

Lakes to Land Regional Initiative

UNIQUE REGION. UNIQUE COMMUNITIES. SHARED VISION.



Crystal Lake Township Master Plan

ADOPTED MAY 21, 2014

CRYSTAL LAKE TOWNSHIP MASTER PLAN

MAY 2014

ACKNOWLEDGEMENTS



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Glossary

Sources

APA - American Planning Association Planner's Dictionary

EPA - Environmental Protection Agency

MI NREPA - Michigan Natural Resources and Environmental Protection Act

B&R - Beckett & Raeder, Inc.

Blight

Unightly condition including the accumulation of debris, litter, rubbish, or rubble; fences characterized by holes, breaks, rot, crumbling, cracking, peeling, or rusting; landscaping that is dead, characterized by uncontrolled growth or lack of maintenance, or damaged; and any other similar conditions of disrepair and deterioration regardless of the condition of other properties in the neighborhood. (Lincoln, Nebr., APA)

Buffer (also screening)

A strip of land, fence, or border of trees, etc., between one use and another, which may or may not have trees and shrubs planted for screening purposes, designed to set apart one use area from another. An appropriate buffer may vary depending on uses, districts, size, etc., and shall be determined by the [appropriate local board]. (Pomfret Township, N.Y., APA)

An area of land, including landscaping, berms, walls, fences, and building setbacks, that is located between land uses of different character and is intended to mitigate negative impacts of the more intense use on a residential or vacant parcel. (Dona Ana County, N.Mex., APA)

A strip of land with natural or planted vegetation located between a structure and a side or rear property line intended to separate and partially obstruct the view of two adjacent land uses or properties from one another. A buffer area may include any required screening for the site. (Charlotte, N.C., APA)

Open spaces, landscaped areas, fences, walls, berms, or any combination thereof used to physically and visually separate one use or property from another in order to mitigate the impacts of noise, light, or other nuisance. (Clarkdale, Ariz., APA)

Man-made or natural vegetated area with plantings to protect adjacent permitted residential uses from noise, odor, dust, fumes, glare, or unsightly storage of materials in commercial or industrial districts. (Rock Hall, Md., APA)

Buffer zone (also transitional zone): Districts established at or adjoining commercial-residential district boundaries to mitigate potential frictions between uses or characteristics of use. Such district regulations may provide for transitional uses, yards, heights, off-street parking, lighting, signs, buffering, or screening. (Miami, Fla, APA.)

Cottage Industry (also home-based business; home occupation)

A small, individual-owned business or concern that functions without altering the residential character of the neighborhood, and which does not create any negative impacts on the public health, safety, and general welfare of the adjacent property owners. (Dona Ana County, N.Mex, APA.)

A business in a residential area conducted primarily by the residents of the property manufacturing artistic, handicraft, and other craft items. (Monterey County, Calif., APA)

A processing, assembling, packaging, or storage industry, generally employing fewer than 20 persons, conducted wholly within an enclosed building located on a site isolated from other such uses, generating low traffic volumes and with little or no noise, smoke, odor, dust, glare, or vibration detectable at any property line. (Multnomah County, Ore., APA)

A use conducted for the generation of revenue entirely within a dwelling, or in an accessory structure located on the same lot or tract as a dwelling, which complies with the requirements of [local code]. The use must: be clearly incidental and secondary to the use of the property for residential purposes; not change the character of the structure or area; or have any exterior evidence of the workshop. Home workshops are intended to be limited to low intensity uses that produce or repair a product, but can be operated in such a way that they do not adversely affect adjacent properties. (Fort Wayne, Ind., APA)

Conservation Easements

A nonpossessory interest in real property imposing limitations or affirmative obligations, the purposes of which include retaining or protecting natural, scenic, or open space values of real property; assuring its availability for agricultural, forest, recreational, or open space use; protecting natural resources; or maintaining air or water quality. (Muskegon, Mich., APA)

A nonpossessory interest in land that restricts the manner in which the land may be developed in an effort to conserve natural resources for future use. (Rock Hall, Md., APA)

A nonpossessory interest of a holder in real property imposing limitations or affirmative obligations for conservation purposes or to preserve the historical, architectural, archaeological, or cultural aspects of real property. (Concord, N.C., APA)

An easement intended to protect, preserve, and conserve a natural feature, which shall prohibit the construction of any buildings or structures within the easement and shall prohibit the removal of all vegetation, except that which is necessary for protecting the public health and safety and/or according to an approved forest management plan, where required. (Wayne County, Ohio, APA)

Dark Sky Provisions

An ordinance or portion thereof designed to protect and promote the public health, safety and welfare, the quality of life, and the ability to view the night sky, by establishing regulations and a process of review for exterior lighting. (Ketchum, Idaho, B&R)

Existing Land Use Map

A map depicting the use of each parcel at the time of the writing of a master plan. (B&R)

Future Land Use Map

A map depicting the intended land use in each area of a jurisdiction. (B&R)

Impervious Surface

Any hard-surfaced, man-made area that does not readily absorb or retain water, including but not limited to building roofs, parking and driveway areas, graveled areas, sidewalks, and paved recreation areas. (Lake County, Ill., APA)

Any nonvertical surface artificially covered or hardened so as to prevent or impede the percolation of water into the soil mantle, including but not limited to roof tops excepting eaves, swimming pools, paved or graveled roads, and walkways or parking areas and excluding landscaping, surface water retention/detention facilities, access easements serving neighboring property, and driveways to the extent that they extend beyond the street setback due to location within an access panhandle or due to the application of [county] requirements to site features over which the applicant has no control. (King County, Wash., APA)

Any material that substantially reduces or prevents the infiltration of stormwater into previously undeveloped land. "Impervious area" shall include graveled driveways and parking areas. (Sandy, Ore., APA)

A surface consisting of asphalt, concrete, roofing material, brick, paving block, plastic, or other similar material which does not readily absorb water. (Bayfield County, Wisc., APA)

Any material which prevents, impedes, or slows infiltration or absorption of storm water directly into the ground at the rate of absorption of vegetation-bearing soils, including building, asphalt, concrete, gravel, and other surfaces. (Traverse City, Mich., APA)

Low Impact Development

An approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. (EPA)

Open Space

land free of human structures, including non-permeable surface coverings to be used for parking. Open space may be privately owned and used for agriculture, forestry, or other commercial, recreational or aesthetic purposes. Open space may also be publicly owned land for parks or resource preservation. (EPA)

Overlay zoning district

An area where certain additional requirements are superimposed upon a base zoning district or underlying district and where the requirements of the base or underlying district may or may not be altered. (Milwaukee, Wisc., APA)

A special district or zone which addresses special land use circumstances or environmental safeguards and is superimposed over the underlying existing zoning districts. Permitted uses in the underlying zoning district shall continue subject to compliance with the regulations of the overlay zone or district. (Merrimack, N.H., APA)

A zoning district to be mapped as an overlay to a use district and which modifies or supplements the regulations of the general district in recognition of distinguishing circumstances such as historic preservation, wellhead protection, floodplain or unit development while maintaining the character and purposes of the general use district area over which it is superimposed. (Lancaster, Ohio, APA)

Provides for the possibility of superimposing certain additional requirements upon a basic use zoning district without disturbing the requirements of the basic use district. In the instance of conflicting requirements, the stricter of the conflicting requirement shall apply. (Racine County, Wisc., APA)

A district established by ordinance to prescribe special regulations to be applied to a site in combination with the underlying or base district. (Blacksburg, Va., APA)

Zoning districts that extend on top of more than one base zoning district and are intended to protect certain critical

features and resources. Where the standards of the overlay and base zoning district are different, the more restrictive standards shall apply. (Hilton Head, S.C., APA)

Screening (also berm; buffer; fence; visual obstruction)

(1) A method of visually shielding or obscuring one abutting or nearby structure or use from another by fencing, walls, berms, or densely planted vegetation; and (2) the removal of relatively coarse floating or suspended solids by straining through racks or screens. (Siskiyou County, Calif., APA)

A method of visually shielding or obscuring an abutting or nearby use or structure from another by fencing, walls, berms, or densely planted vegetation. (Clarkdale, Ariz., APA)

The treatment created with landscaping or a decorative two-dimensional structure to visually conceal an area or on-site utilitarian use that is considered unattractive. (Burien, Wash., APA)

Sedimentation Control Ordinance

An ordinance or portion thereof designed to manage the effects solid particulate matter, including both mineral and organic matter, that is in suspension in water, is being transported, or has been removed from its site of origin by the actions of wind, water, or gravity and has been deposited elsewhere. (MI NREPA part 91)

Sense of Place (also community character; community of place)

The constructed and natural landmarks and social and economic surroundings that cause someone to identify with a particular place or community. (Wisconsin Department of Natural Resources, APA)

The characteristics of a location that make it readily recognizable as being unique and different from its surroundings and that provides a feeling of belonging to or being identified with that particular place. (Scottsdale, Ariz., APA)

Environmentally Sensitive Areas

Environmentally sensitive areas include important natural resources such as sensitive topographic features (i.e. steep slopes (>15%)), geologic/geomorphic formations, sinkholes and karst terrain; scenic vistas/overlooks/lookouts; and public and private forest and woodlands. These areas also include wildlife management areas/natural areas designated for the protection of wild animals, within which hunting and fishing are either prohibited or strictly controlled. Identification of environmentally sensitive areas in your community can assist the community protect these important resources. (EPA)

Setback (also lot definitions)

The minimum distance by which any building or structure must be separated from a street right-of-way or lot line. (Blacksburg, Va., APA)

The required distance between every structure and the lot lines of the lot on which it is located. (Doylestown, Ohio, APA)

The distance between a street line and the front building line of a principal building or structure, projected to the side lines of the lot and including driveways and parking areas, except where otherwise restricted by this ordinance. (Duluth, Ga., APA)

Erosion

The removal of soil through the actions of water or wind. (APA)

The detachment and movement of soil or rock fragments, or the wearing away of the land surface by water, wind, ice, and gravity. (Champaign, Ill., APA)

The general process by which soils are removed by flowing surface or subsurface water or by wind. (St. Paul, Minn., APA)

The process by which soil particles are mobilized and transported by natural agents such as wind, rainsplash, frost action, or surface water flow. (Burien, Wash., APA)

Detachment and movement of soil, rock fragments, refuse, or any other material, organic or inorganic. (Sandy, Ore., APA)

The detachment and movement of soil, sediment, or rock fragments by water, wind, ice, or gravity. (Cudahy, Wisc., APA)

The wearing away of the ground surface as a result of the movement of wind, water, ice, and/or land disturbance activities. (Minneapolis, Minn., APA)

The wearing away of land by the action of wind, water, gravity or a combination thereof. (Grand Traverse County, Mich., APA)

Stormwater Management (also drainage)

Any stormwater management technique, apparatus, or facility that controls or manages the path, storage, or rate of release of stormwater runoff. Such facilities may include storm sewers, retention or detention basins, drainage channels, drainage swales, inlet or outlet structures, or other similar facilities. (Champaign, Ill., APA)

The collecting, conveyance, channeling, holding, retaining, detaining, infiltrating, diverting, treating, or filtering of surface water, ground water, and/or runoff, together with applicable managerial (nonstructural) measures. (Redmond, Wash., APA)

The system, or combination of systems, designed to treat stormwater, or collect, convey, channel, hold, inhibit, or divert the movement of stormwater on, through, and from a site. (Temple Terrace, Fla., APA)

Vegetative Buffer (also riparian)

An area extending landward from the ordinary high-water mark of a lake or stream and/or from the edge of wetland that provides adequate soil conditions and native vegetation for the performance of the basic functional properties of a stream corridor and other hydrologically related critical areas. . . . (Yakima County, Wash., APA)

Viewshed

The area within view from a defined observation point. (California Planning Roundtable, APA)

A visually sensitive area that is visible from a defined observation point. (Loveland, Colo., APA)

Zoning District (also base zoning district; land-use classification)

A section of the city in which zoning regulations and standards are uniform. (Wood River, Ill., APA)

Any district delineated on the official zoning district map under the terms and provisions of this code or which may hereinafter be created subsequent to the enactment of this code for which regulations governing the area, height, use of buildings, or use of land, and other regulations relating to development or maintenance of existing uses or structures, are uniform. (Hedwig Village, Tex., APA)

An area or areas within the limits of the city for which the regulations and requirements governing use, lot, and size of building and premises are uniform. (Hopkins, Minn., APA)

Any section, sections, or divisions of the city of which the regulations governing the use of land, density, bulk, height,

and coverage of buildings and other structures are uniform. (Cabot, Ark., APA)

A land use area or zone established by this title for the designated intent. (Sandy, Ore., APA)

A designated area of the territory of the city within which certain uniform zoning regulations and requirements, or various combinations thereof, apply as set forth in this title. (Santa Rosa, Calif., APA)

A part, zone, or geographic area within the city or under its extraterritorial jurisdiction within which certain zoning or development regulations apply. (North Liberty, Iowa, APA)

A portion of the city within which certain uses of land and buildings are permitted, and certain other uses of land and buildings are prohibited, or within which certain yards and other open spaces are required, or within which certain lot areas are established, or within which certain height limits are required for buildings, or within which a combination of such aforesaid regulations are applied, all as set forth and specified in this title, or any of the districts with which any combining regulations are combined. (Richland, Wash., APA)

Zoning Map (also official map)

A map that graphically shows all zoning district boundaries and classifications within the city, as contained within the zoning code, which is signed by the community development director and on file in the planning department. (Escondido, Calif., APA)

The map adopted as an ordinance by the municipality that delineates the extent of each district or zone established in the zoning ordinance. (Grand Forks, N.Dak., APA)

The map or maps that are a part of this zoning code and that delineate the boundaries of all mapped zoning districts within the physical boundary of the city. (Newport, R.I., APA)

The map and any amendments thereto designating the zoning districts, incorporated into this ordinance by reference. (Wood River, Ill., APA)

The map delineating the boundaries of zones which, along with the zoning text, comprises the zoning ordinance. (North Liberty, Iowa, APA)

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LAKES TO LAND REGIONAL INITIATIVE

Introduction



Why a collaborative master plan?

Residents of 16 communities along the State of Michigan's northwestern coast have decided to join forces in order to commandeer their future and set a course to navigate their growth and development together.

The purpose

Michigan has never seen collaboration like this before.

A project that began as five townships striving for better coordination has expanded into the largest planning effort of its kind in the state. Ten townships, four villages, and two cities have come together to define themselves as belonging to one cohesive region with the potential to become more than the sum of its parts.

The unique formation represented in this report is designed to plan for the region while maintaining communities' individual identities. By undertaking the collaborative master planning process, residents have discovered ways to work together as a united front, sharing assets and collaborating

on ideas to achieve economic well-being and excellent quality of life. We can identify the role that our communities' unique assets play within both the region and the state, then use that understanding to shape the future we will all share.

The strategies

- Develop individual master plans for each community that doesn't have one;
- Identify regional collaborative opportunities;
- Identify cross-community collaborative opportunities;
- Develop community-specific and regional implementation strategies;
- Develop the organizational capacity necessary to implement the plan.

What is a master plan?

“Master plan” is a serious-sounding name, and indeed it’s a serious document. Intended to provide a clearly articulated vision of the community 15 to 20 years into the future, it either succinctly describes persistent concerns or defines the development of the “ideal” community. It also contains a guide to achieve that development based on careful study of many factors, and it can be legally referenced in land use decisions.

But before it’s all those things, a master plan is a dream.

The process of master planning begins with dreaming about how a community could be a better place to live. Citizens gather and share perspectives on their community’s strengths, weaknesses, opportunities, and threats. We talk about what the physical spaces in a community mean to us, how we would like to use them, and what we could do to make them better. We consider the challenges facing us and the organizations we could enlist to help overcome those challenges.

These are issues which must be considered for the success of any community, and the residents of the communities participating in this collaboration have decided to take it into our own hands. We know that unless we take control of our destiny, individually and as a region, our dreams may be left to debate.

What is a collaborative master plan?

For the purposes of this planning process, a collaborative master plan is a document that contains an articulated vision, with defined goals and strategies, for the future development of a geographic area based upon input from members of more than one community.

Basically, it’s the same plan we just talked about—now with all our neighbors on board.

Planning at the local level is usually by definition limited to one community, but collaborative master plans have the luxury of erasing municipal boundaries to view the region as a whole. They are also synonymous with increasingly syllabic names like “regional strategic growth planning” or “regional asset-based land use development planning.”

This collaborative master plan contains a “statutorily compliant” (see next page for legalese) master plan for our unique community, along with a regional component that seeks to understand collaborative opportunities, goals, and strategies.

But...why?

The benefits of having an updated master plan are that it will:

- provide a point of reference for all land use decisions.
- prevent arbitrary or capricious decision-making.
- ensure wise use of resources.
- assist in preserving community assets.
- provide a sound basis for funding opportunities.

The benefits of collaborative master planning include:

- facilitating partnership within a geographical region.
- providing consistency between communities.
- helping communities identify and shares resources.
- protecting land use types and natural resource assets that cross municipal boundaries.
- providing a well-documented and justified basis for funding requests.
- understanding possible opportunities to achieve economies of scale.
- capitalizing on existing assets.
- understanding how sustainability

plays a role in maintaining a high quality of life for current and future generations.



1.1 The Lakes to Land Regional Initiative
Leadership Team

History of the regional initiative: What came before...

In the beginning, there were five.

As 2011 drew to a close, informal discussions among leaders in several communities had coalesced into a decision to forge ahead with a bold new idea: five neighboring townships would join forces to produce a cohesive set of master plans and implementation strategies. Initial assistance came from The Alliance for Economic Success (AES), an economic development organization serving Manistee County and the surrounding area that provides neutral third-party convener and facilitation services to develop organizational capacities and relationships. AES secured funding from the Michigan Department of Treasury State Economic Incentive Program, revised in 2011 to place heavy emphasis on coordination among communities, and the C.S. Mott Foundation. The beginnings of the Leadership Team were formed next and charged with the competitive bidding, interviewing, and selection of a professional planning consultant to guide and facilitate the process.

The five original communities quickly found company. Neighboring townships which did not have master plans seized the opportunity to create one, and communities which did have master plans asked to participate in the implementation phase. Within eight months, the collaboration had tripled in size to encompass 16 communities, signaling a hunger for cooperation. The end result is a defined region with potential collaborative partners and the possibility for greater success.

...and what we did next

The process of developing the collaborative and individual master plans began with the formal development of a Leadership Team. Consisting of representatives from each participating community, this team constituted the linchpin of the Initiative: members provided guidance to the consultants, acted as liaisons with their respective communities, and worked with their elected officials. Their first two action items were the selection of a name for the project and the decision to reach out and invite neighboring communities to join.

Next, the new Lakes to Land Initiative, or L2L as it is affectionately called, launched a media campaign. The lakestoland.org website was developed, Facebook and Twitter accounts were set up, a centralized phone number was dedicated, and email addresses of interested citizens were collected to begin a distribution list. Press releases kept local news outlets updated, and postcards were sent to every taxpayer within the participating communities inviting them to the visioning sessions. Leadership Team members hung posters advertising the visioning sessions and met with citizens face to face—often the most effective communication method available.

The visioning sessions, described in detail in Tab 3, were held throughout the summer in an effort to attract as many seasonal and non-seasonal residents as possible. Each participating community held a session, and two “make-up” visioning sessions were held for members of all communities who were not able to

Making it legal

According to the Michigan Planning Enabling Act of 2008, the general purpose of a master plan is to guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all of the following criteria:

- is coordinated, adjusted, harmonious, efficient, and economical.
- considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development.
- will, in accordance with present and future needs, best promote public health, safety, morals, order, convenience, prosperity and general welfare.

It also has to talk about at least one of the following things:

- a system of transportation to lessen congestion on streets;
- safety from fire and other dangers;
- light and air;
- healthful and convenient distribution of population;
- good civic design and arrangement and wise and efficient expenditure of public funds;
- public utilities such as sewage disposal and water supply and other public improvements;
- recreation;
- the use of resources in accordance with their character and adaptability.

attend their own sessions. Visioning sessions were well attended, with some communities achieving over 100 individuals.

At the same time, presentations were given to individual planning commissions and regional conferences such as the Benzie County Water Festival, and Leadership Team members actively worked at inviting their neighboring communities to join the Initiative.

As the Initiative grew, it caught the attention of Michigan Governor Rick Snyder. Having recently begun a Placemaking Initiative connecting community development with economic development, Governor Snyder asked to audit the Lakes to Land Regional Initiative in hopes of developing strategies that could be replicated elsewhere in the State. Shortly thereafter, the Michigan Department of Natural Resources selected Lakes to Land Regional Initiative as a pilot project to assist with its own internal efforts in placemaking throughout the State. Meetings were held with representatives from Michigan State Housing Development Authority, Michigan Economic Development Corporation, and Department of Agriculture and Rural Development, all charged with helping Governor Snyder further the State's Placemaking Initiative. Other pertinent organizations which attended the Leadership Team meetings included the Grand Traverse Regional Land Conservancy, Benzie and Manistee County planning services, Michigan State University Extension Services, Hart Leadership Development, and the Northwest Michigan Council of Governments.

Once all of the communities had master plan drafts, about 60 leadership team members, trustees, planning commissioners, and interested citizens attended a "Priority Sharing" meeting to discuss their communities' pertinent issues. The 69 submitted priorities were arranged into ten themes which could then serve as a basis for the formation of work committees. This process illustrated clearly the potential benefits of collaboration. A series of sessions was conducted during the master plans' public period that focused on capacity building and learning how to work with funders to maximize opportunities for implementation.

Participating

Communities which are developing a master plan as part of the Lakes to Land Regional Initiative:

Arcadia Township
 Bear Lake Township
 Village of Bear Lake
 Crystal Lake Township
 Gilmore Township
 Village of Honor
 Joyfield Township
 Manistee Township
 Pleasanton Township

Communities which have recently developed a master plan and wish to collaborate with regional neighbors on implementation:

Village of Elberta
 City of Frankfort
 Lake Township
 City of Manistee
 Onkama Community
 (Village and Township)

communities

The Lakes to Land communities are situated along the M-22 and US-31 corridors in Northwestern Michigan, stretching from the northern tip of Lake Township in Benzie County to the southern boundary of Manistee Township in Manistee County. It encompasses communities east of US-31 but adjacent to the highway, then continues west to the Lake Michigan shore.

In it are villages, cities, and townships displaying a range of character from rural agriculture to urbanized centers. Communities are adjacent to each other, have similar socio-economic statuses, and share geographic attributes such as natural resources.

All communities in the geographic area were informed of the Initiative and invited to join.

Haven't I seen you before?

Some of the communities have previously collaborated together. Onekama Township and the Village of Onekama recently developed a joint master plan to facilitate the creation of one greater Onekama municipality. Pleasanton Township, Bear Lake Township, and the Village of Bear Lake attempted to create a joint planning commission and master plan in 2007. The communities in the northern section of the region have had an opportunity to collaborate by developing a regional trail system that spans a number of municipalities.

Historical settlements

Lumber and railroads were defining influences on the communities in the Lakes to Land region—many towns grew up around sawmills or train stops, nourished by the economic lifeblood such enterprises provided. As the fortunes of those industries went, so too did the fate of a few of the settlements.

Descriptions of two such “ghost towns” in Benzie County date from the year 1877. Gilmore was “located in Blaine Township on the shore of Lake Michigan, 12 miles south of Benzonia. Settled in 1850. Wood and logs shipped. Tri-weekly stage to Frankfort and Pier Point. George B. Farley, Postmaster and general store.” A post office in Joyfield Township, 10 miles south of Benzonia, was described as “located on a fruit belt, mail by stage 4 times weekly. Amazia Joy, Postmaster and Pastor of the Baptist Church.”

In 1883 Lake Township, the town of Edgewater was established on the northwest shore of Platte Lake and Aral settled in near Otter Creek. A narrow gauge railroad was built to carry lumber from the Platte Lumber Company to Lake Michigan, with docks at the shore. The Otter Creek Lumber Company, founded in 1891, reportedly shipped extensive material for the rebuilding of Chicago after the great fire of 1871. Lumbering took most of the maple, ash, oak, elm,

basswood, hemlock, and beech trees in the township, and the towns were gone by 1910.

In Manistee County, the town of Pleasanton, also called Saile Station, had 350 people in 1870. Eight miles east of Pierport and 25 miles north of Manistee, it was home to bucket manufacturers D. and R. Lumley along with a furniture maker, a basket manufacturer, and a blacksmith. Timber, potatoes, butter, and sugar were shipped out. The little hamlet was complete with two churches, a general store, and a school superintendent. Stage travel went to Manistee, Benzonia, and Traverse City, and in 1917 modernity arrived: it had telephone service and was listed as a stop on the Arcadia & Betsie River Railway. Further up on the A&BRR was a little town called Butwell, at the corner of Butwell and Taylor Roads, and all we know about a settlement named Burnham is that it was just due north of Arcadia on the county line.

Arcadia Township

The Arcadia & Betsie River Railroad, terminating in Arcadia, had extended over 17 miles to connect with the Chicago and West Michigan Railway by 1895. The line maintained an influx of goods to the area and allowed crop transportation from the fertile fields of the township to the markets of Chicago. There was also a good market for ice, which was cut from Bear Lake and hauled by wagon to A&BRR's Sorenson Station just east of Pleasanton Township from about 1890 until 1937. The Arcadia Furniture Factory on the north end of Bar Lake manufactured both furniture and fine veneers to be sold in Macy's in New York City. The Village of Arcadia, originally named Starkeville after lumberman Henry



1.2 Arcadia Furniture Factory

Constructed in 1906 after the Starke Sawmill burned down.
Photo: Arcadia Historical Museum.

Starke, changed its moniker to match the township in 1870. Anne M. Dempster opened the post office in 1870. Just north of town was a notable "fancy house," which soared in popularity when proprietors struck upon the novel idea of sending a wagon to Arcadia's pier to greet incoming sailors.

Bear Lake Township and the Village of Bear Lake

The earliest inhabitants of the area now encompassed by Bear Lake Township were the Odawa, marking their legacy by leaving behind an impressive number of artifacts. It is thought a burial ground exists near Pierport's artesian well, and a great battle may have taken place near "Brown town," where farmers reported clearing their fields and discovering large numbers of arrowheads and even tomahawks. A silver crucifix found in the area and dated 1664 indicates early contact with Jesuit missionaries, perhaps even explorer Father Jacques Marquette. The first non-Native settlers included Russell Smith, who built his homestead in 1863 on the south side of Bear Lake with the idea of a future village and offered up 12 acres to anyone who would come in and start one. John S. Carpenter and Eliphate Harrington



1.3 Bear Lake School

Legend has it that Crystal Lake was formed by Paul Bunyan, a mighty lumberjack whose mighty big boot carved a footprint along the shore of Lake Michigan.

took him up, building a small store, a boarding house, a steam saw, and grist mill before selling out a few years later to George W. and David H. Hopkins. The Village of Bear Lake was incorporated in 1893.

On June 1, 1876, the Bear Lake Tram Railway began using horse-drawn freight cars to connect the growing village with the docks at Pierport, throwing the gateway to the rich markets of Milwaukee and Chicago open to full throttle. The last of the lumber soon slipped out, followed at close quarters by some early settlers including George Hopkins. By the 1930s, the freshly-cleared land had been put to use producing admirable quantities of blueberries, apples, and cherries. Many local families found seasonal employment on the farms, and the Little River Band of Ottawa Indians has noted the Odawa summer camp located along the shores of Bear Lake during the 1930s through 1950s.

Blaine Township

Blaine Township was founded in 1851 as the location of the Loyed & Thomas sawmill near Herring Lake. But its raison d'être didn't last long: an unusually high water level in 1862 destroyed the dam across the creek, lowering Upper Herring Lake's water level by three feet and rendering the mill unsalvageable. Despite this setback, the township continued to grow, and its official organization in

1867 included the area that is now Gilmore Township. A large commercial fishery founded by John Babinaw ½ mile south of lower Herring Lake shipped thousands of tons of whitefish, herring, and trout to Chicago and Milwaukee.

Crystal Lake Township

Legend has it that Crystal Lake was formed by Paul Bunyan, a mighty lumberjack whose mighty big boot carved a footprint along the shore of Lake Michigan. The township that bears its name is not only the oldest in Benzie County, but predates the county itself by four years. Organized in 1859, Crystal Lake Township's vast area included nearly the entire county. The township's population expanded steadily, especially after the Homestead Act of 1862. One settler who stayed to raise a family was Hiram M. Spicer, a former school teacher who contracted typhus while serving in the Federal Army from 1863 to 1865 and may have moved to northern Michigan to avail himself of its renowned healthful air. Spicer became an accomplished horticulturist, and his 21-acre farm produced abundant quantities of peaches, apples, grapes, and cherries. He also served as Township Supervisor from 1874 until at least 1884. He helped construct a harbor, provided most of the harbor's pilings, and was twice nominated for the state legislature.

City of Frankfort

A Michigan Historical Marker on the north side of the channel connecting Betsie Lake with Lake Michigan proclaims a piece of Frankfort's earliest history: it may have been the site where the famed Father Marquette died in 1675. In 1852, Joseph Oliver bought 14 acres between Lake Aux Becs Scies—French for “of sawbill ducks”—and Lake Michigan to become the first settler of what would become Frankfort. Three years later, a schooner owned by investor George W. Tift from Cleveland blew into the little-known harbor seeking refuge from a storm; Tift promptly bought a thousand acres surrounding the lake and sold it to a development company from Detroit. The first township meeting of the original, massive Crystal Lake Township was held in Frankfort in 1859, and the town became Benzie's county seat ten years later. By 1867, the United States government had taken notice of the Aux Becs Scies harbor and commenced improvements. Former Congressman and Montana territorial governor Jim Ashley capped off the northwestern journey of his Ann Arbor Railroad with the 1892 purchase of a small local line that connected it to Lake Michigan at Frankfort, and then the company built the lavish 250-room Royal Frontenac Hotel to attract tourists by both rail and water.

Village of Honor

About the first of April, 1885, Guelph Patent Cask Company foreman E.T. Henry arrived on the grounds with a crew of men and a small portable sawmill and began to clear a place for a set of camps, naming the settlement “Honor” in compliment to the baby



1.4 Frankfort harbor entrance



1.5 Downtown Frankfort, 1940



1.6 Platte River Trout Pond rearing grounds before the state hatchery

daughter of Guelph general manager J.A. Gifford. Hardly a quarter-century later, the 600-resident village was made the county seat by popular vote and later became the site of a well-known and heavily attended annual reunion of Civil War vets (probably due in part to the name of the town—what veteran's group wouldn't want to meet in Honor?). The Seymour and Peck Company, successor to the Guelph Patent Cask Company, shipped veneer to Chicago while the Desmond Chemical Company Plant at Carter Siding converting cordwood into charcoal, alcohol, acetate and other wood derivatives. In 1953, Honor saw the opening of the Cherry Bowl Drive-In Theater, now lovingly restored and one of the oldest continually operating drive-in theaters in America, and Coho salmon were introduced to the area in 1966 through the Platte River Fish Hatchery.

Gilmore Township and the Village of Elberta

At just 7.25 square miles, Gilmore Township is the smallest in Michigan. The area was first settled in 1855 by Joseph Robar and John B. Dory, and the first improvements to Gilmore Township's harbor on beautiful Betsie Bay occurred in 1859. The harbor was deepened and piers were constructed; these proved vital to the fledgling settlement's future growth, which would depend heavily upon the shipping industry. In 1892, the Ann Arbor Railroad launched the world's first car-ferry service from Betsie Bay. Rail cars carrying lumber, coal, and grain now had a rapid shortcut to the shores of Wisconsin.

Elberta, the only village in Gilmore Township, was first settled in 1855. Early luminaries include L.W. Crane, lumberman and founder of the

local sawmill, built in 1872, and James Gillmore, Benzie County's first newspaper publisher and the gentleman for whom the township was named. The home of a sawmill, a broom handle factory, and Frankfort Furnace, it shipped out wood, lumber, handles, bark, and pig iron. In 1887, the United States Coast Guard installed a Life-Saving Station on Elberta's Lake Michigan shore that operated for nearly 50 years until a larger new facility was built about a half mile away.

Joyfield Township

Reverend Amariah Joy, a Baptist minister from Putney, Vermont, filed Benzie County's first homestead claim on July 11, 1863 and quickly discovered the realities of life in the wilderness: few people and even fewer roads. But he and his wife Frances settled their homestead of 160 acres and Joy went on to become the first

1.7 A car ferry returns to Elberta, 1930s



1.8 Manistee Historic Salt and Logging Operations



Unless otherwise noted, historical photos are from the UpNorth Memories online collection by Don Harrison stores.ebay.com/UpNorth-Memories-Collection

postmaster and then supervisor of the township that bears his name. He was succeeded first by his son and a year later by Charles H. Palmer, a New York teacher who had traveled to Ecuador and California before enlisting in the Civil War. After the war, Palmer made his Michigan homestead claim in November 1866 and resumed teaching while he cleared his land for planting. Eventually his farm boasted a respectable 30 cultivated acres, including 1,500 fruit trees and a unique specialty in nut cultivation.

Lake Township

The Platte River Campground at M-22 on the Sleeping Bear Dunes National Lakeshore has a loooooong history: artifacts dating from the period between 600 BC and 1640 AD suggest a little settlement, smaller than a village, in which Natives used the area on a seasonal basis “actually very much like what campers are doing today.” By 1873, the corner of Michigan made up of forests, the lower Platte River, Otter Creek, Bass Lake, Otter Lake, Long Lake, Platte Lake, Little Platte Lake, Loon Lake (originally Round Lake), and part of Crystal Lake became known quite fittingly as Lake Township. The lighthouse at Point Betsie was lit in 1858, and Alonzo J. Slyfield served for 22 years as its keeper. As the lumber boom wound down at the turn of the century, resorts became the other economic staple for fishing, hunting, and summer guests. Chimney Corners opened in 1910, and Crystal Downs—known as one of the best golf courses in the US—was established in 1927.



1.9 Lake view from the top of Prospect Ave., Onekama

City of Manistee

The name “Manistee” is from an Ojibwa word first applied to the principal river of the county. The derivation is not certain, but it may be from *ministigweyaa*, “river with islands at its mouth.” Other sources claim that it was an Ojibwe term meaning “spirit of the woods.”

In 1841, the John Stronach family constructed a sawmill on Manistee Lake and later another on the Manistee River. By 1849, more settlers were arriving and the reservation was dismantled, with land given to settlers. The city was set back in 1871 when a fire swept through and destroyed over one-half of the city’s buildings. Much was rebuilt, this time of brick.

In 1881, salt was discovered beneath Manistee and another industry was born. By 1885, there were forty sawmills operating and by the end of the century the population reached 14,260. Manistee claimed to have more millionaires per capita than any other city in the United States. They also had city-provided fire protection, a parks department, water, sewer and street lighting.

After 150 years Manistee County has both changed and remained the same. The early boom years of lumbering and exhaustive agriculture have evolved into a stable, diversified industrial base and a top fruit-producing agricultural center. It is the beauty and natural wonder that abounds in the region’s forests, lakes and rivers that remain a constant factor and will always make Manistee County a special place to live and visit.

Manistee Township

Although Manistee County was “set off” as early as 1840, giving it a name and a geographic region, it wasn’t officially “organized” until the state legislature divided it into three townships in 1855: Stronach, Brown, and Manistee. The tax rolls of that year showed over half the county’s valuation in Manistee Township, situated along the Lake Michigan shoreline and host to the Manistee River’s westward journey into Manistee Lake.

Two sawmills with surrounding dwellings lined the lake and eventually grew into the communities of Eastlake and Parkdale. The adjacent farms were among the most successful in the county, in part because of the ready market in the nearby city. The Manistee National Forest brushes the southeast corner of the township, blanketing the land south of the Manistee River and about two miles inland of Eastlake with trees regrown in the wake of the logging industry.

Onkama Township

When Adam Stronach sought a place to build a sawmill in 1845, he knew

the wooded acres along Portage Lake would be ideal. The area was known to settlers as early as 1840 by its Odawa name, onekamenk, or “portage.”

Although its inhabitants called it by its English name for a time, there was another Portage, Michigan and the townspeople voted for a reversion to its historic name of Onkama in 1871. Though the lumber industry was crucial to early development, sawmills and citizens didn’t always mix. Residents fed up with the unnaturally high water

areas were now open to settlement, and the town largely relocated.

Pleasanton Township

Perhaps it was the verdant fields and forests that attracted George B. Pierce, a retired minister seeking a healthy atmosphere on a new frontier, to what was then Brown Township in 1863. When Pleasanton was established separately the following year, he became its first postmaster. By 1870,

Pleasanton Township was home to 65 families, the first shop and school were established, and the first sawmill would arrive in 1871. As settlement surrounding Bear Lake grew just a mile south of the township’s border, residents took advantage of new markets for local timber and forest products. Life became increasingly

By one account, a reveler at a celebration of the new post office took the occasion to hitch his ox to a log in the dam and pull it out, lowering the level of Portage Lake within a few hours and washing much of old Portage out to Lake Michigan.

levels in Portage Lake, raised to power the sawmill, took matters into their own hands. By one account, a reveler at a celebration of the new post office took the occasion to hitch his ox to a log in the dam and pull it out, lowering the level of Portage Lake within a few hours and washing much of old Portage out to Lake Michigan. Portage Creek dried out, previously submerged

civilized for Pleasanton’s inhabitants. By 1880, the community would boast two schools, a public library, a fenced cemetery, and two churches. A local resident was quoted in August 1877 as saying, “[W]hoever chronicles the history of Pleasanton ten years hence will no doubt inform the world that it is one of the most flourishing towns in the State of Michigan.”



LAKES TO LAND REGIONAL INITIATIVE

Context



Regional Setting

Located a little over one hour southwest of Traverse City and two hours north of Muskegon, the Lakes to Land region sits nestled along the shores of Lake Michigan. Accessible from the north or south by M-22 and US-31, and from the east or west by M-55 and M-115, smaller county roads traversing its interior pass through fruit farms, small towns, and scenic vistas.

Although the regional setting of this collaborative master plan is diverse, the communities within it share similar topography, land uses, and economic bases along with a fierce sense of place. Many know the area as unique, peaceful, and possessing a tranquility unparalleled in Michigan. Bluffs beckon from the shores of Lake Michigan with an invitation to stop and watch the amber sunsets over turquoise water. Inland lakes dot the area, some providing safe harbor from Lake Michigan for small craft use. An urban feel can be found in the more heavily populated villages and cities which make up the northern and southern portions of the region. Fine restaurants, nightlife, culture, and entertainment are plentiful. Seasonal and permanent residents alike find hospitality and fellowship.

The region's diverse economic base is comprised of small mom and pop stores, larger retail outlets, and light manufacturing. Between the urban areas to the north and south lies the agricultural stretch of the regional

economy. Fruit farms growing apples, cherries, raspberries, blueberries, and plums are plentiful; other products include maple sugar, honey, corn, and general produce. Agricultural enterprises come in all types and sizes, from non-operative acreage to organic farms to large-scale production. A growing number of farms participate in Farm To Table endeavors such as Farmer's Markets, roadside stands, U-Pick and Community Supported Agriculture arrangements.

Healthcare institutions are found in both the northern and southern portion of the geographical range, and smaller urgent care facilities dispersed throughout the core of the region. Tourism and eco-tourism are important parts of the economy as the region's assets invite visitors to play and relax. Technology has allowed an increasing number of individuals to select the region as home and then define or continue their method of employment, making home occupations important to many.



LAKES TO LAND

Area of Influence

Data Sources: State of Michigan Geographic Data Library

- Area of Influence
- Participating Communities
- Master Plan Complete
- City or Village

- County Boundary
- Township Boundary
- Major Road
- Minor Road



Area of influence

At the inception of the collaboration, the initial communities agreed to focus on a general geographic area which possessed similar qualities and faced comparable issues regarding land use and policy.



2.2 The regional view from Google Earth
Platte Lake and Crystal Lake to the north,
US-31 running down the east, Portage
Lake to the south, and Lake Michigan in
the west.

As discussed in Tab 1, formation of the Lakes to Land collaboration did not happen all at once. Seeds of this capacity to work together were planted during the writing of the Onekama-based Portage Lake Forever Watershed Plan: the township and the village came together so well that they wrote an award-winning master plan covering the entire "Onekama Community." On a roll, they then formed a Community Development Committee and began to investigate the possibility of Scenic Heritage Route designation for route M-22. This brought them outside the township's borders and to the immediate discovery that the "M-22 communities" of Arcadia, Blaine, Gilmore, Crystal Lake, and Bear Lake were not only ready to collaborate but had plans of their own in mind.

Taking a "the more, the merrier" approach, the original communities knew that they would be inviting their neighbors to join them. How, then, to strike a balance between inclusivity and manageability? Taking a cue from collaborative successes already achieved, they decided to focus on the features that had already paved the way for working together: water and transportation. This meant concentrating on the Lake Michigan shoreline communities and those adjacent to them, through

which US-31 runs. Taken together, the leadership team referred to these as the collaboration's "Area of Influence."

As we have seen, that strategy was a success. All but four of the townships signed on, and one village (Honor) decided to come on board even without its surrounding township.

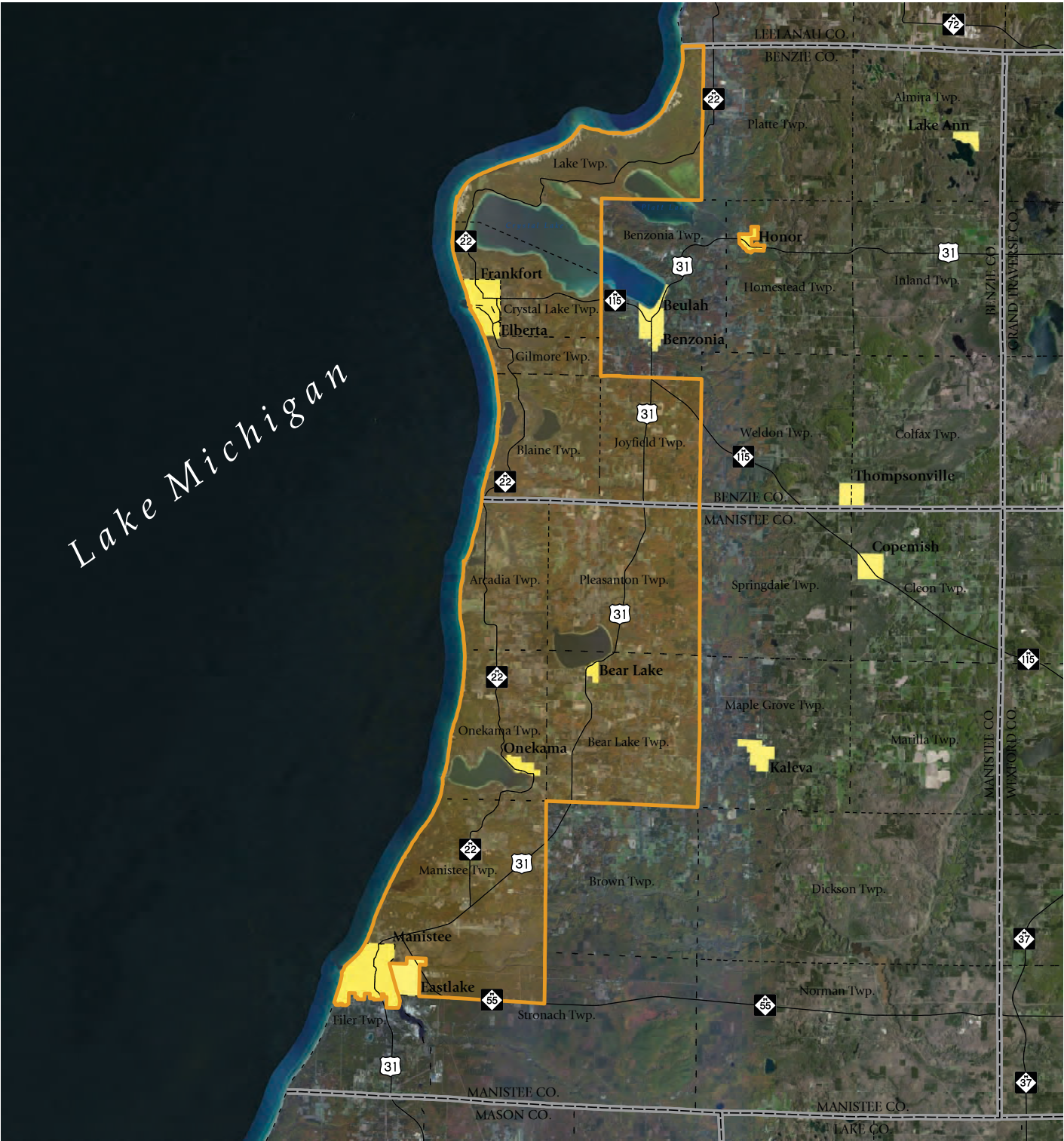
Regional location

Most of the communities within Benzie and Manistee Counties situated along the Lake Michigan shoreline are participating in the Initiative, along with several inland communities.

The initiative includes ten townships, four villages, and two cities. One of those villages – Honor – joined without the participation of surrounding Homestead Township. Manistee Township is participating without one of the two incorporated municipalities within it, the village of Eastlake. With those exceptions, every township is participating along with the incorporated municipalities within them. Crystal Lake Township is participating along with the city of Frankfort, Gilmore Township along with the village of Elberta, Bear Lake Township along with the village of Bear Lake, and the “Onekama community” of Onekama Township and the village of Onekama. The other participants are townships with no incorporated cities or villages within them: Lake, Blaine, and Joyfield Townships in Benzie County, and Arcadia and Pleasanton Townships in Manistee County. The narrative of this report consistently refers to these sixteen communities:

2.3 Table of community types

Township	Benzie County	Blaine Crystal Lake Gilmore Joyfield Lake
	Manistee County	Arcadia Bear Lake Manistee Onekama Pleasanton
City	Benzie County	City of Frankfort
	Manistee County	City of Manistee
Village	Benzie County	Elberta (Gilmore Twp) Honor (Homestead Twp)
	Manistee County	Bear Lake (Bear Lake Twp) Onekama (Onekama Twp)



LAKES TO LAND

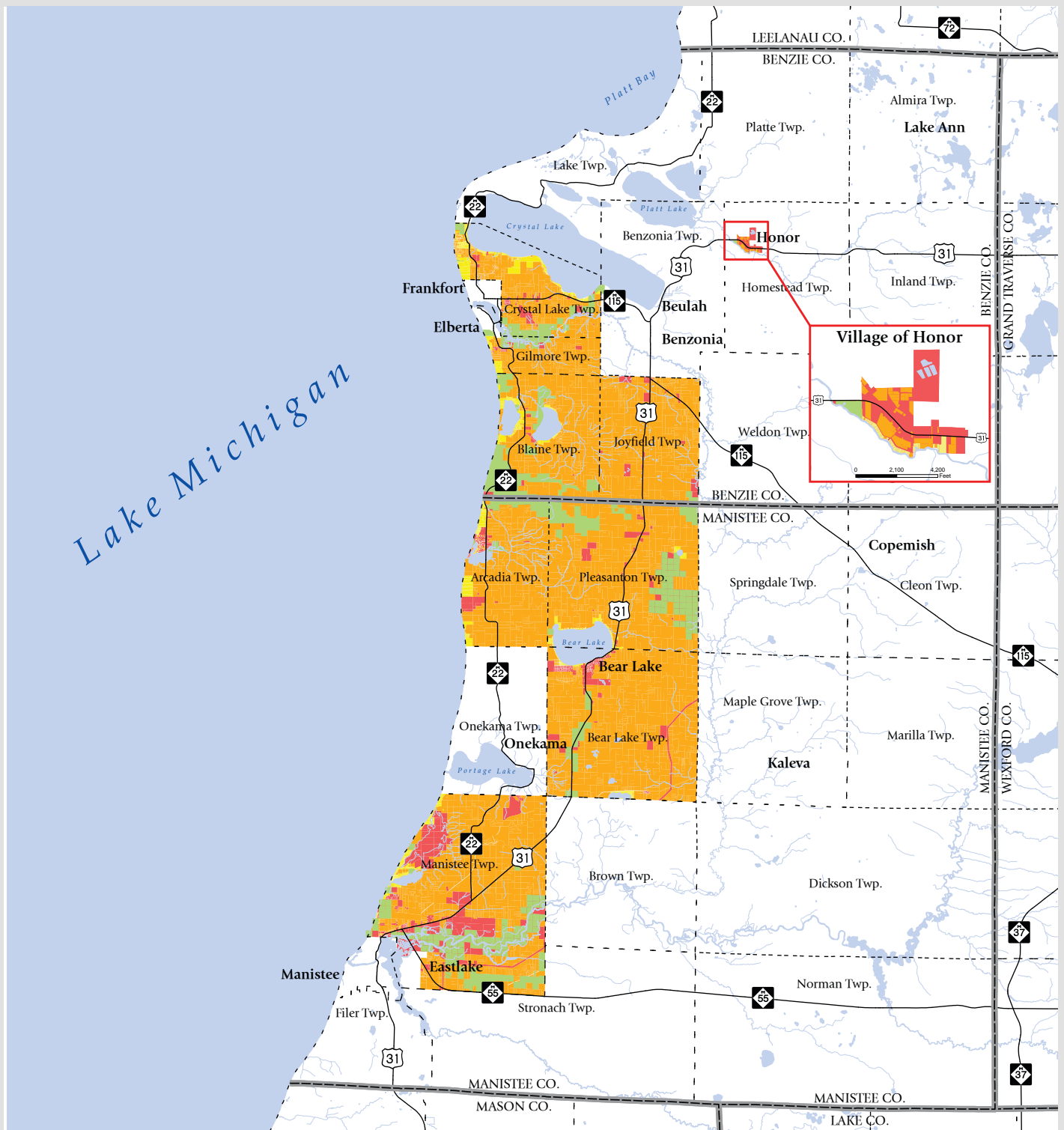
Regional Location

Data Sources: State of Michigan Geographic Data Library

- Participating Communities
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road



2.4 Regional location map



LAKES TO LAND

Regional Transect

Data Sources: State of Michigan Geographic Data Library, MDNR, Benzie and Manistee County Equalization

- County Boundary
- - - Township Boundary
- Major Road

- T1 - Natural
- T2 - Rural / Farm

- T3 - Cottage and Country
- T4 - Settlement

0 2 4 8 Miles
2.5 Transect map

Regional Transect

Shortly after the preparation of the Lakes to Land master plans began, the State of Michigan added placemaking as a component of the State's economic development strategy. Placemaking capitalizes on a local community's assets, inspiration, and potential, with the intention of creating public spaces that promote people's health, happiness, and well being.

The focus of the State's placemaking strategy is to create vibrant and economically viable places that will retain and attract talent and jobs. National trends note that younger professionals who are our up-and-coming entrepreneurs and business owners migrate to places which provide economic, social, cultural and recreational amenities. In order to consolidate limited resources, the State will likely leverage discretionary funds into communities which have the density to support a creative workforce and serve as generators for growth and investment.

To assess where these investments are likely to occur, a "transect" characterizes an area based on its natural and development elements. According to Wikipedia, "the urban-to-rural transect is an urban planning model that defines a series of zones from sparse rural farmhouses to the dense urban core. Each zone is fractal in that it contains a similar transition from the edge to the center of the neighborhood. The importance of transect planning is particularly seen as a contrast to modern Euclidean zoning and suburban development. In these patterns, large areas are dedicated to a single purpose, such as housing, offices, shopping, and they can only be accessed via major roads. The transect, by contrast, decreases the necessity for long-distance travel by any means."

The rural-urban transect includes six (6) zones from natural (T1) to urban core (T6). In the Lakes to Land region, only four (4) of the zones exist, ranging from Natural (T1) to Settlement (T4). The table on the next page describes in more detail the general characteristics found in each of the four character zones. Similarly, the map illustrates the locale of each zone based on a grouping of the future land use categories found in the nine community master plans. The result paints a picture of the Lakes to Land region as primarily Rural / Farm (T2) and Cottage and Country (T3). Only in several areas where densities range from 4 to 6 dwellings per acre are there Settlements (T4), such as the unincorporated village of Arcadia, the villages of Bear Lake, Elberta, and Onekama, and the City of Frankfort. These locales have the underpinnings to accommodate the level of economic and social activity that is envisioned in the State's placemaking initiative.

