

## Chapter X: TRANSPORTATION

### Introduction

Michigan law requires a community master plan to include transportation planning, or a “master street plan” (including a Complete Streets analysis and approach). This requirement must be in any community’s plan adopted or amended 90 days after December 17, 2010. More broadly, inventorying existing public infrastructure, such as public roads and thoroughfares, is an important component of the planning process. Public roads within Whitewater Township include state and county-owned and maintains, highways, roads, and streets.



### Roads and Transportation

M-72 State Highway exists as the primary east-west route through within Whitewater Township, and Williamsburg Road, a primary paved county road, exists as the primary north-south route through the Township. A two-way stop light exists at the intersection of M-72 Highway and Williamsburg Road. Other paved, primary east-west routes with the



Township include Supply Road, Old M-72, Townline Road, Angell Road, Deal Road, Watson Road, Mable Road, Hawley Road, Crain Road, Ayers Road, Odell Road, Cook Road, and Church Road. Paved north-south, primary, paved county roads include Vinton Road, Broomhead Road, Skegemog Road (with an unlighted, dangerous intersection at M-72 Highway), Munro Road, and Bates Road.

Other generally less-traveled collector and unpaved east-west roads include Bunkerhill Rod, Erickson Road, Crisp Road, Whitney Road, Hursh Road, Guernsey Lake Road, Loosie Road, Gay Road, and Park Road. Collector, unpaved north-south roads include Moore Road.

Seasonal roads while county-owned are typically unpaved with no winter maintenance. Seasonal roads within Whitewater Township include Sand Lakes Road, Roots Lake Road, and Smales Road. Minor collector, paved and unpaved roads in Whitewater Township include Lackey Road, Palestrum Road, and Miami Beach Road.

Unpaved, graded gravel roads in the southern portion of the Township are known for their natural beauty, access to high quality lakes, streams/rivers, camping, hunting, trails, mountain biking and other recreational pursuits, and adjoining Sand Lakes Quiet Area, Brown Bridge Quiet/Natural Area, Boardman River, and Pere Marquette State Forest

lands. These routes are pleasant rides at any time of year, but are especially beautiful during the fall color season. M-72 is heavily traveled by cars and trucks, and it and its crossings are generally considered unpleasant and even unsafe for non-motorized travel and pedestrians within Whitewater Township. These and other roads within Whitewater Township can be viewed on the following Base Map on page X-X.



### **Transportation Trends**

Many Whitewater Township roads are unpaved. Development trends are currently increasing the demands for road improvements, potentially ultimately changing the character of rural areas of Whitewater Township and using up limited state and local highway dollars. At the same time an increase in private roads, driveways and other access points along Whitewater Township roads has the potential for increasing the number of hazardous stops and turning patterns. Unregulated private road development and road access can lead to dangerous conditions and increased stop and go traffic, which in turn leads to congestion and the reduces the carrying capacity of roads and public safety.



## Complete Streets

Michigan's Complete Streets policy recognizes that the last half-century of transportation planning and design has created many miles of "incomplete" streets within Michigan communities, i.e., those without safe places to walk, bike, or connect with public transportation. Such streets are particularly dangerous for older adults, children, and those living in lower income neighborhoods. The aforementioned populations can

suffer disproportionately from poor street design in many ways including: increased likelihood of illness, injury, and even death; being cut-off from jobs from a lack of or ineffective provision of public transportation options; and access to healthcare professionals, family, and friends. Additionally, the populations mentioned above tend to spend a larger proportion of their budget on transportation than other populations in Grand Traverse County.

As growth occurs in Whitewater Township a connected network of safe pedestrian routes, trails, and shared streets and roads could provides convenient access to all parts of the Township and importantly connecting pedestrians and non-motorized traffic with safe and convenient routes to schools, population centers, retail and services and parks and

recreational resources. Complete streets are designed for equitable access, comfort, and mobility of any and all users regardless of ability, age, income, or ethnicity.

