apply traffic calming, as discussed above, on residential streets to prevent cut-through traffic.
- **CALM 7.** Install landscaping and street trees at side street intersections
- CALM 8. Improve cross walks at side street locations

CALM 1. Install wide crosswalk markings and advance stop bars at key intersections.



CALM 4. Add traffic calming features along M-22 (landscaping/lighting)



ENTRYWAYS

Entryways are urban design elements located at entry points into the community. They can be used to announce the Village boundary and/or introduce the character and theme of a place or district. Entryways can be defined as a narrowing or perceived narrowing of the roadway, intended to cause drivers to slow down and recognize that they are entering an area of changed land use. Their design often combines hard and landscape materials in a way that will influence travel behavior and project the desired community image.

Entryways serve to welcome visitors, workers, and residents, and orients visitors to the community. They provide opportunities to celebrate local culture and history and frame perceptions of the community, and can reinforce a larger marketing effort aimed at creating a "brand" for the community, corridor or district. If properly designed, entryways can also be effective at calming traffic and improving safety.

Generally, travel speeds are linked to a driver's perception. Where a driver perceives the possibility of cross-traffic, pedestrian activity or slower traffic, they will intuitively slow their travel speed. Elements within the drivers view will all shape how fast or slow they travel in order to feel safe. Just as expressways often are maintained with wide open areas alongside them, local roads should not be so "wide open" so as to encourage faster speeds.

ENTRYWAY CONSIDERATIONS

Some general considerations for entryway designs include the following:

- \Rightarrow Entryways should set the tone for the Village's image, so they should reflect local culture, history or desires.
- ⇒ Entryways must be consistent and appropriately scaled, and they should reflect characteristics of other elements used to define the district.
- ⇒ The design approach and palette of materials must be consistent enough to relate to the other entryways and elements that define the districts.
- ⇒ Improve landscaping along the road edge to present a sense of arrival. Landscaping can also be used to help buffer pedestrians from passing motorized traffic.
- ⇒ Coordinated signage is essential to presenting a cohesive image, but some variety should be encouraged to delineate distinct districts or areas of the Village.

COMMON ENTRYWAY ELEMENTS:

- Gates
- Landscaping
- Public Art
- Pocket parks
- Curb bump-outs
- Medians
- Roundabouts
- Rumble strips

- Bike lanes
 - Changes in road surface
 - Road markings
- Signage
- Overhead banners
- Lighting
- On-street parking
- VILLAGE OF EMPIRE TRANSPORTATION PLAN UPDATE 2022

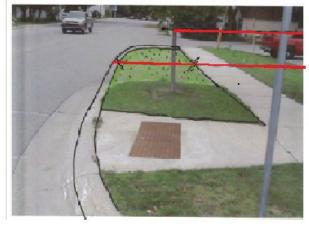
ENTRYWAY RECOMMENDATIONS

ENT 1. Add distances to downtown and beach on entrance signs

ENT 2. Continue to require new construction to bury power lines

ENT 3. Develop downtown gateway at the east end of Front Street to improve esthetic, draw visitors and calm traffic (see graphic this page)

ENT 3. Develop a downtown entryway at the east end of Front Street that includes landscaped areas, signage, physical features or a combination of elements that improve the asthetic, draw visitors and calms traffic.



Add street trees to existing pathways

Remove paving and extend landscape bed creates zone for propsed entry feature







PUBLIC PARKING

With a traditional downtown, the Village of Empire has demand for public, on-street parking. In fact, many businesses on Front Street rely on it. However, with growing businesses and increasing tourist traffic, additional parking areas are needed to augment and enhance existing convenient on-site parking. Without convenient parking, some businesses may choose to relocate to larger sites outside the downtown. There are ways to increase the number of parking spaces through simple striping changes, and others will require more physical changes.

The Village of Empire and its Beach Park is a destination in the summer. The Beach Park is highly used because of its wonderful amenities. However, the dilemma with Beach Park is providing access and parking without consuming the entire beach with pavement. The current parking lot provides significant parking, but more is needed to meet the increasing demand. The locations for additional parking are severely limited at Beach Park. One option that has been implemented is use of a field at the at Lion's Club Park (aka Johnson Park)¹. They allow the use of the field for overflow parking with the Village paying an annual fee. There are currently no direct non-motorized routes that connect Beach Park to Lion's Club Park, or to other parking areas, so achieving such connections should greatly improve available parking for those who want to use the beach.