2.6 Lakes to Land transect typology

Type	General Description	Element	Local Land Use Classifications
T1 Natural	Area characterized by its unique natural resource and ecological assets and therefore considered for future special land stewardship.	Land	Recreation / Open Space Forest
		Living	
		Commerce	
T2 Rural / Farm	Farming is the dominant land use activity with some large lot residential homes	Land	Agriculture Agriculture / Rural Residential - Rural Forest
		Living	
		Commerce	
T3 Cottage and Country	This area consists of low density collections of year-round homes or seasonal cottages some of them clusters around inland lakes or along the Lake Michigan shoreline. Home occupations and outbuildings are permitted. Planting is naturalistic and setbacks are relatively deep. Blocks may be large and the roads irregular to accommodate natural conditions and topography.	Land	Residential - Resort
		Living	
		Commerce	
T4 Settlement	Traditional residential neighborhoods characterized by a grid street pattern, smaller lots with higher densities than found in other locations.	Land	Residential - Settlement Commercial Corridor Commercial Node Village Center
		Living	
		Commerce	

Element Description

Properties under the ownership or management of Federal and State Agencies and Land Conservancies with a variety of natural and sensitive landscapes.

None

None

Agricultural includes parcels used partially or wholly for agricultural operations, with or without buildings, and include the following:

(i) Farming in all its branches, including cultivating soil.

(ii) Growing and harvesting any agricultural, horticultural, or floricultural commodity.

(iii) Dairying.

(iv) Raising livestock, bees, fish, fur-bearing animals, or poultry.

(v) Turf and tree farming. Performing any practices on a farm incident to, or in conjunction with, farming operations.

Farm and non-farm related residences are also found in this category and occupy sites on less than acre to large acreage parcels between 5 and 10 acres in size.

Sporadic stores or shops which serve local residents. These are located along County roads and are not concentrated in one location to be considered a commercial node or district.

A variety of northern Michigan landscapes including rolling hills, lakeshores, meadows, forests and sensitive areas such as critical dunes and wetlands.

Residential land use found along Lake Michigan, inland lakes such as Bear Lake, Lower and Upper Herring Lakes, Arcadia Lake and Platte River, and other streams characterized by small lots. This category will contain a combination of seasonal and year-round homes.

Stores and shops dotted along County Roads, US-31 and M-22. These establishments include canoe/kayak rentals, bait shops, small grocery outlets, gas stations, art galleries and boat sales and service outlets.

Primarily developed and settled as historic villages and centers of commerce.

This land use category describes the neighborhoods of Arcadia, Elberta, Frankfort, Onkama, and Bear Lake. These neighborhoods are made up of single family homes located on lots with an average density of 4 - 6 units per acre. Homes are arranged close to the street with rear garages accessed by an alley when available. Arranged in a grid configuration, the streets are wide enough for on street parking but close enough to maintain an intimate neighborhood character. Trees and sidewalks line the streets, alleys provide rear entry to garages located in the backyard, and front porches beckon neighbors to sit and talk. A church may be found in the middle of the neighborhood along with neighborhood parks. Within walking distance to the Business district, civic, and recreational amenities, the Settlement area is the premier place to live for individuals looking for a more urban environment within view of Lake Michigan, inland lakes, and other natural resource amenities.

A variety of small stores and shops, banks, restaurants, and professional services.



Natural Assets

As the name suggests, many of the Lakes to Land region's very best assets come with the territory.

A coastal region abutting the sixth largest freshwater lake in the world could consider itself well-positioned in any reckoning of benefits, but the water resources in the L2L area extend far beyond that. Every township except Gilmore and Joyfield also hosts an inland lake, from the enormous Crystal Lake on the north end to little Bar Lake in the south. The rivers that criss-cross the area include the Big Manistee, one of the most important rivers of Michigan's lumber boom, the Betsie, and the Platte. This abundance has rightly earned the area the nickname "Water Wonderland," driving a robust tourism and recreation industry. But it also requires attendant maintenance and careful diplomacy from each of the diverse types of users on these public waters, from industrial shippers to trout anglers to stone skippers.

With water come wetlands. Once called "swampland," these hydric areas provide benefits like flood control, water cleansing, and prevention of erosion. They are so important that they are managed at the state level, meaning

that development affecting them is subject to a permit process. Historically, Michigan's original forests built a respectable proportion of the midwest and then gave way to agriculture on the soils that would support it. The soils that wouldn't frequently reverted to government control through delinquent taxes, leading directly to the assemblage of large parcels under federal and state control which then became conservation areas. These forests and preserves attract tourists and contribute to the rural scenery of the region, impacts which must be balanced against the untaxable and undevelopable nature of these vast swaths of land.

The region's most famous and unique natural asset are the sand dunes that line Lake Michigan's eastern shoreline, especially the Sleeping Bear Dunes to the north. Remnants of the glacial age that shaped most of the midwest's geology, these windswept mountains of sand play host to a diversity of biology, climate, and geology that is found nowhere else on Earth.



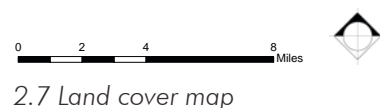
LAKES TO LAND Land Cover

Data Sources: State of Michigan Geographic Data Library, NWMCOG

- County Boundary
- - - Township Boundary
- Major Road

Land Cover Type:

- | | |
|--|--|
| Urban | Wetlands |
| Agriculture | No Data |
| Forest | |



Land cover

“Land cover” refers to the physical material at the surface of the Earth: vegetation, water, pavement, ice, bare rock, wetlands, etc.

The vast majority of land within both Benzie and Manistee Counties is designated as Forest, with significant pockets designated Agriculture. Consistent with the Wetlands map in Figure 2.5, the Land Cover map shows wetlands mostly around the region’s lakes, rivers, and tributaries.

“Urban land cover” refers to the impermeable surfaces with which we line our developments, such as streets, sidewalks, buildings, and parking lots. Shown in pink on the map, the areas in and around incorporated cities and villages, as well as along major roads, are designated Urban. Additionally, nearly every lake in the region is accompanied by an area of urban development. The proximity of development to water bodies presents particular challenges to water quality. Precipitation runoff carries pollutants such as vehicle fluids and animal waste across impermeable surfaces and directly into the water, without any of the filtration that would be provided by a permeable surface such as soil. Improperly constructed or failing septic fields can leach human waste into the water. Chemical fertilizer, even when properly applied and at the residential scale, can have serious consequences for water quality due to its concentration of phosphorous. This essential element for plant life can reduce the dissolved oxygen in a water body and thus its ability to support animal habitats.



2.8 Agricultural land cover

Top: Vineyards north of Manistee.

Bottom: Onekama fields in fall

Topography

The configuration of a surface, including its relief and the relative positions of its natural and constructed features, defines its topography.

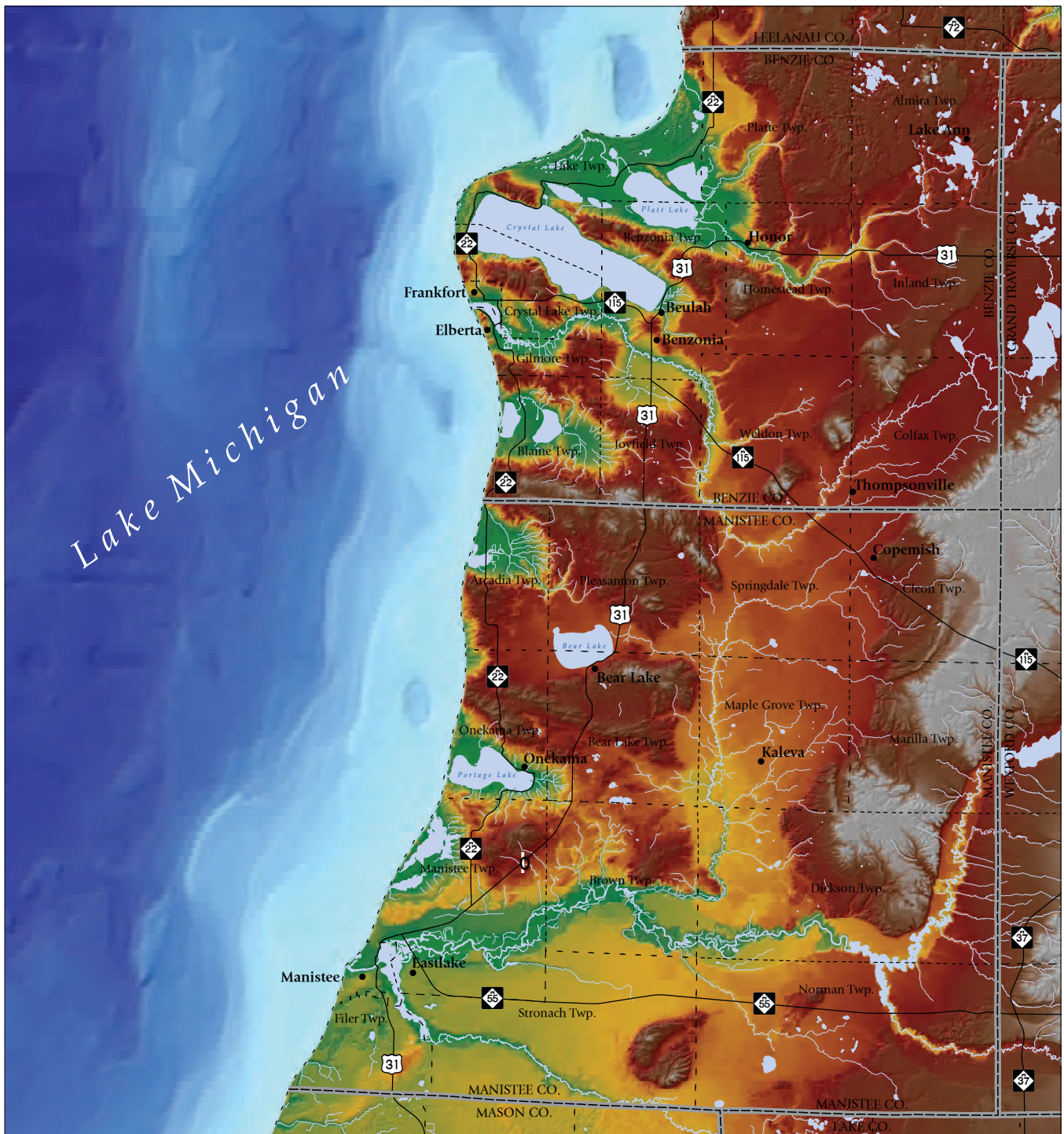
The map in Figure 2.8 demonstrates the highly varied terrain of the Lakes to Land region, which ranges from 450 feet above sea level in the river valleys to 1,350 feet at the ridge separating Benzie and Manistee Counties. Glaciers gouged the coast intermittently to form low-lying lakes, which have in turn been modified to suit human use over the past few hundred years. In many cases, the lakes remain surrounded by lands of higher elevation to form spectacular bluffs, as in the Arcadia and Frankfort areas. These topographic grooves also helped shape the valleys through which rivers such as the Platte, Betsie, and Manistee make their way to the Lake Michigan shore.

Topography plays an indispensable role in development. Engineering concerns presented by swift grade changes were a strong influence on the location of the region's railroad corridors. Construction in areas of low elevation can be subject to flooding, while a building on a severe slope risks an unstable foundation. Also pictured on this map is the configuration of the Lake Michigan floor—its bathymetry. This helps determine how a waterbody can be used. Shallower waters remain warmer and offer recreational opportunities like swimming and windsurfing, while only deeper waters can accommodate the larger vessels used by industry.



2.9 Topography and bathymetry of Frankfort

Note the surrounding bluffs and the dredged harbor. Photo: Google Earth



LAKES TO LAND

Regional Topography and Bathymetry

Data Sources: State of Michigan Geographic Data Library

- County Boundary
- Township Boundary
- Major Road

Elevation (ft):



Lake Depth (ft):



0 2 4 8 Miles



2.10 Topography and bathymetry map



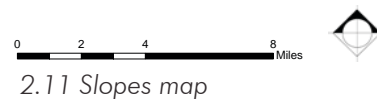
LAKES TO LAND

Representative Slopes

Data Sources: State of Michigan Geographic Data Library

- County Boundary
- - - Township Boundary
- Major Road

Slope Degree:



Slopes



2.12 View from Inspiration Point,
Blaine

Slope is a calculation of “rise over run,” or the change in elevation at two points divided by the distance between them.

When calculated this way, slope is expressed as a percentage or gradient. It can also be expressed in degrees, as the angle of the surface as compared to the horizontal. Figure 2.9 shows “strong” slopes, defined by an angle between 9.1 and 16 degrees (15-30% grade, or a 15- to 30-foot rise over 100 feet of distance), and “steep” slopes which have a rise of over 16 degrees (>30% grade). Awareness of the locations and extents of these slopes can impact decisions with respect to land use and transportation planning. The threat of erosion, sedimentation, and landslides all increase with the slope of a developed surface. Transportation requires more energy to cover the same distance, a situation that is drastically exacerbated as winter snow and ice reduce surface friction on the roads.

On the other hand, part of northwest Michigan’s magnetic appeal is provided by its beautiful vistas and the recreational opportunities offered by its varied terrain. Many areas of steep slopes and undulating grades are concentrated around the inland lakes near Lake Michigan. Crystal Lake in particular has some steep slopes along both its north and south banks, as do several portions of the Lake Michigan shoreline, and the unincorporated village of Arcadia is nestled in a valley surrounded by steep slope hills. M-22 owes its “Scenic Route” designation to the spectacular views offered by steep hills; the popular state lookout Inspiration Point, just north of Arcadia, is the highest elevation on the eastern shore of Lake Michigan.

Watersheds

A watershed is a geographic area of land that drains surface water to a common point in the landscape.

Watersheds catch precipitation and snow melt and channel that water into streams. Those streams flow downhill to feed into bigger streams and rivers, collectively creating a network of waterways that eventually drains into a large water body—in Michigan, all watersheds eventually flow into one of the Great Lakes. The Lakes to Land region is served by three of the watersheds designated by the United States Geological Survey: Manistee, Betsie-Platte, and Pere Marquette-White.

Watersheds connect settlements to each other in a way that is particularly dissociated from jurisdictional boundaries. First, they are usually larger than any standard municipal unit—several to dozens of municipalities can sometimes fit inside a single watershed. Second, and more importantly, water moves under its own power from jurisdiction to jurisdiction. This means that the impact of land use decisions on water quality are felt far beyond the authoritative reach of the decision-makers. Regional planning is therefore an especially valuable tool in watershed protection, as in the case of the Portage Lake Watershed Forever plan that brought the Village of Onekama and Onekama Township together, or the Crystal Lake and Watershed Association that is the most recent incarnation of a citizen-led group focused on that waterbody stretching back over 40 years.

For this reason, federal and state monies for water quality management are often disbursed on the basis of an approved watershed plan. Section 319 of the national Clean Water Act provides grants to address nonpoint source pollution (pollution from diffuse sources such as fertilizer, oil, road salt, and animal waste in runoff). The Clean Michigan Initiative is a \$675 million bond dedicated to the state's water resources, including a \$90 million clean water fund and \$70 million in pollution and remediation monies. Nearly all of the Lakes to Land region is covered by a plan tailored to one of these two programs, with the exception of the areas adjacent to the Platte Bay and those surrounding Bar and Arcadia Lakes.



2.13 Traveling water

The Platte River goes under the M-22 bridge to meet Lake Michigan at the Platte Bay. Photo: UpNorth Memories by Don Harrison.

***In Michigan, all watersheds
eventually flow into one of the Great
Lakes.***



LAKES TO LAND

Watershed Boundaries

Data Sources: State of Michigan Geographic Data Library

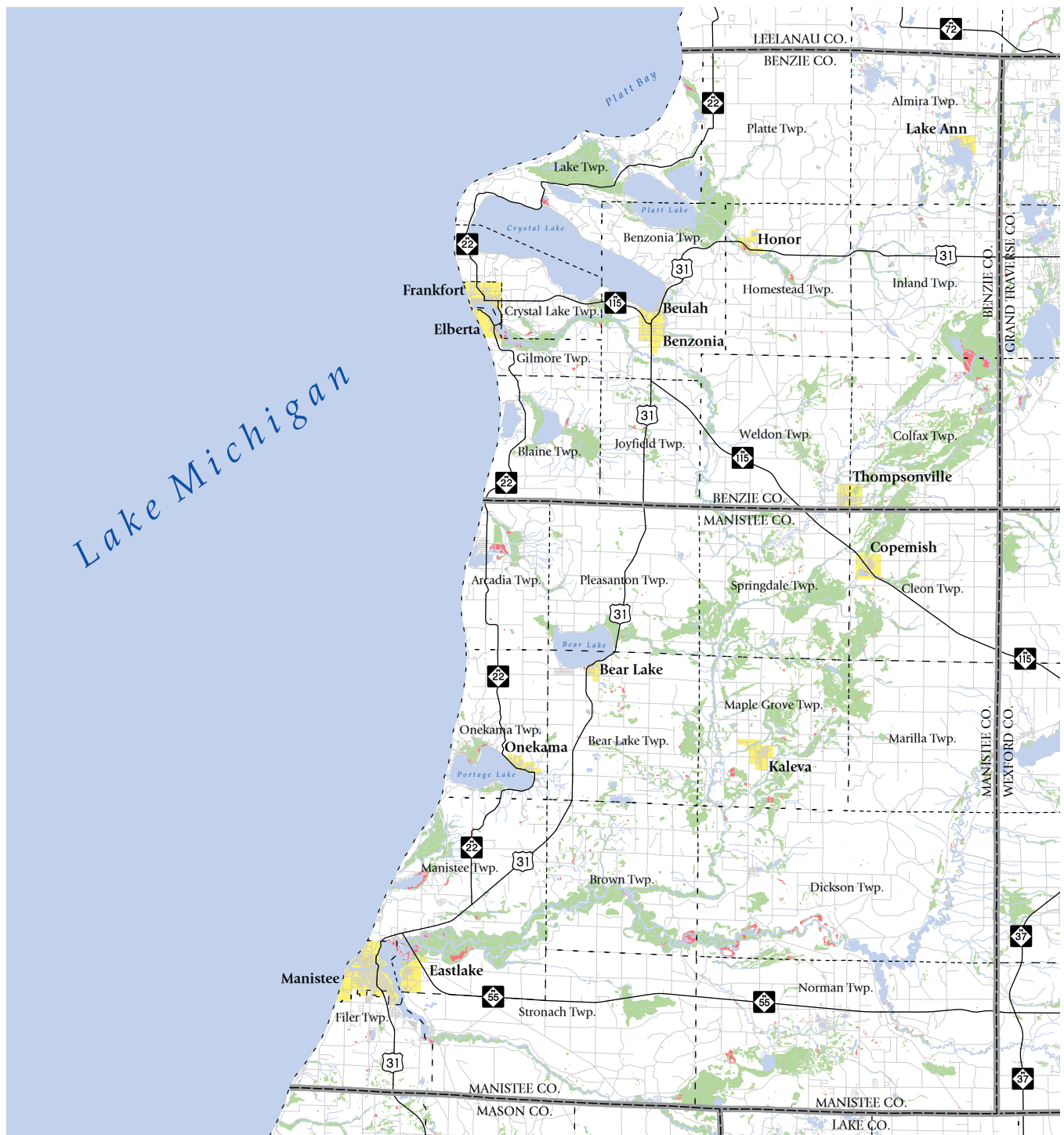
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Watershed Name:

- Manistee
- Betsie-Platte
- Pere Marquette-White
- Subwatershed Boundary



2.14 Watersheds map



LAKES TO LAND

Wetlands

Data Sources: State of Michigan Geographic Data Library, National Wetlands Inventory

- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Wetland Type:

- Emergent
- Lowland, Shrub, or Wooded



Wetlands

Michigan statute defines a wetland as “land characterized by the presence of water at a frequency and duration to support, and that under normal circumstances does support, wetland vegetation or aquatic life...”



2.16 Arcadia Marsh restoration project

Photo: Ducks Unlimited

It goes on to note that these lands are commonly referred to as a bog, swamp, or marsh. By any name, wetlands are key to maintaining northwest Michigan’s natural amenities, and particularly its water bodies. They provide flood control, wildlife habitat, groundwater recharge and protection, pollution treatment, erosion mitigation, and replenishment of water nutrients.

They are so important that the Michigan Department of Environmental Quality delineates and regulates wetlands throughout the state, as shown in Figure 2.13. DEQ regulates wetlands that meet any of the following criteria:

- Connected to, or located within 1,000 feet of, one of the Great Lakes or Lake St. Clair
- Connected to, or located within 500 feet of, an inland lake, pond, river, or stream
- More than 5 acres in size
- Has been determined by the DEQ to be essential to the preservation of the state’s natural resources

Every one of the communities participating in the Lakes to Land Regional Initiative has some delineated wetlands, although the greatest concentration in the region runs northeasterly through the non-participating townships of Maple Grove, Springdale, Cleon, and Colfax. Regulated wetlands require a permit and possibly mitigation for any activity (construction, fill, dredging, etc.) that will impact them.

2.17 Table of wetlands acreage

	Benzie	Manistee	Total
Emergent (characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens)	1,079.27	2,324.67	3,403.95
Lowland, Shrub, Wooded (characterized by low elevation and woody vegetation)	22,762.91	40,787.43	63,550.33

Source: National Wetlands Inventory

Protected lands

As the nineteenth century drew to a close, the lumber barons had just about clear-cut the entire state of Michigan. Though agriculture was expected to take the place of logging in the local economy as it had done elsewhere, soils better suited to the slow, woody growth of trees ensured that it did not.

Collapsing farm prices and tax delinquency following the end of World War I placed hundreds of thousands of acres of land under government control. Faced with a population hemorrhage out of northern Michigan, the state's Conservation Department embarked on a program of rehabilitating the land for recreational purposes.

The Manistee National Forest was created in 1938. Administratively a portion of the Huron-Manistee National Forest, it comprises just over 148,000 acres of land within Manistee County, including 5,778 acres in Manistee Township. The Forest provides recreational opportunities, fish and wildlife habitat, and resources for local industry.

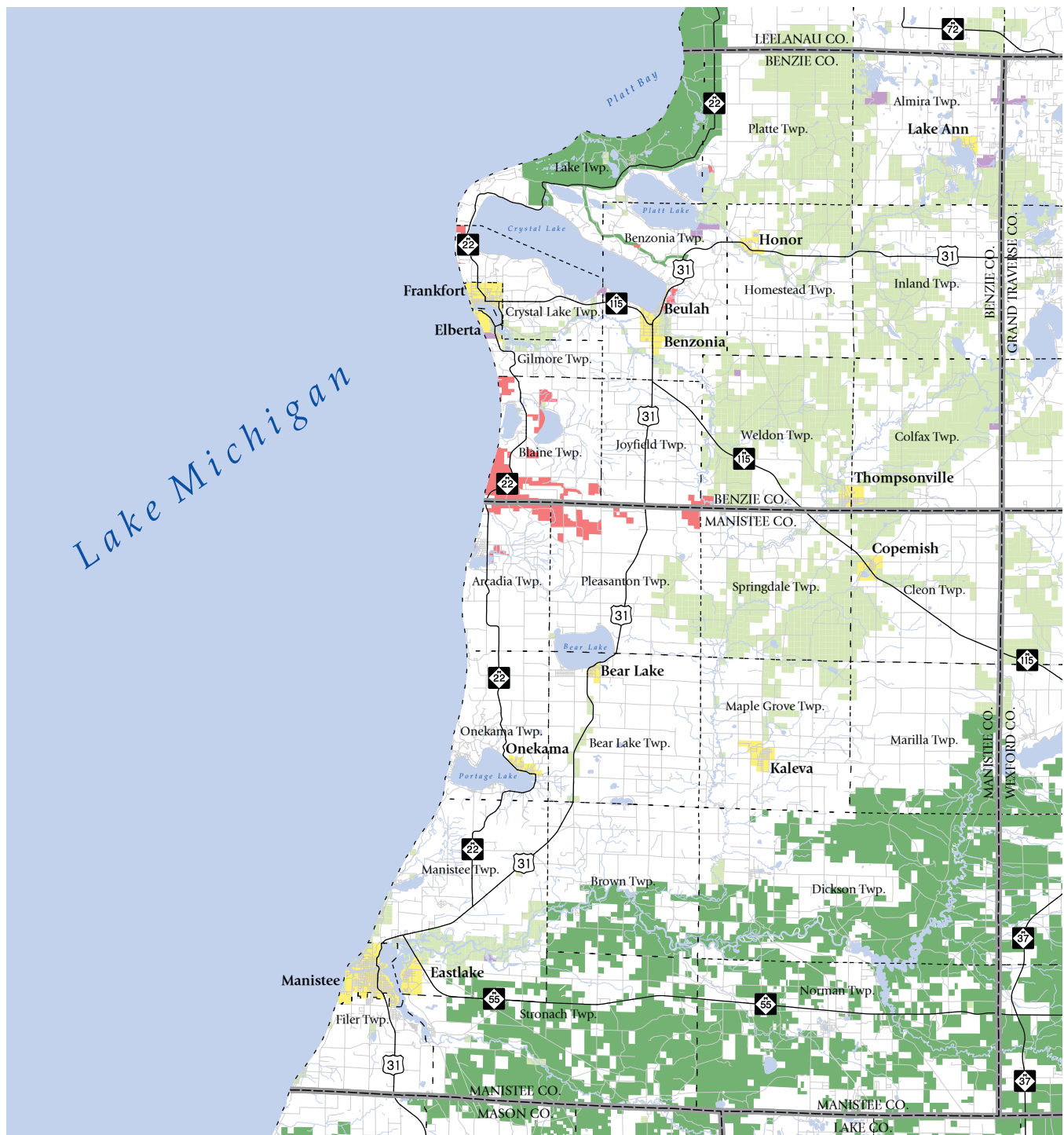
The Sleeping Bear Dunes National Lakeshore began as an unsuccessful 1941 recommendation to establish a state park on the Leelanau Peninsula. Finally authorized by the National Parks Service in 1970, it extends across approximately 35 miles of Lake Michigan Shoreline from Benzie to Leelanau Counties, and part of its 12,000 Benzie County acres comprise 45% of Lake Township. The Lakeshore is an international destination for outdoor and wildlife enthusiasts. In 2011, it was named by ABC's "Good Morning America" as the Most Beautiful Place in America.

In the 1990s, Rotary Charities commissioned a study showing a breakneck pace of development in northern Michigan and responded by incubating the Grand Traverse Regional Land Conservancy. The Conservancy has since partnered with individuals, foundations, and all levels of government to protect over 34,000 acres of land and 100 miles of shoreline.



2.18 Lookout at Sleeping Bear Dunes

Photo: National Parks Service



LAKES TO LAND

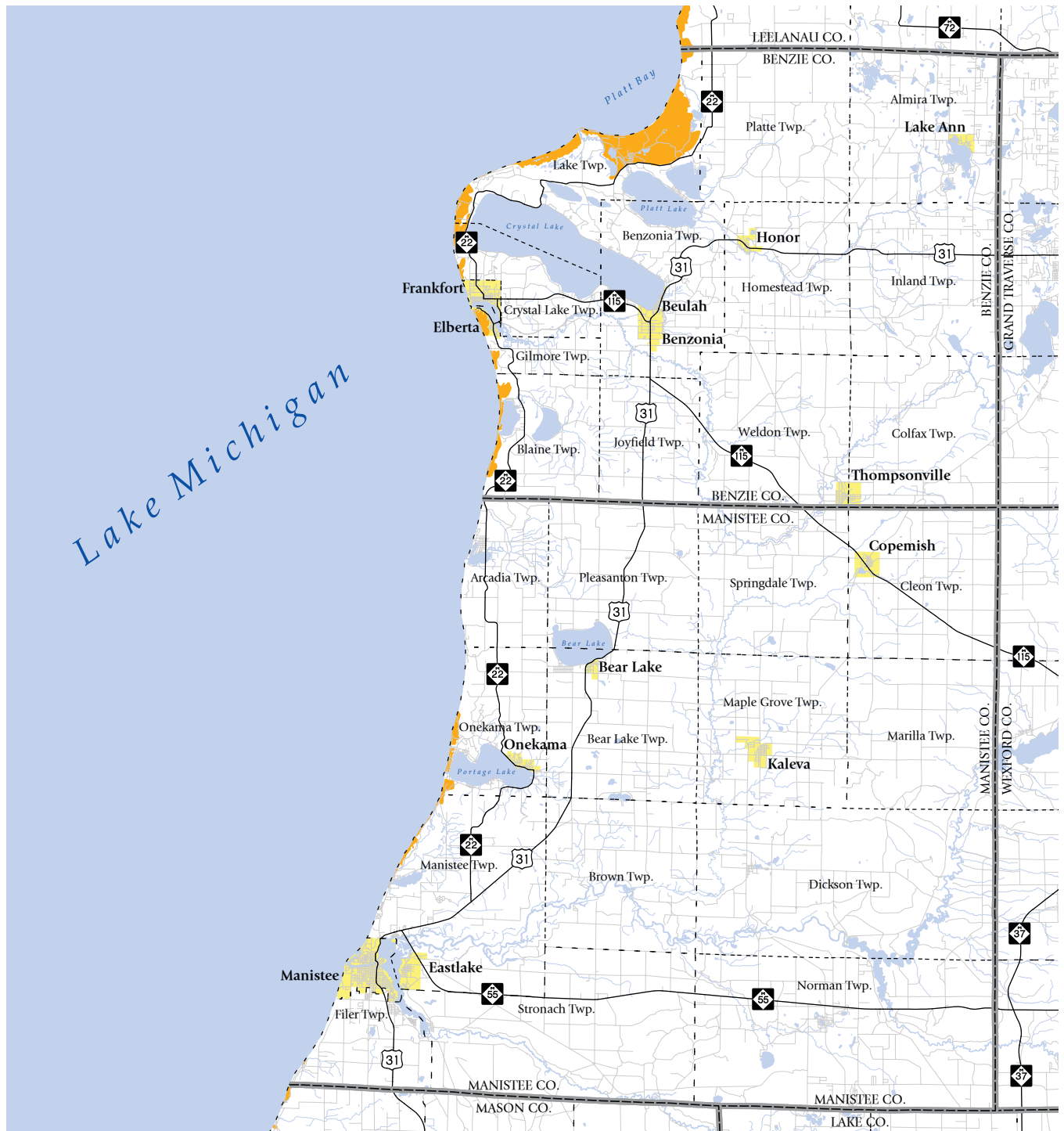
Federal, State, and Protected Lands

Data Sources: State of Michigan Geographic Data Library

- | | |
|---|---|
| City or Village | Federal Owned Land |
| County Boundary | State Owned Land |
| Township Boundary | GTRLC Nature Preserve |
| Major Road | GTRLC Protected Land |
| Minor Road | |



2.19 Protected lands map



LAKES TO LAND

Critical Dunes

Data Sources: State of Michigan Geographic Data Library

- Critical Dunes
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road



2.20 Critical dunes map

***Arcadia
Township
is the only
participating
shoreline
community
in which
critical
dunes have
not been
inventoried
by the
MDEQ.***

Critical dunes

Michigan hosts the largest collection of freshwater sand dunes in the world, a unique ecosystem sheltering five threatened and endangered species.

Protecting the dunes lining the Lake Michigan shoreline along significant portions of Manistee and Benzie Counties is an essential aspect of land use planning in northwest Michigan. Sand mining has been regulated by the State since 1976, and activities related to development, recreation, and forestry have been regulated since 1989. Earthmoving, vegetation removal, and construction activities within a critical dune area are subjected to a permit process. Local governments may assume that permitting authority by passing zoning restrictions that are at least as protective as state regulations, an option that has not been exercised by any Lakes to Land community.

There are approximately 7,025 acres of critical dunes along the shores of Benzie and Manistee Counties, nearly all (91%) of which is in Benzie County. Arcadia Township is the only shoreline community participating in the Lakes to Land initiative in which critical dunes have not been inventoried by the MDEQ.



2.21 Sleeping Bear Dunes



Transportation

Of all the subjects addressed in a master plan, transportation is among those best suited to be considered on a regional scale. People travel for the purpose of getting somewhere—frequently, somewhere outside the municipal boundary in which they started.

Of course, the story is much fuller. The connection between transportation and land use is so deep that many communities owe their very existence to the routes along which they sprang up: the port city of Manistee, for example, or the fortuitous harbor shelter that led George Tifft to arrange for the development of Frankfort. As the land use intensifies, so too do transportation routes: the Guelph Patent Cask Company's lumber operation in Honor brought the Pere Marquette Railroad to town, and the settlements at Manistee, Bear Lake, and Benzonia attracted an "auto trail" that would grow into the cross-country thoroughfare US-31.

For communities bordering a large body of water, limitations on growth are accompanied by challenges to land transportation. This describes the majority of Lakes to Land communities, where geography requires them to be the destination, not a waypoint, for westbound land travelers.

The inseparable nature of production and shipping means that industrial land uses are particularly entwined with transportation. Lumber encampments first sprang up along rivers so that harvested logs, too heavy to be pulled

efficiently by horses, could be floated to ships waiting at port. The emergence of the rail industry meant that operations were no longer confined to any water's edge—rather than bringing the industry to the transportation, the transportation could now be brought to the industry. The Ann Arbor Railroad illustrated the value of combining these approaches when it reached the end of its line in Elberta and began launching waterborne "car ferries" to transport cargo across Lake Michigan to Milwaukee and Chicago.

Sometimes, though, we travel just because we like it. As the 20th century got underway, the trains began to carry more tourists than cargo; some segments of the long-obsolete Ann Arbor Railroad bed have now been transformed into a pleasure trail for hikers and bikers. A group of gliding enthusiasts became so enamored of the offshore breeze at Frankfort that they made it into "the soaring capital of the world." The highway shield for M-22 dots the state, not as a route marker but as two kiteboarders' proclamation of "appreciation for natural wonders such as bays, beaches and bonfire, dunes and vineyards, cottages, friends and family everywhere."



LAKES TO LAND

Road Classifications

Data Sources: State of Michigan Geographic Data Library, USDOT National Functional Classification

- | | |
|--|--|
| City or Village | — Arterial Road |
| County Boundary | — Collector Road |
| Township Boundary | — Local Road |



Road classification

Modern roads have been part of the public domain almost since their inception, and for good reason: their usefulness depends heavily on the consistency of their condition and entirely on their continuity of existence across varied lands.

But the “almost” is an important part of that sentence. In the late ‘teens and early 1920s, Michigan was among many states that became criss-crossed with “auto trails,” routes named by private organizations and marked with colorful bands on electric and telephone poles. The two such trails that headed to Mackinaw City via the Lakes to Land region were the West Michigan Pike, which began in Michigan City, IN, and the Dixie Highway Northern Connector from Niles, IN. Both traveled through the city of Manistee and the villages of Bear Lake and Benzonia.

Following Wisconsin’s example, Michigan became the second state to replace this haphazard system with a numbered trunkline system in 1918-1919. (“Trunkline” now refers to all interstate, US, and Michigan highways.) The West Michigan Pike became M-11 until the United States Numbered Highway system was implemented nationally in 1926, when it was renamed again to US-31. It remains the main artery of Michigan’s west coast, and it was the first highway to cross the Straits via car ferry. In 1952, it was designated as Michigan’s only Blue Star Memorial Highway in a tribute to the Armed Forces.

Also among the Michigan’s first state highway designations was M-22. Just 116 miles long, it follows the Lake Michigan shoreline from Manistee through Onkama, Arcadia, Elberta, Frankfort, and the Sleeping Bear Dunes National Lakeshore before it rounds the tip of the Leelanau Peninsula and returns south to Traverse City. Its sign has been adopted by a private recreation company as an informal brand of the region, and M-22 stickers and clothing are now seen all over the state. The **Leelanau County portion of the** route was designated part of the Leelanau Scenic Heritage Route in 2002, and it’s an honor with a planning component: Scenic Heritage Routes cannot be adjacent to land zoned for commercial or industrial uses.

Finally, the road from Frankfort to Benzonia along the south shore of Crystal Lake was designated as M-115 in 1929. Traveling through the Manistee National Forest and the Pere Marquette State Forest, it now terminates in Clare at the intersection of business US-127 and business US-10.

These roads provide several options for travel north and south, but travelers to the east and west rely on county roads under the jurisdiction of the Benzie and Manistee County Road Commissions.



2.23 Auto trail signs

Top and middle: Signs marking the Dixie Highway and West Michigan Pike

Bottom: M-22 sign that has become an unofficial symbol of northwest Michigan.

Vehicle traffic volume

Annual average daily traffic—the total volume of vehicle traffic on a given road in a year, divided by 365—is a simple measurement of how busy a road is.

One of the most common uses of AADT data, and in many cases the reason it is collected at all, is to determine the distribution of road funding for improvements and maintenance. The United States Department of Transportation Federal Highway Administration requires each state to submit a Highway Performance Monitoring System report each June, and these reports form the basis for funding allocations. Three quarters of the 18.2 cent per gallon federal fuel tax is disbursed to the states, while the other 25% is distributed directly to county road commissions and city and village transportation authorities (all are required to provide matching funds). The Michigan Department of Transportation also collects a 19 cent per gallon gasoline tax in addition to vehicle registration fees and other transportation-related fees.

County roads make up 75% of the total Michigan road system, moving over \$800 billion of goods and services annually. While the most miles are driven on state roads, county roads are the site of the majority of intersections—and crashes. Only four of the 889 Michigan traffic fatalities in 2011 occurred in Benzie or Manistee County. The Benzie-Manistee area saw the greatest number of accidents in November (174), followed closely by October (173) and December (171); crashes with injuries to persons occurred most frequently in October (33), August (31), and July (30). In both counties, drivers aged 16-20 accounted for the greatest number of crashes: 1079 per 10,000 licensed drivers, as compared with 578 crashes per 10,000 licensed drivers among those aged 21-64 and 337 crashes per 10,000 licensed drivers for those aged 65 and up. These trends are consistent with statewide data indicating that crash rates decline as driver age increases.

Traffic volume data can also help prioritize snow removal. For the 2011-2012 year, the Michigan Department of Transportation categorized snow and ice control on US-31 as Priority Level I, meaning that the surface will be bare of ice and snow even if overtime must be paid to accomplish it, while the Priority Level II designation of lower-traffic M-22 means that overtime can be paid to clear a one-wheel track in each direction but the rest must wait for the next scheduled shift.



2.24 Historical snow plowing in Manistee

Photo: UpNorth Memories by Don Harrison



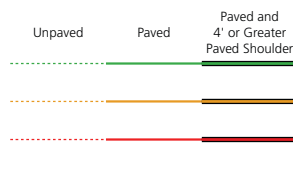
LAKES TO LAND

Vehicle Traffic Volume

Data Sources: State of Michigan Geographic Data Library, MDOT

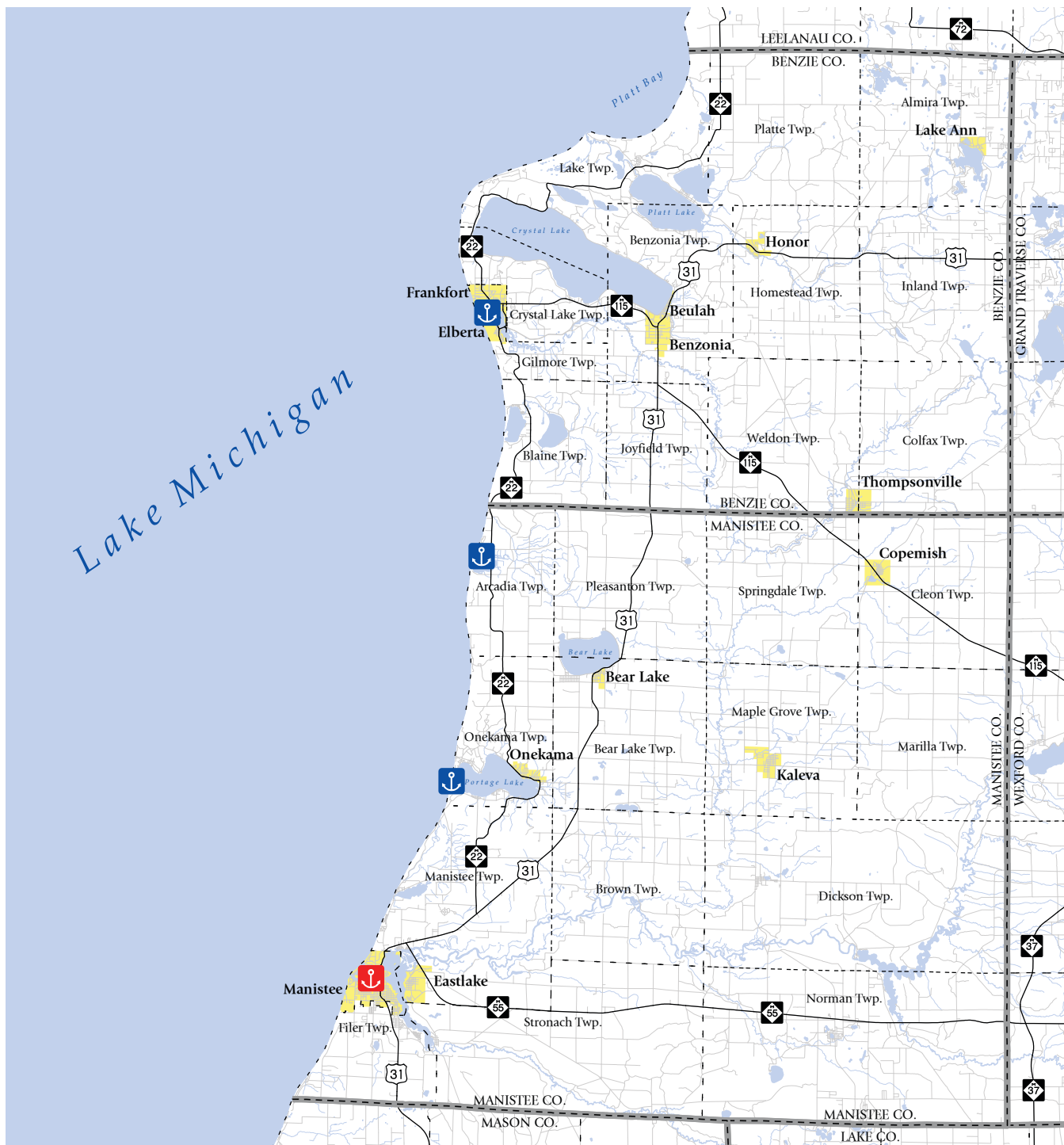
Vehicles per Day:

- Low (Under 2,500)
- Medium (2,500 - 10,000)
- Heavy (Above 10,000)
- Minor Roads (No Data)



- City or Village: Yellow square
- County Boundary: Solid black line
- Township Boundary: Dotted black line





LAKES TO LAND

Marine Harbors

Data Sources: State of Michigan Geographic Data Library, MDNR

- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Harbor Type:

- ⚓ Cargo, Commercial, and Recreational
- ⚓ Commercial, and Recreational



2.26 Marine ports map

Marine ports

The front door of many Michigan coastal communities is its port.

Great Lakes navigation brought the first European settlers to the Lakes to Land region, first to trap fur and then to harvest timber from this western frontier. Commercial use of the waterways has continued ever since, and today one quarter of the nation's top harbors by tonnage are on the Great Lakes. Maritime transport is considerably cheaper and more environmentally friendly than either rail or truck. Its average of 607 miles to one gallon of fuel per ton of cargo is three times the efficiency of a freight train and over ten times as efficient as trucking; it

produces 90% less carbon dioxide than a semi and 70% less than a train. And then there are the infrastructure costs. While rails and roads require continual maintenance, the vast majority of Great Lakes shipping lanes were created by glaciers without any help from us at all.

Sandy barriers prevent some rivers from emptying into Lake Michigan at the close of their journey toward sea level, pooling instead into lakes that dot the western edge of the state. It took no time at all for early settlers to begin dredging these barriers, transforming the lakes into roomy and land-locked harbors. Manistee, with its broad lake at the confluence of two rivers, is the largest in the region. This deep draft commercial harbor serves five major industrial facilities, including the Filer City Generating Station. Frankfort, also a deep draft commercial harbor, was once reknown

for the car ferries that launched rail shipments from the Ann Arbor Railroad onto the waterway system. Though those days are long gone, this Harbor of Refuge supports over 200 recreational boat slips. Citizens of Onkama have established infrastructure around their recreational harbor at Portage Lake that supports 230 recreational boat slips and generates tourist income; residents of Arcadia have done the same to support their 60 recreational boat slips and charter fishing enterprises. Both are also Harbors of Refuge, offering mooring to boaters stranded in inclement weather.

But harbors are not part of the maintenance-free portion of the Great Lakes navigational system. The US Army Corps of Engineers is responsible for them under the national River and Harbor Act of 1879, and the already-challenging task of reliably directing sand and water is complicated by persistent low water levels and deferred maintenance due to constrained budgets.



2.27 Freighter departure

Rails

The sole railroad line now operating within the Lakes to Land region is the CSX line that loops around the north end of Manistee Lake and continues south to Grand Rapids—all that remains of a bustling network of railroads across and around the region, many of which were built to serve the timber industry.

The Manistee route was also the first rail foray into the Lakes to Land region in 1881. Three years later, the Arcadia and Betsey River Railroad began a short trip between Arcadia and its then-neighbor to the northeast, Saile Station, continuing on to the then-village of Springdale in 1887.

Over the next several years, railways exploded all over the region: a Manistee & Northeastern ran a line from Manistee to Nesson City in 1888, the company that would become the Ann Arbor Railroad connected Cadillac to Frankfort in 1889, and lines connecting Walhalla, Interlochen, Lake Ann and Traverse City all popped up in 1890. This completed the backbone of the regional system, and beginning in about 1895 much of the rail-building effort was devoted to spurs that connected established stations and reached ever-further into the Leelanau Peninsula.

The need for rail cars plummeted at the close of the lumber era, and those connecting spurs began to disappear beginning around 1917. The main lines through the region lasted mostly intact until the Depression. In 1934, a Pere Marquette loop that ran from Traverse City through Lake Ann, Interlochen, and Kaleva stopped running, and the Arcadia and Betsey River Railway followed in 1936. For the next 40 years, only the north-south Pere Marquette line and the Ann Arbor Railroad's Frankfort connection remained. The former was abandoned in 1982, and the latter is undergoing rebirth as the Betsie Valley Trail after landing under the control of the State of Michigan in 1980.



2.28 The John D. Dewar Approaches an Arcadia Dock

Photo and text from Arcadia Area Historical Society: "This is a view south along Lake Arcadia's northeast shore. The steamer DeWar is on the left. Logs are stacked along the shoreline, in a barge, and in the water waiting transport to the Starke Sawmill. Source: Postcard Photo from the collection of Bob McCall"



LAKES TO LAND

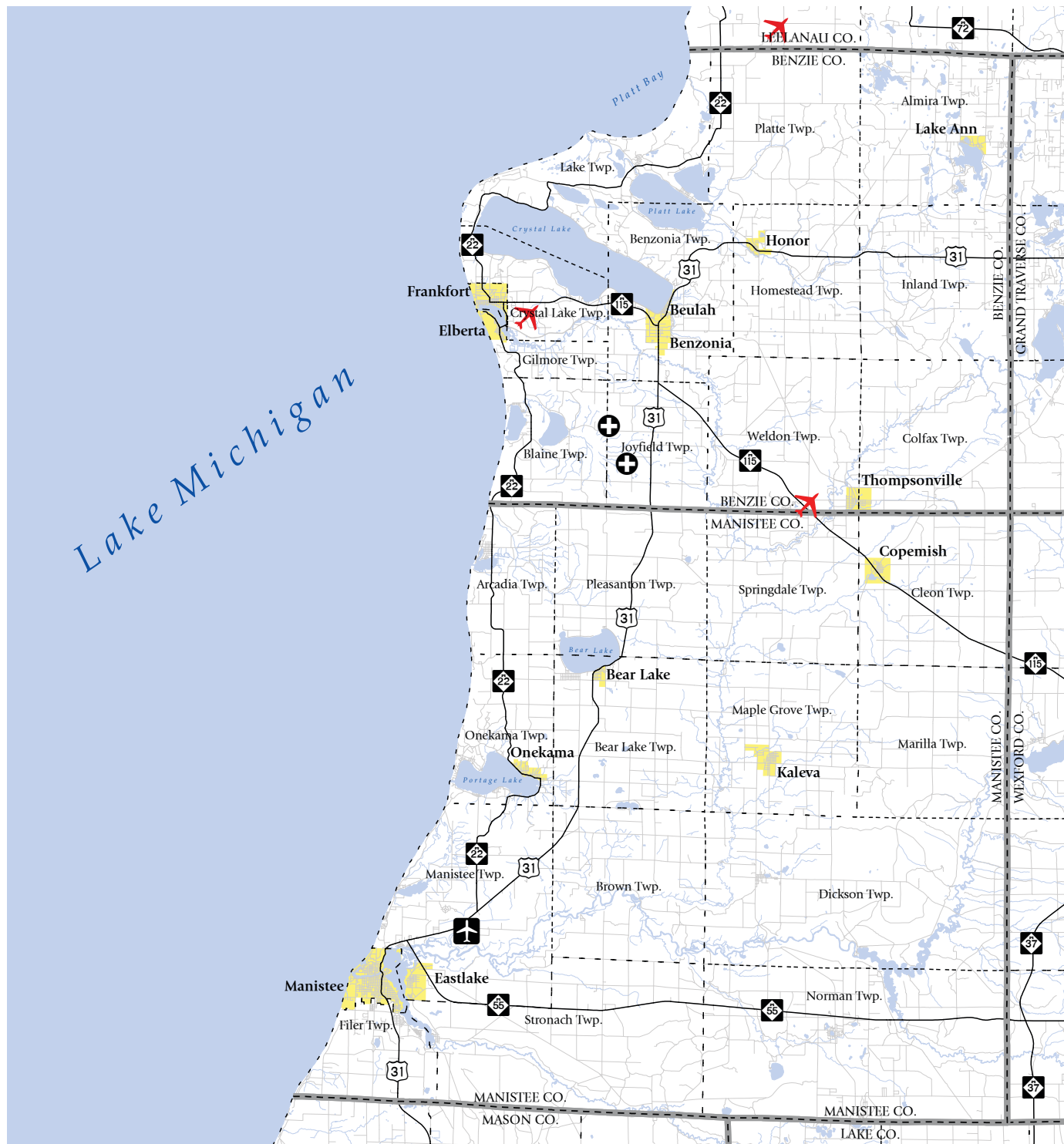
Operable Railroad Tracks

Data Sources: State of Michigan Geographic Data Library

- | | |
|--|--|
| City or Village | Railroad Track |
| County Boundary | Major Road |
| Township Boundary | Minor Road |



2.29 Operable railroad tracks map



LAKES TO LAND

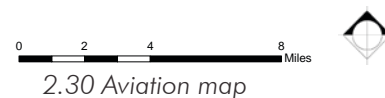
Aviation

Data Sources: State of Michigan Geographic Data Library, MDNR

- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Type:

- + Helipad
- ✈ Commercial
- ✈ General Aviation



Air travel

Long before Blacker Airport became the fastest way to get from the Lakes to Land region to the rest of the world, sailplanes brought the rest of the world to the region.