Whitewater Township recognizes Complete Streets as a valuable guiding tool and opportunity to further many of its strategic goals as laid out in the Township's Master Plan. The Township's complete street vision includes:

**A Connected Township** – By creating and implementing a Complete Streets policy, the Township will work toward a network of connected streets designed for all users.

**Inviting Public Spaces** – Public roads and streets make up a significant portion of the public infrastructure in Whitewater Township. This policy endeavors to make this public space more comfortable and safe for all users, and expand opportunities for safe, shared use of the right-of-way.

**Environmental Responsibility** – Complete Streets design also offers the Township the opportunity to make streets more environmentally friendly. Whether through tree and native flower plantings, using permeable pavement where appropriate, or allowing for the separation and safe for bikes, electric bikes, scooters, etc. and auto traffic, there are many options for incorporating environmental practices into complete street designs.

**Safe Community** – The focus of the Township's Complete Streets policy is to create right-of-ways and road and street crossing that are safe for all users. This policy works to improve the overall design and configuration of streets to promote the safety of all users.

**Complete Neighborhoods** – Through the implementation of a Complete Streets policy, the Township also promotes completed networks of street and pedestrian infrastructure that connect to the whole Township, street designs that provide safe accommodations for any and all users, thus creating comfortable spaces for residents to walk, run, bike, and enjoy other physical activities.

**Economic Vitality** – Street design also plays an integral role in creating economically viable places and communities. Through increasing the walkability and over all pleasantness of streets and roads, it makes a place where people want to go to, spending time and money, and to explore. Consequently, Complete Streets design often brings tools to bear to slow traffic, giving travelers the opportunity to notice and frequent Township businesses that could have otherwise been a blur out a car window when passing through commercial corridor(s).

Whitewater Township recognizes that while some in our Township can choose to leave their car at home on a nice day and bike or walk to their destination, there are many who do not have a choice. It is for those users that this policy acknowledges that not every user who moves by a certain mode is the same, i.e., parents with strollers or cycling with children, elders perhaps requiring more time and may benefit more from clear markings and signage when driving, people with vision impairments require audible and tactile stimuli to travel independently, those using wheelchairs, scooters, and strollers need curb ramps and sidewalks that can accommodate them. This policy endeavors to design streets that will meet these needs to the maximum extent possible.

Whitewater Township recognizes that all projects, new, maintenance, or reconstruction, are potential opportunities to apply Complete Streets design principles. The Township will, to the maximum extent practical, design, construct, maintain, and operate all roads to provide for a comprehensive and integrated network of streets, trails, and rights-of-way for people of all ages and abilities throughout the Township.

In order to create a complete network, this policy will apply to all publicly and privately funded projects including: new construction, reconstruction, rehabilitation, repair, and maintenance of transportation facilities on roads and streets, and redevelopment projects. All transportation infrastructure and street design projects requiring funding or approval by the Township, as well as projects funded solely or in part by the county, state and/or federal funding, shall comply with the Whitewater Township Complete Streets policy. Private developments and related street and road design components or related components shall also incorporate the Complete Streets policy.

In order to create Complete Streets, the latest design guidance, standards, and recommendations available shall be used in the implementation including, but not limited to:

- The Michigan Department of Transportation Project Design and Development Guidebook
- The latest edition of American Association of State Highway Transportation Officials (AASHTO) A Policy on Geometric Design of Highway and Streets
- The United States Department of Transportation Federal Highway Administration's Manual on Uniform Traffic Design Controls (2009).
- The Architectural Access Board (AAB) 521CMR Rules and Regulations
- Documents and plans created for Whitewater Township, as available such as bicycle and pedestrian network plans, highway corridor plans, street type design guides, landscape and streetscape design guides.
- The latest edition of the National Association of City Transportation Officials (NACTO) Urban StreetDesign Guide

## **Complete Streets Performance Measures**

Complete Streets implementation and effectiveness should be evaluated for success and opportunities for improvement. Furthermore, the Township will develop performance measures to gauge implementation and effectiveness of the policy. These measures will set the baseline understanding for where the Township's infrastructure is currently at. The metrics will also inform goals and project selection for future years.