¹ Johnson Park is privately owned by the Lion's Club. Whereas there is currently a working relationship, this arrangement is subject to change without notice.

The anticipated increase in electric vehicles will create a demand for vehicle charging stations within the Village to serve tourists and local area visitors. The demand is projected to evolve and increase over the next several decades. The Village will assess the demand for charging locations, the availability through private businesses, and the need for public charging stations within the Village. To meet projected demand, the Village will monitor and consider opportunities for grant and alternative funding sources.



PUBLIC PARKING RECOMMENDATIONS

- **PPARK 1.** Evaluate converting parallel parking to angle parking Lake Street to create more spaces (approx. 9 spaces)
- **PPARK 2.** Organize future parking lot use in the vicinity of Lake Street/Front Street
- **PPARK 3.** Acquire additional long-term public parking lots (as shown on the Vehicular Ways Map (on page 16)
- **PPARK 4.** Where long-term parking locations are secured through lease or purchase, they should be paved and organized to maximize parking spaces.
- **PPARK 5.** Conduct a long-term parking study that considers purchase or lease of land for municipal parking lots, accommodations for deliveries, short-term vs. long-term parking, and handicap accessibility.
- **PPARK 6.** Continue short-term parking limits on certain downtown parking locations, such as near the Post Office
- **PPARK 7.** Monitor demand for public EV charging stations and consider grant or alternative funding

PPARK 6. If restriped, parking spaces downtown can be shorter.



Re-establish landscaped parkway and plant street trees.

Remove paving and extend landscaped bed and create zone for entry features/signage/lighting.

Front Street at M-22 looking west

BEACH PARKING RECOMMENDATIONS

- BPARK 1. Continue modest charge for beach parking
- **BPARK 2.** Create some dedicated resident parking
- BPARK 3. Maintain direction signs to overflow beach parking



MANAGEMENT POLICIES

Some transportation conditions cannot be addressed with physical changes. Municipal policies can have an impact on local operations.

ACCESS MANAGEMENT

Access Management is a series of techniques and standards used to maximize existing street capacity and minimize the potential for crashes. Studies show reducing or limiting the number of access points, carefully placing, spacing and design of access points can help achieve a safer environments and preserve efficient traffic flow. Access Management can, also, improve the commercial corridors for bicyclists and pedestrians by reducing and limiting the number of potential conflict points along the corridor. Proper placement and design of access points can help improve visibility of pedestrians and bicyclists and reduce the risk involved in crossing multiple driveways and intersections.

Currently, the Village of Empire has one pedestrian friendly walkway from the eastwardly neighborhoods connecting to the downtown district. The easterly neighborhoods are continuing to see development and an increase in pedestrian traffic should be expected from both north and south of M-72.

ACCESS MANAGEMENT RECOMMENDATIONS

- AMPOL 1. Plan for and adequately regulate parking in the Village right-of-ways
- **AMPOL 2.** Implement Gateway Corridor Improvements as shown to the right.
- **AMPOL 3.** Develop policies to manage location, spacing and design of new drive ways as follows:
 - ◊ Maintain Proper sight distance at road intersections
 - Driveways need to be adequately spaced from intersections and other driveways (on both sides of the street) to assist in the reduction of turning movement conflicts

 Providing connections between parking lots and shared driveways, where feasible, limits the number of turning movements onto the main roadway and reduces the potential for crashes.

AMPOL 4. The Village should continue to consider to explore and implement new pedestrian cross-walks along M-22/ Lacore connecting the eastwardly residents to Front Street, creating a one community feel with safe walka-bility.

BICYCLE POLICY

Currently, the Village maintains a policy where bicyclists are prohibited from using public sidewalks. This causes bicyclists to ride in off-road trails, (which may not be available), or in the public street. While policies like this are helpful in areas with high pedestrian activity, bicycleto-pedestrian crashes can still be very dangerous. In Empire, pedestrian volumes are not high enough to warrant such a restriction during most of the year. In light of this, the Village may choose to maintain a 'no bicycles' policy on sidewalks along Front Street where pedestrians are most prevalent, or scale back the policy to apply during the summer tourist season. In either case, it seems appropriate to relax the policy in some way.

BICYCLE POLICY RECOMMENDATIONS

BPOL 1. Implement Complete Streets in future development of pedestrian and vehicular planning