Manistee County - Blacker Airport is the largest airport in the region with 3,413 commercial enplanements ("civil aviation operations other than scheduled air services and non scheduled air transport operations for remuneration or hire") in 2010. It is publicly owned by the Manistee County Blacker Airport Authority, and its first commercial flight went aloft in 1961. Seven single-engine and one multi-

engine aircraft are based in the field. Of the 132 weekly flight operations it averaged in 2010, 72% were split evenly between transient and local general operations; 18% were commercial flights; 9% were air taxis; and less than 1% were military. By contrast, the public-use Thompsonville Airport is the smallest. Owned by the Village of Thompsonville, it hosts four single-engine aircraft. Half of its 15 flight operations per week in 2011 were transient general aviation while the other half were local general aviation.



2.31 Frankfort Cinema TG 1-A

This sailplane was, used by the U.S. Army Air Corps as a training glider.

Frankfort Dow Memorial Field, a general aviation airport, saw three commercial enplanements in 2010. Publicly owned by Frankfort City-Co Airport Authority, its 77 weekly flight operations in 2011 were also split evenly between transient and local general aviation. Its aircraft base, however, was unique: the 13 engine-powered vehicles were accompanied by six gliders and one "ultralight," defined in the U.S. as a single-seat vehicle of less than five gallons fuel capacity with weight and speed restrictions of 254 pounds and 55 knots (64 mph) respectively. These are the crafts of the Northwest Soaring Club, which was based at the Frankfort Dow Memorial Field until summer of that year.

A 1939 article in *The Rotarian* credits six glider enthusiasts with transforming this city of "a few commercial fishermen, a few Summer visitors, and no fame at all" into "the soaring capital of America." It went on to cite the first-ever incorporated sailplane school in America, the Frankfort Sailplane Factory, and the startling statistic that a full 80% of Frankfort's population had taken to the skies. Although the factory moved to Illinois before it folded and the school has moved to Cadillac with the Northwest Soaring Club, the gliders' glory days had put Frankfort on the map for good.



Regional Recreation

The tourism that has become one of the region's strongest economic bases is largely fueled by an abundance of recreational opportunities.

In the winter, residents are found playing on the slopes of nearby alpine ski resorts, racing down snow mobile routes, participating in snow shoe stampedes, enjoying a vigorous day of Nordic skiing, or relaxing in an ice hut on an inland lake trying to secure that perfect catch. Some more adventurous souls are racing their ice sail boats. When warm weather is upon the region, residents are found mountain biking or walking on the non-motorized transportation trails, walking the tree-lined neighborhood streets of the villages and towns, and living life by enjoying family and community.

During the summer months, winter's empty and lonely orchards burst forth with energy. Small fruit stands dot M-22, and nurseries along US-31 are available for drivers to smell the fresh air and listen to the sway of the trees while tasting the bounty of the area. Boating, whether sailing or under power, occupies many lazy afternoon days. Sailboats of all sizes cluster in weekly regattas on the

lakes vying for one more knot. When the wind gets too fierce for the sailors, the sailboarding crew unravels its gear and speeds over the whitecaps, catching air and impressing the bystanders. Lake Michigan may not get waves big enough for surfing on a regular basis, but its substantial wind kicks up some pretty large breakers for an inland lake.

All types of fishing exist in plenty: enterprise or recreation, fly or bait and tackle.

Fishing is a huge industry in the region, whether it is winter or summer. All types exist in plenty: enterprise or recreation, fly or bait and tackle. The region's rivers, streams, and lakes are heavily scrutinized for their freshwater inhabitants, and they are home to some of the finest fly fishing the country has to offer. Golf is also a major recreational must for many who live and visit the region; opportunities range from opulent courses known throughout Michigan and beyond to propitious courses that host all levels of player.

Parks and recreation

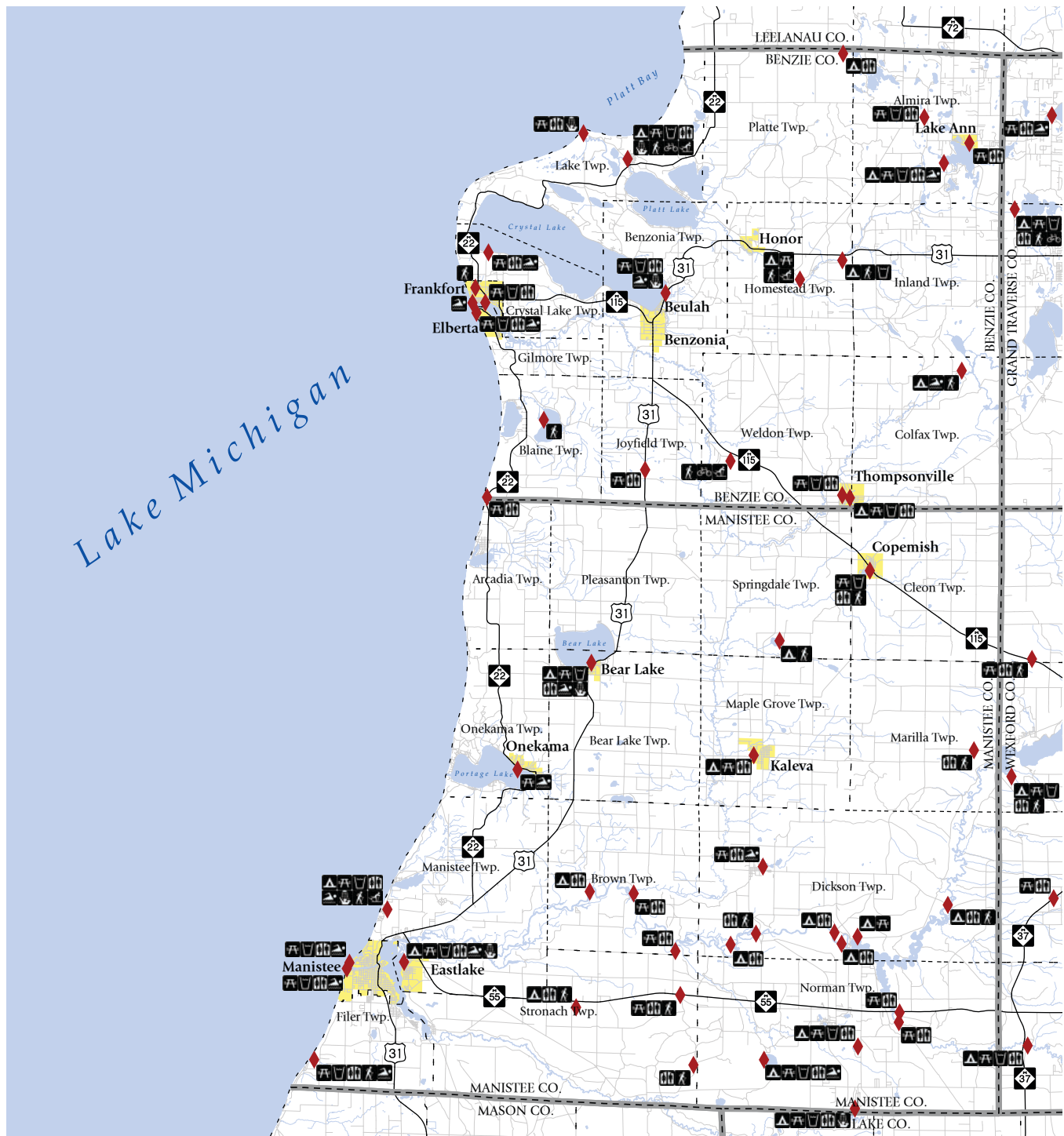
“Because to so many citizens, men and women alike, life is a grind, a round of labor and a season of care... Thus public recreation facilities are provided because of the demand for a free and popular antidote to task-driving conditions.”

Charles Mulford Robinson used these words in a 1910 article titled “Educational Value of Public Recreation Facilities” to assure his readers that his treatise was not going to sap all the fun out of public parks. “To furnish that antidote is their essential purpose,” he soothed. “Education is incidental to it.” Still, his next several pages do not waver from their purpose: “The song of a bird, the scent of a flower, the glory of a sunset sky are parts of our common heritage. ... If the park can cultivate these in large numbers of people, as an incident of its service as a public pleasure ground, it will bestow great benefit; it will vastly increase its usefulness to the community; it will not only heighten the enjoyment of its own attractions, but it will put into hearts and minds a faculty of enjoyment that will be of service in daily life. To such extent, the investment which has been made in the parks will be paying daily dividends on the common stock of human experience.”

That may sound a bit overblown, but it turns out that we needn't rely on the common stock of human experience to get dividends out of parks. Nearly a century after Mr. Robinson's article, a 2006 National Fish and Wildlife Foundation study found that “outdoor recreation sales (gear and trips combined) of \$289 billion per year are greater than annual returns from pharmaceutical and medicine manufacturing (\$162 billion), legal services (\$253 billion), and power generation and supply (\$283 billion).” Camping and hiking alone accounted for 55% of outdoor recreation's total impact on the US economy, surpassing fishing, hunting, water sports, trail- and snow-based activities, and wildlife viewing.



Blaine Township Park



LAKES TO LAND

Recreational Facilities and Amenities

Data Sources: State of Michigan Geographic Data Library, MDOT

- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

- Park / Public Recreation Area
- Camping
- Picnic Facilities
- Drinking Water
- Restrooms / Port-A-Johns

- Swimming
- Showers
- Hiking / Trailhead
- Biking
- Nordic Skiing

0 2 4 8 Miles

2.32 Parks and recreation map



LAKES TO LAND

Campgrounds

Data Sources: State of Michigan Geographic Data Library, MDNR, NPS

- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road
- National Park Campgrounds
- National Forest Campgrounds
- State Forest Campgrounds
- State Park Campgrounds
- Local Municipality Campgrounds



2.33 Campgrounds map

Camping

As leisure activities go, camping is about as democratic as it gets.

The Michigan Department of Natural Resources boasts that “you are never more than half an hour from a Michigan State Park, State Forest Campground, State Recreation Area, or State trail system,” so just about anyone in need of a getaway can pack up a few subsistence items and start communing with the great outdoors in short order. It’s affordable, kid- and pet-friendly, and so therapeutic that entire intervention programs have been built around it.

Lake Michigan’s varied shoreline and the region’s abundance of inland lakes, rivers, streams, woodlands, bluffs, and trails make it a year-round destination for outdoor enthusiasts of all types. And at the end of the river rafting or the bicycle riding, those enthusiasts need a place to rest their heads—and a bite to eat, and maybe a few supplies or souvenirs, making an attractive campground into a community economic driver.



A City of Tents, Orchard Beach State Park, Manistee, Mich.

2.34 Orchard Beach State Park in
Manistee Township

Photo: UpNorth Memories by Don
Harrison

State campgrounds within Benzie and Manistee Counties are maintained and managed by the MDNR. The Platte River campground, federally managed as part of the Sleeping Bear Dunes National Lakeshore, is at the junction of M-22 and the Platte River, where archaeological evidence suggests that humans may have been taking a summer holiday since 600 B.C. Numerous private and quasi-public campgrounds dot the area, but it is interesting to note that the region hosts no state campgrounds at all in the recreation-focused area west of US-31—a potentially overlooked income source.

Boat launches

The eight Great Lakes states registered 4.3 million boats in 2003—one third of all US recreational vessels—and Michigan’s 1,000,000 boats led the region. Forty-two percent of them belonged to residents of coastal counties.

To preserve public access to our 3,000 miles of coastline, Michigan’s state legislature began earmarking fishing license funds to purchase water frontage in 1939. Since then, marine fuel taxes and boat registration fees paid by recreational boaters have funded the construction of over 1,200 boat launching facilities. In the Lakes to Land region, the launches offer access to Lake Michigan, rivers, and inland lakes for watercraft ranging from kayaks to yachts. In addition to these State-designated launches, there are many additional inland lake road-end boat launch areas maintained by the Benzie and Manistee County Road Commissions.

Such maintenance is money well spent. A Great Lakes Recreational Boating study conducted by the US Army Corps of Engineers in 2003-2008 found that an average Great Lakes boat owner spends about \$3600 per year, including equipment, insurance, fees, gas, food, and lodging. Applying that figure to the statistic above, it is reasonable to estimate that recreational boating is a \$72 million enterprise in the Lakes to Land region. The same study appraises its contribution to Michigan personal income at \$1.3 billion, to the overall economy at \$1.9 billion, and to statewide employment at 51,000 jobs.



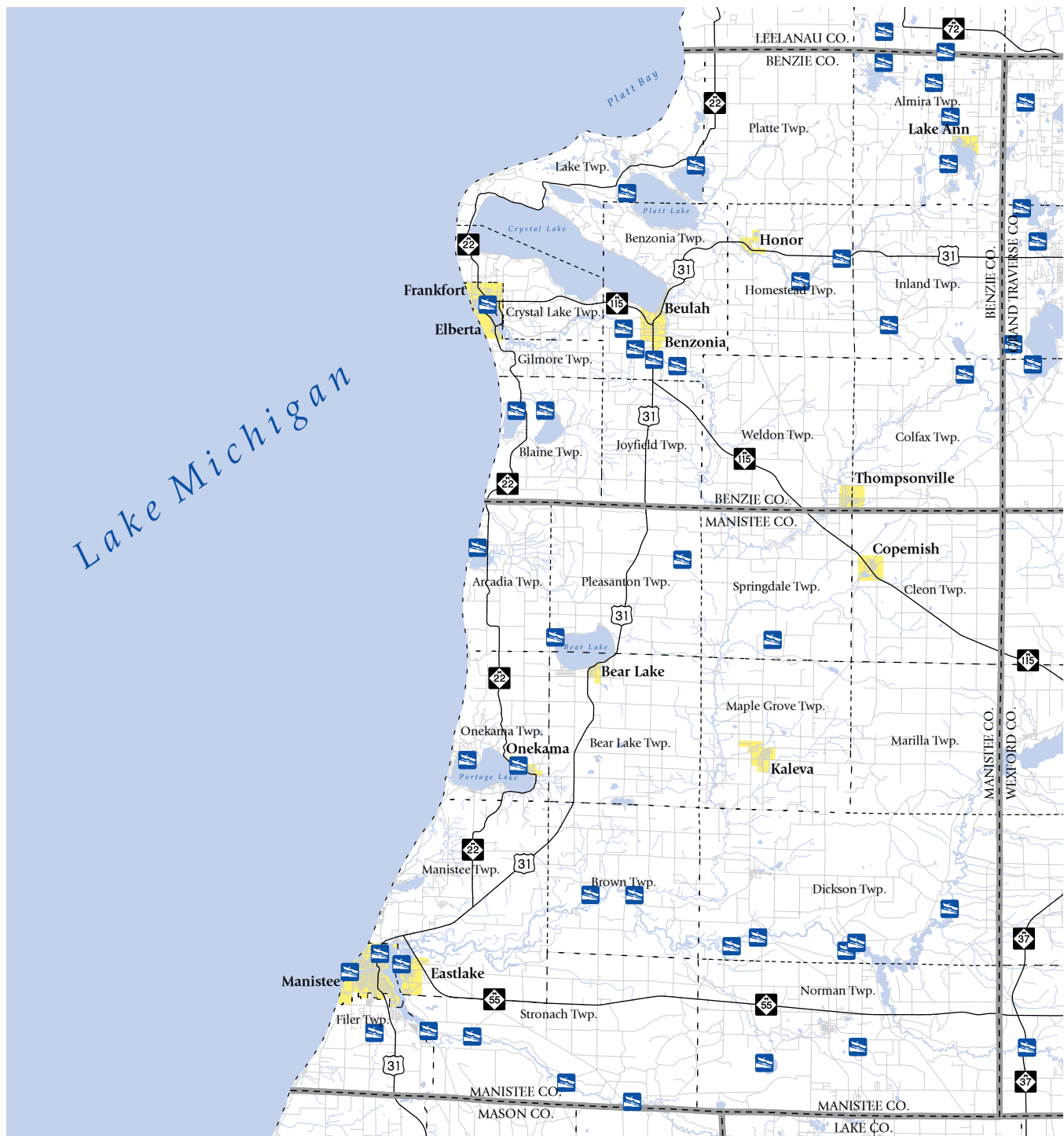
2.36 Bear Lake boat launch circa 1920s

Photo: UpNorth Memories

2.35 Table of boating economic impacts

	Lakes to Land Region*	State of Michigan	Great Lakes basin
Registered boats	19,071	953,554	4,282,507
Trip and craft sales	\$780 million	\$3.9 billion	\$19 billion
Personal income added	\$260 million	\$1.3 billion	\$6.5 billion
Economic value added	\$380 million	\$1.9 billion	\$9.2 billion
Jobs	1,027	51,329	246,117

* calculated by taking 42% of state number and dividing by 21 (2 of 42 total coastal counties)



LAKES TO LAND

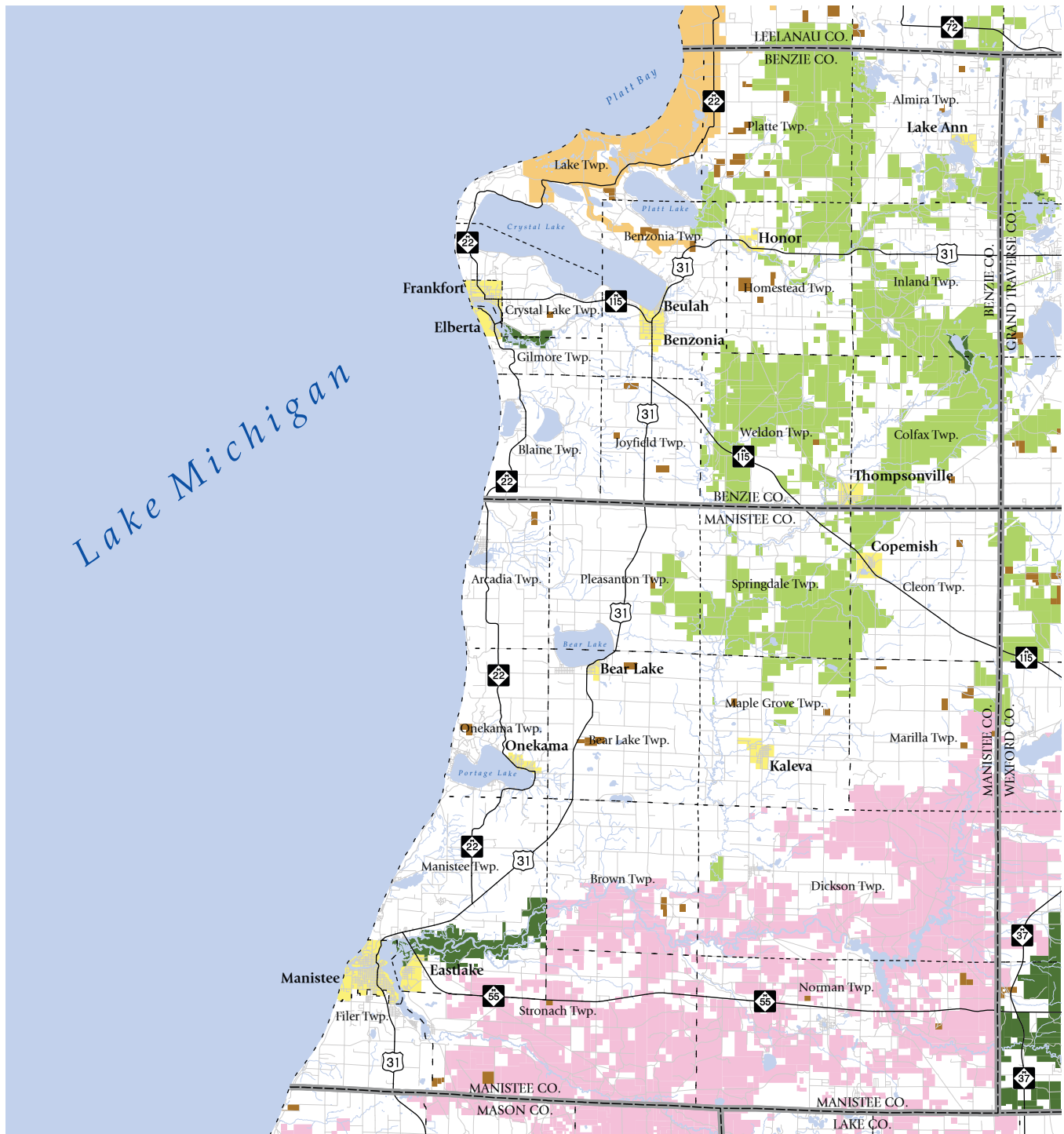
Boat Launch Ramps

Data Sources: State of Michigan Geographic Data Library, MDNR

-  State Designated Boat Access Site
-  City or Village
-  County Boundary
-  Township Boundary
-  Major Road
-  Minor Road



2.37 Boat launch ramps map



LAKES TO LAND

Lands Open to Public Hunting

Data Sources: State of Michigan Geographic Data Library, MDNR

- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

Open to Public Hunting:

- US Forest Service
- National Park Service
- Commercial Forest Act Lands
- State Forest Land
- State Wildlife/Game Areas



2.38 Lands open to public hunting map

Hunting

Want to hunt deer, elk, rabbit, hare, squirrel, pheasant, grouse, woodcock, quail, crow, coyote, opossum, porcupine, weasel, skunk, woodchuck, turkey, or waterfowl? There's a license for that.



2.39 Jake turkeys in Onekama

Photo: Al Taylor

The Department of Natural Resources, responsible for fish and wildlife management, regulations, and habitat protection, is primarily funded through two mechanisms: the direct sale of hunting and fishing licenses, and the leveraging of those proceeds for use in the federal Wildlife and Sport Fish Restoration (WSFR) project. The WSFR program, which turned 75 in 2012, levies a tax of 10% to 11% on sporting arms, ammunition, bows, arrows, and crossbows and then returns that money to state conservation departments (in Michigan, the MDNR) through 3-to-1 matching grants. So, every \$1 spent on a hunting license yields \$4 in conservation funding.

It's a system that many like because it directly ties the cost of preserved land to its use. But it is also a system in which land conservation for all reasons is vulnerable to changes in hunting behavior. The chart below shows that sales for all licenses have declined steadily over the past five years, both numerically and as a share of the overall population. The magnified rate of return provided by the WSFR program also works in reverse: for every \$1 lost in hunting license sales, MDNR must make up a \$4 budget shortfall. This has led the department to urge all who are interested in conservation to buy a license—whether you plan to hunt or not.

2.40 Table of hunting licenses sold by year

		2006	2007	2008	2009	2010	2011	Change 2006- 2011	% change 2006- 2011
Hunting license type ^a	Bear ^b	9,457	9,516	10,180	8,953	8,975	9,020	-437	-4.6%
	Deer	734,089	724,198	733,993	725,186	697,454	691,181	-42,908	-5.8%
	Elk ^b	204	166	355	366	227	154	-50	-24.5%
	Fur harvester	24,024	24,387	24,148	23,331	24,411	25,813	1,789	7.4%
	Small game	295,349	293,659	273,262	266,549	261,032	256,175	-39,174	-13.3%
	Turkey ^c	132,764	127,772	124,570	127,120	125,093	114,139	-18,625	-14.0%
	Spring turkey	125,933	121,487	118,021	120,769	115,101	106,880	-19,053	-15.1%
	Fall turkey	21,951	20,877	20,561	20,758	27,310	20,905	-1,046	-4.8%
	Waterfowl	60,403	58,866	58,040	58,214	56,688	55,724	-4,679	-7.7%
	All types	814,003	800,921	805,299	798,256	772,114	763,059	-50,944	-6.3%
MI population		10,082,438	10,050,847	10,002,486	9,969,727	9,883,640	9,876,187	-206,251	-2.0%
Licenses per capita		0.0807	0.0797	0.0805	0.0801	0.0781	0.0773	-0.003	-4.3%

Source: Brian J. Frawley, MDNR.

^aWithin each license type, a person is counted only once regardless of the number of licenses purchased.

^bA restricted number of licenses were available, and these licenses were distributed using a random drawing.

^cSome but not all of turkey hunting licenses were distributed using a random drawing.

^dTotal for all types does not equal sum of all license types because people can purchase multiple license types.

Trout streams

One of the region's major recreational draws is the wealth of opportunities for fishing, both in Lake Michigan and in its inland lakes, rivers, and streams.

The map displayed in Figure 2.41 identifies the designated trout streams in Benzie and Manistee counties. Viable trout streams are generally defined by three characteristics: coarse soils, limited development (including limited pavement and other impervious surfaces), and an abundance of groundwater. State-designated Blue Ribbon Trout Streams meet even stricter criteria: they support excellent stock of wild resident trout, permit fly casting while remaining shallow enough to wade in, produce diverse insect life, and have excellent water quality.

Trout are good indicators of water quality in general because of their reliance on benthic macroinvertebrate diversity—the bugs, larvae, and other organisms that live on the bottom of a body of water. These creatures thrive in streams with high levels of dissolved oxygen, and this means clean, cold water for two reasons: water's ability to hold dissolved oxygen decreases as temperature increases, and the bacteria in organic waste can quickly consume all available dissolved oxygen. When present, aquatic macroinvertebrates help maintain the water quality by eating bacteria and decayed plants, then become a source of food themselves for the resident fish population.

The Platte River from Maple City Road to Honor and Bear Creek upstream of Nine Mile Road both have Blue Ribbon designations. The Platte River stretch hosts the state's fish hatchery, which raises chinook and coho salmon and produces coho eggs for the entire upper Great Lakes. Despite Bear Creek's modest name, its flows are similar to the Little Manistee and Pine Rivers, and the tributary provides the Manistee River system with its wild runs of steelhead trout and salmon.

2.41 Benthic macroinvertebrates



Mayfly



Dragonfly

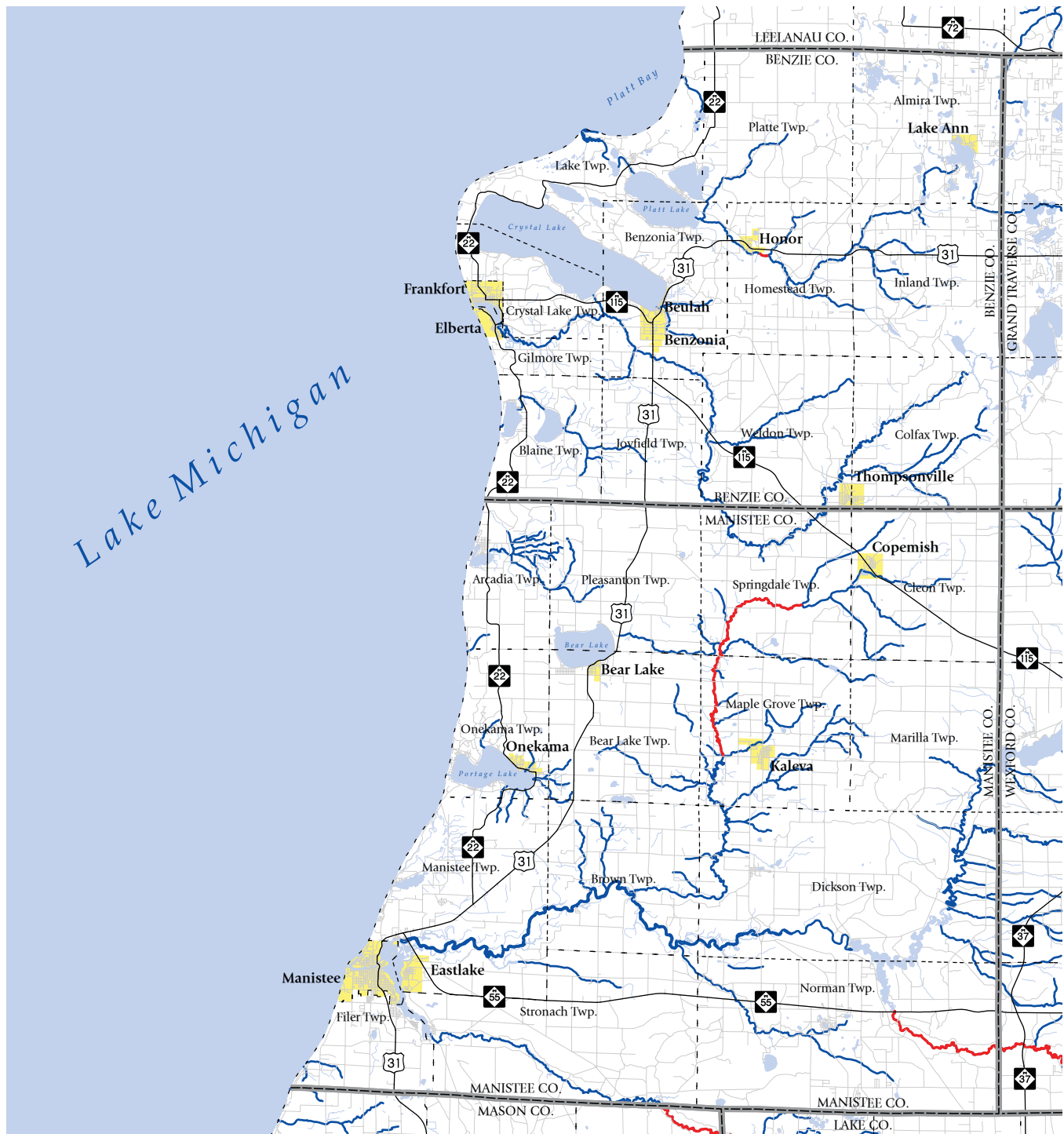


Caddisfly



2.42 Steelhead trout

Photo: Cheri and Tony Barnhart



LAKES TO LAND

Trout Locations

Data Sources: State of Michigan Geographic Data Library

- City or Village
- Trout Stream
- Blue Ribbon Trout Stream

- County Boundary
- Township Boundary

- Major Road
- Minor Road



2.43 Trout locations map



LAKES TO LAND

Regional Recreational Trails

Data Sources: State of Michigan Geographic Data Library, MDOT, NWMCOG, GTRLC

- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

- GTRLC Trail
- Equestrian Trail
- Betsie Valley Trail

- Snowmobile Trail
- North Country Trail
- Non-Motorized Multi Use Trail
(use restrictions vary)



2.44 Recreational trails map

Recreational trails

However many worthy benefits a trail might provide, its raison d'être can often be boiled down to one word: fun.

The Michigan Statewide Trails Initiative of 1992 defines a trailway as “a land corridor passing through the community or countryside...accommodating a variety of public recreation uses.”

Recent research casts trails in the role of community superhero, providing economic, environmental, recreational, health, and even safety benefits. They offer transportation alternatives to the car. They are exercise opportunities that lead directly to better medical outcomes. They're sites of chance meetings with neighbors and wildlife. They can provide a buffer between natural areas and inhabited ones. They draw in visitors from other communities. Their activity can enliven an area that would otherwise look desolate enough to invite crime.

But however many worthy benefits a trail might provide, its *raison d'être* can often be boiled down to one word: fun. Michigan's citizenry comes together in myriad ways to identify, create, and maintain an extensive and varied trail network. For example, our 6,200-mile web of snowmobile trails, 181 miles of which run through Benzie and Manistee counties, is one of only three such systems in the country. Half of the system is on private lands while the other half is distributed among federal, state, and other public lands; all utilize grant program grooming tractors for maintenance. The 22-mile-long Betsie Valley Trail that follows the abandoned Ann Arbor Railroad bed is another collaborative example: owned by the Michigan Department of Natural Resources, it is maintained by Benzie County and supported by the not-for-profit Friends of the Betsie Valley Trail corporation. The Shore to Shore Riding and Hiking Trail that cuts across the northeast corner of Benzie County was established in 1964 by the Michigan Trail Riders Association, and the only “riding” to be done on this journey between Oscoda on Lake Huron and Empire on Lake Michigan is on a horse—neither motors nor bicycles are welcome. The Grand Traverse Regional Land Conservancy has made trails an integral part of its land stewardship mission. And the federally-managed North Country Trail is a footpath that traverses seven states between New York and North Dakota; the Huron-Manistee is one of the 10 national forests it touches on in its 4,600 mile journey.

2.45 Table of trail miles

	Benzie	Manistee	Total
Snowmobile	63.13	118.68	181.81
Equestrian	15.36	0	15.36
Nonmotorized	60.01	64.91	124.96
North Country Trail	0	33.21	33.21
GTRLC	14.71	2.07	16.79



Cultural Resources

Though the land itself provides plenty of amusement for many, over the years the people of the region have built, preserved, and accrued a wealth of cultural endeavors with which to supplement their entertainment.

Those inclined toward the visual arts may like to visit the works at the Oliver Art Center and the Crystal Lake Art Center, or wait until the art fairs arrive in Frankfort and Bear Lake. For a little free anytime cultural pick-me-up, peek into the Frankfort post office at the car ferry mural funded by the Works Progress Administration in 1941.

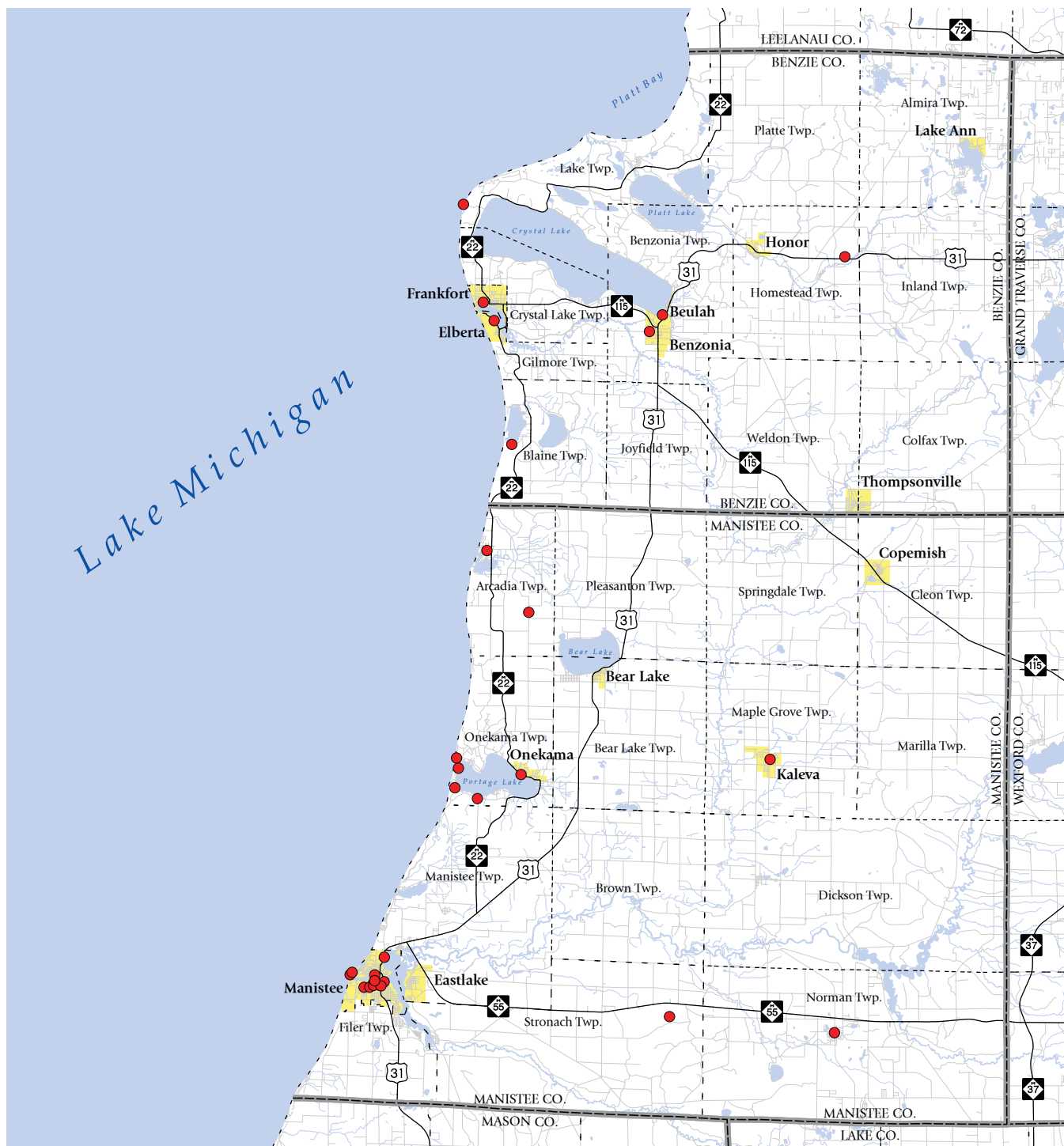
Those who prefer the auditory delights can be serenaded by the Benzie Community Chorus and make the summer rounds of Concert in the Park venues. In the theatrical hub of Frankfort, you can attend the Lakeside Shakespeare Theatre, Benzie County Players, and Frankfort Garden Theatre.

Your culture can come packaged with a little education at the Arcadia Historical Society, or it can come packaged in the 60,000 bottles used to build the house that now hosts the Kaleva Historical Society in Manistee County. Both Benzie

*Even a little hotel stay
can come with a side of
history.*

and Manistee counties offer public libraries and branches. Even a little hotel stay can come with a side of history at the lumber-town-turned-resort called Watervale Inn—or it can make history the main attraction as in the old-west-themed Rockin' R Ranch in Bear Lake. There you'll find horseback riding, hayrides, sledding, carriage rentals, and of course a saloon.

For fun that's a little less formal, hometown festivals Arcadia Daze and Bear Lake Days are celebrated in July while Onekama hosts Onekama Days in August and the Manistee County Fair in September. You can get a head start on sampling the region's dining options at the Taste of Benzie festival in Elberta. Catch a movie in Honor at the Cherry Bowl Drive-In, open every summer since 1953, and if you're in the car anyway, defy a little gravity at the Putney Road Mystery Spot in Blaine.



LAKES TO LAND

Historic Sites

Data Sources: State of Michigan Geographic Data Library, MSHDA

- Registered Historic Site
- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road



Historic sites

“[T]he task is to breathe the breath of life into American history for those to whom it has been a dull recital of facts—to recreate for the average citizen something of the color, the pageantry, and the dignity of our national past.”

So spoke Verne Chatelan, chief historian for the National Parks Service at the 1935 passage of the Historic Sites Act. Since then, the 1966 National Historic Preservation Act has broadened both the definition and the scope of historic designation, giving official recognition and benefits access at all levels of government and in the private sector. Historic sites connect a geographic location to itself across time. They offer those who behold them an opportunity to broaden our definition of “community,” beyond those souls who happen to be living in a particular place right now to the sum all those who have passed through—an act which, when conceived in reverse, lets our own souls become part of a community which will outlive us many hundreds of times over.

The Frankfort Land Company House imagined itself in just such a way in 1867: the two-story Italianate was the first stylish house in Frankfort, built for the company officials tasked with developing the town. “No building in Frankfort is more closely connected to the establishment of the city,” says the building’s National Register entry, adding that the lavish structure also “advertised the company’s confidence in the town’s economic potential.”

The Manistee County Courthouse Fountain in Onekama Village Park has twice been solemnly dedicated to the community. In 1887, the ornate public sculpture was purchased to decorate the lawn of the new Victorian Gothic courthouse. After a 1950 fire destroyed the building, the Portage Lake Garden Club obtained the fountain and moved it to the Village Park to memorialize the deceased servicemen of Onekama Township.

The William and Ursula Quimby Homestead is neither lavish nor ornate, called an “ordinary farmhouse” even by its Register entry. But it sheltered a truly extraordinary Arcadia Township neighbor: their daughter Harriet Quimby, who became the first licensed female pilot in 1911 and successfully completed the first female solo flight over the English channel in 1912.



2.47 Historic site photos

Top: The Frankfort Land Company House, Frankfort (Benzie County)

Middle: The Manistee County Courthouse Fountain, Onekama Village (Manistee County)

Bottom: The William and Ursula Quimby Homestead, Arcadia Township (Manistee County)

Photos: Michigan State Housing Development Authority “Historic Sites Online”

Lighthouses

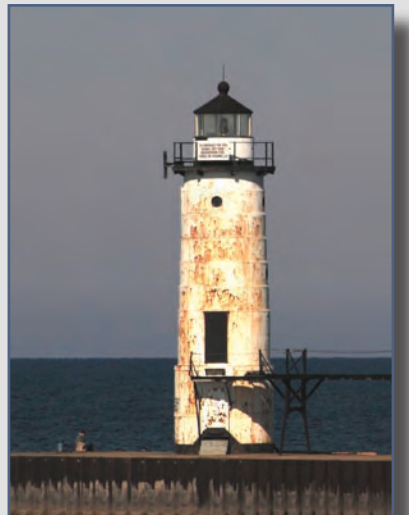
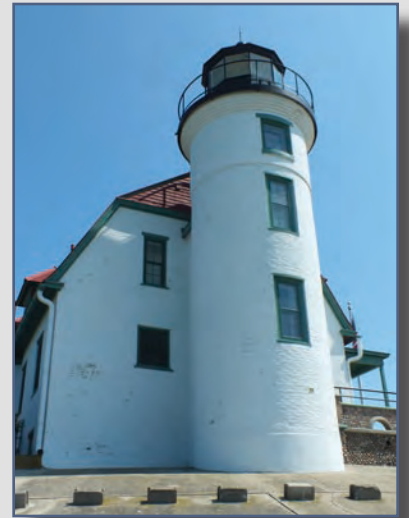
The outsize role of waterborne trade in the history of Michigan—and the Lakes to Land region in particular—afforded lighthouses the equally outsize role of trying to keep that trade from becoming deadly.

Colonial lighthouses came under federal control in 1789, when President George Washington created the U.S. Lighthouse Establishment. No lighthouses were constructed in Michigan until 1925, when the light at Fort Gratiot was lit. The first lights on Lake Michigan shone from Chicago Harbor and St. Joseph in 1832.

By 1838, the Manitou Passage had been established as the fastest and most protected route to the Straits from the south, but it was still so treacherous it furnished an entire underwater preserve with shipwrecks. The South Manitou Light was lit in 1838 to mark the west side of the passage's entry. By the time the Point Betsie Light Station joined it in 1858 to guide navigation into the passage from the east, the South Manitou Light was ready for reconstruction.

Just south of the passage was the Lake Betsie harbor at Frankfort, the most northern improved harbor on Michigan's west coast and an excellent refuge at which to wait for optimum passage conditions. Private funds had first improved the harbor, but by 1867 the traffic volume warranted the attentions of the Army Corps of Engineers. The next six years saw a new channel dug and dredged to accommodate the largest ships of the day, a pair of piers and revetments built, and the construction of the Frankfort Pierhead Light.

Meanwhile, lumberers on the south side of the Lakes to Land region had discovered the tremendous potential of the Manistee River for transporting their product out of the state's interior and began lobbying for improvements to the harbor. An Army Corps of Engineers study confirmed the need in 1861 and a lighthouse was built in 1870—and again in 1872, after the first one fell victim to Michigan's coast-to-coast Great Fire of the previous year.



2.48 Lighthouse photos

Top: Point Betsie lighthouse

Middle: Frankfort North Light

Bottom: Manistee North Pierhead Lighthouse



LAKES TO LAND

Lighthouses

Data Sources: State of Michigan Geographic Data Library

- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

- 1 Point Betsie Lighthouse
- 2 Frankfort North Light
- 3 Manistee North Pierhead Lighthouse



2.49 Lighthouses map



Demographics

Demographics are the statistics of a population: gender, age, ethnicity, income, employment, housing, education, etc. Taken together, they try to paint a picture that gives a generalized answer the question, “Who lives here?”

The answer to that question is central to the planning process because it is impossible to create a plan that will serve a community well without knowing about the people who comprise that community. Planning strategies vary based upon a population’s current characteristics, and on the ways in which the population is projected to change. For example, a community experiencing an increase in new families

should be planned differently than one with an aging population. The former may place a priority on new single-family housing, new schools, extension of infrastructure, playgrounds and parks, etc., while the latter may be more concerned with issues of mobility and accessibility, emergency services, health care, and accommodating senior housing and assisted living.

***It is impossible to create a plan
that will serve a community
well without knowing about
the people who comprise it.***

Population and housing

In the “snapshot” of a community that demographic information presents, data about population and housing form the outline.

Population

The most basic piece of demographic information is the population count. This static number gives us a sense of scale which is necessary to understand and address the population’s needs. Many of the inputs and outputs of a municipal system are based on inputs and outputs of individual bodies (clean water, food, human waste, trash), so the size of the services needed are tied directly to the size of the community.

Taken over time, population statistics become trends. These provide a basis for limited future forecasting and also offer a more robust comparison among communities. For example, we see that although the population growth rate of all 16 communities combined was 2.13%, the growth rate among individual communities ranged from a 36% loss of population from the Village of Onekama to an almost 20% gain in Lake Township. Moreover, comparing the participating communities to the larger populations within which they reside, we see that the growth rate did not keep pace with the national rate of 9.71% or the combined Benzie/Manistee county rate of 4.28%, but it did avoid Michigan’s fate of population loss. The Lakes to Land citizens, then, made up a greater percentage of Michiganders in 2010 than they did in 2000 (0.143% versus 0.139%), but a smaller percentage of the combined Benzie/Manistee County areas (33.4% versus 34.1%).

Households

The second most basic piece of demographic data, the molecular

structure in which the atoms of population reside, is the household. The US Census Bureau defines a “Household” as follows:

A household consists of all the people who occupy a housing unit. A house, an apartment or other group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live with any other persons in the structure and there is direct access from the outside or through a common hall.

A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household. The count of households excludes group quarters. There are two major categories of households, “family” and “nonfamily.”

Households function as discrete economic units because their basic inputs and outputs are intertwined. American households have been in flux over the past half-century or so as people have reacted to increased wealth, relaxed social mores, and heightened mobility by changing the basic relationships that construct their lives: people stay single longer, have fewer children, and no longer assume that

they will live with those children in their own old age.

This situation is represented by consistent ratcheting downward of household size. Between 2000 and 2010, the number of households in the participating communities grew 5.7% while the population grew only 2.13%, yielding a 3% decrease in household size from 2.55 persons per housing unit to 2.47 persons per housing unit. This percentage was consistent throughout the Benzie/Manistee county area and in Michigan overall, which gained over 86,000 households even as its population declined. Households size decreased nationally, too, although less dramatically at just -0.85%—from 2.67 persons per housing unit to 2.65 persons per housing unit.

In some states, however, the 2010 census marked the first increase in household size in many years. Conventional wisdom attributes this in a large part to the doubled-edged Great Recession. First, high unemployment



A seasonal resident of Pleasanton Township?

2.50 Table of population, households, and housing units

		Population			Households			Housing Units		
		2000	2010	Change	2000	2010	Change	2000	2010	Change
Benzie County	Lake Twp*	635	759	19.5%	318	387	21.7%	1,106	1,271	14.9%
	Crystal Lake Twp*	960	957	-0.3%	414	438	5.8%	1,051	1,240	18%
	Gilmore Twp*	850	821	-3.4%	341	360	5.6%	439	477	8.7%
	Village of Elberta**	457	372	-18.6%	190	173	-9%	237	229	-3.4%
	Blaine Twp*	491	551	12.2%	215	234	8.8%	431	504	16.9%
	Joyfield Twp*	777	799	2.8%	286	313	9.4%	338	404	19.5%
	Village of Honor	299	328	9.7%	129	135	4.7%	153	186	21.6%
	City of Frankfort	1,513	1,286	-15%	665	601	-9.6%	873	942	7.9%
Manistee County	Arcadia Twp*	621	639	2.9%	280	296	5.7%	545	574	5.3%
	Pleasanton Twp*	817	818	0.1%	344	365	6.1%	623	694	11.4%
	Bear Lake Twp*	1,587	1,751	10.3%	639	696	8.9%	916	1,031	12.6%
	Village of Bear Lake**	318	286	-10.1%	132	118	-10.6%	161	169	5%
	Manistee Twp*	3,764	4,084	8.5%	1,188	1,270	6.9%	1,391	1,598	14.9%
	Onkama Twp*	1,514	1,329	-12.2%	603	634	5.1%	1,117	1,289	15.4%
	Village of Onkama**	647	411	-36.5%	239	205	-14.2%	315	338	7.3%
	All Participating Communities			2.13%			5.7%			13.7%
Benzie and Manistee Counties				4.28%			7.6%			13.5%
Michigan				-0.55%			2.3%			7.0%
United States				9.71%			10.7%			13.6%

* Includes the totals of any villages (incorporated or unincorporated) within the township

** Village totals not included in overall total because they are already included in their township's total

Source: US Census Bureau, ESRI Business Analyst

rates which rest disproportionately on younger adults has given them less opportunity to leave "the nest." Second, the mass transfer of home ownership from individuals to lending institutions during the foreclosure crisis resulted in a smaller number of available housing units over which to spread the population, an effect which is particularly pronounced in some geographic areas.

Housing Units

The total number of housing units in the participating communities grew 13.7% between 2000 and 2010, despite the fact that the total population grew only 2.13% and the number of total households grew 5.7%. While the number of total housing units typically exceeds the number of total households due to vacant housing units, we see in Figure 2.48 that many of the Lakes to Land communities have two or even three times as many housing units as households. This is because the "vacant" classification used by the census does not distinguish between

units which are for sale or rent and those which are used as seasonal, vacation, or second homes. In 2010, the total vacancy rate for housing units in the United States was 11.4%, and 14.6% in Michigan. Vacant housing units for seasonal, recreational, or occasional use made up 3.5% of the national total of housing units in 2010, and 5.8% of the state total. Among the participating communities, however, 43.1% of housing units are vacant and 34.8% of all housing units are for seasonal/recreational/occasional use. Growth in housing units among the participating communities, then, has been driven primarily by construction of seasonal, recreational, and second homes rather than primary residences.

A look at individual Lakes to Land communities can provide even more striking examples as communities which saw their populations decrease experienced seemingly paradoxical growth in housing units. A third of the Village of Onkama's population, representing just under 1/6 of its households, departed between 2000

and 2010, yet there were 7.3% more houses at the end of the decade than at the beginning. The City of Frankfort and the Village of Bear Lake both also lost households while gaining housing units; Crystal Lake Township, Blaine Township, Joyfield Township, Manistee Township, Onkama Township, and the Village of Honor all saw the number of housing units grow at least twice as fast as the number of households. Only in Lake Township and Arcadia Township did housing units grow more slowly than households, and it is worth noting that resident households already accounted for a fairly small proportion of housing units in both communities (30% and 51% respectively).

It is only in these numbers that we find a representation of a fundamental aspect of the Lakes to Land region: seasonal residents. Because the guiding principle of the census is to count people at their "usual residence," this group is not reflected in the population count, and yet their presence affects and often drives many parts of the Lakes to Land economy

Age

There is a well-documented “aging” trend in the population of the United States that is more acute in Michigan and particularly in northern Michigan.