Metrics to be considered:

- a. Lineal feet of new or reconstructed sidewalks, pathways and bikeways
- b. Miles of new or re-stripped on and off-street bicycle facilities
- c. New or reconstructed curb ramps
- d. New or repaired crosswalks
- e. New way-finding or safety signage installed
- f. New street trees/percentage of streets with tree canopy
- g. Percentage complete of bicycle and pedestrian networks
- h. Efficiency of transit vehicles on routes
- i. Percentage of transit stops with shelters
- j. Percentage of transit stops accessible via sidewalks and curb ramps
- k. Multimodal Level of Service (MMLOS)
- l. Auto trips generated
- m. Decrease in rate of crashes, injuries, and fatalities by mode
- n. Pedestrian and bicycle counts (i.e., chart increase in people biking and walking)
- o. Vehicle Miles Traveled trip reductions
- p. PASER rating; pavement conditions
- q. Satisfaction/comfort levels expressed on a preference survey

## **Complete Streets Implementation**

Whitewater Township commits to making Complete Streets practices a routine part of everyday operations including but not limited to site plan review, maintenance activities, and after action evaluation. The Township will train pertinent staff and decision-makers on the content of Complete Streets principles and best practices for implementing policy through workshops, professional development opportunities, and other appropriate means.

The Township shall review and either revise or develop proposed revisions to all appropriate planning documents (i.e., master plan, Planned Unit Develop/site condominium standards, private road design guides, landscape/open space, and recreation planning, etc.), zoning and subdivision codes, laws, procedures, rules, regulations, guidelines, programs, and templates to integrate Complete Streets principles into all

right-of-way projects on and off roads and streets that carry pedestrians, bicyclists, equestrians, and motor vehicles; and include guidance from this updated Master Plan.

Whitewater Township shall develop and maintain a comprehensive inventory of pedestrian and bicycle facility infrastructure that will prioritize projects to eliminate gaps in the sidewalk and bikeway network in the Township's Master Planning process.

Every five years, during the Township shall review and update its Master Plan, including the existing non-motorized network.

Whitewater Township will evaluate its Capital Improvement Projects prioritization to encourage implementation of Complete Streets.

Whitewater Township will utilize inter-governmental, inter-agency, and inter-departmental coordination to promote the most responsible and efficient use of resources for activities within public right of ways.

Whitewater Township will seek out appropriate sources of funding and grants for implementation of its Complete Streets policies, and enhance and support regional efforts to develop public and pedestrian-oriented transportation choices and facilities.

Finally, the Township will also encourage county-wide and regional transportation and access management planning, and coordinate with adjacent counties as well as county, state and federal agencies on transportation planning and implementation. The Township will encourage county-wide trails planning, and coordinate with adjacent counties as well as state and federal agencies on recreational resource planning and implementation.

### **Public Transportation**

The Bay Area Transportation Authority (BATA) provides over half a million rides to residents and visitors of Leelanau and Grand Traverse counties, including Whitewater Township and the city of Traverse City. BATA provides public transportation services to both counties from a voter-approved a multi-year millage.

BATA provides on-line bus schedules and maps will help regional riders find bus loop stop closest to them and offers shelter, benches, and bike racks at numerous established loop pick-up locations. BATA also provides a fixed loop service for downtown Traverse City, and villages in Grand Traverse and Leelanau Counties. Riders outside of fixed bus loops can link to on-demand services to request a ride, similar to Lyft or UBER, and BATA's Village Link service helps rural area riders communicate with BATA Dispatch Services to schedule connections and pick-ups. Since 2017 BATA has grown to employ 120 people, acquired new, greener buses, added and renovated transfer stations.



## **Summary of Findings**

It is anticipated that future residential and commercial development within Whitewater Township will necessarily translate into more vehicle trips on primary Township roads, with calls to straighten curves, build deceleration and passing lanes, erect more signage or even traffic lights, calm traffic, advance its Complete Street policy, etc.