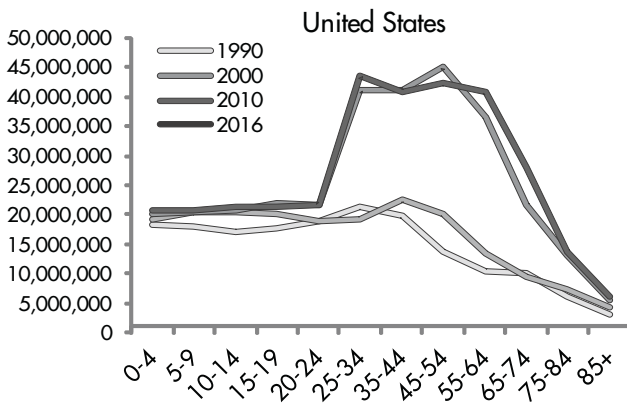
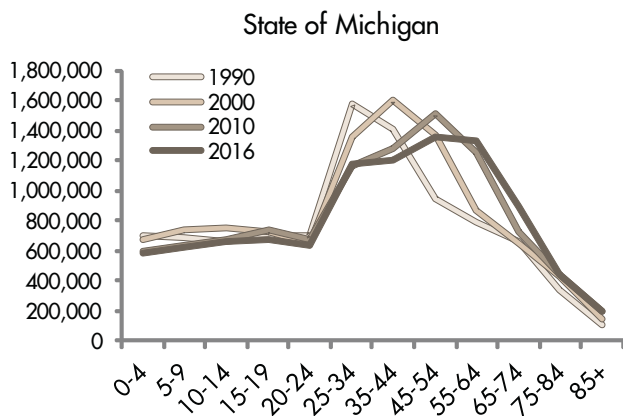
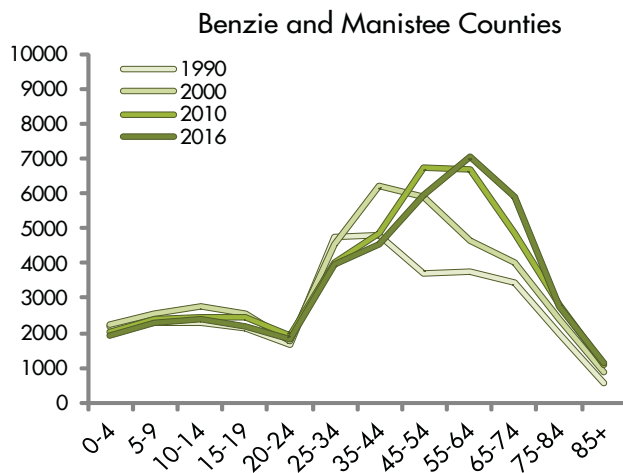
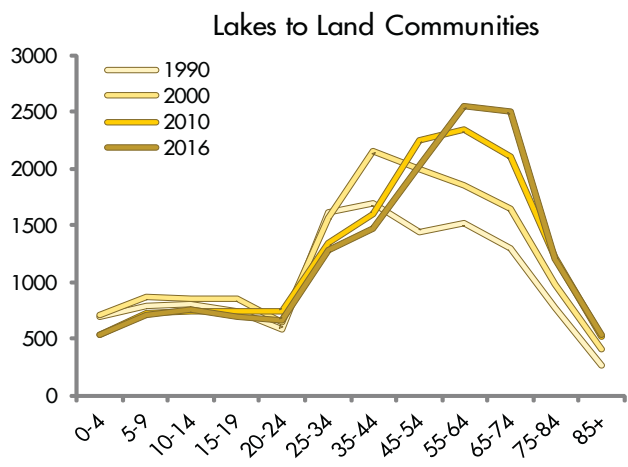
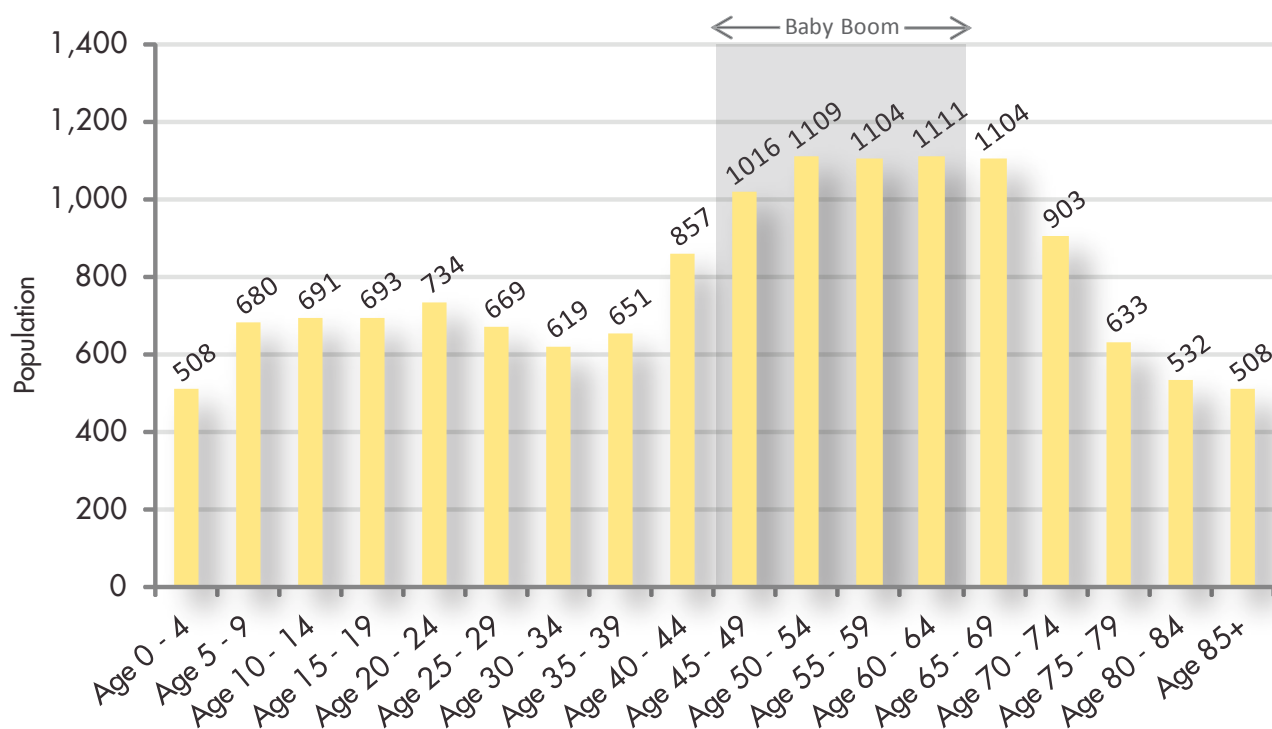
Those born during the Baby Boom of 1946 to 1964 have already entered or are approaching retirement age, raising the median age of the population. Nationally and statewide, the number hovers at just under 40 years of age, with Michigan’s median age about a year and a half older than America’s. When looking at Benzie and Manistee counties, however, that median jumps nearly a decade to 46.2 and 47.1 years respectively—and two-thirds of the Lakes to Land communities have median ages that are older still (Figure 2.49). Only in the Village of Honor is the median age younger than it is statewide and nationally.

In Figure 2.50, we see that the population “peak” is mostly contained within the Baby Boom age ranges of 45-64. Almost a third (30.7%) of the citizens of the Lakes to Land communities are within this age range, and another quarter (26.1%) are older. The bottom four graphs in Figure 2.50 reproduce the imaginary line that runs across the bar chart for the Lakes to Land communities, the Benzie/Manistee county area, the State of Michigan, and the United States, repeated at four different points in time. In each line, the “Baby Boom bump” is visible as it moves through the age ranges; we can see that this concentration becomes more pronounced as the population focus narrows from national to state, state to region, and region to participating communities.

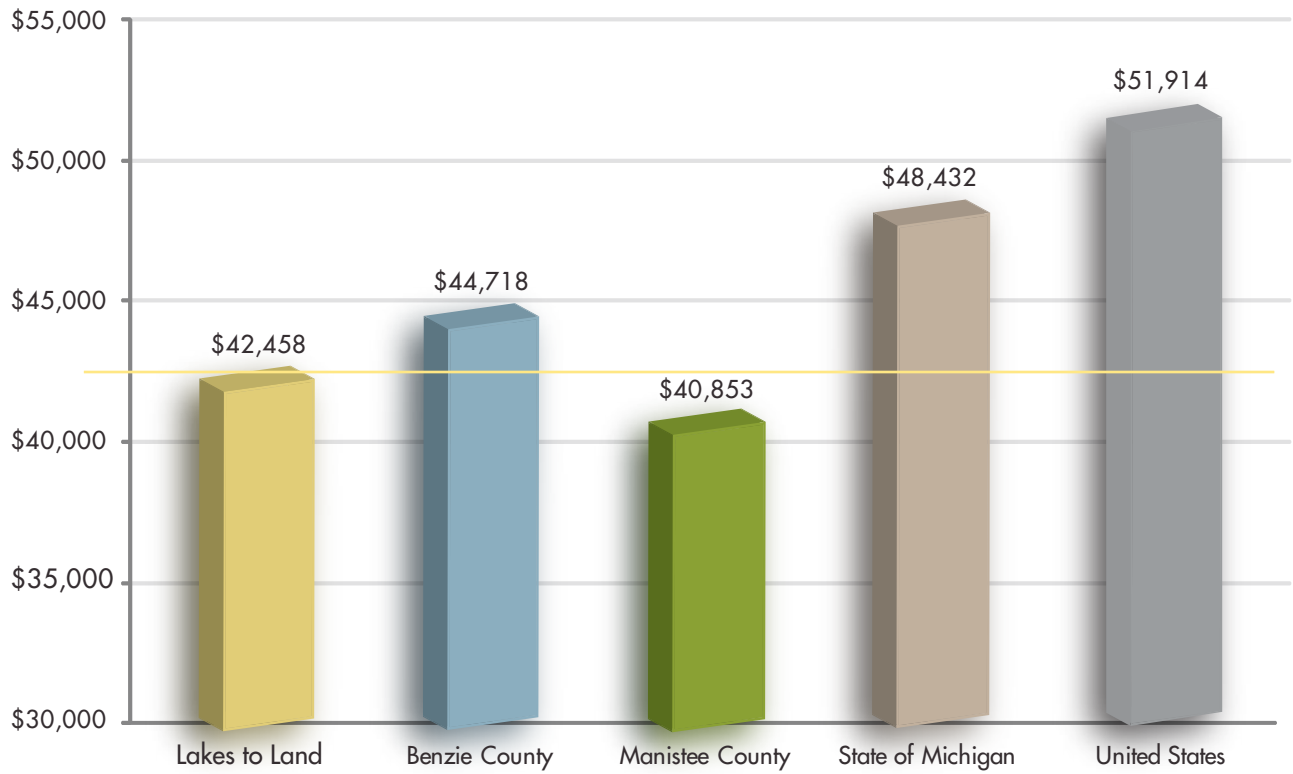
This is important to know in addressing the needs of each community. It signals a need for age-appropriate housing and greater attention to universal access in design. More advanced life support and paramedic services may be needed, while the demand for schools is likely to be low. Fewer jobs may be needed if a large percentage of the population subsists on retirement income.

2.51 Table of median ages and ages 65+

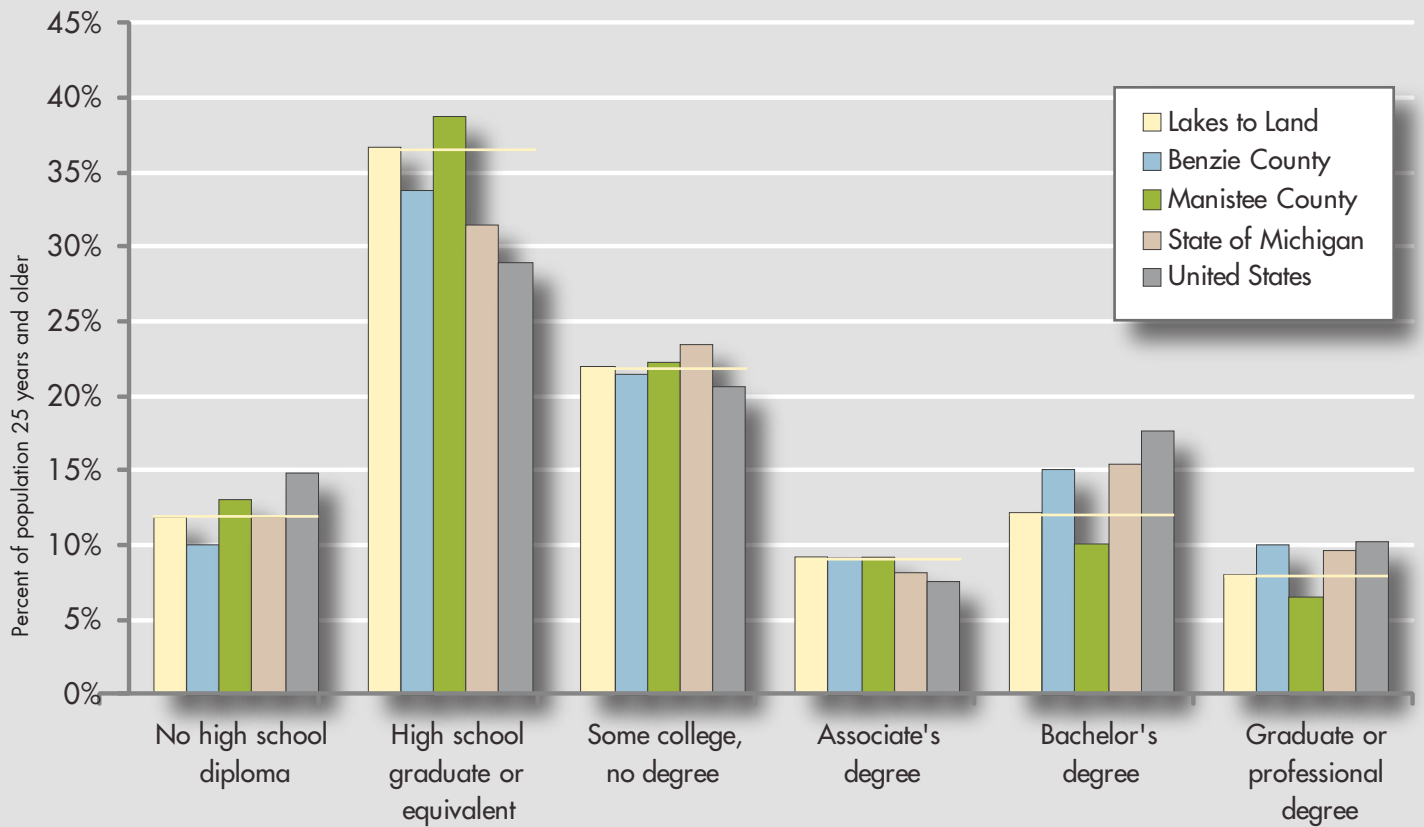
	Median Age	% Population Aged 65+
Lake Twp	64.4	48.5%
Arcadia Twp	56.1	31.9%
Crystal Lake Twp	55.4	31.2%
Onkama Twp	55.2	29.9%
City of Frankfort	54.6	36.1%
Village of Onkama	54.4	28.5%
Blaine Twp	53.3	31.4%
Pleasanton Twp	50.0	27.9%
Gilmore Twp	48.6	22.9%
Village of Elberta	47.8	21.5%
Manistee County	47.1	20.7%
Benzie County	46.2	20.6%
Joyfield Twp	45.0	18.4%
Bear Lake Twp	44.4	20.2%
Manistee Twp	44.0	19.4%
Village of Bear Lake	40.6	18.4%
Michigan	38.9	13.8%
United States	37.2	13.0%
Honor (village)	36.8	20.4%



2.53 Median income comparison



2.54 Educational attainment comparison



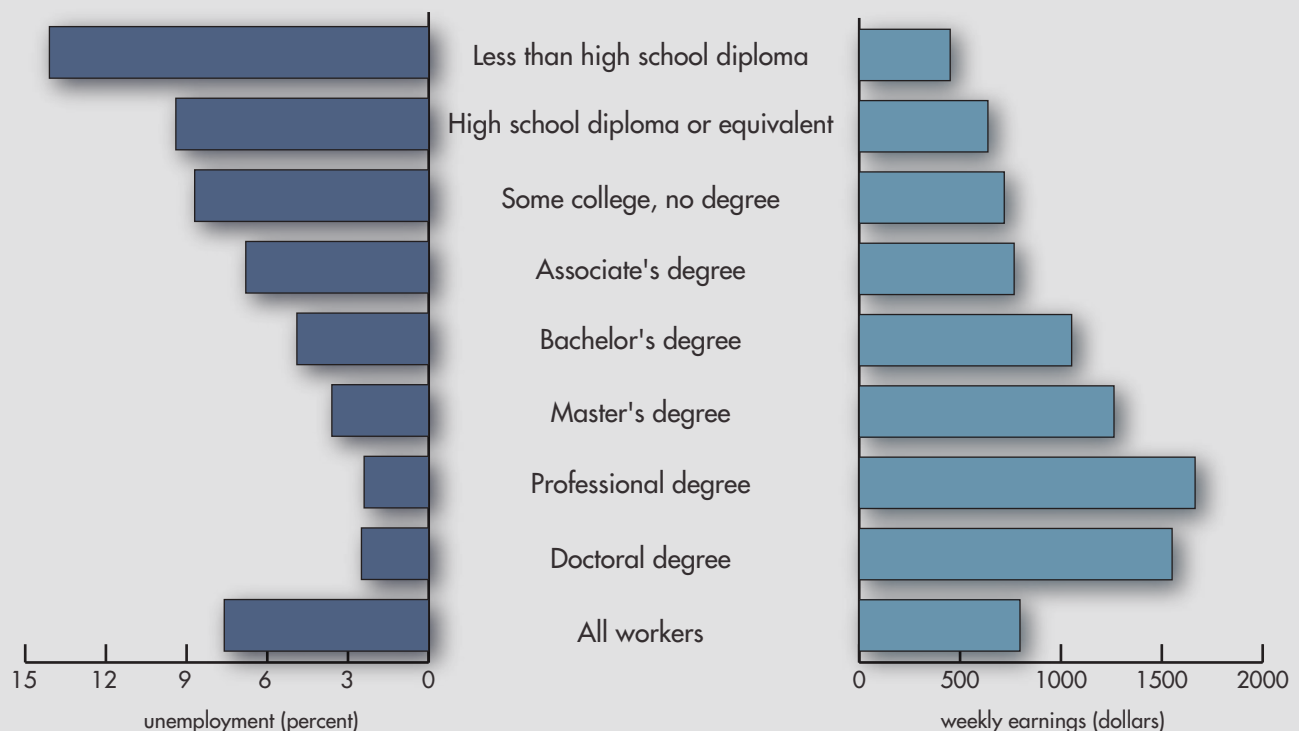
Education and income

There is a direct correlation between educational attainment and income.

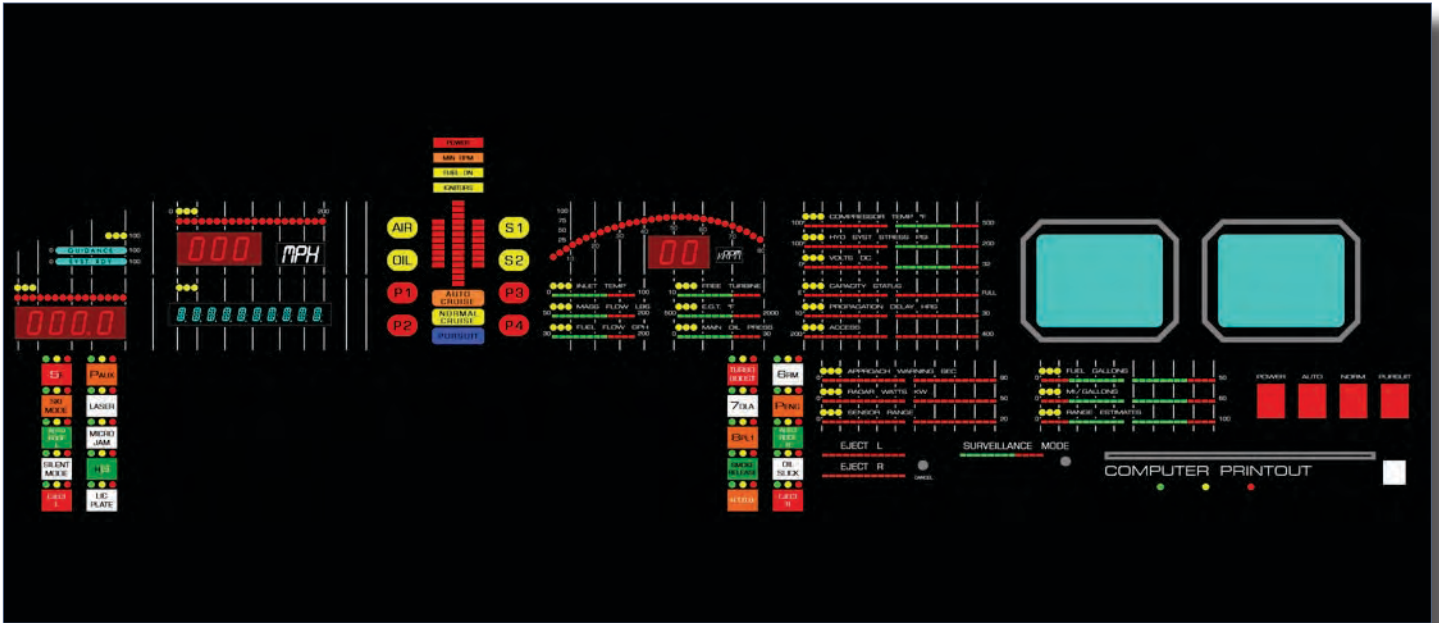
The chart in Figure 2.51 shows the median household income for the Lakes to Land region, Benzie County, Manistee County, the state of Michigan, and the United States, and the chart in Figure 2.52 displays the educational attainment for the population ages 25 and up for each of those groups. To see the relationship between education and income at each level, a line indicating the value of the Area of Influence relative to the other groups has been drawn. We can see that at the bachelor's degree level and above, the graphs for education and income are quite similar, indicating a positive correlation between earnings and income. On the other end of the scale, we see that the graphs depicting a high school education or less depict the converse: the groups with lower percentages of population educated at that level are the groups with higher median incomes.

This rather unscientific comparison is borne out in Figure 2.53, which shows the 2011 unemployment rate and median weekly earnings for each of eight levels of education and the overall workforce. Here it is clearly illustrated that education is not only correlated with earnings but also with having a job at all. For those with less than a high school diploma, the unemployment rate is 14.1%, nearly twice the rate of all workers, and getting a job only yields \$451 per week—just above the federal poverty threshold for a family of four.

2.55 Educational attainment, income, and unemployment in the L2L communities



Source: Bureau of Labor Statistics, Current Population Survey



Credit: Dave Metlesits

Dashboards

Data dashboards are tools designed to convey assessment metrics in a visual, quick-to-understand format.

Statistics provide a good way to compare one population to another. By selecting a measurement and comparing its value in different places, we can draw conclusions about those places in relation to one another: where the educational attainment levels are lagging, for example, or where median income levels indicate the presence of well-paid jobs. When trying to compare the overall snapshot of one community to another, however, the sheer volume of numbers can almost immediately become overwhelming to anyone who is not a professional statistician.

Enter the data dashboard, a graphic representation of the community's vital statistics. The following pages show the population, population growth, housing ownership, education levels, household income, and types of work in Benzie County, Manistee County, the State of Michigan, and the United States, as well as a quick-reference list of additional statistics related to each of those categories.

***The Prosperity Index
moves past description
to assessment.***

The Prosperity Index moves past description to assessment. By combining individual measurements, we can ask and answer questions such as,

"Are market forces creating most of the jobs?"

"What kind of jobs are they?"

"How plentiful are jobs?"

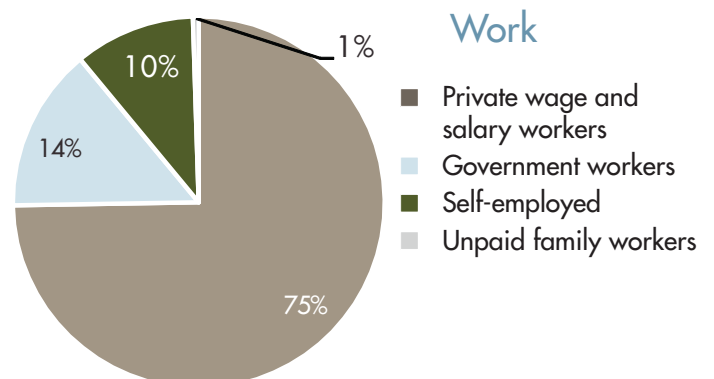
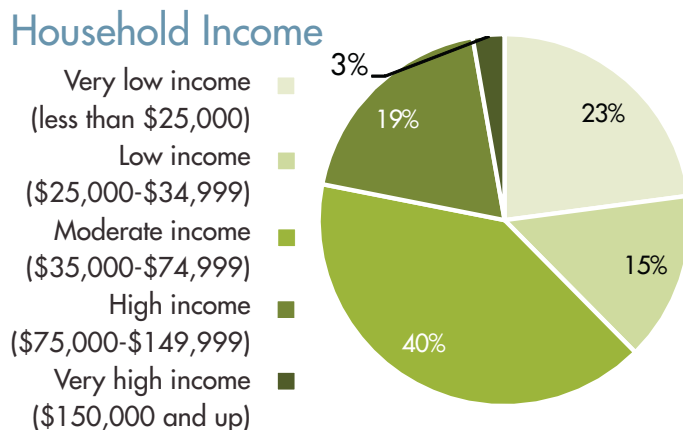
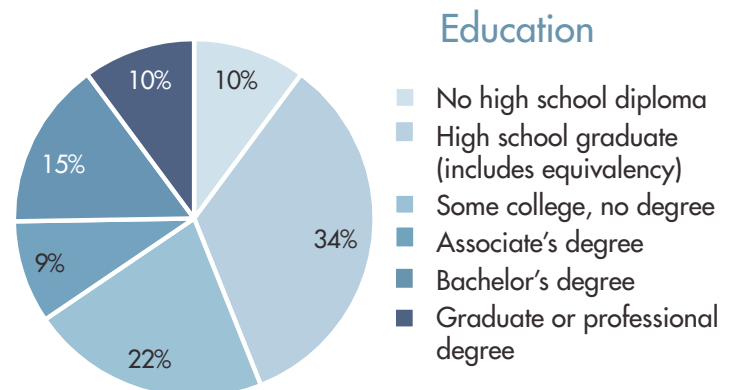
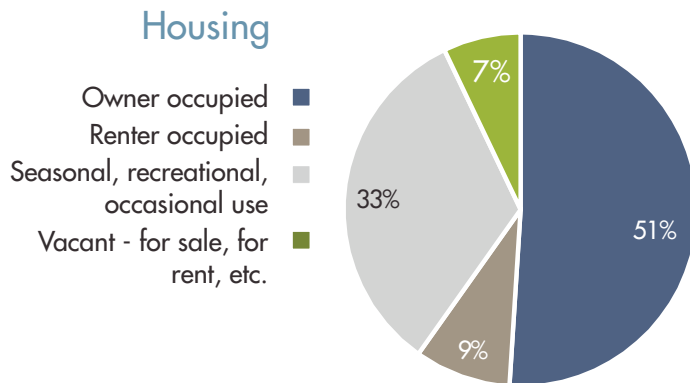
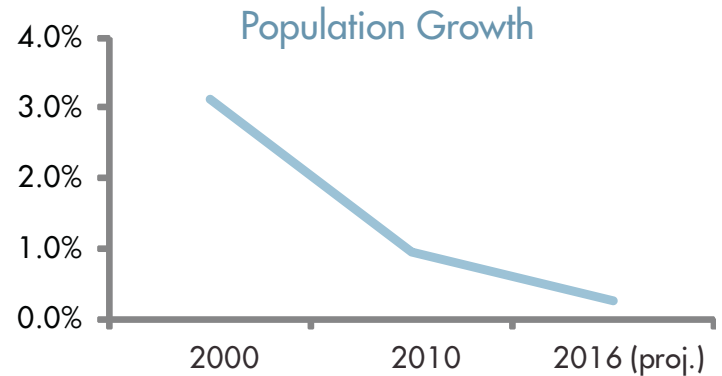
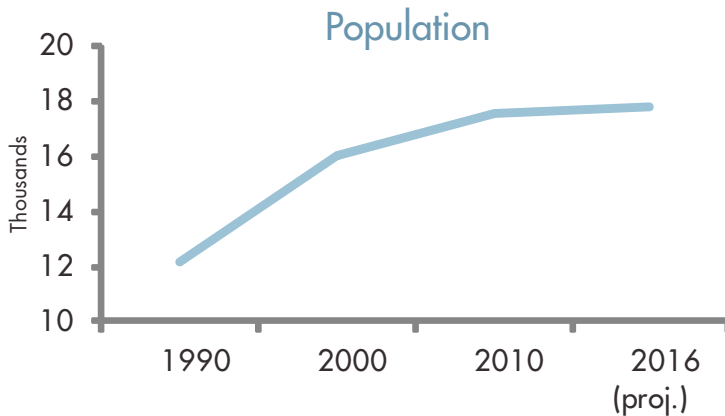
"What kind of jobs will the education level of our workforce support?"

"Are the jobs that we have keeping our residents out of poverty and providing for their children?"

"Is the government keeping our residents and children out of poverty?"

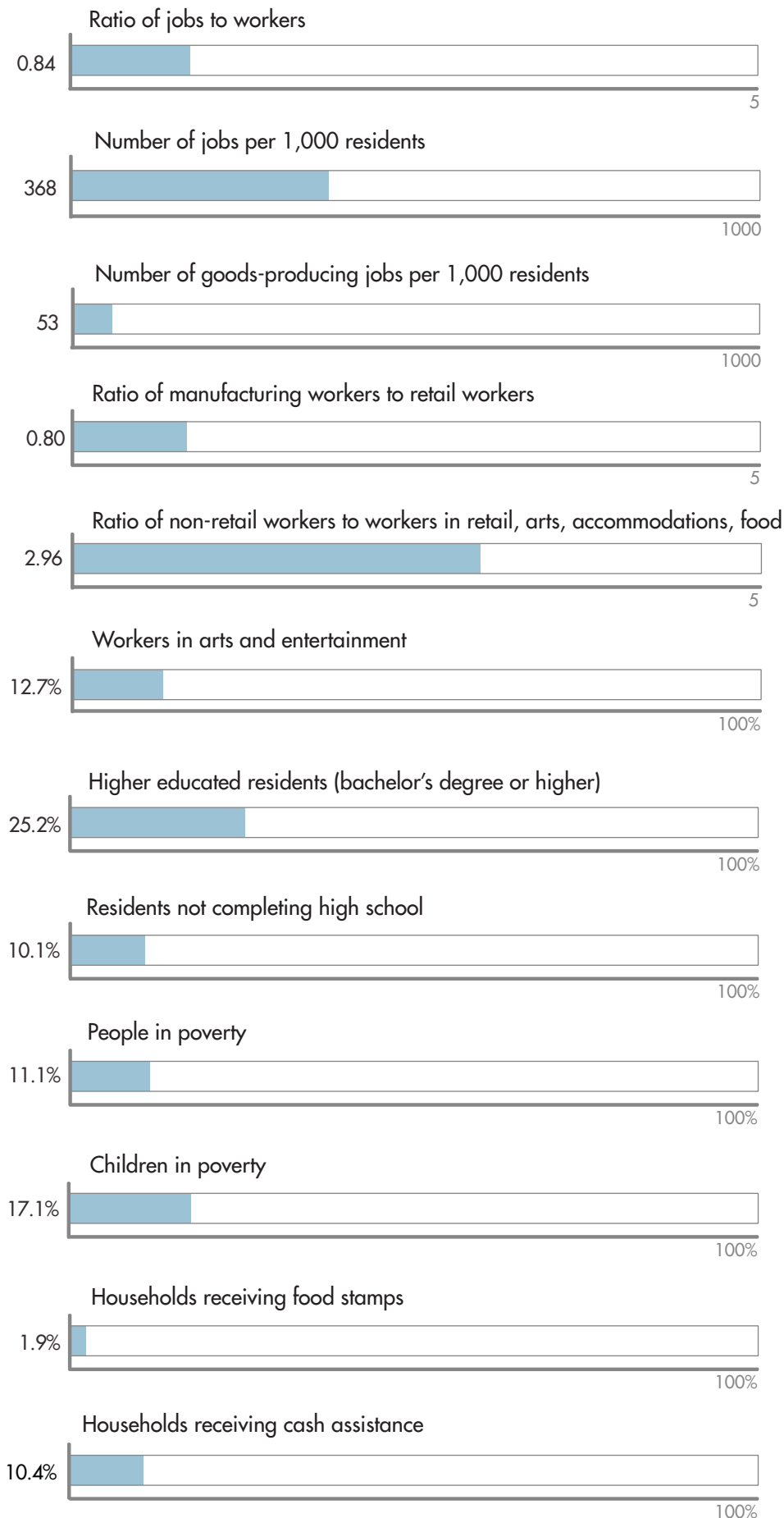
Of course, these answers arrive in the form of a single number. To contextualize that number, it is depicted on a bar graph and a colored band indicating its value is carried forward for comparison on the following bar graphs. (It's easier to look at than to explain, we promise.) The Community Dashboard presented in Tab 4 retains these contextual bands.

Benzie County Dashboard



Classifications modified from HUD guidelines, using the state median income of \$48,432.

Prosperity Index



Households

2.35

person average household size

\$160,200

owner-occupied median home value

\$737

median gross rent

Education

23%

population enrolled in school

90%

high school graduate or higher

25%

bachelor's degree or higher

Commuting

94%

workers who commute

85%

commuters who drive alone

23.1

minute average commute

Employment

6,452

jobs

7,722

workers

11.7%

unemployment rate

14.2%

civilian veterans

Income

\$44,718

median household income

\$22,160

median earnings for workers

\$37,704

male full-time, year-round earnings

\$31,272

female full-time, year-round earnings

11%

population in poverty

17%

children in poverty

Top Industrial Sectors

17%

accommodation and food services

14%

retail trade

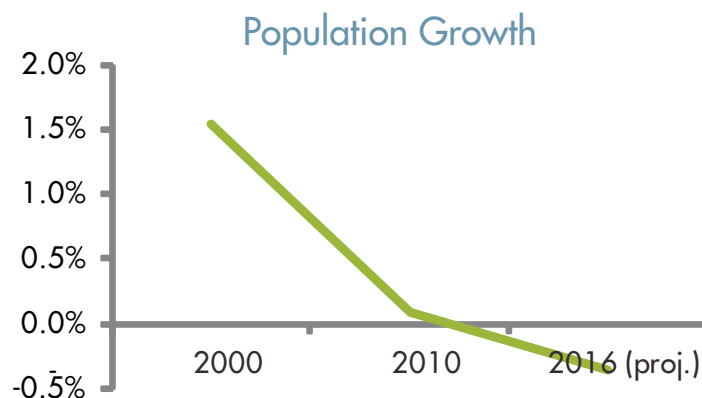
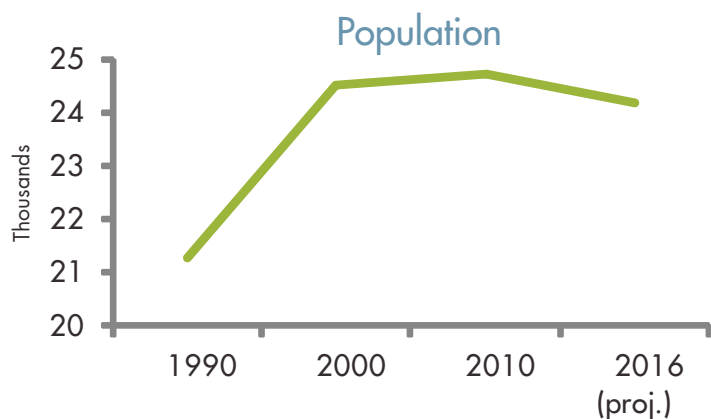
11%

health care and social assistance

Manistee County Dashboard

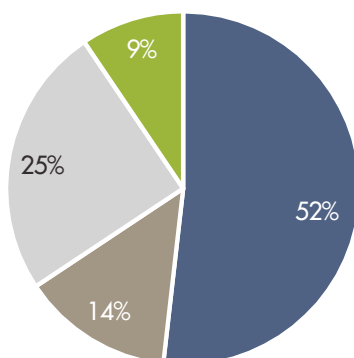
Key for prosperity index graphs:

Benzie County



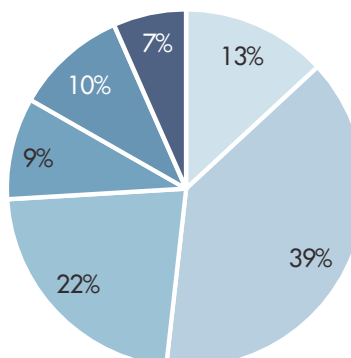
Housing

- Owner occupied
- Renter occupied
- Seasonal, recreational, occasional use
- Vacant - for sale, for rent, etc.



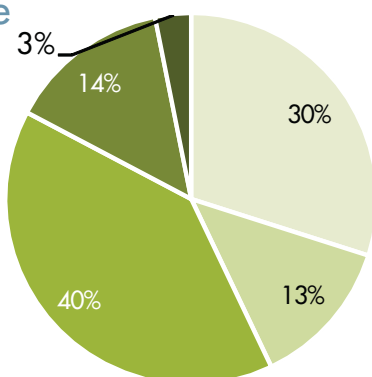
Education

- No high school diploma
- High school graduate (includes equivalency)
- Some college, no degree
- Associate's degree
- Bachelor's degree
- Graduate or professional degree



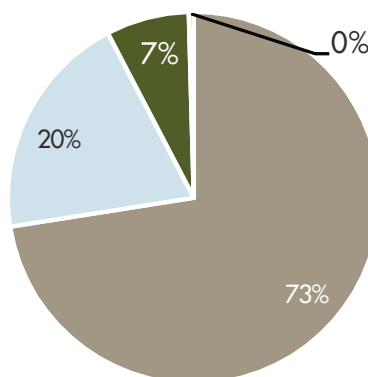
Household Income

- Very low income (less than \$25,000)
- Low income (\$25,000-\$34,999)
- Moderate income (\$35,000-\$74,999)
- High income (\$75,000-\$149,999)
- Very high income (\$150,000 and up)



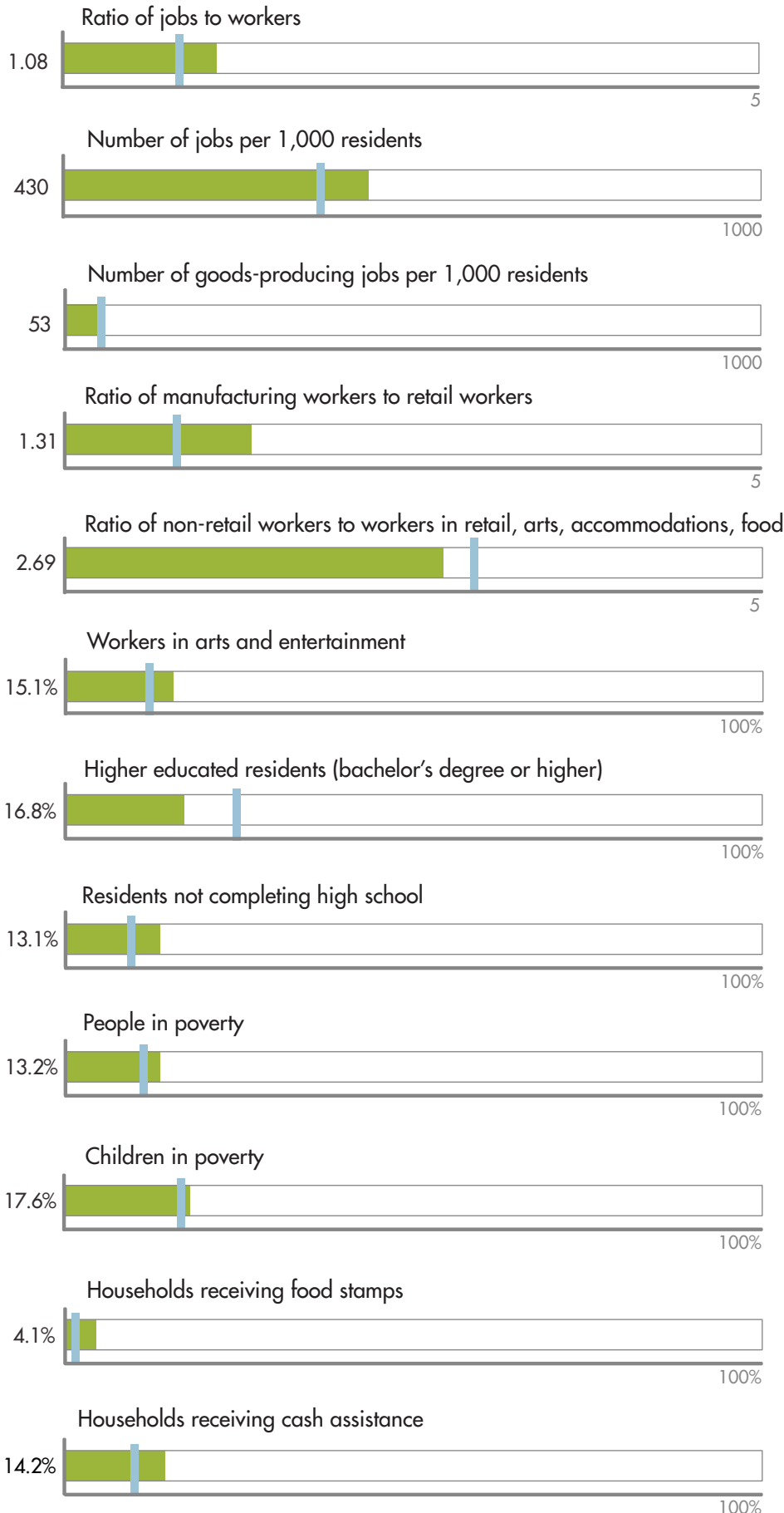
Work

- Private wage and salary workers
- Government workers
- Self-employed
- Unpaid family workers



Classifications modified from HUD guidelines, using the state median income of \$48,432.

Prosperity Index



Households

2.2

person average household size

\$124,000

owner-occupied median home value

\$627

median gross rent

Education

19%

population enrolled in school

87%

high school graduate or higher

17%

bachelor's degree or higher

Commuting

95%

workers who commute

83%

commuters who drive alone

21

minute average commute

Employment

10,646

jobs

9,846

workers

11.6%

unemployment rate

15%

civilian veterans

Income

\$40,853

median household income

\$21,443

median earnings for workers

\$41,134

male full-time, year-round earnings

\$27,479

female full-time, year-round earnings

13.2%

population in poverty

17.6%

children in poverty

Top Industrial Sectors

15%

retail trade

13%

health care and social assistance

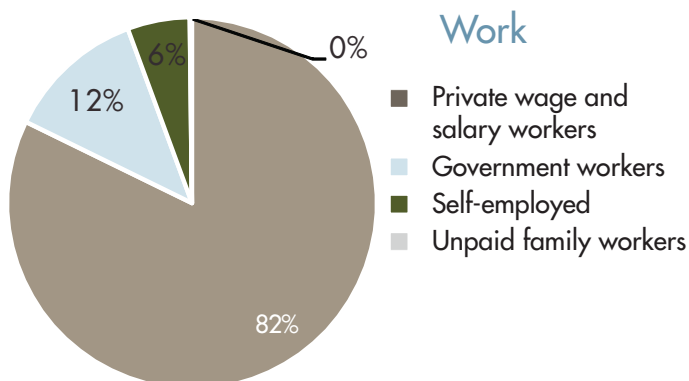
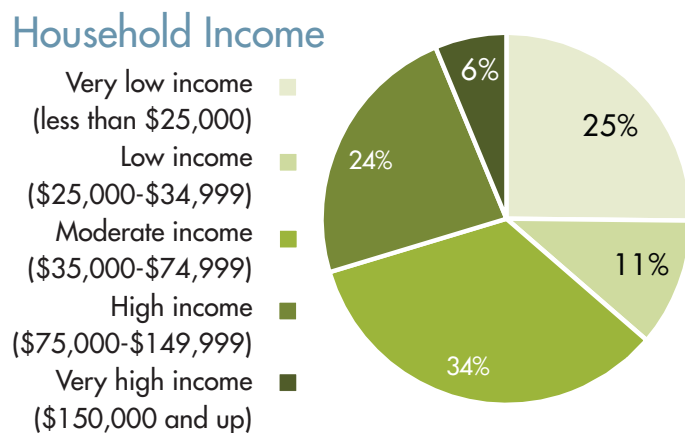
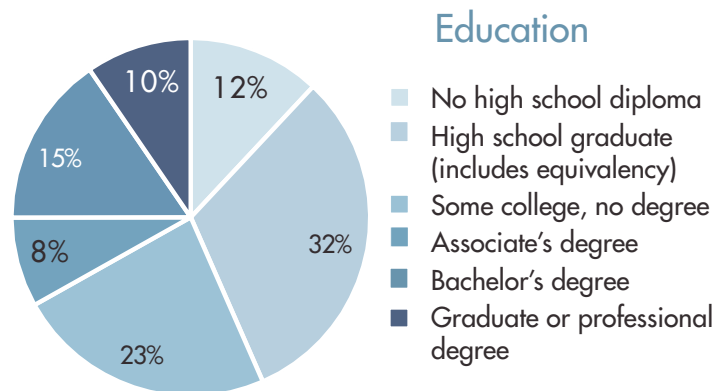
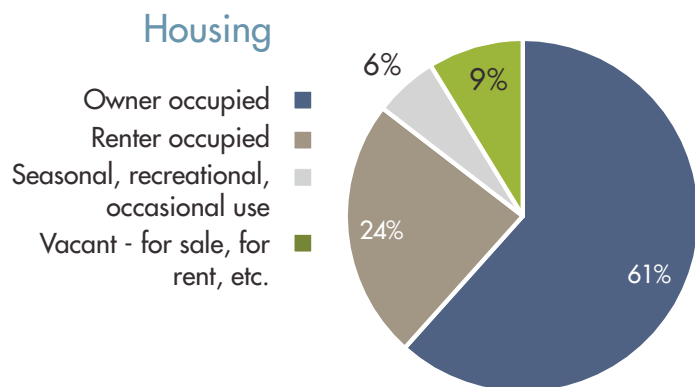
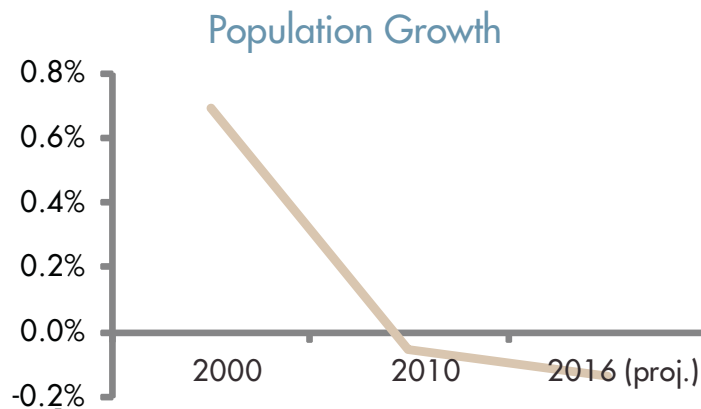
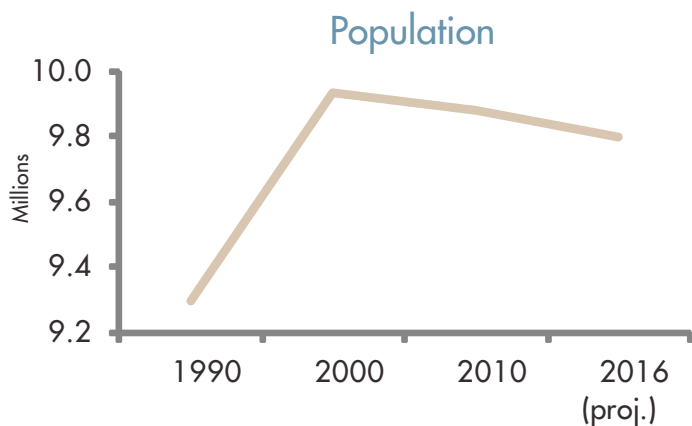
12%

public administration

State of Michigan Dashboard

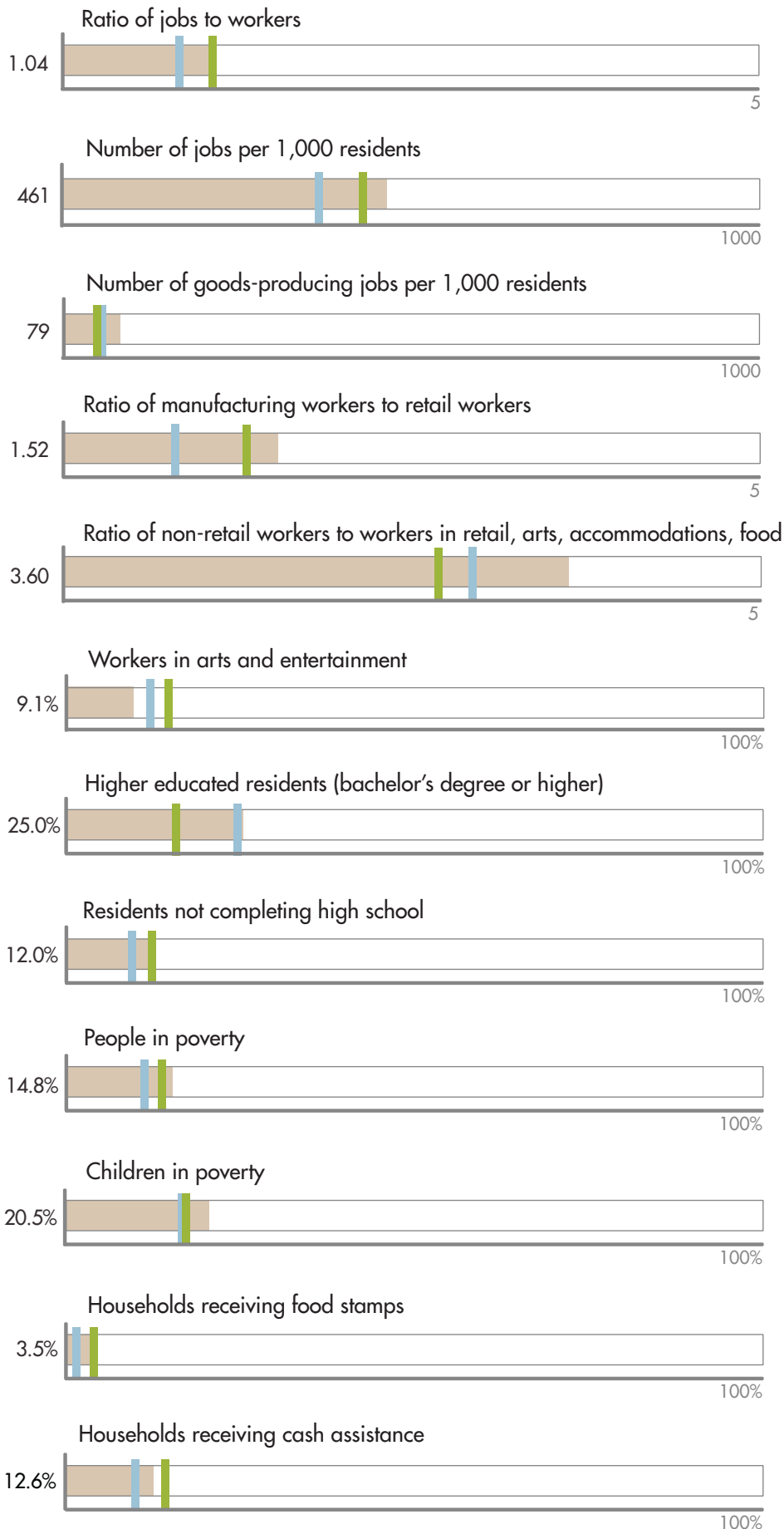
Key for prosperity index graphs:

Benzie County Manistee County



Classifications modified from HUD guidelines, using the state median income of \$48,432.

Prosperity Index



Households

2.53
person average household size
\$144,200
owner-occupied median home value
\$723
median gross rent

Education

28%
population enrolled in school
88%
high school graduate or higher
25%
bachelor's degree or higher

Commuting

97%
workers who commute
86%
commuters who drive alone
23.7
minute average commute

Employment

4,561,169
jobs
4,369,785
workers
1.5%
unemployment rate
9.7%
civilian veterans

Income

\$48,432
median household income
\$27,432
median earnings for workers
\$50,208
male full-time, year-round earnings
\$36,157
female full-time, year-round earnings
14.8%
population in poverty
20.5%
children in poverty

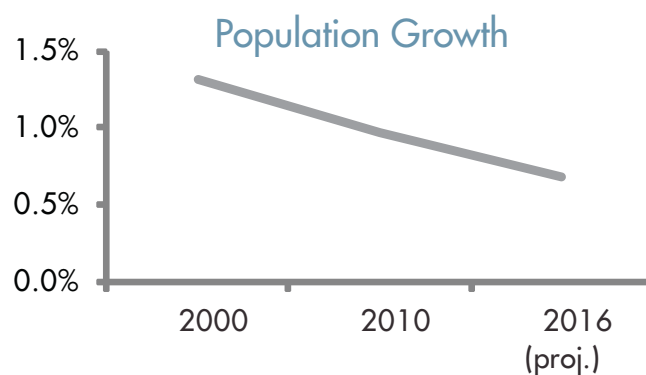
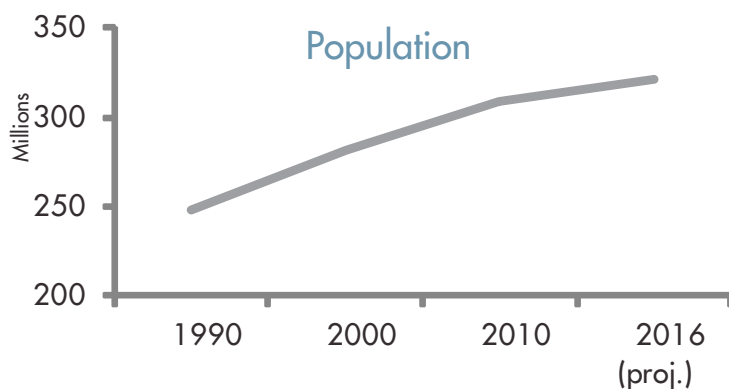
Top Industrial Sectors

14%
health care and social assistance
13%
retail trade
12%
manufacturing

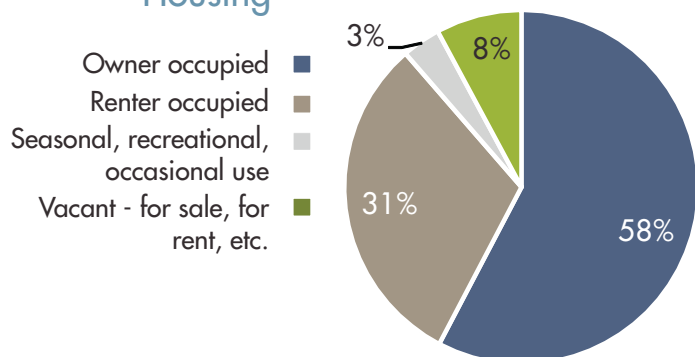
United States Dashboard

Key for prosperity index graphs:

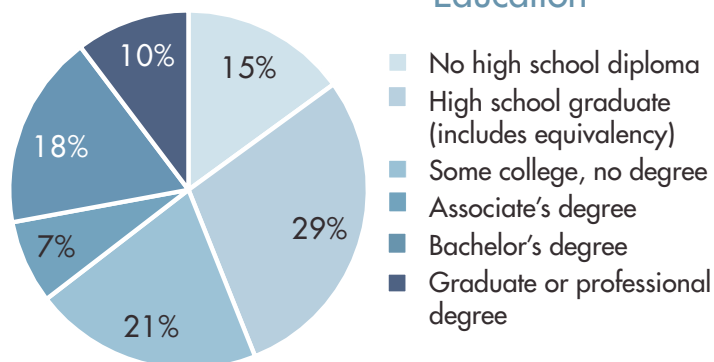
Benzie County Manistee County Michigan



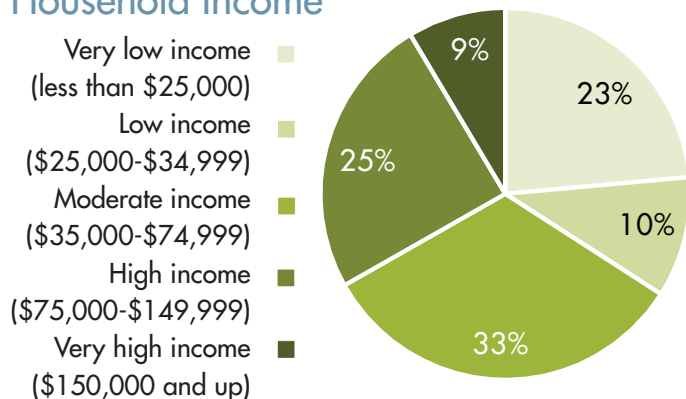
Housing



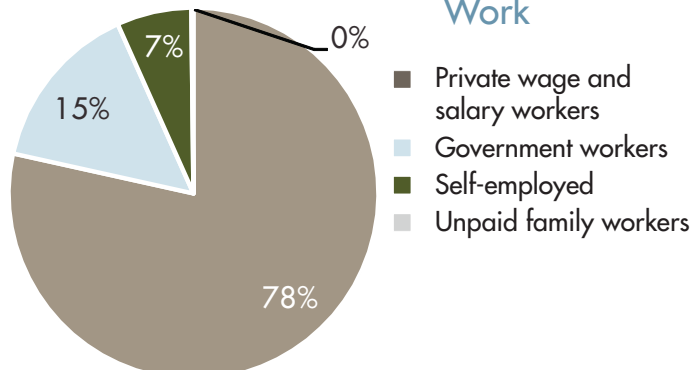
Education



Household Income

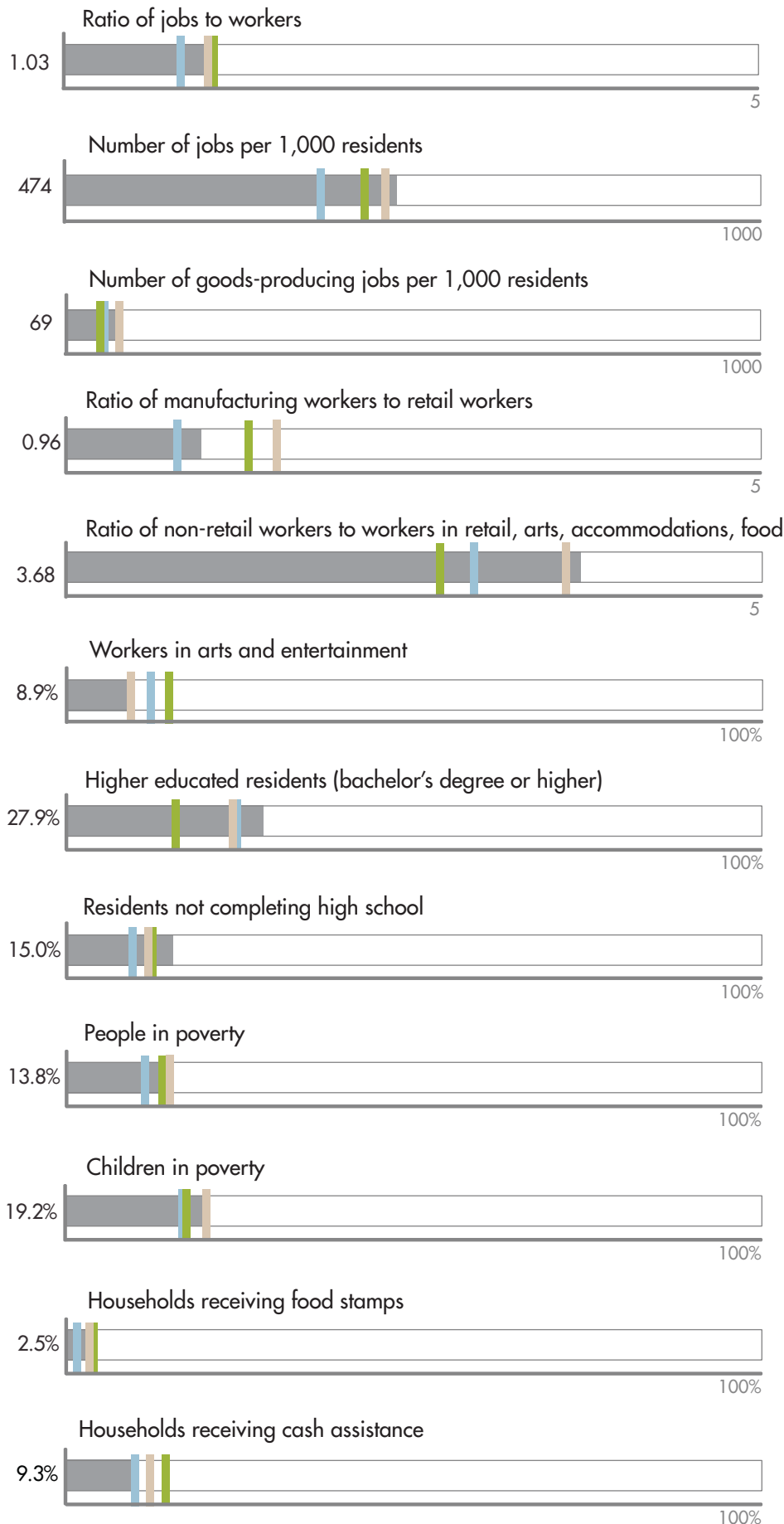


Work



Classifications modified from HUD guidelines,
using the national median income of \$51,914

Prosperity Index



Households

2.59

person average household size

\$188,400

owner-occupied median home value

\$841

median gross rent

Education

26%

population enrolled in school

85%

high school graduate or higher

28%

bachelor's degree or higher

Commuting

96%

workers who commute

79%

commuters who drive alone

25.2

minute average commute

Employment

146,234,698

jobs

141,833,331

workers

7.9%

unemployment rate

9.9%

civilian veterans

Income

\$51,914

median household income

\$29,701

median earnings for workers

\$46,478

male full-time, year-round earnings

\$36,040

female full-time, year-round earnings

13.8%

population in poverty

19.2%

children in poverty

Top Industrial Sectors

13%

retail trade

13%

health care and social assistance

9%

accommodation and food services



County Plans

Master plans are written at all levels of government—community-specific, regional, and statewide. A county master plan contains many of the same attributes found in a plan for a single community, and its preparation follows the same process.

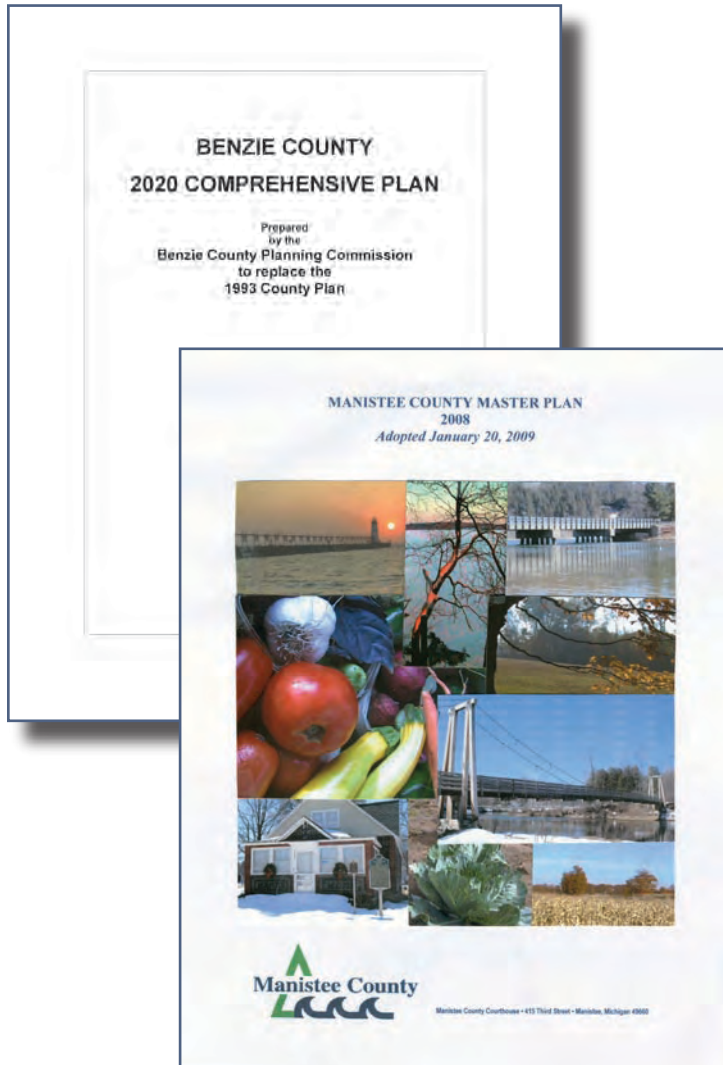
One difference is that the focus sweeps over municipal boundaries to consider factors that affect the county as a whole. Both Benzie and Manistee Counties have written county master plans that take a regional view within their respective boundaries.

Benzie County's Master Plan was prepared in 2000, and Manistee County's Master Plan was prepared in 2009. No matter what level of government the master plan is being prepared for, it is influenced by the conditions within the community at the time the plan is drafted, public interests of the day, and the issues that extend beyond the municipal boundaries but have a significant impact locally. Despite the fact that the plans were written nearly ten years apart and the vastly different economic and societal conditions that existed at the time of their preparation, there are commonalities in planning strategies.

The commonalities between the Manistee and Benzie County Master Plans speak to a commitment to rural scenic character, a land use strategy that guides development towards existing population centers, and a desire for coordination of planning with neighbors. Two themes strongly articulated in both plans are the preservation of views, wetlands, rivers, streams, and the Lake Michigan shoreline, and an emphasis on retaining rural scenic character by preserving lands for

forestry, agricultural, and low density residential use. Natural resources and environmental protection are also strong key components of both plans. In addition, both plans call for coordination of planning between municipalities and neighboring regions in order to obtain efficiencies in services.

The largest difference between the Manistee County and Benzie County Master Plans lies in the type of plan: the Manistee County Master Plan is service-oriented, while the Benzie County Master Plan is a growth management tool. They also differ in how they deal with local government sovereignty in that Benzie County is focused on regionalism rather than Manistee's emphasis on the sovereign right of local governments to plan individually. Another difference is in how their strategies are articulated. The Manistee County Master Plan has a series of goals and objectives that are categorized by topic. Benzie County Master Plan also has goals and objectives found in associated "Background Reports," but they are summarized in eight "fundamental principles." The fundamental principles and associated policies of the Benzie County Plan are what most of the communities in the county use as their guiding basis for decisions as the "Background Reports" have been unavailable. Both plans lay out an articulated path for the future development of their respective county.



No matter what level of government the master plan is being prepared for, it is influenced by the conditions within the community at the time the plan is drafted, public interests of the day, and the issues that extend beyond the municipal boundaries but have a significant impact locally.

Benzie County Planning History

The history of the county plan involves active citizenry looking to plan for the county on a regional scale. Because regional planning and collaboration among communities are “best practices” in planning, the functions of planning and zoning were, until recently, housed at the county level. Rather than individual townships taking on those administrative duties, they were performed by a county planning commission, a county planner, and a county zoning administrator. This scale lends itself to a comprehensive approach: as planning and zoning issues are considered, their impact on the county as a whole was considered.

When the county decided to discontinue zoning on a regional scale, individual townships tried to take on that role by quickly adopting the county master plan and zoning ordinance. However, they soon found that the plan wasn’t suited to their individual needs and further realized that the data contained in it needed updating with the 2010 census data. Therefore, communities took the opportunity presented by the Lakes to Land collaboration to write updated, individual master plans tailored to their own unique needs.

Referencing the county plan is important in the sense that it provides the historical backbone to continued scenic rural preservation goals and other regional planning initiatives. Policies that the county established in the plan, such as concurrency in infrastructure development, open space and agricultural preservation, and economic development geared toward established urban cores, are still seen in individual master plans. The county plan provided the framework that is still being adhered to today; such consistency among planning efforts makes for good planning practice. It is hoped that as the individual communities offer more detailed visions of their preferred

futures, these visions will be reflected in subsequent county planning efforts.

Manistee County Planning History

In Manistee County, professional planning services have been provided by a professionally staffed planning department for decades. The planning department works with communities in developing master plans, administering zoning, and facilitating solutions to a myriad of problems. Also of key importance is their use of Geographic Information Systems (GIS), a specialized software program used to convey spatial data in map form, to aid communities and decision makers.

While planning in the County is decentralized, the use of the County Planning Commission and a professional planner provides local master plans and regulatory tools with review and coordination to help achieve some regional consistency. In fact, a number of Manistee County communities over the years have formed joint planning commissions and prepared joint master plans. As mentioned in Tab 1, these include Pleasanton Township, Bear Lake Township, and the Village of Bear Lake as well as Onekama Township and the Village of Onekama. Currently, a number of watershed planning efforts are also underway that cross municipal boundaries to focus on the single issue of ensuring the highest integrity of water quality possible within the County.

Manistee County understands that closely coordinated planning which seeks to ensure collaboration and coordination between municipal neighbors, while maintaining local autonomy, is essential to ensuring continued prosperity for County residents. In fact, the Lakes to Land Initiative was born from just a few Manistee County residents.

KEY STRATEGIES

Benzie County 2020 Comprehensive Plan

- The Benzie Co. Master Plan has a growth management focus. Policies are geared toward defining land use development patterns and practices guiding new development and services to specific areas of the County in order to manage development and maintain a rural scenic character.
- Benzie Co. Master Plan focuses on regional land use planning, emphasizing land use patterns and policy for the county as a whole while promoting integration of individual municipal boundary lines.
- Economic development, character, transportation, land use issues, natural resources, and environmental protection are topics that are encompassed within the scope of where and how to place development within the County, utilize the transportation system efficiently and install infrastructure improvements that builds on exiting systems. Efficiencies in land use patterns and services are key components to the success of the plan. Benzie County maintains a Recreation and Cultural Plan within the county.
- Urban Service Districts are mapped out to indicate where new public services may be extended to accommodate new development.
- Rural scenic character preservation is a key focus of the plan. Policies that call for the development of corridor plans, buffer screening, conservation easements, design guidelines, night sky policies, and additional design guidelines are aimed at aiding in this goal.
- Eight guiding fundamental principles are articulated followed by 4 strategies: balanced growth, environmental protection, protection of the visual character of the landscape, and protection of the visual character of small towns.

Manistee County Master Plan, 2008

- The Manistee County Master Plan is geared toward building the capacity of public services and investment—the development and enhancement of programs, plans, and facilities in order to actualize their vision.
- Public services that would be created or enhanced include recreation, housing, economic development, natural resources, infrastructure, and transportation. These topics collectively work to actualize the desired end result of the Master Plan. For example, the Manistee County Plan calls for the creation of a recreation plan and recreation department, alternative energy program, economic development programming, and solid waste management program. Capacity building of this type would aid in creating recreational opportunities and management of those programs, achieve greater alternative energy production, protection of the environmental and natural resources, and expand and grow the economic base.
- In Manistee County, community-specific land use planning is preferred, honoring local planning efforts. It does point to a few general regional land use goals, such as compact development forms and coordination of planning efforts among municipalities.
- The Plan calls for nine categories of goals with associated objectives to achieve the goals.

2.60 County Plan summary table

Manistee County Goals	
ECONOMY / BALANCED GROWTH	<ul style="list-style-type: none"> • Increase opportunities for business in the county. • Encourage the Alliance for Economic Success and the Greater Manistee Area Chamber of Commerce to diversify the industrial base to create more job opportunities and to create specialty groups. • Increase the ability of Manistee County to attract and retain technology-based businesses. • Link economic development goals and objectives with those of the Little River Band of Ottawa Indians to provide broader, unified economic development programs. • Coordinate a collaborative planning program among the county, local units of government within the county, and adjoining counties.
HOUSING	<ul style="list-style-type: none"> • Encourage the development of more assisted living facilities/senior housing options as the average age in the county rises, including development of support services to assist seniors to stay in their own homes. • Encourage housing options for a variety of income levels. • Discourage blight and nuisance housing areas.
PROTECTION OF NATURAL RESOURCES AND ENVIRONMENT	<ul style="list-style-type: none"> • Encourage the remediation of environmentally contaminated lands which have a potential for damaging rivers, streams and groundwater. • Advocate for the creation and long term maintenance of a county-wide solid waste management program • Advocate for the maintenance of Manistee County's natural resources and the beauty of its landscape. • Encourage local governments to develop guidelines and criteria which protect natural features and sensitive areas. • Advocate for county-wide alternative energy programs and projects.
RECREATION	<ul style="list-style-type: none"> • Continue to work on the development of the Manistee County Recreation Plan, including all areas of the county. • Encourage universal accessibility to all recreation sites. • Increase recreational opportunities for all ages. • Advocate for a Manistee County parks program including the preservation of open spaces for recreation purposes.
AGRICULTURE	<ul style="list-style-type: none"> • Advocate for agriculture and forest management activities which enhance Manistee County's economic base and quality of life. • Advocate that designated agricultural areas in the county remain primarily agricultural or low density residential.
TRANSPORTATION	<ul style="list-style-type: none"> • Advocate for the development of a coordinate county transportation plan. • Advocate for the awareness of the importance of our local airport for all travelers in the county. • Monitor projects and proposals to assess the maintenance of safe and efficient routes in and through the county while respecting the rural character. • Advocate for expansion of deep water port facilities linking to air, rail, highway connections, and warehousing and distribution facilities. • Advocate for the continued study of the railroad relocation project.
INFRASTRUCTURE	<ul style="list-style-type: none"> • Advocate for the development of a county infrastructure plan. • Advocate for the effective and efficient location of public facilities and delivery of public services.
LAND USE / VISUAL CHARACTER	<ul style="list-style-type: none"> • County master planning will respect the goals and land use plans of local government, including the Little River Band of Ottawa • Future growth will occur in existing and planned growth centers such as the City of Manistee and population centers as identified in each local government plan.

Benzie County Principles and Strategies

The principal land use issue in Benzie County is not whether to grow, it is where, when and in what manner can growth occur without undermining the integrity of the scenic natural character of the County and the economy built around it.

FUNDAMENTAL PRINCIPLES

1. Scenic character should be preserved or enhanced wherever feasible in the County
2. Natural resources in the County should be protected from inappropriate use or conversion.
3. 3. The pristine natural environment of the County should be protected from degradation.
4. An economy built on renewable natural resources is sustainable and should continue to be the principal economic base for the future.
5. Future development should primarily take place in a compact development pattern.
6. Future land use, zoning, land division and public infrastructure decisions should be made consistent with this Plan.
7. A strong effort should be made to achieve improved intergovernmental cooperation within Benzie County
8. The vision in this Plan must be achieved without violating protected property rights.

Balanced Growth Strategy

Preservation of scenic character in Benzie County is both dependent on and supports most of the economic base in the County. The scenic character is comprised of the natural environment, farms, and the built environment. Thus, protecting scenic character, the natural environment, and economic development must proceed together—or one or the other (or both) will suffer. The solution lies in pursuit of a balanced growth policy. Balanced growth will require housing not only for seasonal residents, retirees, or two income commuter families, but also for the elderly, young families, and other persons on low fixed incomes. New businesses will be needed to meet the needs of the growing seasonal and permanent populations.

Environmental Protection Strategy

The other side of the balanced growth strategy is the environmental protection strategy. This term embraces protection of renewable natural resources like agricultural and forest land, as well as the air, water, and other sensitive natural features in the County (like wetlands, floodplains and sand dunes) The greatest threat to these resources is from poorly planned or sited new development. Residential development poses the greatest threat because there is so much more of it over a much wider area.

STRATEGIES

Strategy to Protect the Visual Character of the Landscape

County citizens have strongly indicated that they do not want growth to spoil the scenic character of the landscape. They do not want it to take on a suburban or urban character. They want the forested, lake, and riverine landscapes to be preserved for the benefit of present and future generations. Almost everyone feels a right to see, enjoy, and help protect these resources. As a result, protection of the unique rural character of the County must be a fundamental part of all future planning and development decisions.

Strategy to Protect Visual Character of Small Towns

The physical features of the city of Frankfort and the villages in Benzie County are a critical component of the rural scenic character of the County. New development that is encouraged to take place in and adjacent to these small towns must both complement and fit with the existing character, or it will damage the scenic character of the community and the County.

Strategy to Address Issues of Greater than Local Concern

The fundamental principles presented in this Chapter recognize that intergovernmental cooperation is critical to implementation of the strategies in this Plan.

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Final Exercise
Collective Priorities

RESPONSIBLE ZONING
& PLANNING SPECIFIC TO
TOWNSHIP.

KEEP LOW RESIDENTIAL
DENSITY / LIMIT HOUSING
DEVELOPMENT

ACCESS TO NATURAL
GAS LINES

LAKES TO LAND REGIONAL INITIATIVE

Community Engagement



Outreach

Once upon a time, master planning was believed to be the province of professionals and only minimally subject to public opinion. Toward the middle of the 20th century, however, “the public” made some changes to that system.

As a practice, city planning took off under the City Beautiful movement of the early 1900s. The theory was that an orderly, aesthetically pleasing public setting could induce citizens themselves to be more orderly and harmonious. Physical plans with ornate street layouts and elaborate civic centers were produced by these design professionals, often paid for by the business community. After the Depression radically shifted just about everyone’s priorities away from aesthetic concerns to financial ones, the City Efficient movement strove to root out graft and create smooth bureaucratic systems which could carry out the municipal functions of a nation urbanizing at a breakneck pace.

The seismic demographic and technological changes that occurred after World War II caused the now-well-established profession of planning to use every tool at its disposal to accommodate them. Combining physical and systems planning yielded some extremely bold innovations, with mixed results—the national Interstate highway system, for example, in contrast to urban renewal.

But no massive alteration to a densely populated area can avoid making a deep impact on the individual lives being lived in that space, and this is where the top-down model of planning met its match. As homes were razed and neighborhoods bisected to make room for the freeways, public meetings filled with citizens who not only did not care for the plan under consideration, but also did not care for the fact that such dramatic and irreversible consequences for their own lives were being dropped on them. Journalist Jane Jacobs combined her background on the urban beat with her fury over being displaced from her home to write the 1960 critical examination of planning that eventually ushered in a sea change to the profession, “The Death and Life of Great American Cities.”

Though it is generally true that planners’ professional training gives them a wider variety of municipal tools and information than the average citizen, it is now fundamentally understood that the direction of a community’s progress is *always* best guided by its members.

The leadership team

The first community members to “get engaged” with the Lakes to Land Regional Initiative were the ones who would eventually make up the backbone of the collaboration.

At its very earliest stage, this sprawling collaboration began as a meeting of just four minds. Onekama Township supervisor David Meister and planning commission chair Dan Behring worked with Alliance for Economic Success director Tim Ervin on the Portage Lake Watershed Forever plan, which brought Onekama Township and the Village of Onekama together so successfully that they decided to work together further in the preparation and adoption of a joint master plan. Now thoroughly convinced of the merits of collaboration, the Onekama Community Master Plan advocated using the M-22 corridor as a focus for economic development, and that brought Meister, Behring, and Ervin to the doorstep of Arcadia Township planning commission chair Brad Hopwood. The three communities wrote an M-22 Economic Development Strategy together in 2010.

Realizing the potential of the regional assets identified in the report and knowing that Arcadia Township’s master plan needed updating, Hopwood and Ervin decided to reach out to adjacent communities to assess their willingness to participate in a broader initiative. After “many meetings over my kitchen table,” said Hopwood, the original M5 partnership of Arcadia, Bear Lake, Blaine, Crystal Lake, and Gilmore Townships solidified. The first members of what would become the Lakes to Land Leadership Team were identified either through their roles in the community (many are planning commission members, elected officials, or professionals in a field related to land use, such as real estate) or identified themselves as having an interest in serving the collaboration. Their first tasks were to name the initiative, define the potential Area of Influence, decide which team member would contact each adjacent community, and establish a timetable for other communities to opt-in.

As new communities joined the initiative, the requirements for admission were simple: their elected bodies were asked

to execute an “Agreement to Partner” resolution, and the community was asked to furnish two people to serve on the Leadership Team. Throughout the initiative, Leadership Team members met on a monthly basis to update each other on the collaborative process.

In addition to providing a forum for communication and connection, the meetings also served as an educational avenue as the team members began blazing the trail through uncharted cooperative territory. Topics for discussion included the purpose of master planning, engagement with neighboring communities, stakeholder analysis, and methods of public outreach. Guest presentations were made by agencies such as the Grand Traverse Regional Land Conservancy and the Northwest Michigan Council of Governments.

The Leadership Team’s engagement extended to the best in-depth citizen planning training in the state. By giving these committed community members the most up-to-date tools and knowledge to effectively advocate for high-quality community planning decisions, the Lakes to Land Regional Initiative provides a benefit to participating communities that will long outlast the project duration. Links to the Michigan Association of Planning annual conference and the organization’s Planning and Zoning Essentials basic training program were made available on the Lakes to Land website, and an educational committee was formed to organize training opportunities such as participation in Michigan State University Extension’s Citizen Planner course on Fundamentals of Planning and Zoning. Each community sent multiple representatives to this seven-week course aimed at providing a basic skill set to land use decision makers, particularly elected and appointed officials. Leadership Team members’ participation was funded by the Lakes to Land grants.

Naming the Initiative



With its substantive elements fleshed out, the project remained in need of a name and a logo—the “face” it would present throughout the region. This exercise in brand messaging was designed to help cement the project and continue to strengthen ties among the Leadership team while fostering memorability, loyalty, and familiarity among the wider public.

Through multiple brainstorming sessions and the use of the online tool SurveyMonkey, many different names and tag lines were suggested and debated. In offering the “Lakes to Land” moniker, one team member noted that the region is comprised of rolling green topography and scenic views of forests, farms, and fields, edged on one side by the Lake Michigan shore and dotted throughout with the inland lakes which are at the heart of many of its communities. The rest of the Leadership Team coalesced around this suggestion with relative ease, bestowing the project with the official name of “Lakes to Land Regional Initiative” and the immediate nickname of “L2L.”

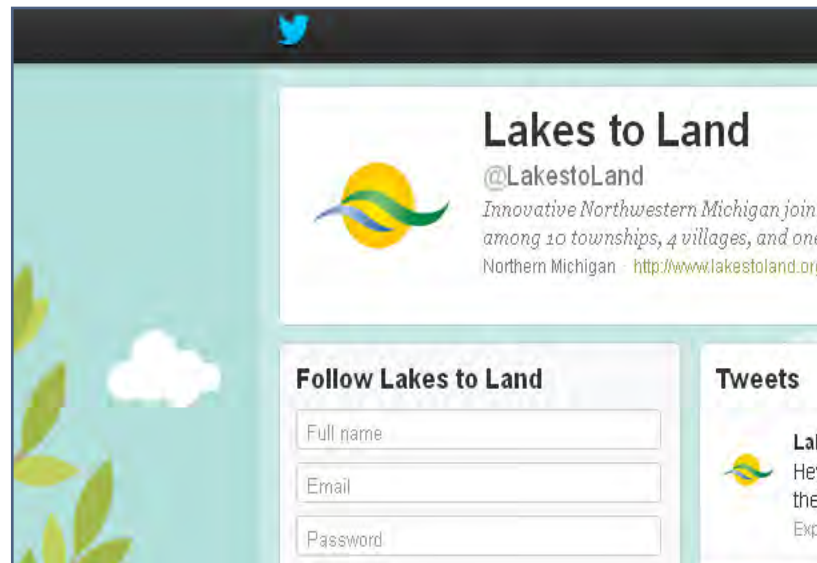
While the initial goal was to brand the initiative and as a consequence the region, Leadership Team members wisely understood that undertaking a proper regional branding would require participation from diverse groups such as local chambers of commerce, business associations, and elected officials. This was outside the scope of the project at hand, but groundwork has been laid with the effort to name the first regional collaborative effort of its kind in the State of Michigan.



Lakes to Land

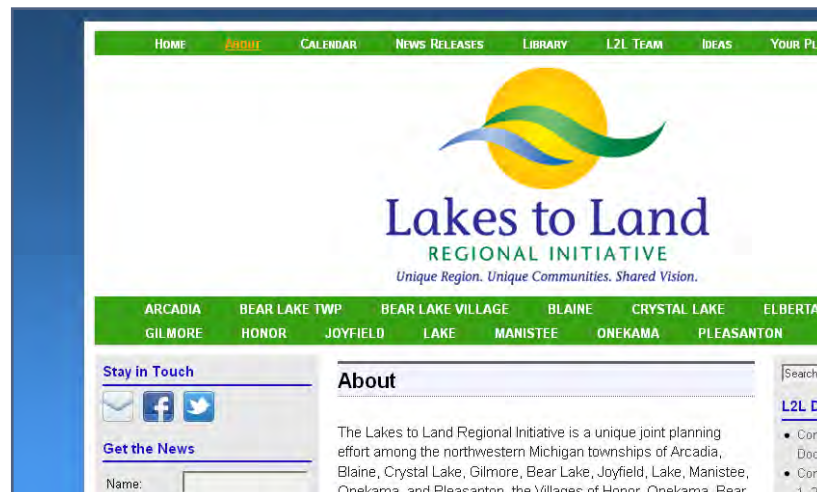
REGIONAL INITIATIVE

What makes this project unique? How will it benefit area stakeholders? Why should they get involved?



3.2 Web screenshots

The Lakes to Land pages on Facebook (top), Twitter (middle), and the world wide web (bottom)



Communication strategies

The Leadership Team's primary communication goals were to facilitate stakeholder participation and garner broad support for the project. They also recognized the importance of elevating the project's visibility, reinforcing positive relationships with decision-makers, and creating a sustainable platform for ongoing coverage through positive media relationships.

Determining that the use of a consistent and positive message was essential to the success of these goals, the team distilled that message by identifying and answering the questions at its core: What makes this project unique? How will it benefit area stakeholders? Why should they get involved? Having clearly articulated answers to these questions was essential to persuading communities that it is in their best interest to work together, and that doing so reinforces their own identities. The process also helped create synergy and momentum, much-needed ingredients in the quest to elicit as much participation in the master planning process as possible.

Face-to-face outreach

Even though it sometimes seems like a new form of communication is born every minute these days, and even though the Lakes to Land team tried to use just about all of them, the most effective method of communication in our outreach efforts was often good old one-on-one, face-to-face contact. The role of leadership team members as community ambassadors was critical in identifying and communicating with neighboring communities and key stakeholders throughout the region. An early decision to make the Initiative as inclusive as possible offered them the opportunity to reach out to neighboring communities directly, calling and meeting with individuals throughout the region to educate them about the benefits of the Initiative. In addition, the Beckett & Raeder team undertook other types of personal communication initiatives that

included speaking at the Benzie County Water Festival and individual planning commissions, holding informal meetings with residents, and a presentation at the professional planning conference hosted by the Michigan Association of Planning. The goal of the outreach effort was never to recruit but rather to inform and educate with the hopes that communities would see the benefit of joining the Initiative. It was largely through this face-to-face contact that the collaboration grew from five communities to 16 in just a few short months.

During the development of the individual master planning process, community leaders identified key stakeholders, then personally encouraged them to attend planning commission meetings and work sessions in order to hear their opinions and allow them to weigh in during the formation of the master plan. One community member expressed that they felt they had knocked on every door in the community, personally inviting the resident inside to attend the meetings.

Further, in an effort to create a collegial environment and begin to collaborate professionally, invitations to regular Leadership Team meetings were extended to professional planners and zoning administrators in both Benzie and Manistee Counties, representatives from the Michigan Department of Natural Resources, and a Michigan State University Extension Land Use expert. Other entities were invited to give educational presentations at the meetings, such as the Heartland Center for Leadership Development. Meetings also occurred with the Michigan Economic

Development Corporation Community Assistance Team Specialist to discuss economic development tools and applicability for the region. As a nod to the significance of the Initiative and in an effort to learn from this ground-breaking process, Governor Rick Snyder designated key government employees from various departments to study the Initiative and to collaborate with the region. These individuals were in contact with the Alliance for Economic Success, team members, and the consultants.

Communication tools

To keep the momentum of the project going and continue to engage the public, the Lakes to Land team developed magnets and brochures listing all the ways to keep in touch with the project: a centralized phone number, a United States Postal Service address, a new website, and Facebook and Twitter accounts. Press releases to news outlets covering the geographic area from Manistee to Petoskey were issued by the Alliance for Economic Success at the beginning of the initiative and at strategic points throughout the process to keep the public updated.

The Lakes to Land website (www.lakestoland.org) was created to maintain open lines of communication among active members of the project team, residents of the region, and other interested folks. This was particularly critical in light of the wide spectrum of technological sophistication and infrastructure available throughout the region, making a centralized repository for project-related information necessary. The collaborative nature of the project meant that it was imperative to build a site robust enough to serve the dual

objectives of creating a cohesive whole and maintaining each community's unique identity.

It was decided early on that the site would feature a page for each individual community in addition to the blog, the "about" description of the project, a calendar of events, and an archive of news releases related to the project. Each community's page presented a short excerpt of its history from this report, updated information related to the scheduling or results of its vision session, and any available links to previous plans or municipal websites. To the initial regionally-focused content mentioned above, several more pages were added at the Leadership Team's request: a catalog of the entire library of work products and resources, a repository for documents specific to the Leadership Team, and an open comment forum for exchange of ideas.

Metrics show that as of this writing, 1,975 people have racked up 9,687 page views on the website. The highest pageview numbers were driven by subscribers, people who signed up for the mailing lists and received an email linking directly to each new post as it was published. The largest concentration of visits came from the Manistee area (881), followed by Traverse City (598) and Grand Rapids (266). While most were from Michigan, visits also came from across the country: 141 from Hialeah (FL), 84 from Honolulu, 73 from Chicago, and a dozen scattered cities along the California coastline. All entries from the website were also posted to the project's Facebook and Twitter accounts (www.facebook.com/lakestoland and twitter.com/lakestoland).

Information meetings

The public kickoff of the project occurred at two informational meetings on May 24 and 25, 2012. Between the two sessions—one in Benzie County and one in Manistee County—approximately 100 attendees were introduced to the Initiative. The purpose of the informational meetings was to educate the citizens about the project, extend an invitation to neighboring communities to join, discuss funding sources, and give a detailed explanation of the expected process and benefits. It was also hoped that the meeting would explain the planning process, prepare the communities for their vision sessions, and generate excitement for the project. Brochures and magnets were distributed, and the dates for the vision sessions were announced.

Farmers' meetings

As the process of writing the new master plans began in earnest, two townships chose to host a forum dedicated specifically to understanding the needs of their agricultural communities. Blaine and Joyfield Townships each invited the general public, with a particular emphasis on the farming citizenry, to answer the question, "What can the township do to ensure that our working farms remain viable over the next 20 years?"

Both groups expressed a strong desire for fewer and more flexible regulations. Regardless of whether the context was land division, crop contents, building and equipment construction, or the lease of land for purposes other than agriculture, participants made it clear that the township's decisions had a discernible effect on their bottom line.



Arcadia Bear Lake Blaine Crystal Lake Gilmore Joyfield Pleasanton Onekama Frankfort

You are Invited!

Information Meetings Scheduled

May 23 at 7 p.m.

Onekama Consolidated Schools

May 24 at 7 p.m.

Frankfort-Elberta Elementary School Gym

The Lakes to Land Regional Initiative is a unique joint planning effort to bring voices from throughout the region into a collaborative vision for the future. The communities will work together to prepare a series of individual Master Plans and then use them to design collaborative strategies.

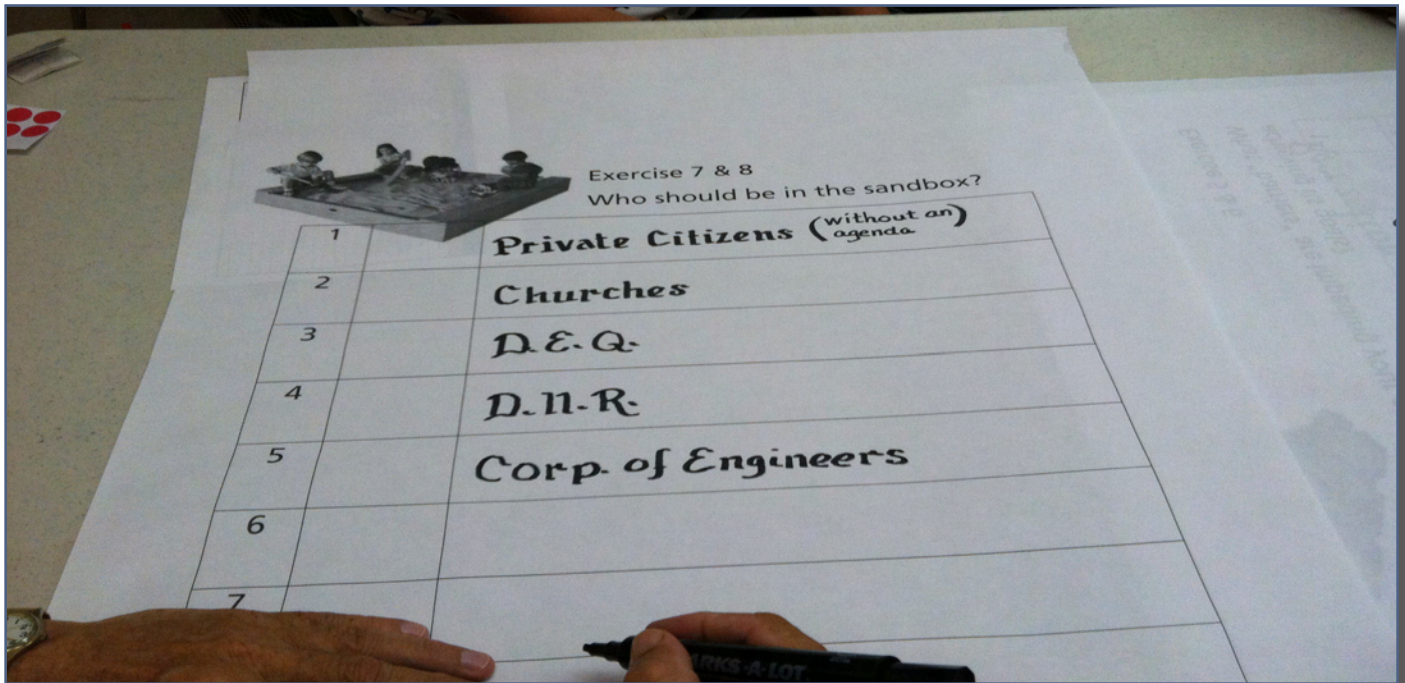
Come to an information meeting to meet the leadership team members, learn about the purpose, goals, opportunities for participation, and schedule for the

For More Information
231.933.8400
www.lakestoland.org

3.3 Information meeting

Beckett & Raeder, Inc. gives a presentation introducing the Lakes to Land Regional Initiative to citizens.





Visioning

The heart of the collaborative initiative is the development of individual community master plans. In the preparation of a master plan, the voice of the community is heard and articulated, and getting residents of the region to the Visioning Sessions was one of the primary responsibilities of the Leadership Team.

The Leadership Team selected the days, venues, and times for the vision sessions and placed posters advertising them throughout their communities. In addition to the project's official website and social media accounts, they used word-of-mouth, personal contact lists, and their own social media outlets to publicize the meetings. Postcards were mailed to every tax payer in each participating community inviting residents to share their input at the meeting, a step that the team concluded was important to ensure contact with every person. To minimize scheduling barriers to participation, residents were advised to attend their own community's session if possible but also invited to attend other sessions. If attending another community's vision session, residents were asked to sit at a separate table to work on the exercises but invited to participate in the presentation of the results. In this manner, communities often got a first glance at issues occurring in neighboring communities. All results were kept separate.

The method for decision-making was designed to be ideal for large groups, take everyone's opinion into account, and assist in narrowing down the results to the top major issues through the use of tallying. Participants not only had the opportunity to voice their opinions to small groups but also to the larger assembly, explaining and clarifying issues. Issues were often repeated, and in many cases the participants were able to both hear and see through the tallying process the collective nature of their opinions.

Ten vision sessions were held to accommodate all communities developing master plans, including a makeup session designed to give residents from communities with less than ideal participation at the outset another opportunity to weigh in. All followed an identical format: Prior to the meeting, the facilitators placed a marker, a pen, nametags, a sign-in sheet, pre-counted voting dots, and a set of 24x36 exercise sheets on each table. Arriving

citizens were asked to sit 6-8 persons to a table, don a nametag, and sign in. (Email addresses from the sign-in sheets were added to the distribution list used for updates and new website post notices, with an opt-out available at each.) Shortly after the start time of 6:30 p.m., the session began with a presentation about the history, scope, and objective of the Lakes to Land project.

The bulk of the sessions were focused on the visioning exercises. A volunteer at each table took the role of Table Secretary, recording answers to each of the tasks assigned. In most cases, a voting exercise followed in which each participant placed a dot next to the two items s/he felt were the best responses. "Double-dotting," or voting twice for the same item, was not allowed.

At the conclusion of the exercises, each group selected a member to present its findings. Presentations to the group conveyed the top three preferred futures from exercise 9 and 10 and the strategies to achieve them identified in exercise 11. A member of the facilitation team recorded the preferred futures on 24x36 sheets as they were stated, consolidating duplicate items with some discussion about what constituted a "duplicate": is the item "more business along US-31" identical to "increased economic development," for example?

Once all responses had been recorded, the sheets were hung on a wall at eye level, usually in the vicinity of the exit. The attending citizens were thanked for their participation and then instructed to use their remaining three dots for a "collective prioritization" exercise in which they voted for the three images they preferred most out of all presented at the meeting. Again, double- or triple-dotting was prohibited. The meeting officially concluded after all participants voted.

The stuff

3.4 The invitations

Lakes to Land
REGIONAL INITIATIVE
Unique Region. Unique Communities. Shared Vision.

Community Vision Sessions

The Lakes to Land Regional Initiative is a unique joint planning effort to involve voices from throughout the region in the creation of Community Master Plans. The communities will then work together to design strategies for collaboration.

Bring your voice to the Vision Session in your community and help shape the future.

If you are unable to attend the session, please join us at any of the following sessions:

Township	Date	Time
ARCADIA TWP	June 12	6:30 P.M.
JOYFIELD TWP	June 13	6:30 P.M.
CRYSTAL LAKE TWP	June 14	6:30 P.M.
GILMORE TWP	June 14	6:30 P.M.
PLEASANTON TWP	June 18	6:30 P.M.
BLAINE TWP	June 19	6:30 P.M.

COMMUNITY VISION MAKEUP SESSION

Lakes to Land
REGIONAL INITIATIVE
Unique Region. Unique Communities. Shared Vision.

COMMUNITY VISIONING SESSION

Lakes to Land is a 15-community joint planning effort seeking to bring voices from throughout Northwest Michigan together to shape the future we all share.

We wish more of you in Pleasanton and Bear Lake Townships had come to the previous sessions. Luckily, the Village of Bear Lake's addition to our collaboration offers the opportunity to hold one more.

Come talk with us about:

- Bear Lake Water Treatment Plant
- Water P & R E
- Public Road Imp
- Blight Er
- Wildlife and Fisheries

It's your last chance to participate in this session if you don't participate at the previous sessions. (And who wants that?)

6:30 P.M. ON MONDAY, JUNE 18, 2012
BEAR LAKE SCHOOL (in the Village of Bear Lake)

Questions? Visit www.lakestoland.org

Lakes to Land
REGIONAL INITIATIVE
Unique Region. Unique Communities. Shared Vision.

Manistee Township has joined the Lakes to Land Regional Initiative, a unique collaboration in which 15 Northwest Michigan communities are using the master planning process to identify strategies for working together. Manistee Township will be updating its master plan, and you are invited to a

COMMUNITY VISIONING SESSION

to share your preferred vision for our future.

Citizen input is **critical** to creating a plan that genuinely reflects our community.


Please join us.

AUGUST 22, 2012 AT 6:30 P.M.
MANISTEE TOWNSHIP HALL
410 Holden Street

www.lakestoland.org

visions are made of

3.5 The exercises

Exercise 1 & 2		
That "one" word which best describes your COMMUNITY.		
1		


Participants were told that a short phrase was acceptable. This was a voting exercise.

Exercise 3 & 4	
List those items that your COMMUNITY has accomplished well.	List those items that your COMMUNITY could have accomplished better.

Participants first answered the "accomplished well" question and voted on the answers, then answered the "could have accomplished better" question and voted on the answers.

Exercise 5 & 6		
What "barriers" are impeding improvements in your community?		

Facilitators explained that "barriers" could refer to organizations, situations, attitudes, physical attributes, power structures, etc. This was a voting exercise.

	Exercise 7 & 8
	Who should be in the sandbox?
1	

Facilitators explained that responses to this question should name organizations of any size which could contribute expertise or resources to further the project's goals. This was not a voting exercise, but a tally was kept of the number of times each organization was mentioned within a session.

Exercise 9 & 10		
Looking Forward – Envision your Community in 2021?		

Participants were asked to offer a description of their community after ten years of work on their preferred investments. This was a voting exercise, and the secretary was asked to record the top three vote-getters on the next page.

Exercise 11	
Actions to Accomplish our 2021 vision?	
<i>(List the Actions needed to implement the top three (3) images from Exercise 8 & 9)</i>	
Priority 1	

Participants contributed strategies to achieve each of the three most-preferred visions from the previous exercise.

Final Exercise	
Collective Priorities	

Participants distributed their remaining three dots among the top preferred visions from each group. This was THE voting exercise.

Visioning Results

Bear Lake Township

The first vision session scheduled for Bear Lake Township, to be held on June 21, 2012 at Bear Lake School, 7748 Cody Street, was cancelled due to the low turnout of three residents. Fortunately, the addition of the Village of Bear Lake provided an opportunity for a makeup session aimed at the "Bear Lake Community" made up of Bear Lake Township, Pleasanton Township, and the Village of Bear Lake, held on August 16 at Bear Lake School. Twenty-two of the 36 attendees represented Bear Lake Township, or 1.3% of the township's 1751 residents.

Citizens used the words "lake" (and "multiple lakes"), "beautiful," and "lake health" to describe Bear Lake Township. They named fire/EMS services, community activities, and lake improvement as their greatest accomplishments. The top three items that could have been more successful were all physical: buildings on Lake Street, lake access with facilities, and roads. Residents cited funding, participation, and lack of communication/miscommunication as the greatest barriers to progress. They felt that the sandbox should be made up of business owners, community organizations, and property owners. A vibrant, revitalized downtown and parks and lakes access topped the list of collective priorities; these items received two to four times more votes than the next two on the list, trails for biking and walking and the improvement of property values.



3.6 Bear Lake School



3.7 Bear Lake Township, Bear Lake Village, and Pleasanton Township makeup visioning

Village of Bear Lake

The Village of Bear Lake joined the Lakes to Land collaborative after the initial round of visioning sessions, so its only session took place on August 16. The meeting was held at Bear Lake School in conjunction with the make-up session for Bear Lake and Pleasanton Townships. The six Village of Bear Lake residents in attendance comprised 2.1% of overall population.

Words used to describe the Village of Bear Lake by its residents were "stagnant," "development challenged," and "retired - mature." Residents were most proud of their school, water system, and community events such as Bear Lake Days and Sparkle. They felt that more attention could be paid to a blight ordinance, affordable sewer, and park facilities such as a restroom. Barriers to progress were money, knowledge, and participation. When asked which organizations could be potential allies to progress, the citizens named community groups, specifically the Bear Lake Promoters and the Lions, and state government. Collectively, they prioritized employment, an innovative sewer system, and being centered on recreation. The other items to receive votes were having a vital downtown, and being characterized as "multi-generational" and "beautiful."

Pleasanton Township

Sixteen residents of Pleasanton Township gathered at Bear Lake School for their community's initial vision session on June 18, 2012, and eight more arrived at the same location for a makeup session on August 16. In all, 2.9% of the township's 818 residents participated in the session.

Citizens described Pleasanton as "rural," "agricultural," and "quiet." The water quality in Bear Lake was their signature accomplishment, including watershed planning and organization and the control of Eurasian water milfoil. Pleasanton residents mentioned division in the community with some frequency. When asked what the could have been done better, "lack of cooperation among municipalities and board" was first, followed by master planning, better communication, and an accepted sewer plan; the list of barriers was topped by "inter-community discord," "polarization and divisiveness on issues," and "divisive leadership." They felt support should come from service clubs and community groups, Bear Lake Township and Village, and Michigan's environmental departments (DNR and DEQ). In a particularly direct summation of the previous exercises, residents listed their top priorities as leadership that brings the community together, a zoning ordinance that reflects the master plan, and good communication and cooperation among all groups.



3.8 Pleasanton Township visioning



3.9 Joyfield Township visioning

Joyfield Township

Joyfield Township hosted its visioning session at Blaine Christian Church, 7018 Putney Road, on June 13, 2012. There were 50 Joyfield residents in attendance, as well as two residents of Arcadia Township and two residents of Blaine Township. All participants completed the exercises with members of their own community, and the results were tallied by community. The rate of participation among Joyfield's 799 residents was 6.3%.

The most common one-word descriptions of Joyfield Township were "beautiful," "rural," and "divided." Residents felt that their community's strengths were neighborliness, land stewardship or balanced land use, and preserving scenic beauty. They said the community could have a better job of zoning and planning, planning for the future, and communication. Top barriers to improvement were miscommunication (specifically, communication prior to major issues and the complain that "government doesn't listen"), division within the community, and both personal and governmental financial struggles. Organizations which should be "in the sandbox" were the Farm Bureau, Michigan Department of Environmental Quality, and the Joyfield Township Board of Supervisors. The citizens' list of collective priorities was topped by retaining scenic character, growth in specialized agriculture, implementing zoning and planning, maintaining a rural character/environment, increasing job opportunities and supporting local business, and utilities.

Arcadia Township



3.10 Arcadia visioning

3.11 Pleasant Valley Community Center



Arcadia Township's visioning session took place at the Pleasant Valley Community Center, 3586 Glovers Lake Road. Ninety-three citizens attended the session held on June 12, 2012. In addition to those citizens, ten Arcadia residents attended a makeup session on July 11, 2012 at the Pleasant Valley Community Center and two Arcadia residents attended the visioning session in Joyfield Township. In total, 103 of Arcadia's 639 citizens participated; its 16.1% was the best among municipalities which held visioning sessions.

The top three words residents used to describe Arcadia were "peaceful," "natural" (including "nature" and "natural beauty"), and "beautiful." They felt that their community had done a good job establishing the Pleasant Valley Community Center and the fire department. They also felt that their community was successful in the "wind issue" or the "Duke energy diversion," saying they had "defeated turbines" and "avoided bad economic development." They felt that the community could improve channel dredging, calling it a "yearly hassle" and saying a "better policy" was needed. Enforcement of zoning ordinances and speed control were two other areas which residents felt could be improved. The list of barriers to improvement was led by finances, resistance to change, and communication problems. The top three organizations that should be "in the sandbox" were Camp Arcadia, the Grand Traverse Regional Land Conservancy, and the Lions Club. The citizens' top six collective priorities were channel dredging, improving outdoor activities and developing eco-tourism, M-22 improvements and streetscape, connectivity of biking and hiking trails, a fully operational harbor, and sustainable businesses on Main Street.

Blaine Township



3.12 Blaine visioning



On June 19, 2012, Blaine Township Hall at 4760 Herring Grove Road filled up with 72 citizens ready to share their vision for the township's future. Two more citizens attended the July 11 makeup session, totaling 13.4% of the municipality's 551 residents.

Blaine residents described their community as "peaceful" (adding "serene" and "tranquil"), "beautiful" (specifically "natural and seasonal beauty"), and "rural" (including "rural / agriculture"). They cited conservancy and preservation of their land and shore as their greatest accomplishment, followed by "eradicating turbine development" or "stopping the wind energy program," then zoning. Internet access, road repair, and planning and zoning topped the list of things that the community could have done better. The top two barriers to their goals were financial, both general and public, and each received three times as many votes as the item in third place, which was lack of viable, good-paying employment opportunities. The organizations which should be in the sandbox were township officials, the Michigan Department of Natural Resources, and the Benzie County Road Commission. Citizens listed maintaining the health and quality of lakes, streams, and forests, maintaining a rural community, high speed internet service, healthy and sustainable operating farms, and maintaining the scenic beauty of the township as their top collective priorities.

Crystal Lake Township

Forty-two Crystal Lake Township citizens gathered at Frankfort-Elberta High School on June 14, 2012 for their community's vision session, and two more attended the July 11 makeup session at the Pleasant Valley Community Center. Taken together, 4.5% of Crystal Lake Township's 975 residents participated.

Residents described Crystal Lake Township as "beautiful," "vulnerable," and "pristine." They listed rails to trails, water quality, and the Benzie Bus as their top achievements; zoning, citizen participation, and the RV park topped the list of things they felt the township could have done better. Barriers to the community's goals were leadership (and specifically, "leadership reflecting all taxpayers"), lack of an agreed-upon, long-term vision, and lack of opportunities to share in a common goal. They felt that it was important for the Crystal Lake Watershed Association, farmers, and the Paul Oliver Memorial Hospital to be in the sandbox. The top priorities to emerge from the exercises were maintaining rural character (including preservation and open green space), quality development resulting from a function master plan and zoning ordinance, better leadership including cooperation and communication, and the regulation of blight and pollution (light, air, noise, and water).



3.13 Crystal Lake Township visioning

Gilmore Township

Gilmore Township's restored, historic Old Life-Saving Station at 1120 Furnace Ave. was the site of its community visioning session on June 14, 2012. Thirty-one of Gilmore's 821 residents attended for a participation rate of 3.7%.

The most frequent descriptions of Gilmore were "scenic," "beautiful," and "sense of community." Attendees listed land preservation of land for biking and hiking, parks, and schools as its best achievements. It could have done a better job with broadband internet service, a boat launch, and communication between the village and township. Financial restraints led the list of barriers to progress, followed by communication and lack of year-round employment. Residents felt that local government of all levels should be in the sandbox, including elected and appointed officials of the township, village, county, and state. They singled out Gilmore's planning commission and the Michigan Department of Natural Resources to round out the top three. The top collective priorities were zoning and planning enforcement, Betsie Bay improvements (clean, dredge, remove invasive species, increase docks and access), rural and natural community character preservation (specifically, maintaining the balance of uses between agricultural and single family residential), and public access to the lake with improvements in game management.



3.14 Old Life-Saving Station

3.15 Gilmore visioning





3.16 Manistee visioning (top and bottom)



3.17 Honor visioning



Manistee Township

The last Lakes to Land visioning session was held in Manistee Township on August 22 at Manistee Township Hall. Forty-nine of the community's 4,084 residents attended for a turnout of 1.2%.

Those in attendance used the words "beautiful," "deteriorating" (specifically in reference to Bar Lake) and "water" or "water lovers" to describe their home. They were most proud of services, including fire, EMS, recycling, and road maintenance. Concerns centered around Bar Lake: the outlet, observation deck, park, tables, parking, marking, water level, and public access all made the list, as well as a simple plea to "Save Bar Lake." Residents cited disagreement in leadership, funding, and government regulations as the top barriers to achieving their goals. They put themselves first in the sandbox, followed by the Michigan Department of Environmental Quality and the United States Army Corps of Engineers. Collectively, the citizens of Manistee Township prioritized the establishment of a watershed authority and cleanup of Bar Lake first, followed by commercial development along US-31 and a reduction in regulations.

Village of Honor

Like the Village of Bear Lake, the Village of Honor joined the Lakes to Land Regional Initiative after the first round of visioning had concluded. Because the community had completed a visioning session the previous year in connection with the Honor Area Restoration Project (from which the collective priorities to the right were taken), the Planning Commission opted to use a survey instrument to gather information related to the Lakes to Land master planning process. Forty-nine surveys were returned.

Residents said they most liked that Honor is friendly and small, and its location. By a large margin (56%), they most disliked its blight, including run-down homes and junk piles; vacant stores (13%) and traffic speed (11%) lagged far behind. Citizens would most like to see new development in the form of retail commercial, specifically a deli, coffee shop, and resale or antique shop, followed by single-family homes and then office commercial. Offered a choice of recreation, their support was evenly split between facilities for active recreation and those which are multi-use. Sidewalks were the most-desired new service. Residents did not want to see commercial design requirements for their buildings, but slightly more residents approved of annexing property for future development than disapproved. Citizens also wanted to see growth of green energy and sustainable business policies, and support for a new blight ordinance was overwhelming (84%).

Collective priorities

The ultimate goal of spending a whole intense summer conducting visioning sessions was to bring the individual voices of citizens together to hear what they said in unison.

Five hundred residents spoke clearly. This is what was on their minds:

Arcadia	Channel dredging	Improve outdoor activities; develop eco-tourism	M-22 improvements - streetscape
Bear Lake Township	Vibrant, revitalized downtown	Parks and lakes access	Bike and walk trails
Bear Lake Village	Employment	Innovative sewer system - destination	Recreation-centered
Blaine	Maintain health and quality of lakes, streams, forests; watershed planning	Maintain rural community ("stay the same")	High speed internet service, cable or tower, fast and affordable
Crystal Lake	Maintain rural character - preservation - open green space	Quality development: functioning master plan/ zoning	Build better leadership, cooperation, communication
Gilmore	Zoning and planning enforcement	Betsie Bay improvements: clean and dredge; remove invasives; increase docks and access	Rural, natural community character preservation; maintain balance of single family residential and agricultural
Honor	New downtown streetscape	New recreation facilities	Destination businesses for tourism
Joyfield	Retain scenic character - developed natural areas	Growth in agriculture - specialized	Implement zoning/planning
Manistee	Establish watershed authority / clean up Bar Lake / healthy Bar Lake ecosystem	Business on US-31 / commercial development	Reduce regulations
Pleasanton	Leadership that brings community together	Zoning ordinance that reflects the master plan	Master plan

3.18 Collective priorities table

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LAKE TO LAND REGIONAL INITIATIVE

Crystal Lake Township People and Land

ADOPTED
MAY 21, 2014



Expectations

The visioning session in Crystal Lake Township enjoyed a turnout that was both sizable and vocal—tallied results show one to several answers from each of the 45 attendees for every exercise—but the final accounting from this diverse group was among the most cohesive of any. Just seven collective priorities emerged from the meeting, the top three of which earned 76% of all the votes cast.

What are these compelling priorities? The answer is sweet in its simplicity: where there is rural character to be preserved, do it effectively, and where there is development to be undertaken, do it thoughtfully. Build better leadership, cooperation, and communication to achieve both. The remaining four priorities represent no substantive departure from the top three, but could rather be considered extensions of them: water quality maintenance and the regulation of blight and pollution are essential components of rural character, while sustainable building design and locally-owned cottage industry are excellent examples of thoughtful development.

Planning and zoning played a starring role in the strategies offered to achieve these goals. It was wholly agreed that a good plan could only be produced in genuine collaboration between an informed, involved, educated citizenry and leadership that is communicative, transparent,

and accountable. Participants also broadened that circle to welcome input and assistance from the Grand Traverse Regional Land Conservancy, the farming community, Benzie County, the Michigan Department of Transportation, universities, and foundations. Citizens were equally clear about what they *didn't* want, suggesting a need for regulations pertaining to variances, junk, pesticides, fertilizer, fracking, water bottling, big box stores, home size, minimum acreage for building, commercial lighting, campfires, septic systems, and viewsheds.

The following pages present “Cornerstones,” or goals formulated by the Crystal Lake Township Planning Commission to guide future development. Each includes a set of “Building blocks,” specific strategies to be implemented to achieve those goals. At the bottom is the “Foundation” that supports each Cornerstone: its linkage to the citizens’ stated priorities and to the Benzie County Master Plan.

Cornerstone 1

Improve the water quality of Crystal Lake and the Betsie River and its tributaries and streams, which feed the Betsie River and ultimately Lake Michigan.

A large component of our economy is water-related tourism. Crystal Lake and the Betsie River provide an abundance of recreational activities and ecological value to the community, county, and region. Approximately 2,884 acres of Crystal Lake are in the township, as well as 24 miles of streams and creeks. In the southern portion of the township is the Betsie River State Game Area, which is dependent on the water quality in the Betsie River and adjacent wetlands. According to the National Wetlands Inventory, there are approximately 869 acres of emergent, lowland, and aquatic wetland complexes in the township. The Crystal Lake Watershed is a small, self-contained watershed comprised of 17 smaller subwatersheds. Without good water quality, the attractiveness of Crystal Lake Township to both full-time and seasonal residents will greatly diminish.

Building blocks

1. Support the development of the Betsie River/Crystal Lake Watershed Management Plan.
2. Consider continued use of the Crystal Lake Watershed Overlay District as a tool to protect the environmental quality of Crystal Lake, the shoreline, and the watershed.
3. Continue supporting monitoring the water quality of Crystal Lake and Betsie River.
4. Enact Low Impact Development (LID) stormwater strategies, such as rain gardens, filtration basins, and rain cisterns, into the zoning ordinance as required standards for site development.
5. Encourage higher density development in areas with public water and sanitary sewer facilities.
6. Ensure that water quality and storm water MDEQ best management practices for Michigan Watersheds are incorporated into land use planning and zoning processes.
7. Work with surrounding Crystal Lake communities to improve and standardize septic system and holding tank standards.
8. Any use of land shall not pollute or degrade the quality of surface water or groundwater.
9. Crystal Lake Township ordinance should be adopted or amended to provide protection for sensitive features, including wetlands, floodplains, sand dunes, high-risk erosion areas, and land bordering lakes and streams.



Photo: Sharron May

Foundation

Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Crystal Lake collective priorities	Maintain rural character	Quality development through master plan and zoning	Maintain water quality; minimize light, air, noise, and water pollution	Build better leadership, cooperation, communication

Cornerstone 2

Encourage the continuation and growth of small agricultural operations.

Crystal Lake Township has a number of small, agriculturally-based cottage businesses and commercial farming operations: cherry and apple orchards, vineyards, nurseries, greenhouses, value-added herbal products, and livestock farms. These small agricultural operations are important elements in local and regional food systems. Small scale farming within a few miles of a city or village can perform an important task in the overall preservation of agriculture by providing a buffer between city residents and large-scale farms.

Ideally situated on the periphery of Frankfort and three villages, Crystal Lake Township's agriculturally-based businesses provides a variety of specialty products to those markets including fruits, vegetables, beef, lamb, pork, poultry, soaps, lotions, herbal remedies, nursery stock, plants, flowers, honey, eggs, alpaca fiber products, and gourmet mushrooms. These products weave their way into home kitchens, local farm markets, grocery stores, restaurants, and farm-to-school food programs.

The interest in farmer's markets, U-pick farms, and community-supported agriculture has been fueled by the flavor, freshness, and health benefits of locally produced foods and a sense of connection to the food and farmer. Families enjoy the multi-generational appeal of a visit to the farm.

Bolstered by beginning farmer programs, grants and incentives communities like Crystal Lake Township can anticipate an increase in small, specialized agricultural start-ups.

Local farmers serve as responsible stewards of the land, provide local jobs, and support other local business through their purchase of goods and services.

Building blocks

1. Formulate and adopt zoning policies that preserve and prioritize agriculture as an important land use and economic activity in the community, such as state and local Purchase of Development Rights and other farmland protection programs.
2. Incorporate provisions that encourage local food and farming operations such as market gardens, road-side stands, cottage food businesses, and agri-tourism, and which discourage large industrial agricultural operations such as concentrated animal feed operations (CAFOs)
3. Ensure that agricultural operations are harmonious with the other Cornerstones, such as operating in accordance with best conservation practices as recommended in the Michigan Agriculture Environmental Assurance Program (MAEAP) and Right to Farm Act.
4. Seek expertise and input of local farmers on agriculture-related planning and zoning issues.
5. Economic development efforts should focus on supporting farmers' ability to diversify; develop, process, market, and transport value added products; and access new market channels.



4.1: The May Farm, Benzie County
Photo: Sharron May

Foundation

Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Crystal Lake collective priorities	Maintain rural character	Quality development through master plan and zoning	Maintain water quality; minimize light, air, noise, and water pollution	Build better leadership, cooperation, communication

Cornerstone 3

Participate in a network of connected local and regional non-motorized trails.

Northwest Michigan is blessed with a variety of regional trails that provide recreational opportunities for biking, hiking, snowmobiling, cross-country skiing, and horseback riding. In Crystal Lake Township, a part of the nonmotorized Betsie Valley Trail meanders along portions of scenic Betsie River and Crystal Lake. In addition to their recreational and health benefits, trails provide economic benefit to local businesses which supply food, groceries, and lodging facilities. The Michigan Trails at the Crossroads report prepared by MDNR states, “the annual economic impact of cyclists...is estimated to be almost nine times greater than the one-time expenditure of public funds to construct the bicycle facilities.”

Building blocks

- 1. Reserve adequate right-of-way for non-motorized trails along proposed routes and County roads.
- 2. Preserve the scenic and rural beauty of the trail system to ensure economic viability and attraction to the trails.
- 3. Incorporate bike parking requirements in the local zoning ordinance.
- 4. Coordinate efforts with the Benzie County Road Commission to provide paved shoulders when township roads are resurfaced and/or reconstructed.



4.2: Betsie Valley Trail
Photo: AllTrails - National Geographic website

Foundation

Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Crystal Lake collective priorities	Maintain rural character	Quality development through master plan and zoning	Maintain water quality; minimize light, air, noise, and water pollution	Build better leadership, cooperation, communication

Cornerstone 4

Preserve our rural character.

The rural character of Crystal Lake Township is defined by open spaces and forests, small farms, orchards, vineyards, trails, resort cottages, the Betsie River, Crystal Lake, and its varied topography and viewsheds. The consolidation of these private and publicly owned properties paints a picture of how the township is perceived by residents and visitors, and as a result preservation of rural character is an important priority for the community. Also, rural character includes values such as family, community, independence, responsibility, conservation, entrepreneurship, and a strong work ethic.

Rural character has value. Communities with open space (farms, orchards, woodlands, large park reserves, etc.) create economic benefit to local and state government. In addition, tax revenue/cost studies have shown that farms, orchards, and other privately-owned open space require fewer public services and therefore produce, rather than consume, local tax revenues.

A commitment to retain the rural character of Crystal Lake Township requires that it be preserved through careful development and zoning. Crystal Lake Township endorses larger residential lots, small farms and cottage industries, roadside stands, and other small businesses in keeping with a rural Michigan lakeshore "sense of place." Dense development, industrial parks, high rise buildings, big box stores, shopping malls, strip malls, and similar development are incompatible with Crystal Lake Township's visual harmony and environmental standards.

Building blocks

1. Encourage development designed to preserve open and farmable land. Strive to achieve development that is aesthetically pleasing, unobtrusive to the natural settings, and environmentally sound.
2. Direct future development to areas with existing water and sewer services.
3. Review and revise Article 10: Rural Preservation of the Crystal Lake Township Zoning Ordinance to remove less rural land uses.
4. Plant trees and minimize the removal of trees along county roads.
5. Protect main transportation corridors (M-115, M-22, River Road) to ensure that development is harmonious with rural character and remains attractive to destination visitors.



Photo: Sandra Skees

Foundation

Benzie County master plan principles	<i>Balanced growth</i>	<i>Environmental protection</i>	<i>Visual character of the landscape</i>	<i>Visual character of small towns</i>
Crystal Lake collective priorities	<i>Maintain rural character</i>	<i>Quality development through master plan and zoning</i>	<i>Maintain water quality; minimize light, air, noise, and water pollution</i>	<i>Build better leadership, cooperation, communication</i>

Cornerstone 5

Preserve our cottage industries and home occupations.

According to Infogroup, a proprietary data collection firm, Crystal Lake Township had 78 businesses with 613 employees in 2012. Many of the businesses have less than 10 employees; six businesses have three or fewer employees. Home occupations and cottage industries are already present in the township. A cottage industry with fewer than 10 employees can also be classified a microbusiness, and 95.5% of all businesses in the U.S. fall in that category.

A home occupation is a business, profession, or other economic activity conducted full- or part-time in the principal residence of the person conducting the business. Examples of home occupations are general office use, graphic designers, marketing, manufacturing representatives, software engineers, tutoring, sewing, fine arts activities, computer programming, cosmetologists, barbers, physicians, and other licensed health care professionals. Similar to a home occupation but more intensive is a cottage industry, in which the creation of products and services is home-based rather than factory-based. In rural areas, cottage industries are fostered by an entrepreneurial spirit. Whereas home occupations are conducted primarily in the residence, a cottage industry is operated on the property, possibly in pole barns and/or accessory buildings. For example, small specialized home builders/contractors or custom cabinet makers are considered cottage industries. In Crystal Lake Township, small agricultural operations focused on organic food products, herbs and spices, native plant materials, etc. can be viewed as cottage industries. Michigan's Cottage Food Law, PA 113 of 2010, exempts a "cottage food operation" from the licensing and inspection provisions of the Michigan Food Law of 2000, thus increasing the opportunities for addition local business. In addition, active sellers on eBay and other Internet "For Sale" sites can be considered cottage industries.

Building blocks

1. Work with other agencies (public and private) to ensure there is access to broadband or high speed Internet.
2. Permit a greater variety of home occupations and cottage industries to accommodate business while respecting the health, safety, welfare, and enjoyment of adjacent property owners.
3. Cottage industries and home businesses shall abide by the same noise, air, light, water, and environmental standards as all residents and businesses of Crystal Lake Township.
4. Review and revise Article 10 of the Zoning Ordinance: Rural Preservation districts to remove less rural land uses.



Photo: Sandra Skees

Foundation

Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Crystal Lake collective priorities	Maintain rural character	Quality development through master plan and zoning	Maintain water quality; minimize light, air, noise, and water pollution	Build better leadership, cooperation, communication

Cornerstone 6

Preserve resort and seasonal cottages and rural residential character of the township.

Crystal Lake is ringed by a network of county roads, such as South Shore Drive (Co Hwy 702) and Molineaux Road, which, along with M-22, provide access to small lots with resort (seasonal) cottages and home sites for year-round residents. In addition, there are several groupings of housing between Crystal Lake and Lake Michigan. According to the 2010 US Census, 61% of the 1,240 housing units in the township are classified as seasonal and/or for recreational use. Further, based on the Benzie County Equalization Department records for 2012, 98% of all parcels in the township are classified as residential, accounting for \$141,347,706, or 99.6%, of the township's valuation. As a percentage of the total residential valuation, 67% is attributed to seasonal (non-primary resident) residential property.

Maintaining and encouraging resort cottages will result in preserving the character of the township and the historic land development pattern associated with the Crystal Lake area. Further, the continuance of resort cottages and the expenditures made by seasonal residents inject significant dollars into the local economy. Based on a retail market potential summary for the township, seasonal residents contribute upwards of \$3,800,000 to the local retail economy.



Building blocks

1. Ensure that the zoning ordinance allows for cottage / resort-related residential housing and that the schedule of regulations promotes this form of development.
2. Utilize low impact development (LID) stormwater measures to minimize stormwater runoff directly into tributaries, Crystal Lake, and Lake Michigan.
3. Placement of new housing is encouraged to maximize views and preserve the natural setting.

Foundation

Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Crystal Lake collective priorities	Maintain rural character	Quality development through master plan and zoning	Maintain water quality; minimize light, air, noise, and water pollution	Build better leadership, cooperation, communication

Cornerstone 7

Promote intergovernmental cooperation and leadership, and improve communication between township government and constituents.

The root of good community building and development is leadership. Vibrant communities can trace their success back to three fundamental components: vision, collaboration, and leadership. Without leadership, collaboration will not happen; without leadership and collaboration, the vision articulated by the community will never materialize. So, leadership is a key ingredient in the process. Today, as fiscal and personnel resources are stretched, the willingness to cooperate with other agencies and groups is crucial. In the future, intergovernmental cooperation will be the rule rather than the exception.

Building blocks

1. Work with other communities on regional strategies while maintaining our own Master Plan and Zoning Ordinance, adhering to the concept that planning and zoning is a local process that reflects the opinions and values of Crystal Lake Township's citizens.
2. Collaborate with other communities and promote the establishment of a leadership forum which provides leadership training and capacity-building to local elected officials and other community leaders.
3. Ensure that the annual Planning Commission budget has funding for continuing education and training.
4. Participate in the Michigan Township Association regional programs, which provide a good venue for networking.
5. Maintain a working relationship with the Lakes to Land Regional Initiative as the process moves into collaborative projects.
6. Utilize the various committees and commissions within the township as incubators for tomorrow's leadership.
7. Collaborate with other surrounding townships on the development of a regional communications and energy strategy.
8. Develop systems to improve communications between township government and constituents, such as newsletters, a functioning website, etc.



Foundation

Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Crystal Lake collective priorities	Maintain rural character	Quality development through master plan and zoning	Maintain water quality; minimize light, air, noise, and water pollution	Build better leadership, cooperation, communication

Cornerstone 8

Avoid blight and noise, air, light, and water pollution.

According to the 2010 U.S. Census, 61% of the 1,240 housing units in the township are classified as seasonal and/or for recreational use. Further, 98% of all parcels in the township are classified as residential, accounting for 99% of the township's valuation. This condition occurs because of the quality of place, the presence of clean air and water, and lack of night light disturbance. Crystal Lake Township's economy is dependent on its location and clean environment; avoiding pollution makes economic sense and helps sustain the tax base of the township. Strategies for maintaining and improving the physical and ecological conditions within the Township should be patterned after the New Designs for Growth Development Guidebook referenced in the Benzie County Comprehensive Master Plan 2020.

Building blocks

1. Design new development to maximize preservation of open space and minimize visual impact from public rights-of-way.
2. Establish sign ordinances that respect our rural and scenic character while providing for business identification and communication of other essential messages.
3. Enforce blight, junk, and dumping ordinances and direct those in need of assistance to available resources.
4. Update dark sky provisions in the Zoning Ordinance to reflect Best Management Practices.
5. Establish a mining reclamation ordinance.
6. Adopt and enforce ordinances to protect the health, safety, and welfare of residents while avoiding zoning ordinances that needlessly overburden local citizens and inhibit the traditional rural values of independence and resourcefulness.

Foundation

Benzie County master plan principles	<i>Balanced growth</i>	<i>Environmental protection</i>	<i>Visual character of the landscape</i>	<i>Visual character of small towns</i>
Crystal Lake collective priorities	<i>Maintain rural character</i>	<i>Quality development through master plan and zoning</i>	<i>Maintain water quality; minimize light, air, noise, and water pollution</i>	<i>Build better leadership, cooperation, communication</i>

Cornerstone 9

Encourage the protection of our natural resource base.

Crystal Lake Township can be characterized by its unspoiled natural features. The primary land cover is “forest,” supplemented with wetlands which parallel the Betsie River. Much of the township is blessed with rolling topography which forms a band running east to west through the midsection of the township. Severe slopes commonly exist throughout the township. Along Lake Michigan, just north of the south boundary of the township (George Street), are critical dunes and pristine beach which stretch north toward Lake Township. Most, if not all, of these land forms require some form of protection and/or monitoring to ensure that they are not irreversibly altered and/or lost.

Building blocks

1. Direct future development to areas with existing water and sewer services.
2. New development shall be designed and constructed to avoid sensitive natural features and comply with applicable federal, state, county, and local regulations.
3. New development shall not pollute or degrade the quality of surface water or groundwater.
4. Provide protection and restoration for sensitive features including wetlands, floodplains, sand dunes, high risk erosion areas, and land bordering lakes and streams.
5. Impervious overlay zones, setback and vegetative buffer requirements, soil erosion and sedimentation control ordinances, and stormwater management ordinances shall be adopted and enforced.
6. Best management practices shall be used to protect soil, surface water, and groundwater quality as land use change occurs.
7. Local zoning should prevent the fragmentation of farm and forest land unless there is no other reasonable alternative available to preserve the renewable resource.
8. Wildlife corridors and linkages between open spaces shall be a primary consideration in the development of new county-wide and local plans.
9. New lakefront public access sites shall be carefully sited to minimize environmental degradation and managed to prevent overcrowding of the lake surface and nuisance impacts on abutting properties.

Foundation

Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Crystal Lake collective priorities	Maintain rural character	Quality development through master plan and zoning	Maintain water quality; minimize light, air, noise, and water pollution	Build better leadership, cooperation, communication

Cornerstone 10

Encourage land development patterns which respect the natural, ecological, and topographic character of the township.

The rural character of Crystal Lake Township is defined by open spaces and forests, small farms, orchards, vineyards, trails, resort cottages, the Betsie River, Crystal Lake, and its varied topography and viewsheds. The physical and natural character of Crystal Lake Township offers the community the ability to guide development and growth through a process that recognizes the concept of *Designing with Nature*, *New Designs for Growth*, and similar studies that conclude that proper land use planning which respects the underlying physical, natural and infrastructure assets of the community is the best practice.



Photo: Sandra Skees

Building blocks

1. Revise zoning and related regulations to curtail sprawl and strip development along M-115.
2. Support actions that enhance the long-term economic development of the agriculture, forestry, recreation, and tourism industries.
3. Support zoning that encourages the continuation of the township's resort cottage development pattern and the continuation of low density, rural residential development that is sensitive to the natural features of the property.
4. New development in the township shall be encouraged provided it is: a) in locations with public services adequate to meet its needs, b) environmentally friendly, and c) consistent with the density, character, and development in the area.
5. Ensure that new development pays its own way in terms of public services and does not unreasonably create future public service obligations that are not met by the new development or are unfairly charged to existing residents, except where the township explicitly decides to subsidize it.
6. Improvements to pedestrian circulation, bike paths, bus service, and airport services should be consistent with adopted regional and state plans for long-range improvements of these transportation services, such the Northwest Michigan Non-Motorized Strategy and the Frankfort Dow Memorial Field Airport Layout Plan (ALP).
7. Prepare corridor plans and establish standards for development along River Road, M-22, and M-115 to protect their rural character and viewsheds, including but not limited to use of overlay zoning, buffering screening, and conservation easements.

Foundation

Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Crystal Lake collective priorities	Maintain rural character	Quality development through master plan and zoning	Maintain water quality; minimize light, air, noise, and water pollution	Build better leadership, cooperation, communication



Photo: Monica Schultz

People and Places

How many people? How long did they go to school? What do they do? What activities can be supported by the land itself? And where can we go shopping around here, anyway?

Population

Population is both an indicator and a driver of economic growth. An increase in people creates a larger economic and customer base on which the business environment can draw, and an area of bustling economic activity attracts people looking to share in its benefits.

In 2000, Crystal Lake Township had just completed a decade of growth from 899 citizens to 960. Michigan's millennium-opening population slide brushed the township, taking three citizens with it, but a projection from Esri estimates a return to steady population growth of about 0.37% between now and 2016—about 20 new residents, bringing the total to just under 1,000.

Housing

Home is where the heart is, and where all your stuff is, and probably where the people you call family are too. On a community level, it's much the same: housing data may talk

about buildings, but it tells us much about the actual people we call neighbors.

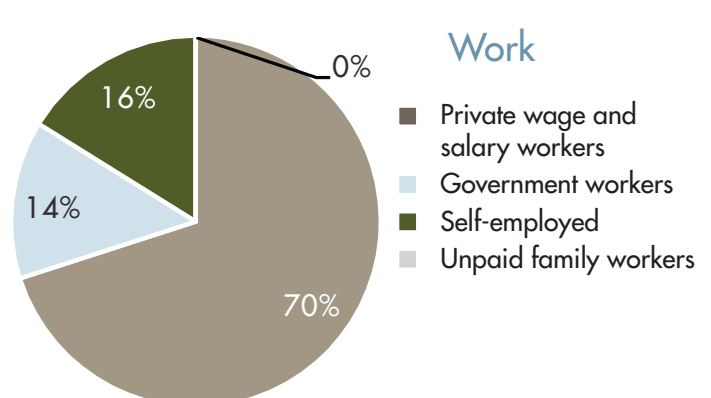
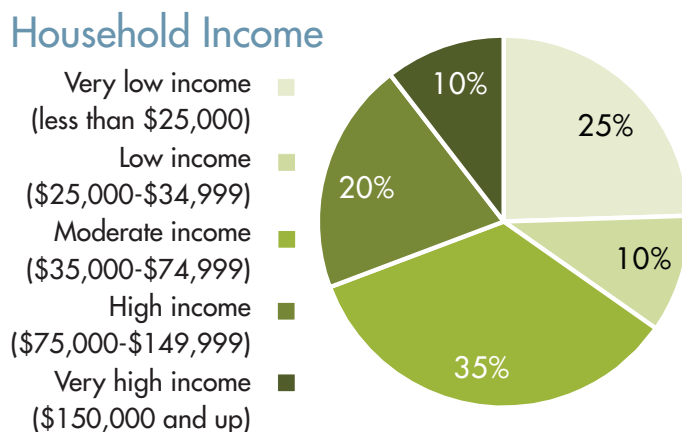
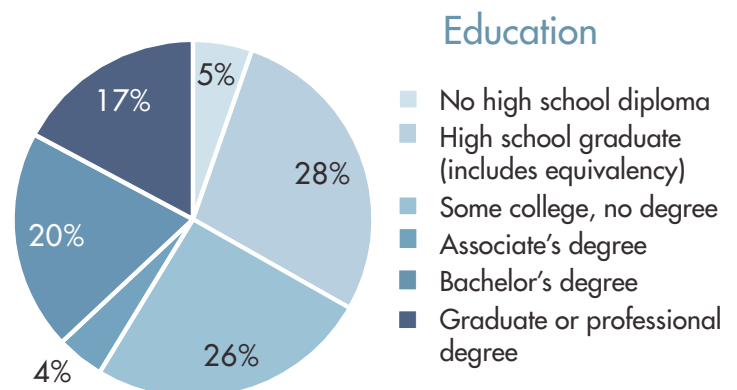
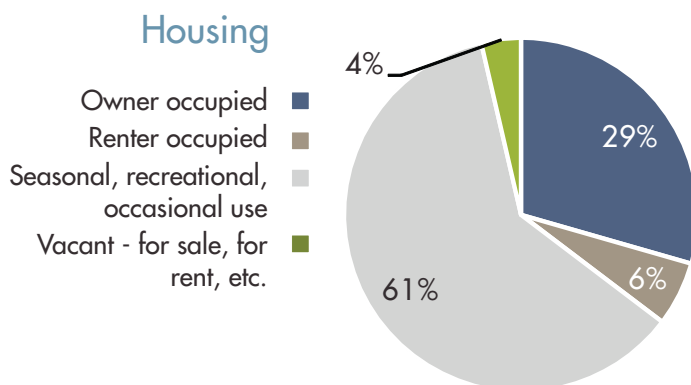
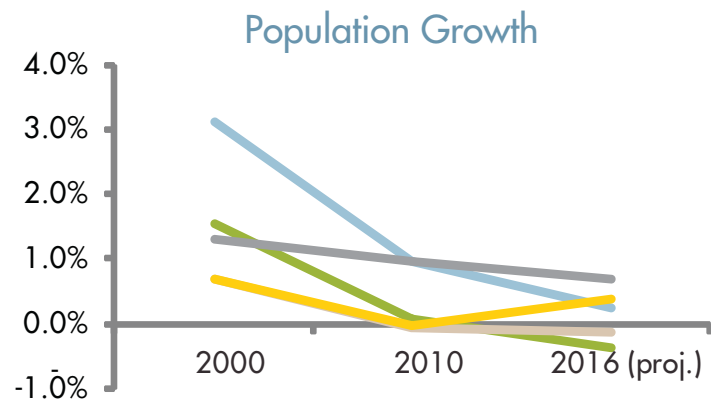
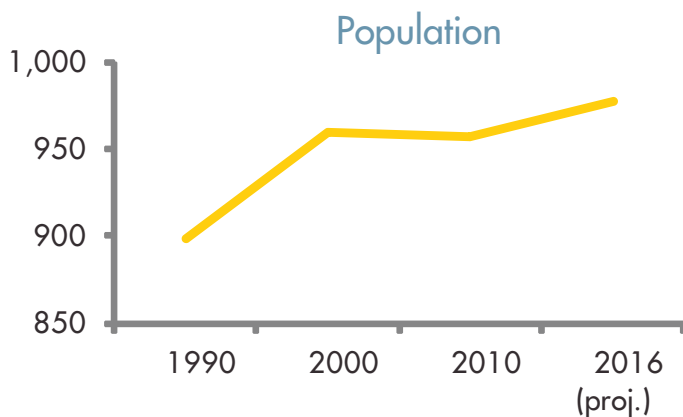
Crystal Lake's 1,240 housing units provide the shelter for its 449 households. Astute observers may note that that represents about 2.8 houses per household, and that is correct: Crystal Lake is one of two Lakes to Land communities in which the majority of housing units (61%) do not have a household attached to them but are instead for "seasonal or recreational use" (a detailed discussion follows under "Seasonal Fluctuations"). The median home value of \$258,000 is the second highest in the region, but that hasn't stopped buyers: the vacancy rate is the lowest among all L2L communities at 3.6%.

The largest share of homes were built either before 1939 (18%) or during the 1980s (22%). Almost 9% of homes were constructed during a mini-boom in the 1950s, notable because that decade was a sleepy one in many of the other communities in the region. Construction continued robustly up until the housing crash, increasing the housing stock from

Demographic Dashboard

Key for population and prosperity index graphs:

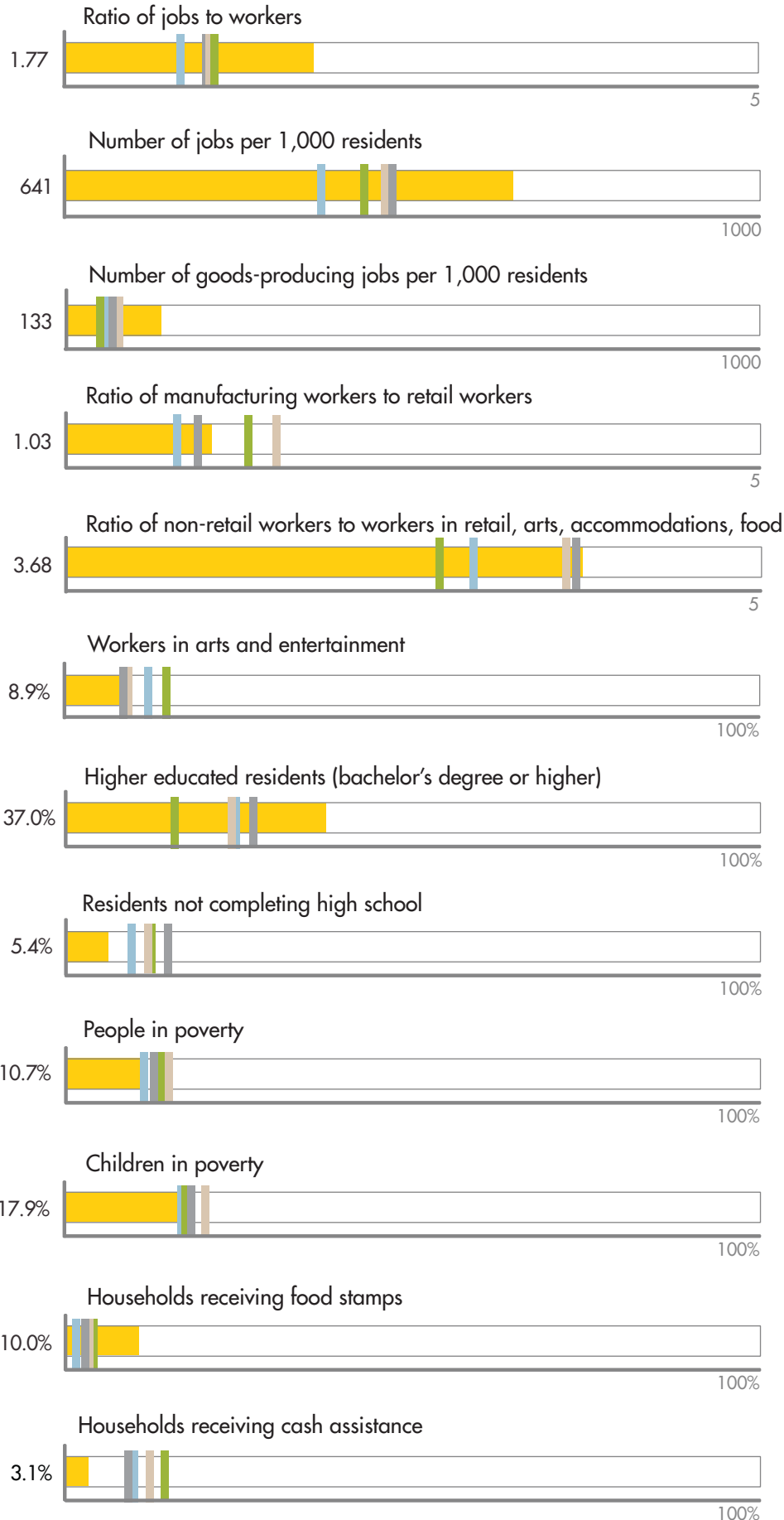
Crystal Lake Benzie County Manistee County Michigan United States



Classifications modified from HUD guidelines, using the state median income of \$48,432.

Sources: American Community Survey 2006-2010, Esri Business Analyst

Prosperity Index



Households

2.07
person average household size
\$258,000
owner-occupied median home value
\$658
median gross rent

Education

14%
population enrolled in school
95%
high school graduate or higher
37%
bachelor's degree or higher

Commuting

89%
workers who commute
77%
commuters who drive alone
14
minute average commute

Employment

613
jobs
347
workers
15.4%
unemployment rate
11%
civilian veterans

Income

\$45,625
median household income
\$21,750
median earnings for workers
\$48,281
male full-time, year-round earnings
\$25,893
female full-time, year-round earnings
10.7%
population in poverty
17.9%
children in poverty

Top Industrial Sectors

17%
manufacturing
16%
health care and social assistance
15%
retail trade

823 units to 1,129 between 1990 and 2005; just 25 new homes have been recorded since.

The majority of the homes (46%) are heated by bottled, tank, or liquid petroleum (propane) gas, and another 31% use utility gas. The remaining households fend off the northern Michigan winter with electricity (10%), fuel oil or kerosene (7%), or wood (6%).

Education

The citizens of Crystal Lake Township are a well-educated bunch. Ninety-five percent have graduated high school, the second highest proportion in the region after Lake Township and a full ten percentage points higher than the national average. And they didn't stop there: 37% of residents went on to achieve a bachelor's degree, also the second highest proportion in the region. Almost half of those (46% of college graduates) continued to a graduate or professional degree.

About 14% of the township's residents are currently enrolled in school. This figure is in the lower half among L2L communities and well below county, state, and national benchmarks, a consequence of Crystal Lake's relatively high median age of 57 (third highest in the region).

Income

The median household income in Crystal Lake Township is \$45,625, and median earnings for workers are \$21,750. Both are in the upper half among Lakes to Land communities.

Median earnings for year-round, full-time male workers are the second

highest in the region at \$48,281. This figure is also higher than the national median and that in Benzie and Manistee Counties, but slightly lower than for the state of Michigan. Crystal Lake Township earnings broke the six-figure mark in two North American Industrial Classification System (NAICS) categories: Transportation / Warehousing / Utilities (\$152,813) and Finance / Insurance / Real Estate (\$105,625).

Median earnings for year-round, full-time female workers were 54% of males' earnings (\$25,893 vs. \$48,281), representing the third greatest disparity in the region between males' and females' earnings. Of the two highest-paying professions in the township, there were no females at all in Transportation / warehousing / utilities, and two-thirds of those employed in finance / insurance / real estate were male. Median earnings for female workers in the latter category were \$45,625—about 43% of that for male workers. In no category did the pay of full-

time, year-round female workers meet or exceed that of their male counterparts.

Crystal Lake Township's poverty rates of 10.7% for all persons and 17.9% for persons under 18 are commensurate with or just below regional, county, state, and national benchmarks. Ten percent of the population receives food stamps, a number that aligns with the poverty rate with uncommon precision. Cash assistance is received by 3% of the local population, which is about one-third to one-fourth of the rate in the aggregated populations.

A quick estimate of a community's "net worth" can be obtained by dividing its major assets (checking and savings accounts, stocks, bonds, mutual funds) by its major liabilities (home and car loans). The higher the resulting ratio, the better insulated the community will be from quick changes in the economy. As shown in Table 4.4, the ratio in Crystal Lake Township is 3.11, the third highest among L2L communities (range: 2.93-3.23).

4.4: Net worth

Assets		
Checking Accounts		\$2,043,872
Savings Accounts		\$4,774,676
U.S. Savings Bonds		\$140,840
Stocks, Bonds & Mutual Funds		\$14,499,912
Total		\$21,459,300
Liabilities		
Original Mortgage Amount		\$6,028,630
Vehicle Loan Amount		\$861,792
Total		\$6,890,422
Net Worth		
Assets / Liabilities		3.11

Source: Esri Business Analyst

4.5: Non-retail to retail earnings

Industry	Workers	Median earnings	Weighed median earnings
Non-retail			
Educational services, and health care and social assistance	89	\$26,131	\$2,325,659
Construction	46	\$33,500	\$1,541,000
Manufacturing	38	\$41,500	\$1,577,000
Other services, except public administration	29	\$30,313	\$879,077
Finance and insurance, and real estate and rental and leasing	27	\$45,469	\$1,227,663
Transportation and warehousing, and utilities	12	\$60,833	\$729,996
Professional, scientific, management, administrative, waste management services	11	\$14,792	\$162,712
Public administration	9	\$56,250	\$506,250
Agriculture, forestry, fishing and hunting, and mining	8	\$16,250	\$130,000
Total	269		\$9,079,357
Average of weighted median earnings		\$33,752	
Retail, art, accommodation, food service			
Retail trade	37	\$18,958	\$701,446
Arts, entertainment, and recreation, and accommodation and food services	31	\$32,583	\$1,010,073
Total	68		\$1,711,519
Average of weighted median earnings		\$25,169	
<small>"Wholesale trade" had too few sample observations to calculate an estimate; "Information" median fell in the lowest interval of an open-ended distribution. Source: American Community Survey 2006-2010</small>			

Occupations

This section talks about the occupations and professions in which the residents of Crystal Lake Township work, whether or not their places of employment are within the township limits.

Of Crystal Lake Township's 347 civilian workers, 89 (26%) listed their occupation as "educational services, health care, and social assistance." The second greatest proportion of workers (13%) were in construction. In third place, the manufacturing and retail fields tied for 11% of the CLT workforce apiece.

The breakdown of occupations in Crystal Lake suggest conditions favorable to both prosperity and stability. The ratio of manufacturing workers to retail workers is almost exactly 1:1, providing a buffer against dramatic changes in either sector. The township also has the third highest ratio in the region of workers in non-retail occupations to those in retail, arts, accommodation, and food services (3.68). Nationally, the median earnings of workers in non-retail occupations are double the median earnings of workers in retail occupations. Although it is not a direct comparison, we can get a sense of this disparity in wages

between non-retail jobs and those in retail, arts, accommodations, and food service by multiplying the median earnings in each industry by the number of workers in that industry, then dividing the resulting aggregate income for each category (non-retail and retail, arts, etc.) by the number of workers in it. This average of weighted median earnings, shown in Table 4.5, estimates that non-retail workers in Crystal Lake Township earn about 1.34 times as much as workers in retail, arts, accommodation and food service. The wage advantage is not quite as dramatic as it is at the national level, but with over three-quarters of the working population earning the

4.6: Retail marketplace summary

Industry	NAICS Class.	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage / Surplus Factor	Businesses
Motor Vehicle & Parts Dealers	441	\$2,087,318	\$515,459	\$1,571,859	60.4	1
Automobile Dealers	4411	\$1,772,328	\$107,857	\$1,664,470	88.5	0
Other Motor Vehicle Dealers	4412	\$216,535	\$407,602	-\$191,067	-30.6	1
Auto Parts, Accessories & Tire Stores	4413	\$98,456	\$0	\$98,456	100.0	0
Furniture & Home Furnishings Stores	442	\$210,634	\$43,390	\$167,244	65.8	0
Furniture Stores	4421	\$114,188	\$0	\$114,188	100.0	0
Home Furnishings Stores	4422	\$96,446	\$43,390	\$53,056	37.9	0
Electronics & Appliance Stores	4431	\$255,171	\$16,386	\$238,785	87.9	0
Bldg Materials, Garden Equip. & Supply Stores	444	\$364,877	\$205,753	\$159,124	27.9	1
Bldg Material & Supplies Dealers	4441	\$322,003	\$100,518	\$221,485	52.4	1
Lawn & Garden Equip & Supply Stores	4442	\$42,874	\$105,235	-\$62,361	-42.1	0
Food & Beverage Stores	445	\$1,396,531	\$989,057	\$407,474	17.1	0
Grocery Stores	4451	\$1,253,980	\$989,057	\$264,923	11.8	0
Specialty Food Stores	4452	\$106,486	\$0	\$106,486	100.0	0
Beer, Wine & Liquor Stores	4453	\$36,065	\$0	\$36,065	100.0	0
Health & Personal Care Stores	4,464,461	\$298,038	\$167,958	\$130,079	27.9	0
Gasoline Stations	4,474,471	\$1,564,480	\$920,695	\$643,784	25.9	0
Clothing & Clothing Accessories Stores	448	\$286,628	\$209,900	\$76,729	15.5	1
Clothing Stores	4481	\$242,880	\$201,166	\$41,713	9.4	1
Shoe Stores	4482	\$21,738	\$7,024	\$14,714	51.2	0
Jewelry, Luggage & Leather Goods Stores	4483	\$22,010	\$1,709	\$20,301	85.6	0
Sporting Goods, Hobby, Book & Music Stores	451	\$68,031	\$116,337	-\$48,306	-26.2	1
Sporting Goods/Hobby/Musical Instr Stores	4511	\$46,921	\$46,730	\$191	0.2	1
Book, Periodical & Music Stores	4512	\$21,110	\$69,607	-\$48,497	-53.5	0
General Merchandise Stores	452	\$2,262,055	\$1,313,167	\$948,888	26.5	0
Department Stores Excluding Leased Depts.	4521	\$441,158	\$39,135	\$402,023	83.7	0
Other General Merchandise Stores	4529	\$1,820,897	\$1,274,032	\$546,865	17.7	0
Miscellaneous Store Retailers	453	\$130,896	\$166,713	-\$35,817	-12.0	2
Florists	4531	\$7,249	\$1,949	\$5,300	57.6	0
Office Supplies, Stationery & Gift Stores	4532	\$77,417	\$117,094	-\$39,678	-20.4	1
Used Merchandise Stores	4533	\$17,752	\$8,467	\$9,286	35.4	0
Other Miscellaneous Store Retailers	4539	\$28,477	\$39,203	-\$10,726	-15.8	0
Nonstore Retailers	454	\$34,255	\$0	\$34,255	100.0	0
Electronic Shopping & Mail-Order Houses	4541	\$563	\$0	\$563	100.0	0
Vending Machine Operators	4542	\$17,112	\$0	\$17,112	100.0	0
Direct Selling Establishments	4543	\$16,579	\$0	\$16,579	100.0	0
Food Services & Drinking Places	722	\$1,364,296	\$630,122	\$734,174	36.8	2
Full-Service Restaurants	7221	\$858,040	\$433,290	\$424,750	32.9	1
Limited-Service Eating Places	7222	\$221,872	\$80,613	\$141,258	46.7	0
Special Food Services	7223	\$231,063	\$33,605	\$197,458	74.6	0
Drinking Places - Alcoholic Beverages	7224	\$53,321	\$82,613	-\$29,292	-21.5	0

Source: Esri Business Analyst

higher wage, it nonetheless points to a higher aggregated income than would otherwise be available.

Retail and Business Summary

This section talks about the businesses and jobs within Crystal Lake Township, whether or not the proprietors and employees are residents of the township itself.

The business summary generated by Esri counts 78 businesses which employ 613 people within the township's borders. When compared with the residential population of CLT, this equates to 641 jobs per 1,000 residents—the second highest proportion in the region. It is somewhat surprising, then, that the township also had the second highest unemployment rate in the region at 15.4%. This seeming incongruity results from measuring different populations: in this case, the jobs ratio refers to people who *work* within the township, while the unemployment rate measures a quality of the people who *live* in the township. We can, then, conclude that jobs within Crystal Lake Township are being filled by persons who live outside the township.

The largest concentration of businesses were in retail trade, with 15 establishments comprising just under 20% of the total. That category was followed by “other services (except public administration,” which made up 13% of the business community. Construction and accommodation / food services tied for third with 7 businesses (9%) apiece.

The greatest number of employees work in the four businesses devoted

to manufacturing (105 persons, 17% of all employees); in addition to the township's overall relative abundance of jobs, it also has the second highest proportion of goods-producing jobs in the region at 133 per 1000 residents. Retail trade and health care / social assistance rounded out the top tier with 98 and 93 employees respectively (about 15%).

Table 4.6 is designed by Esri to provide a snapshot of retail opportunity by presenting the fullest picture possible of both supply and demand. Supply is calculated by combining the Census of Retail Trade, a portfolio of demographic and business databases, and the Census Bureau's Nonemployer Statistics data to estimate total sales to households by businesses within the study area. To estimate demand, Esri combines annual consumer expenditure surveys from the Bureau of Labor and Statistics with its own proprietary Tapestry Segmentation system (Tab 2), yielding a fairly tailored picture of the purchases likely to be made by the inhabitants of the study area

We can then arrive at the Retail Gap by subtracting the supply from the demand. A negative number, shown in red on the chart, signifies an oversupply or surplus, while the positive numbers shown in green indicate leakage of sales which are presumably being conducted outside the community.

Commuting

It's a real estate truism that the three most important factors considered by buyers are location, location, and location, yet the traditional measure of housing affordability—surely

another consideration hovering near the top of the list—makes no allowance at all for location. The Center for Neighborhood Technology set out to redefine “affordability” to more accurately reflect the proportion of a household's income that is committed to housing costs, including those incurred while getting to and from that aforementioned location. CNT describes its Housing and Transportation Affordability Index this way:

“The traditional measure of affordability recommends that housing cost no more than 30 percent of income. Under this view, three out of four (76 percent) US neighborhoods are considered “affordable” to the typical household. However, that benchmark ignores transportation costs, which are typically a household's second largest expenditure. The H+T Index offers an expanded view of affordability, one that combines housing and transportation costs and sets the benchmark at no more than 45 percent of household income. Under this view, the number of affordable neighborhoods drops to 28 percent, resulting in a net loss of 86,000 neighborhoods that Americans can truly afford.”

Crystal Lake Township's neighborhoods are among those that disappear from the affordability map: while the H+T Index shows the average housing cost to be less than 30% of household income for the entirety of Benzie County, the addition of transportation costs to the equation puts the share of household income spent on those two combined items over 45% for the whole county.

4.7: Crystal Lake “workshed”



The 14-minute average commute enjoyed by CLT residents is the shortest in the region, pointing to hope that its residents are avoiding some of the most detrimental effects of commuting that are being highlighted by a growing body of recent literature: uncompensated monetary costs, poorer health due to time shorn from exercise and meal preparation, and an actual decrease in general happiness. Figure 7.4 is a drive-time map showing the “workshed” within a 14-minute commute, stretching up on both sides of Crystal Lake and south to almost the county line.

The percentage of CLT residents who commute at all (89%) is lower than county, state, and national rates, and it is lower than 11 of the 15 Lakes to Land communities. This is really a measurement of the portion of the population who works at home, since they are the only ones who would have no commute at all. It is an area in which the township appears to be excelling and, as evidenced by the Cornerstones, wishes to continue to advance and support.

While the length of commute may have the greatest effect on the commuter,

it's the method of commuting that has the greatest effect on the environment. Across the board, driving alone is overwhelmingly the most common method of commuting, and it is the one which maximizes the output of vehicle emissions per commuter. Just 76% of Crystal Lake's commuters drive alone, which is lower than the aggregated benchmarks (range: 80%-85%) and in the bottom half among L2L communities (range: 68%-90%). There are more walkers (5%) and carpoolers (15%) than in the aggregated populations (2.3%-3.3% and 10.2%-11.7%, respectively).

Agricultural Influence

Of the 7,808 acres of land that comprise Crystal Lake Township, 766 (9.8%) have an existing land use designation of "Agriculture." This land represents 23 of the 1,780 parcels (1.2%) in the Township. Another 26 acres spread across two parcels (0.1%) are "Natural Resource Related." Overall, then, about 10.1% of the land and 1.3% of the parcels in the township are devoted to "value added" land practices.

Esri business analyst lists no businesses coded by NAICS as "agriculture, forestry, fishing, hunting." Eight workers who live in the township used that classification to describe their occupations.

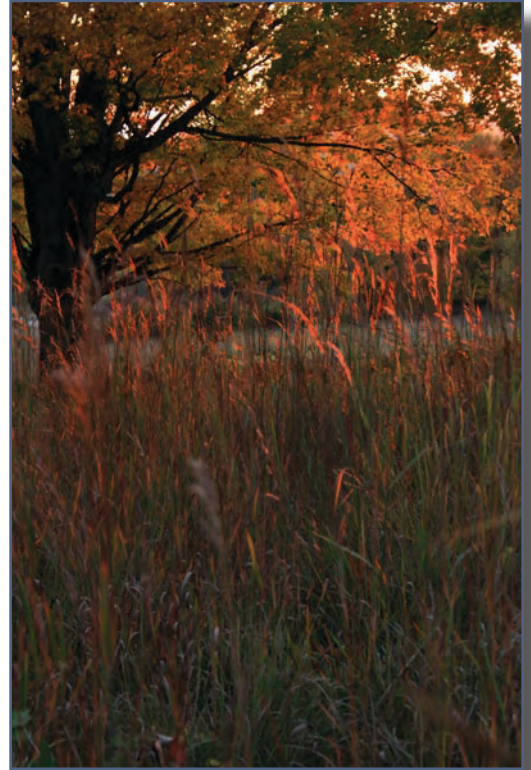
Seasonal Fluctuations

The entire Lakes to Land region is affected to varying degrees by a seasonal economy. An abundance of parks and recreation activities combines with the temperate summer weather to create a magnetic pull felt by most inhabitants of the state from spring to fall, and then formidable weather joins a lack of critical mass in economic activity to produce an edge of desolation through the winter months. The result is a cyclical ebb and flow of people through the region, some to stay for a few hours and some for a few months, all driven by Michigan's intensely seasonal climate.

Traffic counts can provide one measure of seasonal increases in activity. M-22 passes between Lake Michigan and Crystal Lake along the western edge of the township, and M-115 carries vehicles between Frankfort and Benzonia. Counts taken by the Michigan Department of Transportation



Photos: Sharron May



Photos: Sandra Skees

between 2001 and 2007 along those routes (the latest available data for the township) are limited to the summer and fall seasons, but even on this basis clearly display a marked decrease between the two (Figure 4.8): M-115 declines from about 7,000 vehicles per day in August to about 4,000 in November, and M-22 declines from just over 3,000 vehicles in August to about 1,500 by the end of October.

While traffic counts can measure an increase in activity in the community, they do not offer any information about the relationship between the community and the people who comprise the traffic that travels through it. For this, seasonal housing provides a better gauge. In many communities, the basic goal of every housing unit is to be occupied. The optimum condition is one in which the number of housing units is only slightly larger than the number of households, with a small percentage of homes empty at any given time to provide choice and mobility to households wishing to change housing units. This percentage is the traditional vacancy rate.

Seasonal changes in population, such as seen in the Lakes to Land communities, create an entirely new category of housing units: those for “seasonal or recreational use.” Technically considered “vacant” by the US Census because its rules dictate that a household can only attach itself to one primary housing unit, these homes provide a measure of investment by those seasonal populations that cannot be replicated elsewhere. A high percentage of seasonal/recreational use homes provides concrete evidence of the value of the area for those purposes. It also provides a measure of a portion of the community which will have a somewhat nontraditional relationship with the community at

large: seasonal residents may not have kids in the school system or have the ability to attend most government meetings, but they do pay taxes and take a vital interest in goings-on. In some ways, knowing the percentage of seasonal/recreational housing in a community is the most reliable measure of the accommodations the community must make to include its “part-time” population in its decision-making framework.

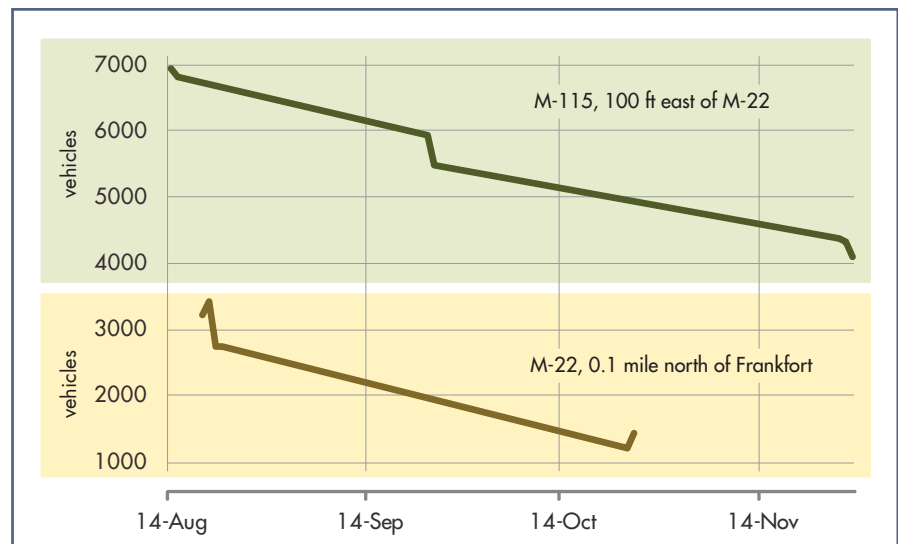
Crystal Lake Township is one of two L2L communities in which seasonal housing actually comprises a full majority (61%) of the housing stock. This figure approaches double the aggregated rates in Benzie and Manistee counties (33.1% and 24.9%), and it is vastly removed from the state and national benchmarks of 5.8% and 3.5%.

Such an anomalous piece of data is the sort of thing that signals a defining

feature of a community, and Crystal Lake’s Cornerstones reflect its citizens’ and planners’ understanding of that. Resort cottages, with an economic impact that exceeds even their physical footprint, are expressly cited as resources to be protected.

Crystal Lake Township’s stewards’ understanding of their seasonal housing stock goes well beyond the structures themselves to a clear image of those houses as the intersection of citizens and land. Protection of natural resources, development patterns which take their cues from the land, and the preservation of clean water, pristine landscapes, dark skies, and country quiet are all expressed, both individually and under the broader umbrella of preserving rural character. It should be no surprise that a community named after a lake should be intensely focused on water quality, as Cornerstones addressing both surface and groundwater demonstrate.

4.8: Traffic counts on M-115 and M-22



Source: Michigan Department of Transportation



4.9: Building M-22. Photo: Arcadia Area Historical Society

Infrastructure

For planning purposes, infrastructure is comprised of “the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions.”

These components, which come together to form the underlying framework that supports our buildings, movements, and activities, usually include our power supply, water supply, sewerage, transportation avenues, and telecommunications. Successful infrastructure is often “experientially invisible,” drawing as little attention in its optimum condition as a smooth road or a running faucet—until it’s not, and then it likely has the potential to halt life as we know it until the toilet flushes again or the lights come back on.

It seems we all know the feeling. The American Society of Civil Engineers’ 2013 “Report Card for America’s Infrastructure” gave us a D+ (takeaway headline: “Slightly better roads and railways, but don’t live near a dam”). The

Michigan chapter of the ASCE surveyed our state’s aviation, dams, drinking water, energy, navigation, roads, bridges, stormwater, public transit, and wastewater and collection systems in 2009 and gave us a D. Clearly, there is room for improvement all over.

But it’s expensive. The ASCE report came with a national price tag of \$3.6 trillion in investment before 2020. If this were evenly distributed among the 50 states, it would mean about \$72 billion per state—almost half again as much as Michigan’s entire annual budget. The combination of the essential nature of infrastructure with its steep price tag highlights a need for creative problem-solving in this area—precisely the aim of the Lakes to Land Regional Initiative.

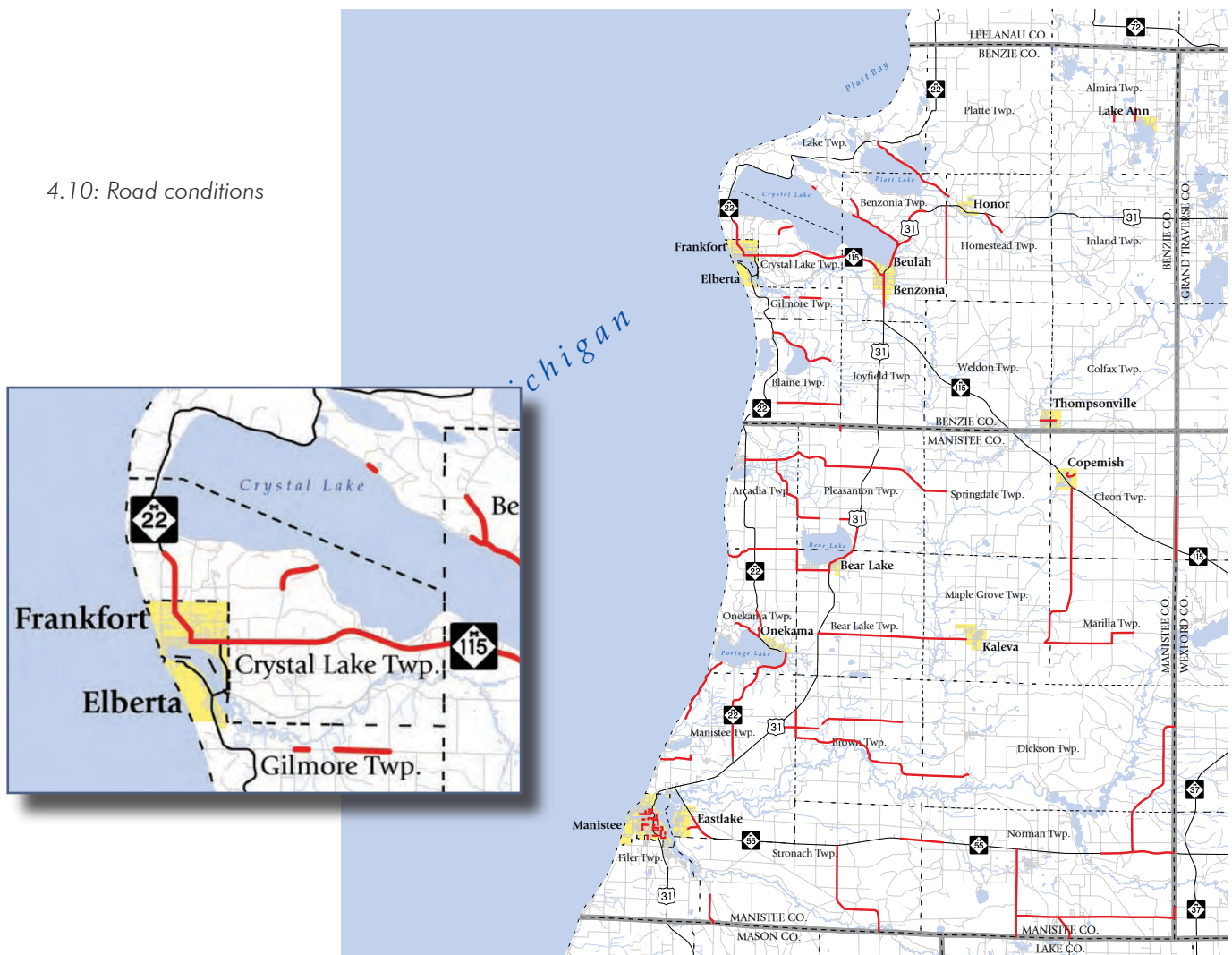
Roads

The State of Michigan's Public Act 51, which governs distribution of fuel taxes, requires each local road agency and the Michigan Department of Transportation to report on the condition, mileage, and disbursements for the road and bridge system under its jurisdiction. The Pavement Surface Evaluation and Rating (PASER) system used to report on the condition is a visual survey conducted by transportation professionals that rates the road surface from

1 to 10; roads rated 5 and above are considered to be at least "Fair."

Figure 4.10 depicts all of the roads with PASER ratings of "poor" (1-4) in Benzie and Manistee Counties. The close-up in the inset reveals poor conditions along the entire length of M-115 from Beulah to Frankfort and continuing north on M-22 about halfway to the township's northern border. The stretch of Lobb Road between S. Shore Drive and Graves Road is also in need of attention.

4.10: Road conditions



LAKES TO LAND

Pavement Surface Evaluation and Ratings

Data Sources: State of Michigan Geographic Data Library, NWMCOG 2012 Asset Management Report

- City or Village
- County Boundary
- Township Boundary

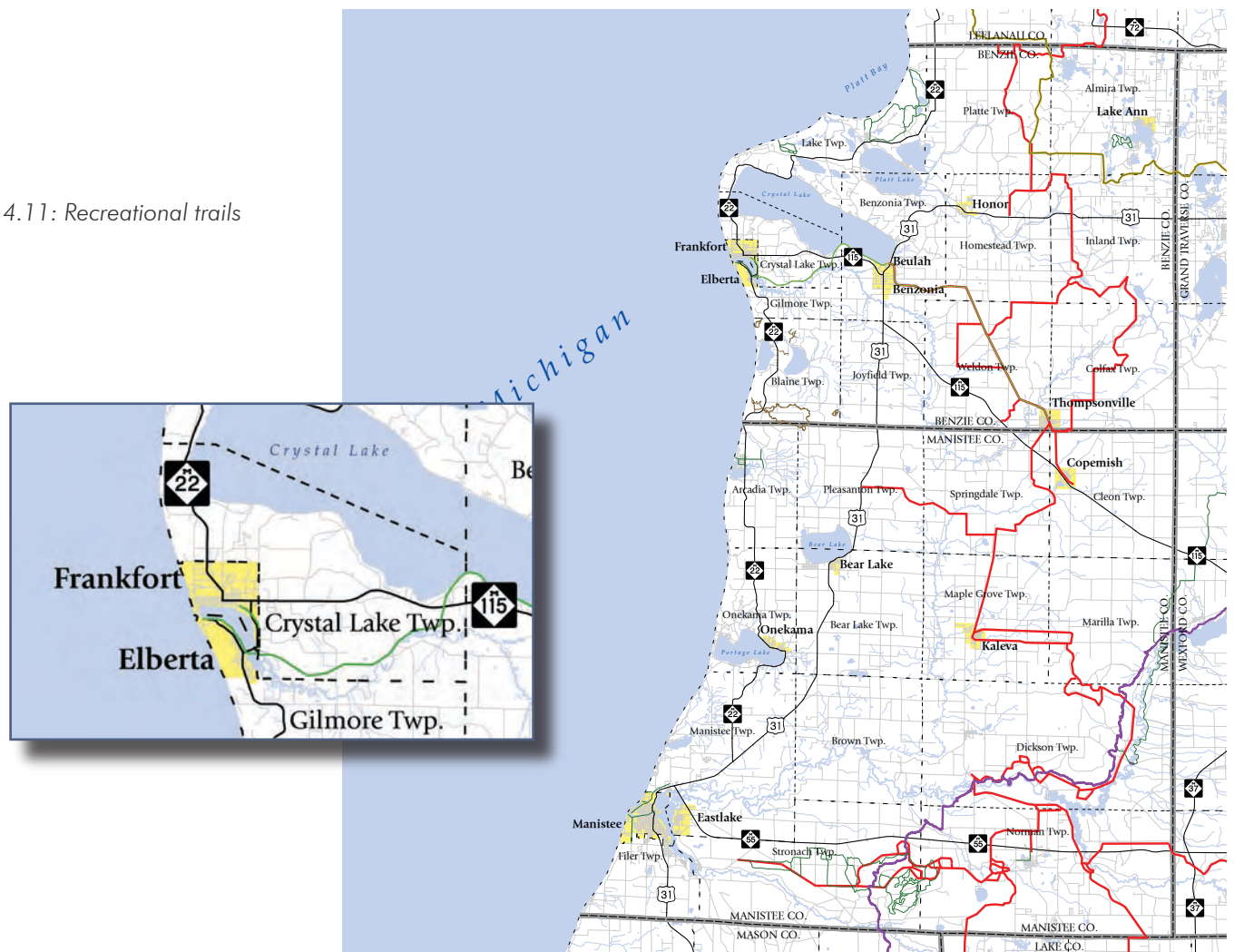
- Poor PASER Rating (1 - 4)
- Major Road
- Minor Road

Trails and regional connections

As can be seen in Figure 4.11, Crystal Lake Township is home to a considerable stretch of the Betsie Valley Trail, a 22-mile long regional multimodal trail that follows the bed of the old Ann Arbor Railroad. It is nonmotorized between Frankfort and Beulah, although snowmobiles are permitted between Beulah and Thompsonville. The six miles immediately west of Frankfort are paved with asphalt, making the trail barrier-free and suitable for rollerblading.

At the visioning session, four groups expressed a desire for trails, walkability, and connectivity. The Cornerstone which reflects this calls for obtaining adequate right-of-way along proposed routes, paving road shoulders during improvement projects, and ensuring adequate parking for bicycles. Additionally, preservation of the scenic beauty surrounding current and proposed trails is required to maintain their attraction and consequent economic value.

4.11: Recreational trails



LAKES TO LAND

Regional Recreational Trails

Data Sources: State of Michigan Geographic Data Library, MDOE, NWMCOG, GTRLC

- City or Village
- County Boundary
- Township Boundary
- Major Road
- Minor Road

- GTRLC Trail
- Equestrian Trail
- Betsie Valley Trail

- Snowmobile Trail
- North Country Trail
- Non-Motorized Multi Use Trail

Updated: 09-24-13

Power supply

Electricity for Crystal Lake Township homes and businesses is available from Consumers Energy Company (Jackson), and natural gas service is available from Michigan Consolidated Gas Company (Detroit). Service from “alternative energy suppliers” is also available through Michigan’s Electric Customer Choice and Natural Gas Customer Choice programs.

Public Act 295 of 2008 requires Michigan electric providers’ retail supply portfolio to include at least 10% renewable energy by 2015. The Michigan Public Service Commission’s 2012 report estimates renewables to make up 4.7% of the energy supply that year. Figure 4.12 shows the US

Environmental Protection Agency’s analysis of renewable energy potential in the Lakes to Land region.

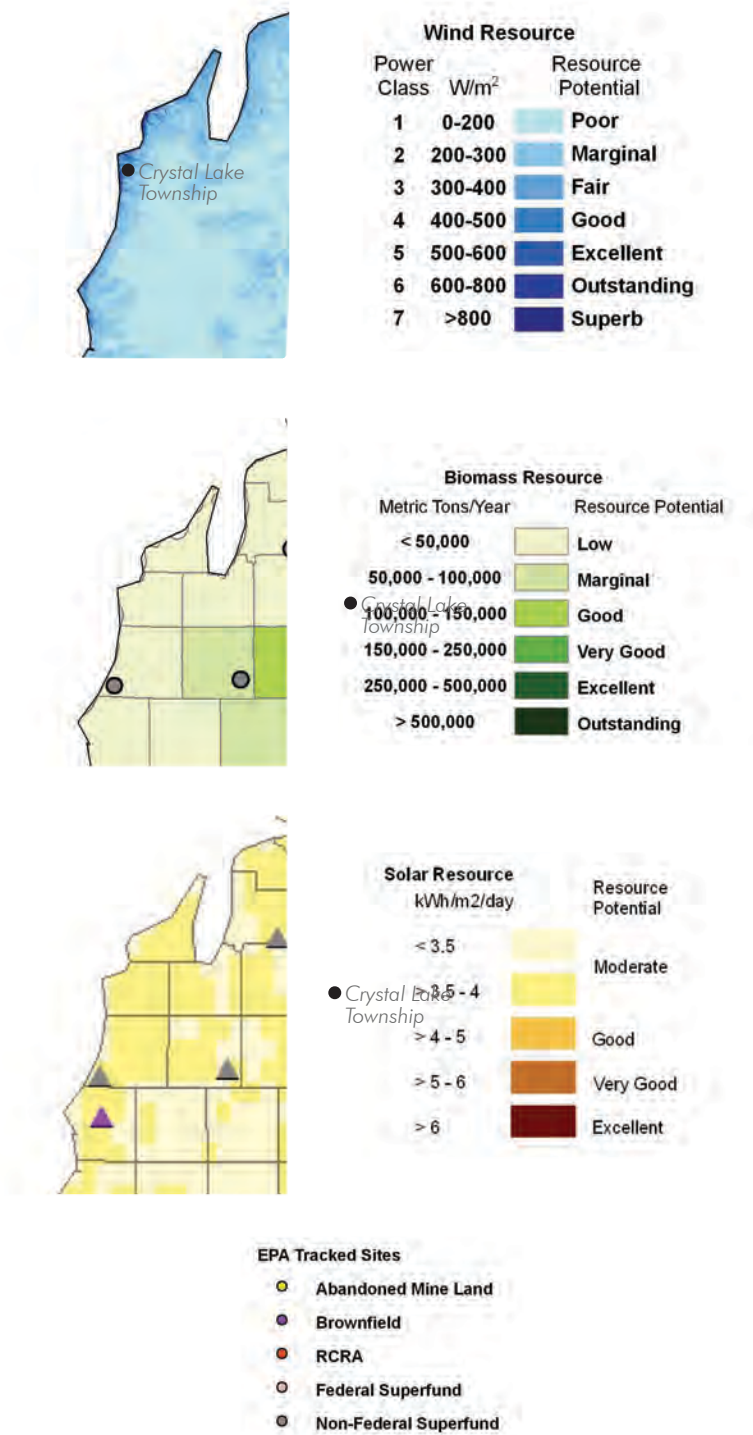
Water and sewer

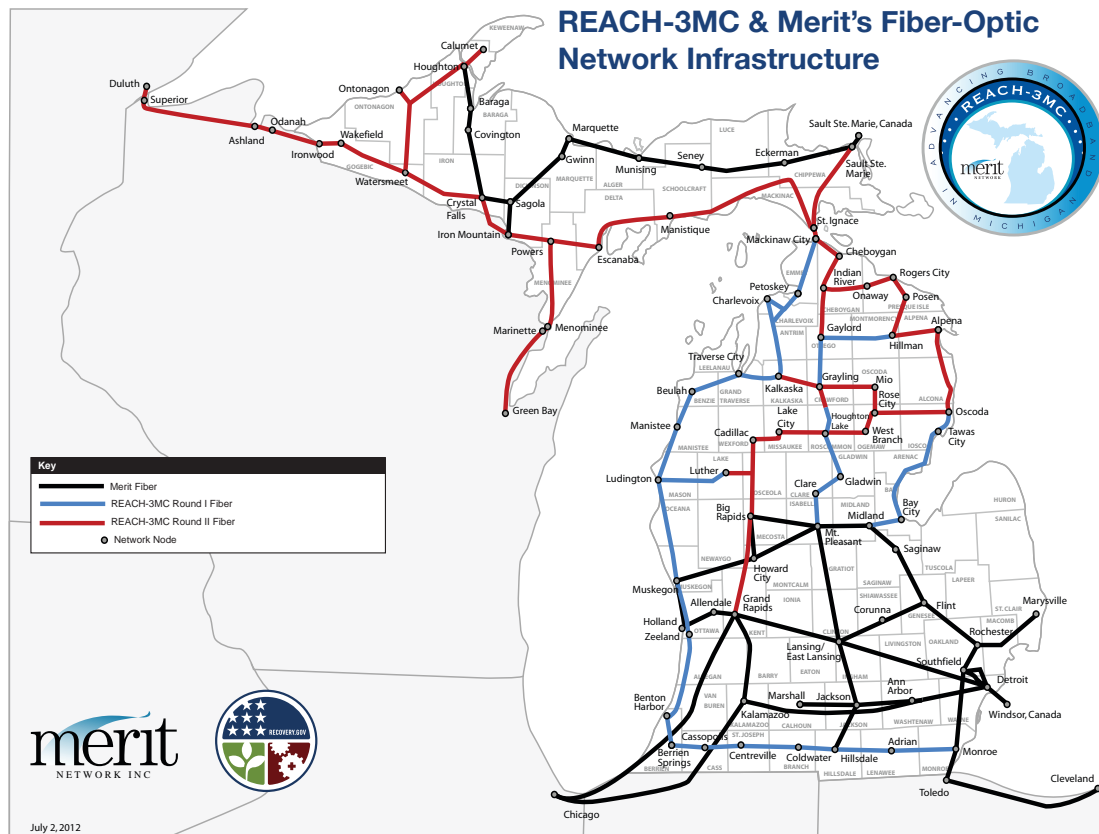
Crystal Lake Township does not have a public water or sewer system. Residents rely on septic and well systems. The township is not known to have difficulty in installing wells and septic systems, but there are still a number of factors relevant to community development to consider. In order to avoid problems such as inadequate water yield, gas in water, salty water, bacteria contamination, or organic chemical contamination, the community must consider the probable causes and seek out the remedies through policy and regulatory mechanisms. Some of the

probable causes occur at a community-wide level, such as road salting, septic effluent from systems in older developed areas, drainage from slopes into improperly sited residential areas, and failure to protect groundwater recharge areas through a lack of buffer zones and development limitations. Density and intensity of development need to be considered as they relate to septic and well systems, as increased development pressures lead to increasing need for understanding and oversight in well and septic system integrity. Health department standards provide regulatory oversight at the individual level, but wise land use policy at the community level is also a partner in the effort to protect the clean water supply and dispose of waste properly.



4.12: Renewable energy potential





Telecommunications

Connect Michigan, our arm of the national agency dedicated to bringing broadband access to every citizen, calculates that such success has already been achieved in 97% of households in Benzie and Manistee Counties. Figure 4.13 further shows that the remaining unserved areas are mostly in the counties' inland areas rather than in the Lakes to Land communities.

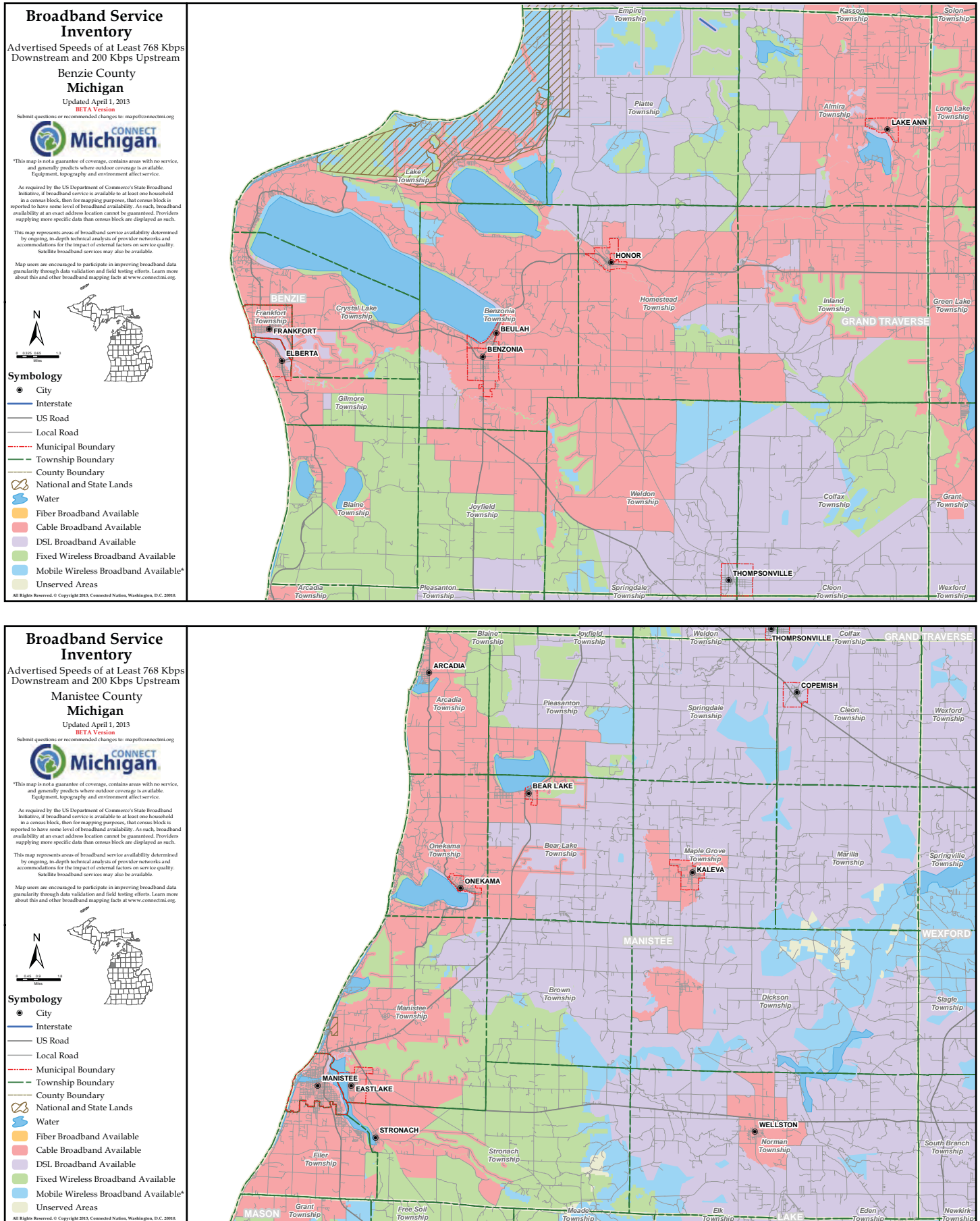
Still, improved broadband access came up in several of the visioning

sessions, including Arcadia's. There is certainly room for improvement, particularly in terms of increased speed, provider choice, and types of platforms available. In January 2010, Merit Network was awarded American Recovery and Reinvestment Act funds to launch REACH-3MC (Rural, Education, Anchor, Community, and Healthcare—Michigan Middle Mile Collaborative), a statewide fiber-optic network for "community anchor institutions" such as schools and libraries. The completion of the line between Manistee and Beulah,

serving the Lakes to Land region, was announced on December 28, 2012.

What does this mean? Besides extending leading-edge direct service to organizations that serve the public, the REACH-3MC network uses an open access model that welcomes existing and new internet service providers to join. By constructing the "middle mile" between providers and users, the REACH-3MC cable removes a significant barrier to rural broadband by absorbing up to 80% of an internet service provider's startup costs.

4.13: Broadband service inventory in Benzie and Manistee Counties





Land

“In 1873, an ambitious but ill-advised project was put through in an effort to connect Crystal Lake and Lake Michigan with a navigable channel.”

So say three monuments erected by the citizens of Benzie County to mark “The Tragedy of Crystal Lake,” in which a group of enterprising pioneers called the Betsie River Improvement Company pooled their resources to cut a navigable channel from the Betsie River to Crystal Lake. Engineering imprecision led swiftly to unintended consequences as the lake burst through the breach onto the soft, swampy soil of the outlet, 75 billion gallons of rushing water taking extreme liberties with the modest channel prepared for its journey to the Betsie. The level of the lake promptly dropped the four and a half feet that had been predicted—and then another 15 feet after that.

Within days, however, the lemonade-making had begun. With 50 to 100 feet of brand-new beach exposed by the receding water, the Benzie county Journal reported that a Joint Stock Company had been organized “to build a hotel at the head of Crystal Lake for the purpose of accommodating those who come to this delightful retreat for a summer resort, and to encourage others to share the luxury.” Thus the Crystal Lake resort community was born.

Formed as the advancing Lake Michigan glacier’s outward expansion bulldozed fingerlike depressions into the surrounding terrain, which were then sealed off from the larger lake by wind- and water-borne earth, it is uncertain how accessible Crystal Lake would have been to modern township residents if not for the “Tragedy.” Steep slopes rise sharply along the southern coast, yielding awesome vistas but little contact. Today, many of Crystal Lake Township’s 691 parcels designated “residential cottage / resort”—more than any other community in the collaborative—are tucked in the strip between slope and shore. A concrete dam built in 1911 keeps them safe from fluctuating lake levels.

The township meets Lake Michigan even more abruptly, in sheer cliffs of plunging dune labeled “critical” by the state of Michigan. Agricultural operations have staked out some of the high ground, while the lower elevations leading to and surrounding the Betsie River are forested wetlands.

Land Dashboard

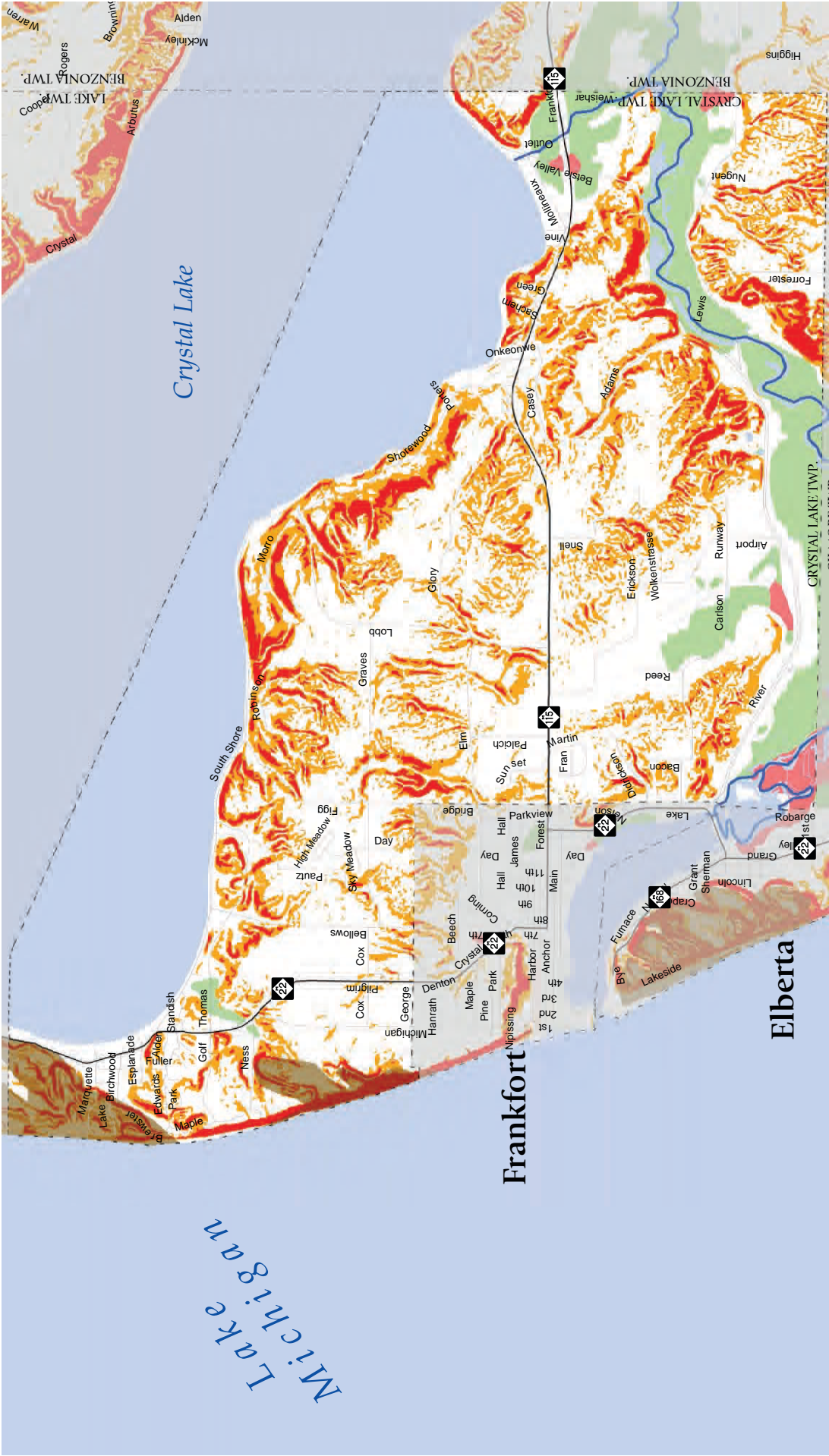
Percentages indicate proportion of total land area except where noted

TOPOGRAPHY			
Elevation	Slopes		Critical dunes
Low: 575 feet above sea level	0-1 degrees: 816 acres	10%	281 acres 4%
High: 985 feet above sea level	1.1-5 degrees: 2,716 acres	35%	
Range: 410 feet	5.1-9 degrees: 1,920 acres	25%	
	9.1-16 degrees: 1,777 acres	23%	
	16.1-80 degrees: 634 acres	8%	

WATER		
Lakes	Rivers	Wetlands
2,884 acres 37%	24 miles 0.3%	Emergent (characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens): 87 acres 1.1%
	Trout Streams: 5.4 miles 23% of river length	Lowlands, Shrub, Wooded (characterized by low elevation and woody vegetation): 782 acres 10%

PUBLIC LAND USE				
Roads	Regional Trails	Conserved Land	State Land	Federal Land
57 miles 0.7%	5.3 miles 0.1%	GTRLC: 128 acres 2%	State Wildlife/Game Areas: 300 acres 4%	0 acres
			Other DNR Land: 890 acres 11%	

4.15: Natural Features map



LAKE TO LAND

Crystal Lake Township Natural Features

Data Sources: State of Michigan Geographic Data Library, Benzie County Equalization

----- Township Boundary

—— Major Roads

—— Minor Roads

Wetland Type:

Lowland, Shrub, or Wooded

Emergent

Slope Degree:

9.1 - 16

16.1 - 50

Critical Dunes

Trout Stream

Land use

The land use section of this master plan provides an analysis of existing land use conditions and a proposed future land use development scenario. It contains two distinct maps: the existing land use map and future land use map.

The existing land use map depicts how the property within the jurisdiction is currently developed. It shows how the land is actually used, regardless of the current zoning, lack of zoning, or future land use map designation—it is what you see happening on the property.

The future land use map of a master plan is a visual representation of a community’s decisions about the type and intensity of development for every area of the municipality. These decisions, represented by the

community’s land use categories, are based on a variety of factors and are guided by the goals developed earlier in the master planning process—the Cornerstones and Building Blocks presented earlier in this plan. Although the future land use map is a policy document rather than a regulatory document, meaning that it is not legally binding once adopted, it is used to guide the creation of the zoning ordinance and the zoning map, and it supports land use decisions about variances, new development, and sub-area planning. That makes it perhaps the most important part of your master plan, as it defines how community land uses should be organized into the future.

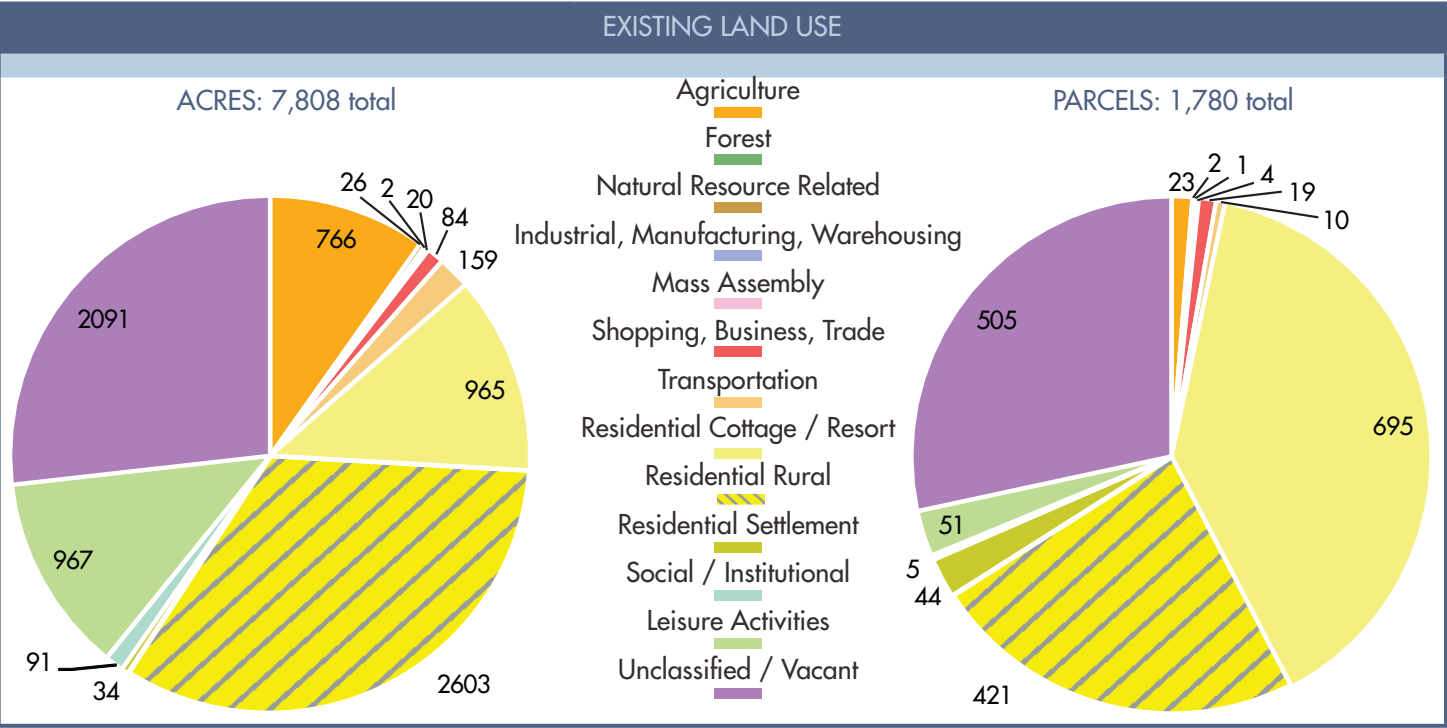
A part of the development of the future land use map is a discussion of the major land use related issues facing the community, how they interrelate with

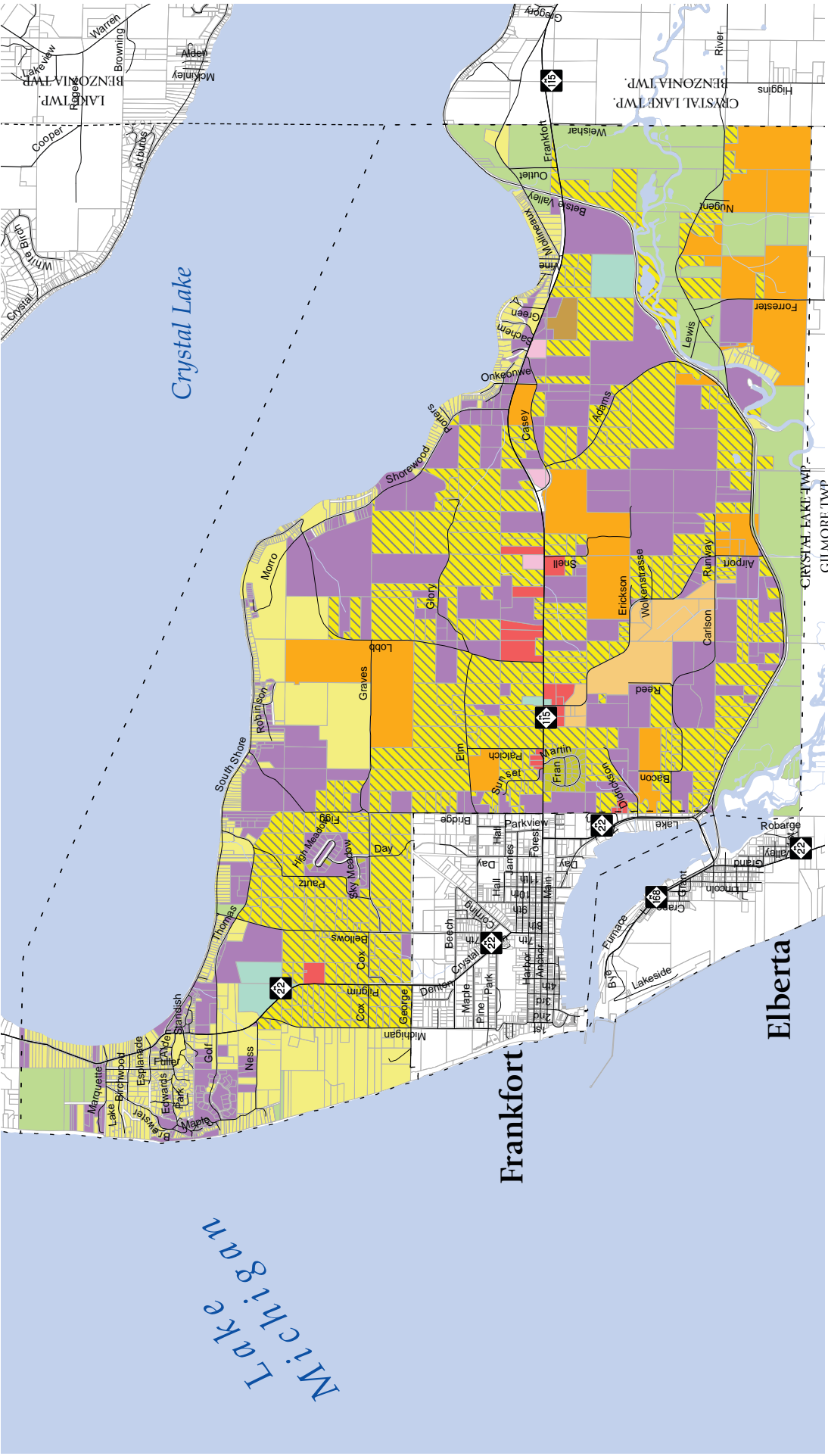
the Cornerstones and Building Blocks, and strategies that may be undertaken to achieve the desired future land use. But at the heart of planning for future land use is a picture of how the physical development of the community will take shape. Simply put, this section describes how, physically, the community will look in 15 to 20 years.

Factors considered when preparing the future land use map include:

- 1. Community Character. How will the land uses promote that character?
- 2. Adaptability of the Land. What physical characteristics (wetlands, ridges, lakes, etc.) need to be considered when planning for future development? How do the land uses for those areas reflect the uniqueness of the land?
- 3. Community Needs. What housing, economic development, infrastruc-

4.16: Existing Land Use chart and map





LAKES TO LAND

Crystal Lake Township Existing Land Use

Data Sources: State of Michigan Geographic Data Library, Benzie County Equalization, Windshield Survey by Township Citizens

- Agriculture
- Leisure Activities
- Mass Assembly
- Natural Resources
- Residential, Cottage / Resort
- Residential, Rural
- Residential Settlemt
- Shopping, Business, or Trade

- Social / Institutional
- Transportation / Utilities
- Unclassified / Vacant

- Parcel Boundary
- Township Boundary
- Road



ture, or other needs should the community consider planning for?

4. Services. How are we ensuring that existing infrastructure is used efficiently, and that new infrastructure is planned for areas where new development is anticipated?
5. Existing and New Development. How will new development in the community relate to existing development?

Existing and future land use maps are both different from a zoning map, which is the regulatory document depicting the legal constraints and requirements placed on each parcel of land. The parcels are classified into zoning districts, which are based on the future land use map. When owners want to develop or use their property in ways that do not conform to the zoning map, the planning commission uses the future land use map and the master plan to consider whether the proposed development conforms to existing regulations and policy.

The rural character of Crystal Lake Township is defined by open spaces and forests, small farms, orchards, vineyards, trails, resort cottages, the Betsie River, Crystal Lake, and its varied topography and viewsheds. The physical and natural character of Crystal Lake Township offers the community the ability to guide development and growth through a process of planning which embraces the geographic and natural assets of place while encouraging an economic return on investment in the land.

The topographic character of the township is the most prominent element that has influenced land use in the township. The early glacial history of Manistee and Benzie counties resulted in large depressions that now form Platte Lake, Crystal Lake, Lower and Upper Herring Lakes, and the Arcadia Lake and watershed. In a 1946 State of Michigan, Department of Conservation publication, author James Lewis Calvert states, "from the City of Manistee northward to Sleeping Bear Point, a number of depressions are located on the inner margin of the Manistee Moraine. These depressions are surrounded by moraine except on their western, or Lake Michigan sides. Platte and Crystal Lakes lie within two of these depressions, which are separated by a double morainic ridge."

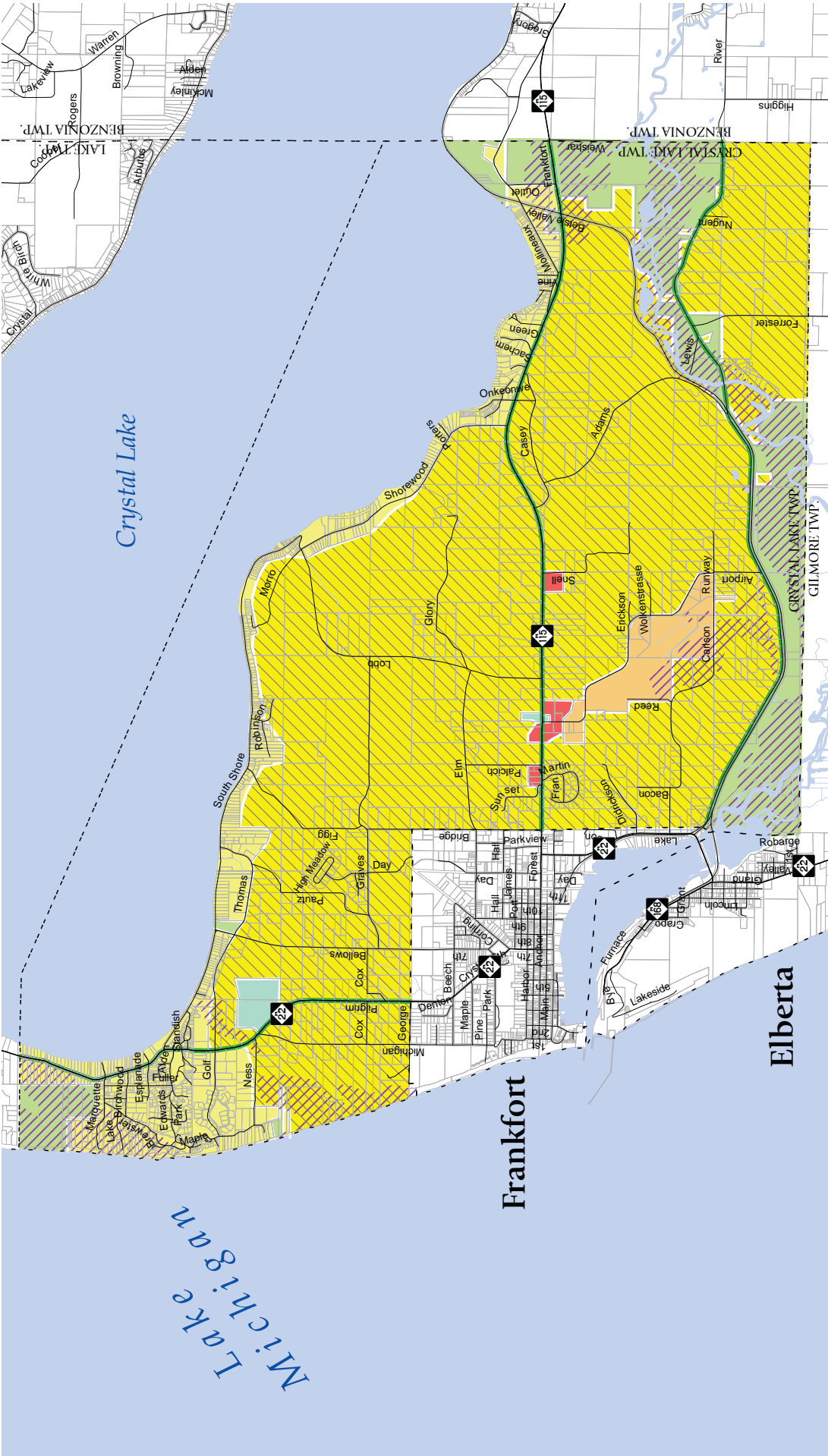
The map entitled "Local Topography" in Tab 2 shows the Crystal Lake depression surrounded by a ring of ridgelines. The map entitled "Crystal Lake Township Natural Features" in this section graphically illustrates the severity of the ridge slopes, some of which extend several hundred feet. As a result of this geologic activity, land immediately abutting Crystal Lake is flat and over time has developed as smaller-lot residential property with lake access and views. Properties on High Meadow, Graves, Lobb, and Glory Roads are located along the top of the ridges; some with exceptional views of Crystal Lake and Lake Michigan are occupied as farmland, forests, and rural residential homes.

Likewise, M-115 meanders through the ridges and valleys which provide a scenic panorama of Crystal Lake Township. One such viewshed is created at the hilltop on M-115, marked by the gateway structure to Frankfort. There are relatively few areas within the township with low topographic relief. Two notable areas are the valley which traverses northwest to southeast, used for the Frankfort Dow Field Airport, and the floodplain associated with the Betsie River along the southern portion of the township.

So, how will land be used in the future? The Cornerstones provide the key. Simply articulated, the Cornerstones look to preserve and protect the natural features and rural character of Crystal Lake Township. Collectively, they state:

- Improve the water quality of Crystal Lake and the Betsie River and its tributaries and streams, which feed the Betsie River and ultimately Lake Michigan
- Encourage the continuation and growth of small agricultural operations
- Preserve our rural character
- Preserve resort and seasonal cottages and the rural residential character of the township
- Encourage land development patterns which respect the natural, ecological, and topographic character of the township
- Encourage the protection of our natural resource base

4.17: Future Land Use map



LAKES TO LAND

Crystal Lake Township Future Land Use

Data Sources: State of Michigan Geographic Data Library, Benzie County Equalization, Windshield Survey by Township Citizens

- Parcel Boundary
- Township Boundary
- Road

- Institutional
- Preserve
- Residential, Cottage / Resort
- Residential, Rural

- Shopping, Business, or Trade
- Transportation / Utilities
- Sensitive Area

- Scenic Highway



Future land use categories

Future land use for Crystal Lake Township is segmented into six categories, including:

Residential – Rural

Residential rural property is located in a rural area but is not associated with a farm operation, usually on lots in excess of an acre and in many cases on larger parcels consisting of five or more acres. These inland properties are predominant in the interior portion of the township, and it is the predominant land use category overall.

Agriculture is also a primary use in this category. Farming operations in Crystal Lake Township tend to be smaller than their counterparts in surrounding townships and focus on a variety of farm-to-school and farm-to-table products. Ideally situated on the periphery of Frankfort and three villages, Crystal Lake Township's agriculture-based businesses provide a variety of specialty foods and products to those markets: fruits, vegetables, beef, lamb, pork, poultry, soaps, lotions, herbal remedies, nursery stock, plants, flowers, honey, eggs, alpaca fiber products, and gourmet mushrooms. These items weave their way into home kitchens, local farm markets, grocery stores, restaurants, and farm-to-school food programs. Economic development efforts should focus on supporting farmers' ability to diversify, develop, process, market, and transport value-added products and access new market channels.

Agricultural properties comprise approximately 10% of the township's land area, contributing to both the

economy and the quality of life. Development potential and market value can often displace agricultural value, which can result in prime farmland being fragmented, sold, and removed from agricultural use. The township should work with farmers to formulate and adopt zoning policies that preserve and prioritize agriculture as an important land use and evaluate the feasibility of state and local Purchase of Development Rights (PDR) and other farmland protection programs. Protection of agricultural areas is consistent with the assessment and recommendations of the Benzie County Open Space and Natural Resources Protection Plan.

Residential – Coastal / Resort

This residential land use is designated along Lake Michigan, Crystal Lake, and the Betsie River, characterized by small, sometimes narrow lots created to maximize access and/or views to the adjacent water body. This category will contain a combination of seasonal and year-round homes. Classification of this type of residential use is important because these properties often located within sensitive natural landscapes or adjacent to riparian areas. Their placement on the property is crucial to maintaining and the protecting resources such as critical dunes, wetlands, and water bodies.

Corridor / Dependent Commercial

Crystal Lake Township's future land use plan recognizes Frankfort as "our town," and the charm of the city is a large part of the quality of life enjoyed by township residents. As one community, Frankfort and the Village of Elberta provide the bulk of the services

and amenities that are utilized by residents and visitors to the township. Frankfort provides needed employment, affordable housing, and commercial and industrial sectors that are not available in the township. This plan envisions a mostly residential future for the corridor in order to maintain the rural and scenic character of the highway. Careful consideration of commercial activities, including a review of emerging patterns of commercial use along the highway, will be undertaken as a part of the zoning plan.

Transportation / Utilities

This form of land development includes the Frankfort Dow Memorial Field (Benzie County Airport Authority) located south of M-115 along Airport Road. Depending on the final master layout plan for the Airport, there may be some form of warehousing and/or light industrial use located and associated with airport operations.

Institutional

Property owned by local government or not-for-profit entities, used for such purposes as churches, cemeteries, offices, parks, and open space.

Special management areas

There are two special management areas identified on the Future Land Use map: Scenic Highway and Sensitive Areas. These management areas overlay the land use categories to denote areas of special concern.

Scenic Highway

This designation applies to the M-115 and River Road corridors due to

4.18: Residential land use

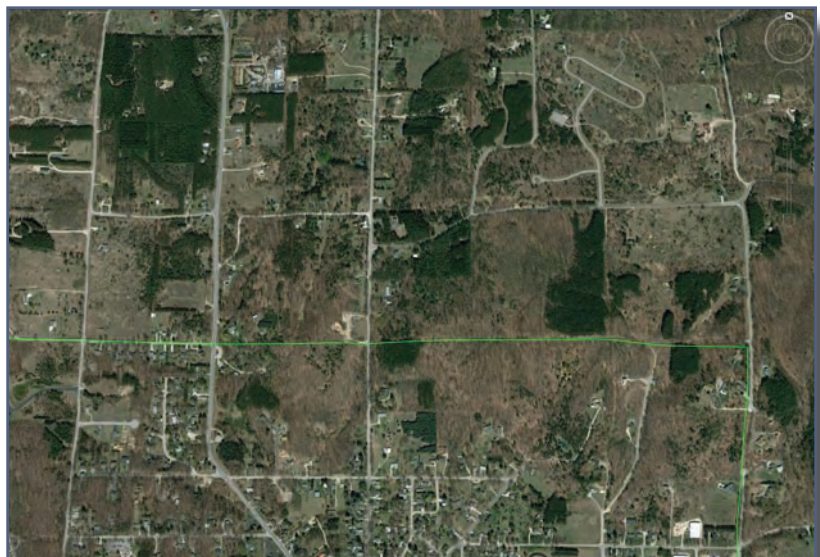
Residential – Rural



*Residential – Cottage & Resort,
adjacent to Crystal Lake*



*Residential – Settlement
(Frankfort city limit is in green)*



Images: Google Earth

their scenic qualities. As mentioned previously, the M-115 corridor meanders through varied topography buffered in many stretches by dense woods and large sweeping vistas. Many uses along the M-115 corridor are setback from the edge of the road by 80 to 140 feet while retaining much of the vegetation which promotes the rural character of the Township. This responsible and preferred form of site design; retaining existing vegetation along the front setback, should be encouraged and integrated into site design regulations in the Zoning Ordinance. Similarly, River Road interfaces with the Betsie River corridor. River Road, east of Adams Road, runs south of the Betsie River and then runs north of the Betsie River and Betsie Valley Trail west of Adams Road. The latter segment is very park-like and scenic due to the presence of the Trail and the open spaces of the Betsie River floodplain.

The gateway to Frankfort, including the historic Gateway Arch on M-115 at the city limits, is an area that is highly valued. Whether one is a township resident, a city resident, or a visitor, passing through the Gateway Arch provides a special quality to the end of a journey. This plan envisions maintaining the scenic quality of the immediate gateway area by limiting commercial development and carefully planning for likely future residential development in the area of the township/city border.

Sensitive Areas

These areas include the floodplains and wetlands along

the Betsie River and the critical dunes identified by the Michigan Department of Environmental Quality along the Lake Michigan coastline. Both of these sensitive areas require added precautions and review when developing properties in or adjacent to these features.

The continued use of the Crystal Lake Watershed Overlay District also serves as a tool for protecting the quality of Crystal Lake, the shoreline and the watershed.

Zoning plan

The Michigan Planning Enabling Act of 2008 requires the inclusion of a zoning plan in the master plan. The zoning plan calls attention to changes that need to be made to the current zoning ordinance in order to align the zoning ordinance with the new master plan. Specifically, the zoning plan looks to show the relationship between the future land use map and the zoning map, and to suggest ordinance revisions to strengthen that relationship. The changes suggested are necessary in order to help implement specific aspects of the master plan.

The table outlines the recommended modifications to the Crystal Lake Township Zoning Ordinance which focuses on deletions of some districts and consolidation of several others. Revisions are suggested in the alignment of the zoning districts with the master plan Future Land Use classifications.

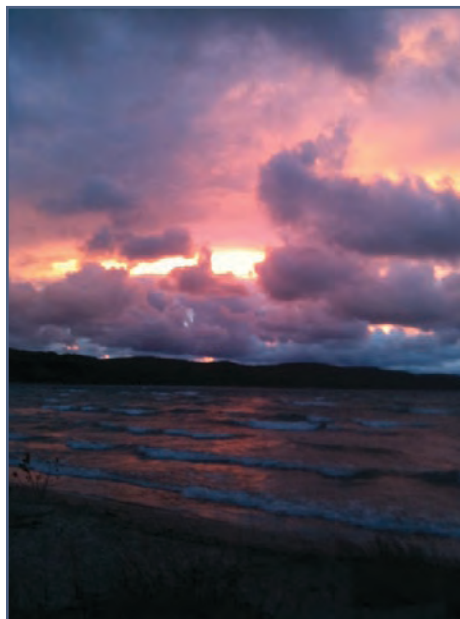


Photo: Sharron May

4.19: Zoning Table

EXISTING ZONING CLASSIFICATIONS	WIDTH AND AREA	FUTURE LAND USE CATEGORY	RECOMMENDED MODIFICATIONS
R-1 Lakeshore Residential	100' 12,000 sq. ft.	RESIDENTIAL COTTAGE and RESORT	<ul style="list-style-type: none"> Remove reference to Livestock as a Conditional Use Revise zoning map to accurately depict R-1
R-2 Single Family Residential	100' 15,000 sq. ft.		
C-1 Commercial	150' 43,560 sq. ft.	SHOPPING, BUSINESS or TRADE	
C/R Commercial Resort	150' 43,560 sq. ft.		Delete district.
General Zoning Provisions			<ul style="list-style-type: none"> Consider and analyze existing lot sizes within RP 2.5 district to determine if they are compatible with RP5 or RP10. Create a Corridor Preservation Overlay for the M-22, M-115, and River Road corridors. This overlay would be focused on maintaining setbacks and mitigating the removal of vegetation along the primary road and access management, including non-motorized trails, improving walkability, signage, and preservation of view sheds. Add Low Impact Development stormwater management requirements. The Zoning Enabling Act does not recognize "Conditional Uses." Suggest modifying the language to conform with the intent of the statute. Formulate and adopt zoning policies that preserve and prioritize agriculture as an important land use and economic activity in the community, such as state and local Purchase of Development Rights and other farmland protection programs. Incorporate bike parking requirements in the local zoning ordinance. Review and revise Article 10: Rural Preservation of the Crystal Lake Township Zoning Ordinance to remove less rural land uses. Permit a greater variety of home occupations and cottage industries to accommodate business while respecting the health, safety, welfare, and enjoyment of adjacent property owners. Update dark sky provisions in the Zoning Ordinance to reflect Best Management Practices. Establish a mining reclamation ordinance. Revise zoning and related regulations to curtail sprawl and strip development along M-115.

Action Plan

The overall success of the Crystal Lake Township Master Plan will be determined by how many of the recommendations have been implemented.

This linkage between master plan acceptance and its eventual implementation is often the weakest link in the planning and community building process. All too often we hear that familiar phrase, “The plan was adopted and then sat on the shelf.” The plan is cited as the failure, but the real culprit was the failure to execute or implement the plan.

Specifically, the Action Plan is focused on modifications to the Zoning Ordinance to consolidate districts and refine the ordinance to include low impact development stormwater techniques and a new provision to preserve the scenic corridors along M-115 and River Road. In addition, several new township Planning Commissions have been formed since the dissolution of the Benzie County Planning Commission, making formal training of Planning Commissions an imperative.

4.20: Action Plan

RECOMMENDED IMPLEMENTATION STRATEGY 2013 – 2018		
Action Item	Description	Responsible Party
Planning Commission Training	The Lakes to Land Regional Initiative is coordinating Planning Commission training through Michigan State University for planning commissions within the region. This is an opportune time to have Planning Commission members go through the MSU-Extension Citizen Planner program.	Crystal Lake Township Board of Trustees and Planning Commission <i>(note: The township should check with its municipal insurance carrier for PC member scholarships)</i>
Zoning Ordinance	Revise the current Township Zoning Ordinance using the Zoning Plan as a guide.	Planning Commission and Board of Trustees
Scenic Highway Provision	Prepare a new provision in the Zoning Ordinance focused on maintaining the visual appearance of the M-22, M-115, and River Road Corridors.	Planning Commission
Intergovernmental Exchange	Meet on with the City of Frankfort Planning Commission and other jurisdictions as needed to review developments, zoning, and related Planning Commission initiatives affecting the joint jurisdictional boundaries.	Planning Commission
Communication and Leadership Training	Improve communication between the township and its residents (functioning website, etc.). Collaborate with other L2L communities on a regional training program similar to the Planning Commission training.	Planning Commission

Appendix A

Sources and Data

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Tab 2 – by Page

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Data

US Census Bureau, American Community Survey 2006-2010, Selected Social Characteristics (DP02), Selected Economic Characteristics (DP03), and Selected Housing Characteristics (DP04)

	Estimate	Percent
POPULATION		
1990	899	NA
2000	960	0.68%
2010	957	-0.03%
2016 (proj.)	978	0.37%
HOUSING OCCUPANCY		
Total Housing Units	1,240	1240
Owner-occupied	365	29.4%
Renter-occupied	73	5.9%
Seasonal/Recreational/Occasional use	757	61.0%
Vacant - For Sale, For Rent, etc.	45	3.6%
EDUCATIONAL ATTAINMENT		
Population 25 years and over	768	768
Less than high school	41	5.40%
High school graduate and equivalency	214	27.90%
Some college, no degree	196	25.50%
Associate's degree	33	4.30%
Bachelor's degree	152	19.80%
Graduate or professional degree	132	17.20%
Percent high school graduate or higher	(X)	94.70%
Percent bachelor's degree or higher	(X)	37.00%
SCHOOL ENROLLMENT		
Population enrolled in school	130	13.58%
CLASS OF WORKER		
Civilian employed population 16 years +	347	347
Private wage and salary workers	243	70.00%
Government workers	48	13.80%
Self-employed	56	16.10%
Unpaid family workers	0	0.00%
Private sector jobs	86.2%	
INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED \$)		
Total households	449	449
Less than \$10,000	24	5.30%
\$10,000 to \$14,999	44	9.80%
\$15,000 to \$24,999	42	9.40%
\$25,000 to \$34,999	46	10.20%
\$35,000 to \$49,999	82	18.30%
\$50,000 to \$74,999	73	16.30%
\$75,000 to \$99,999	55	12.20%
\$100,000 to \$149,999	36	8.00%
\$150,000 to \$199,999	16	3.60%
\$200,000 or more	31	6.90%
Median household income (dollars)	45,625	(X)
Very low income	110	24.5%
Low income	46	10.2%
Moderate income	155	34.5%
High income	91	20.3%
Very high income	47	10.5%
Per capita income	43,033	(X)
Median earnings for workers (dollars)	21,750	(X)
Median earnings: male FT, year-round	48,281	(X)
Median earnings: female FT, year-round	25,893	(X)

POVERTY		
All families	(X)	6.20%
All people	(X)	10.70%
Under 18 years	(X)	17.90%
Receiving food stamps	45	10.00%
Receiving cash assistance	14	3.10%
INDUSTRY		
Civilian employed population 16 years and over	347	347
Agriculture, forestry, fishing and hunting, and mining	8	2%
Construction	46	13%
Manufacturing	38	11%
Wholesale trade	6	2%
Retail trade	37	11%
Transportation and warehousing, and utilities	12	4%
Information	4	1%
Finance and insurance, and real estate and rental and leasing	27	8%
Professional, scientific, and management, and administrative and waste management services	11	3%
Educational services, and health care and social assistance	89	26%
Arts, entertainment, and recreation, and accommodation and food services	31	9%
Other services, except public administration	29	8%
Public administration	9	3%
Manufacturing to retail jobs	1.03	
Non-retail	250	
Retail, arts, accommodations, food	68	
Non-retail to retail, arts, acc., food	3.68	
EMPLOYMENT STATUS		
Population 16 years and over	846	846
In labor force	410	48.50%
Civilian labor force	410	48.50%
Employed	347	41.00%
Unemployed	63	7.40%
Armed Forces	0	0.00%
Not in labor force	436	51.50%
Civilian labor force	410	410
Percent Unemployed	(X)	15.40%
Jobs per 1,000 residents	363	
Non-service jobs per 1,000 residents	281	

COMMUTING TO WORK		
Workers 16 years and over	331	331
Drove alone	225	68.00%
Carpooled	49	14.80%
Public transit (except taxi)	0	0.00%
Walked	17	5.10%
Other means	3	0.90%
Worked at home	37	11.20%
Workers who commute	294	88.82%
Commuters who drive alone		76.53%
Mean travel time to work (minutes)	14	(X)
HOUSEHOLDS BY TYPE		
Total households	449	449
Average household size	2.07	(X)
Average family size	2.48	(X)
VETERAN STATUS		
Civilian population 18 years and over	818	818
Civilian veterans	90	11.00%
ANCESTRY		
Total population	928	928
American	6	0.60%
Arab	0	0.00%
Czech	12	1.30%
Danish	11	1.20%
Dutch	48	5.20%
English	226	24.40%
French (except Basque)	59	6.40%
French Canadian	8	0.90%
German	293	31.60%
Greek	0	0.00%
Hungarian	12	1.30%
Irish	127	13.70%
Italian	42	4.50%
Lithuanian	10	1.10%
Norwegian	72	7.80%
Polish	31	3.30%
Portuguese	0	0.00%
Russian	14	1.50%
Scotch-Irish	15	1.60%
Scottish	61	6.60%
Slovak	0	0.00%
Subsaharan African	15	1.60%
Swedish	39	4.20%
Swiss	11	1.20%
Ukrainian	0	0.00%
Welsh	8	0.90%
West Indian (excluding Hispanic origin groups)	0	0.00%
OCCUPATION		
Management, business, science, and arts occupations	95	27.40%
Service occupations	78	22.50%
Sales and office occupations	87	25.10%
Natural resources, construction, and maintenance occupations	63	18.20%
Production, transportation, and material moving occupations	24	6.90%

VALUE		
Owner-occupied units	382	382
Median home value (dollars)	258,800	(X)
MORTGAGE STATUS		
Owner-occupied units	382	382
Housing units with a mortgage	159	41.60%
Housing units without a mortgage	223	58.40%
GROSS RENT		
Occupied units paying rent	44	44
Median rent (dollars)	658	(X)
HOUSE HEATING FUEL		
Occupied housing units	449	449
Utility gas	141	31.40%
Bottled, tank, or LP gas	205	45.70%
Electricity	43	9.60%
Fuel oil, kerosene, etc.	31	6.90%
Coal or coke	0	0.00%
Wood	29	6.50%
Solar energy	0	0.00%
Other fuel	0	0.00%
No fuel used	0	0.00%
YEAR STRUCTURE BUILT		
Total housing units	1,184	1,184
Built 2005 or later	25	2.10%
Built 2000 to 2004	147	12.40%
Built 1990 to 1999	189	16.00%
Built 1980 to 1989	257	21.70%
Built 1970 to 1979	83	7.00%
Built 1960 to 1969	89	7.50%
Built 1950 to 1959	104	8.80%
Built 1940 to 1949	74	6.30%
Built 1939 or earlier	216	18.20%

US Census Bureau, American Community Survey 2006-2010, Selected Economic Characteristics (DP03)

HOUSEHOLDS BY TYPE				
Total households	449	+/-58	449	(X)
Family households (families)	289	+/-44	64.40%	+/-7.0
With own children under 18 years	68	+/-22	15.10%	+/-5.1
Married-couple family	232	+/-41	51.70%	+/-7.4
With own children under 18 years	40	+/-17	8.90%	+/-4.0
Male householder, no wife present, family	27	+/-16	6.00%	+/-3.3
With own children under 18 years	27	+/-16	6.00%	+/-3.3
Female householder, no husband present, family	30	+/-16	6.70%	+/-3.3
With own children under 18 years	1	+/-3	0.20%	+/-0.6
Nonfamily households	160	+/-41	35.60%	+/-7.0
Householder living alone	133	+/-40	29.60%	+/-7.4
65 years and over	73	+/-29	16.30%	+/-5.9
Households with one or more people under 18 years	72	+/-23	16.00%	+/-5.2
Households with one or more people 65 years and over	228	+/-47	50.80%	+/-7.2
Average household size	2.07	+/-0.17	(X)	(X)
Average family size	2.48	+/-0.20	(X)	(X)

PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL		
All families	6.20%	+/-4.4
With related children under 18 years	20.80%	+/-14.0
With related children under 5 years only	0.00%	+/-66.2
Married couple families	5.20%	+/-4.9
With related children under 18 years	22.50%	+/-19.9
With related children under 5 years only	-	**
Families with female householder, no husband present	0.00%	+/-49.8
With related children under 18 years	0.00%	+/-100.0
With related children under 5 years only	0.00%	+/-100.0
All people	10.70%	+/-4.7
Under 18 years	17.90%	+/-12.0
Related children under 18 years	17.90%	+/-12.0
Related children under 5 years	0.00%	+/-64.3
Related children 5 to 17 years	21.60%	+/-14.5
18 years and over	9.80%	+/-4.3
18 to 64 years	13.10%	+/-6.4
65 years and over	5.20%	+/-3.5
People in families	8.50%	+/-5.7
Unrelated individuals 15 years and over	18.40%	+/-8.7

Notes for US Census Bureau, American Community Survey 2006-2010, Tables S2403 and S2404 (following pages)

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

The methodology for calculating median income and median earnings changed between 2008 and 2009. Medians over \$75,000 were most likely affected. The underlying income and earning distribution now uses \$2,500 increments up to \$250,000 for households, non-family households, families, and individuals and employs a linear interpolation method for median calculations. Before 2009 the highest income category was \$200,000 for households, families and non-family households (\$100,000 for individuals) and portions of the income and earnings distribution contained intervals wider than \$2,500. Those cases used a Pareto Interpolation Method.

Industry codes are 4-digit codes and are based on the North American Industry Classification System 2007. The Industry categories adhere to the guidelines issued in Clarification Memorandum No. 2, "NAICS Alternate Aggregation Structure for Use By U.S. Statistical Agencies," issued by the Office of Management and Budget.

While the 2006-2010 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

1. An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '****' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

S2403: INDUSTRY BY SEX AND MEDIAN EARNINGS IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) FOR THE CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER

2006-2010 American Community Survey 5-Year Estimates

Crystal Lake township, Benzie County, Michigan												
Subject	Total		Male		Female		Median earnings (dollars)		Median earnings (dollars) for male		Median earnings (dollars) for female	
	Estimate	Error	Estimate	Error	Estimate	Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Civilian employed population 16 years and over	347	+/-60	55.3%	+/-6.3	44.7%	+/-6.3	25,708	+/-2,854	33,875	+/-10,193	21,635	+/-3,850
Agriculture, forestry, fishing and hunting, and mining:	8	+/-8	100.0%	+/-96.4	0.0%	+/-96.4	16,250	+/-24,430	16,250	+/-24,451	-	**
Agriculture, forestry, fishing and hunting	8	+/-8	100.0%	+/-96.4	0.0%	+/-96.4	16,250	+/-24,430	16,250	+/-24,453	-	**
Mining, quarrying, and oil and gas extraction	0	+/-109	-	**	-	**	-	**	-	**	-	**
Construction	46	+/-17	84.8%	+/-14.0	15.2%	+/-14.0	33,500	+/-13,830	35,417	+/-17,205	27,813	+/-11,749
Manufacturing	38	+/-22	68.4%	+/-24.0	31.6%	+/-24.0	41,500	+/-34,133	52,917	+/-21,610	21,500	+/-37,544
Wholesale trade	6	+/-9	100.0%	+/-100.0	0.0%	+/-100.0	2,500-	***	2,500-	***	-	**
Retail trade	37	+/-19	24.3%	+/-19.0	75.7%	+/-19.0	18,958	+/-9,847	18,125	+/-25,716	21,000	+/-13,351
Transportation and warehousing, and utilities:	12	+/-10	100.0%	+/-78.7	0.0%	+/-78.7	60,833	+/-105,710	60,833	+/-105,710	-	**
Transportation and warehousing	12	+/-10	100.0%	+/-78.7	0.0%	+/-78.7	60,833	+/-105,710	60,833	+/-105,710	-	**
Utilities	0	+/-109	-	**	-	**	-	**	-	**	-	**
Information	4	+/-5	0.0%	+/-100.0	100.0%	+/-100.0	-	**	-	**	-	**
Finance and insurance, and real estate and rental and leasing:	27	+/-16	59.3%	+/-22.7	40.7%	+/-22.7	45,469	+/-19,258	46,875	+/-104,776	18,125	+/-28,863
Finance and insurance	23	+/-15	52.2%	+/-25.3	47.8%	+/-25.3	43,750	+/-46,870	105,625	+/-109,718	18,125	+/-28,863
Real estate and rental and leasing	4	+/-6	100.0%	+/-100.0	0.0%	+/-100.0	-	**	-	**	-	**
Professional, scientific, and management, and administrative and waste management services:	11	+/-12	100.0%	+/-82.2	0.0%	+/-82.3	14,792	+/-62,332	14,792	+/-62,332	-	**
Professional, scientific, and technical services	5	+/-8	100.0%	+/-100.0	0.0%	+/-100.0	-	**	-	**	-	**
Management of companies and enterprises	0	+/-109	-	**	-	**	-	**	-	**	-	**
Administrative and support and waste management services	6	+/-8	100.0%	+/-100.0	0.0%	+/-100.0	-	**	-	**	-	**
Educational services, and health care and social assistance:	89	+/-41	31.5%	+/-14.4	68.5%	+/-14.4	26,131	+/-4,555	48,125	+/-149,598	23,875	+/-6,814
Educational services	15	+/-11	0.0%	+/-70.4	100.0%	+/-70.4	50,313	+/-71,774	-	**	50,313	+/-71,774
Health care and social assistance	74	+/-41	37.8%	+/-15.9	62.2%	+/-15.9	26,071	+/-3,516	48,125	+/-150,191	23,750	+/-7,974
Arts, entertainment, and recreation, and accommodation and food services:	31	+/-27	61.3%	+/-38.9	38.7%	+/-38.9	32,583	+/-35,697	33,417	+/-15,701	15,938	+/-2,017
Arts, entertainment, and recreation	22	+/-25	86.4%	+/-25.6	13.6%	+/-25.6	33,167	+/-30,007	33,417	+/-15,701	-	**
Accommodation and food services	9	+/-9	0.0%	+/-90.9	100.0%	+/-90.9	16,406	+/-13,410	-	**	16,406	+/-13,410
Other services, except public administration	29	+/-16	41.4%	+/-21.8	58.6%	+/-21.8	30,313	+/-30,859	11,667	+/-59,391	30,938	+/-31,485
Public administration	9	+/-6	66.7%	+/-41.3	33.3%	+/-41.3	56,250	+/-99,230	2,500-	***	-	**

S2404: INDUSTRY BY SEX AND MEDIAN EARNINGS IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) FOR THE FULL-TIME, YEAR-ROUND CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER
2006-2010 American Community Survey 5-Year Estimates

Crystal Lake township, Benzie County, Michigan												
Subject	Total		Male		Female		Median earnings (dollars)		Median earnings (dollars)		Median earnings (dollars)	
	#	Margin of error	Estimate	Margin of error	Estimate	Margin of error	Estimate	Margin of error	Estimate	Margin of error	Estimate	Margin of error
Full-time, year-round civilian employed population 16 years and over	184	+/-44	58.2%	+/-9.2	41.8%	+/-9.2	36,389	+/-12,689	48,281	+/-6,848	25,893	+/-5,118
Agriculture, forestry, fishing and hunting, and mining:	3	+/-4	100.0%	+/-100.0	0.0%	+/-100.0	-	**	-	**	-	**
Agriculture, forestry, fishing and hunting	3	+/-4	100.0%	+/-100.0	0.0%	+/-100.0	-	**	-	**	-	**
Mining, quarrying, and oil and gas extraction	0	+/-109	-	**	-	**	-	**	-	**	-	**
Construction	36	+/-16	91.7%	+/-11.6	8.3%	+/-11.6	36,667	+/-18,997	42,750	+/-16,862	-	**
Manufacturing	33	+/-22	63.6%	+/-26.7	36.4%	+/-26.7	52,708	+/-65,166	53,958	+/-23,875	21,500	+/-37,544
Wholesale trade	0	+/-109	-	**	-	**	-	**	-	**	-	**
Retail trade	9	+/-9	0.0%	+/-90.9	100.0%	+/-90.9	11,875	+/-20,849	-	**	11,875	+/-20,849
Transportation and warehousing, and utilities:	7	+/-7	100.0%	+/-100.0	0.0%	+/-100.0	152,813	+/-190,723	152,813	+/-190,723	-	**
Transportation and warehousing	7	+/-7	100.0%	+/-100.0	0.0%	+/-100.0	152,813	+/-190,723	152,813	+/-190,723	-	**
Utilities	0	+/-109	-	**	-	**	-	**	-	**	-	**
Information	0	+/-109	-	**	-	**	-	**	-	**	-	**
Finance and insurance, and real estate and rental and leasing:	18	+/-13	66.7%	+/-30.6	33.3%	+/-30.6	46,875	+/-60,950	105,625	+/-139,041	45,625	+/-44,156
Finance and insurance	14	+/-12	57.1%	+/-35.9	42.9%	+/-35.9	76,250	+/-92,491	106,875	+/-178,836	45,625	+/-44,156
Real estate and rental and leasing	4	+/-6	100.0%	+/-100.0	0.0%	+/-100.0	-	**	-	**	-	**
Professional, scientific, and management, and administrative and waste management services:	0	+/-109	-	**	-	**	-	**	-	**	-	**
Professional, scientific, and technical services	0	+/-109	-	**	-	**	-	**	-	**	-	**
Management of companies and enterprises	0	+/-109	-	**	-	**	-	**	-	**	-	**
Administrative and support and waste management services	0	+/-109	-	**	-	**	-	**	-	**	-	**
Educational services, and health care and social assistance:	53	+/-28	43.4%	+/-28.1	56.6%	+/-28.1	26,736	+/-14,278	27,396	+/-42,913	25,417	+/-9,260
Educational services	9	+/-8	0.0%	+/-90.9	100.0%	+/-90.9	51,250	+/-69,473	-	**	51,250	+/-69,473
Health care and social assistance	44	+/-27	52.3%	+/-31.7	47.7%	+/-31.7	26,667	+/-13,355	27,396	+/-42,913	25,208	+/-3,226
Arts, entertainment, and recreation, and accommodation and food services:	4	+/-5	0.0%	+/-100.0	100.0%	+/-100.0	16,667	+/-52,133	-	**	16,667	+/-52,133
Arts, entertainment, and recreation	0	+/-109	-	**	-	**	-	**	-	**	-	**
Accommodation and food services	4	+/-5	0.0%	+/-100.0	100.0%	+/-100.0	16,667	+/-52,133	-	**	16,667	+/-52,133
Other services, except public administration	15	+/-11	33.3%	+/-41.2	66.7%	+/-41.2	36,458	+/-3,006	39,583	+/-61,388	35,417	+/-4,890
Public administration	6	+/-6	50.0%	+/-50.0	50.0%	+/-50.0	57,500	+/-1,994	-	**	-	**

Esri Business Analyst

Financial Expenditures				
Crystal Lake Township				
Area: 17.08 Square Miles				
	Spending Potential Index		Average Amount Spent	Total
Assets				
Market Value				
Checking Accounts	82		\$4,647.38	\$2,043,872
Savings Accounts	85		\$10,856.70	\$4,774,676
U.S. Savings Bonds	80		\$320.24	\$140,840
Stocks, Bonds & Mutual Funds	87		\$32,970.03	\$14,499,912
Annual Changes				
Checking Accounts	72		\$181.36	\$79,760
Savings Accounts	47		\$176.57	\$77,653
U.S. Savings Bonds	-148		-\$3.41	-\$1,501
Earnings				
Dividends, Royalties, Estates, Trusts	94		\$897.60	\$394,756
Interest from Savings Accounts or Bonds	94		\$831.09	\$365,508
Retirement Plan Contributions	70		\$936.42	\$411,828
Liabilities				
Original Mortgage Amount	66		\$13,707.95	\$6,028,630
Vehicle Loan Amount 1	74		\$1,959.55	\$861,792
Amount Paid: Interest				
Home Mortgage	69		\$3,086.93	\$1,357,604
Lump Sum Home Equity Loan	70		\$88.78	\$39,044
New Car/Truck/Van Loan	74		\$149.70	\$65,836
Used Car/Truck/Van Loan	72		\$112.95	\$49,675
Amount Paid: Principal				
Home Mortgage	71		\$1,369.87	\$602,456
Lump Sum Home Equity Loan	72		\$116.66	\$51,308
New Car/Truck/Van Loan	74		\$803.17	\$353,226
Used Car/Truck/Van Loan	72		\$530.42	\$233,275
Checking Account and Banking Service Charges	68		\$18.20	\$8,004
Finance Charges, excluding Mortgage/Vehicle	68		\$161.93	\$71,214

Business Summary				
Crystal Lake Township				
Area: 17.08 Square Miles				
Data for all businesses in area				
Total Businesses:	78			
Total Employees:	613			
Total Residential Population:	960			
Employee/Residential Population Ratio:	0.64			
	Businesses		Employees	
by NAICS Codes	Number	Percent	Number	Percent
Agriculture, Forestry, Fishing & Hunting	0	0.0%	0	0.0%
Mining	0	0.0%	0	0.0%
Utilities	0	0.6%	2	0.3%
Construction	7	8.4%	22	3.6%
Manufacturing	4	5.0%	105	17.1%
Wholesale Trade	2	3.1%	11	1.8%
Retail Trade	15	19.3%	93	15.2%
Motor Vehicle & Parts Dealers	1	1.6%	9	1.4%
Furniture & Home Furnishings Stores	0	0.4%	1	0.1%
Electronics & Appliance Stores	1	1.2%	3	0.5%
Bldg Material & Garden Equipment & Supplies Dealers	2	2.5%	12	1.9%
Food & Beverage Stores	2	2.4%	36	5.9%
Health & Personal Care Stores	0	0.5%	3	0.5%
Gasoline Stations	1	0.6%	5	0.8%
Clothing & Clothing Accessories Stores	2	2.1%	6	1.0%
Sport Goods, Hobby, Book, & Music Stores	2	2.2%	5	0.8%
General Merchandise Stores	1	0.9%	4	0.7%
Miscellaneous Store Retailers	4	4.9%	10	1.6%
Nonstore Retailers	0	0.0%	0	0.0%
Transportation & Warehousing	2	1.9%	6	0.9%
Information	1	1.4%	5	0.8%
Finance & Insurance	2	3.1%	19	3.1%
Central Bank/Credit Intermediation & Related Activities	1	1.9%	16	2.6%
Securities, Commodity Contracts & Other Financial Investments & Other Related Activities	0	0.4%	1	0.1%
Insurance Carriers & Related Activities; Funds, Trusts & Other Financial Vehicles	1	0.8%	2	0.3%
Real Estate, Rental & Leasing	4	5.5%	25	4.1%
Professional, Scientific & Tech Services	4	4.6%	14	2.3%
Legal Services	1	0.9%	2	0.4%
Management of Companies & Enterprises	1	1.1%	9	1.5%
Administrative & Support & Waste Management & Remediation Services	3	3.6%	7	1.2%
Educational Services	2	2.3%	57	9.2%
Health Care & Social Assistance	6	8.0%	98	15.9%
Arts, Entertainment & Recreation	1	1.4%	2	0.3%
Accommodation & Food Services	7	9.6%	55	9.0%
Accommodation	3	3.6%	11	1.7%
Food Services & Drinking Places	5	6.0%	45	7.3%
Other Services (except Public Administration)	10	12.6%	38	6.2%
Automotive Repair & Maintenance	1	1.0%	7	1.1%
Public Administration	5	5.8%	41	6.7%
Unclassified Establishments	2	2.6%	6	1.0%
Total	78	100%	613	100%
Source: Business data provided by Infogroup, Omaha NE Copyright 2012, all rights reserved. Esri forecasts for 2011.				

Appendix B

Northwest Michigan Regional Non-Motorized Strategy

Please visit <http://www.nwm.org/userfiles/filemanager/465/>

Appendix C

Documentation

A complete packet has been assembled that includes

- “Intent to plan” notices
- Draft distribution notices
- Public hearing notices
- All received comments

- Meeting minutes related to consideration of comments
- Public hearing meeting minutes

A copy of this packet is on file at Crystal Lake Township Hall. The documents are also available at www.lakestoland.org/crystal-lake/master-plan/

As required by Michigan Public Act 33 of 2008, the Michigan Planning Enabling Act, the signed resolution adopting this master plan is on the inside cover.



LAKES TO LAND REGIONAL INITIATIVE

Implementation



Priority Sharing

The original scope of work for the collaboration, designed at the very beginning of the process, was focused on respecting and honoring the individuality and unique qualities of communities while developing opportunities for partnership and collaboration.

Given their potential utility to other communities, the appendix includes a generic copy of the resolutions that Lakes to Land governing bodies were asked to consider and pass to signify grassroots acceptance and understanding of Lakes to Land goals and principles. Just as Lakes to Land began within a collaborative framework, a culmination was envisioned in which all of the participating communities brought their completed master plans—whether written with Lakes to Land or independently—together to share their content and discuss the potential for implementation partnerships. The event was to be called a “Convention of Communities,” and would be both a working session and a celebration of the successful master planning process.

But it’s hard to accurately predict the conditions at the end of a pioneering undertaking. The Leadership Team’s monthly meetings over the course of the year and a half spent writing the master plans forged some deep and personal connections among the communities’ planning commissioners and leaders, and excitement to share in each others’ work built as the drafts neared completion. There is a long, quiet administrative stretch between when a planning commission completes its draft and when it is formally and finally adopted, and the Leadership Team wanted to capitalize on and spread some of the enthusiasm before it dissipated. Accordingly, they invited planning commissioners and appointed and elected officials from all of the participating communities as well

as the Little River Band of Ottawa Indians to a “Priority Sharing Meeting” on June 27, 2013. Fifty-nine people, including a couple of members of the public, attended. This unprecedented gathering of community planners and leaders was exciting and dynamic, occurring at the right time under the right circumstances—a situation that could hardly be planned even by the best planners.

The meeting opened with a locally-sourced, zero-waste feast of pizza and veggies organized by Crystal Lake Township leadership team member Sharron May. In preparation for the meeting, communities were asked to choose five priorities that could serve as an initial step to advance their goals and vision, and the consultant team presented the full list of 69 priorities before consolidating them into ten categories in order to indicate potential alliances. Demonstrating both the value and effect of momentum, Tim Ervin of Manistee Alliance for Success introduced a new grant awarded to the Initiative by the Michigan Department of Treasury for implementation and explained that the grant was written to target support for zoning and the development of an Agriculture Innovation District—both common themes that had emerged through the collaborative goal-setting process.

Ten posters, one for each theme and its associated priorities, were affixed to the wall. Participants were given





5.1 Shared Community Priorities table

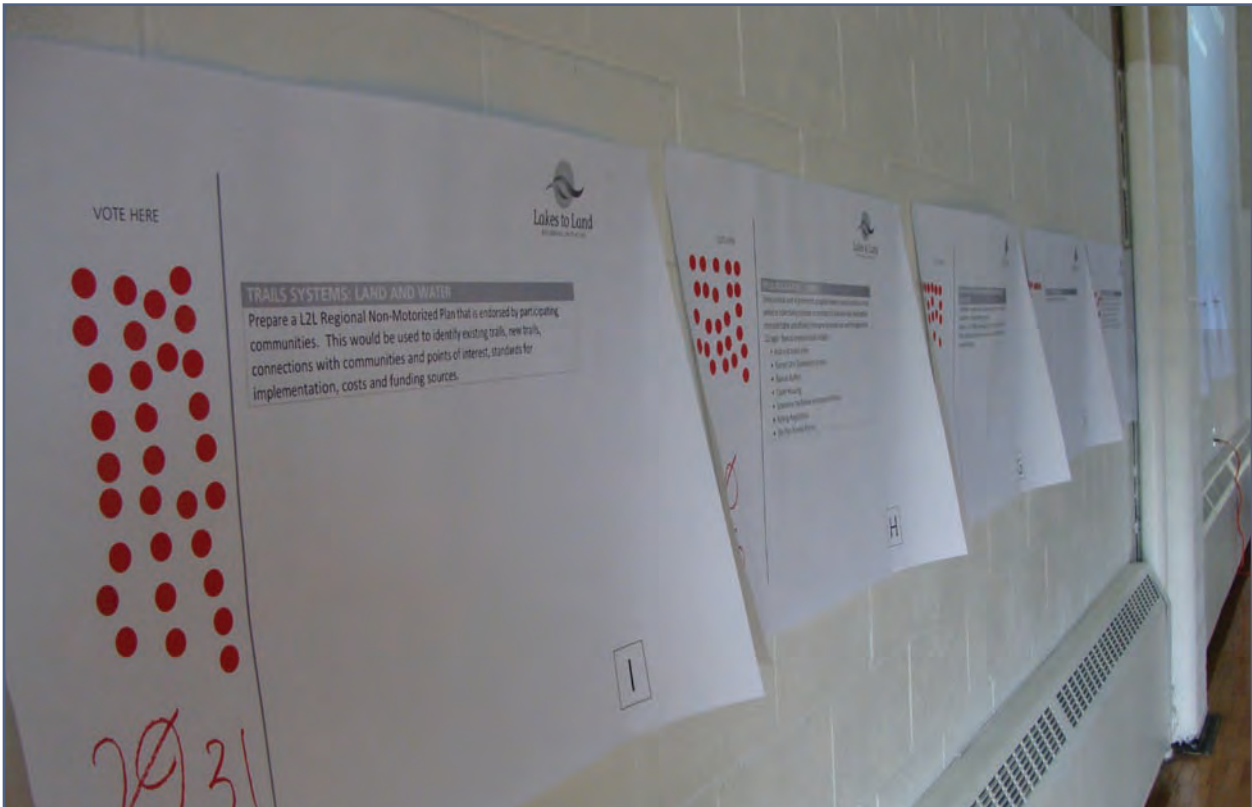
SHARED COMMUNITY PRIORITIES	
AGRICULTURE	
Blaine	Consider developing an agriculture vitality strategy
Pleasanton	Develop agriculture -based economic development.
REDUCE BLIGHT AND NUISANCES	
Crystal Lake	Ordinances should be adopted and enforced from nuisances such as blight, noise, air, smoke, light and water pollution
Joyfield	Multi-township household dump day
Gilmore	Blight
Honor	Development of a blight/junk ordinance.
Bear Lake Twp	Develop an enforceable blight and junk ordinance and take steps to implement it.
Bear Lake Village	Eliminate blight
IMPROVE COMMUNICATIONS	
Crystal Lake	Improve communication and cooperation between Crystal Lake Township and its citizens and other local units of government.
Manistee	Reinstitute semi-annual meetings with neighboring townships
Manistee	Expand/Use Web Page and Facebook to promote Manistee and link to CVB, Chamber & AES
ECONOMIC DEVELOPMENT	
Crystal Lake	Encouraged development in locations with public services and consistent with the density, character, and development in the area and our Cornerstones
Elberta	Historic Life Saving Station Preservation
Joyfield	Growth in light industry/small business (training, zoning issues)
Manistee	Work with Main Street/DDA to recruit more business options
Manistee	Promote Guidebook for Economic Development/Job Creation
Honor	Develop design guidelines that expresses the community's vision for achieving a desired Village character.
Arcadia	Implement commercial streetscape improvements.
Manistee Twp.	Continue to welcome construction of large retail stores in the township
Bear Lake Village	Revitalize downtown



INFRASTRUCTURE: EXPAND AND IMPROVE	
Elberta	Sewer/Water infrastructure
Joyfield	Infrastructure - wireless, natural gas
Joyfield	Township roads - assessment, upgrades, trails
Blaine	Develop a road improvement plan to cover maintenance, site plans (private roads) and good communication and coordination with MDOT and County Road Commission.
Gilmore	Technology
Arcadia	Project analysis and feasibility study of installing a sanitary sewer system.
Arcadia	Utilize and develop the facilities at the Pleasant Valley Community Center to be the local and regional trail hub.
Frankfort	Create and Improve Way-finding signage and Enhance the commercial corridor through traffic controls and improved pedestrian/non-motorized access and off-street parking.
Frankfort	Adopt Energy Independence Plans, including community energy generation and reduction in grid-based energy based on fossil fuels.
Bear Lake Village	Affordable sewer
Onokama	High-speed Internet infrastructure
M-22 SCENIC HIGHWAY	
Gilmore	M-22 Scenic Highway Designation
Onokama	M-22 corridor/ Scenic Heritage route
EXPAND RECREATION OPPORTUNITIES AND IMPROVE EXISTING FACILITIES	
Honor	Purchase the vacant properties along South Street for the purpose of developing a public access point to the Platte River.
Elberta	Penfold Park Marina (dredging, raised boardwalk/fishing deck, kayak/canoe launch, connect to Betsie Valley Trail)
Elberta	Elberta beach park development (parking, picnic tables, restrooms, changing area, play area/landscaping)
Elberta	Elberta Dunes South (trail signs, benches, lookout platforms, natural-history signage, promote year round activities, self-composting style permanent restrooms)
Frankfort	Create new standards for public facilities in recreational destinations and develop public private partnership(s) to build these facilities
Manistee Twp.	Provide more access to the Big Manistee River
Bear Lake Twp.	Develop a parks and recreation plan.
Bear Lake Village	Community Center
Bear Lake Village	Park Facility/Public Restrooms
Bear Lake Village	5 year Recreation Plan



SPECIAL REGULATIONS / ZONING	
Crystal Lake	Review and revise Rural Preservation Zoning District of the Zoning Ordinance
Blaine	Develop a scenic view protection plan
Blaine	Simplify PUD process
Elberta	Zoning Ordinance critique and revision
Gilmore	Funding to incorporate zoning revisions and provide for legal review of zoning ordinance.
Gilmore	Rural scenic charioteer preservation.
Honor	Revisions to the zoning ordinance.
Pleasanton	Update the Zoning Ordinance.
Frankfort	Update Parking regulations and standard
Frankfort	Develop Zoning Ordinance(s) for Alternative and Renewable Energy collection, storage and use along with conservation standards that will bring about the reduction in energy demand.
Manistee Twp.	Require buffers & connections between different land use districts
Manistee Twp.	Streamline permitting processes
Onkama	Zoning ordinance rewrite
Onkama	Protection of "Natural Resources" (watershed, agriculture, etc.)
TRAILS SYSTEMS: LAND AND WATER	
Gilmore	Trail Systems
Honor	Develop a non-motorized transportation route through the Village linking the Village to the Sleeping Bear Dunes National Lakeshore.
Pleasanton	Develop a multi-user trail system throughout the Township that also connects to regional trail systems.
Arcadia	Development of blue and green non-motorized transportation trails.
Bear Lake Twp.	Develop trail systems throughout the community and provide linkages to regional trail systems.
Onkama	Bike/ hiking pathway/ trail plan
Joyfield	Trails / bridge over Betsie River
WATER QUALITY	
Crystal Lake	Incorporate water quality and storm water MDEQ BMP's into land use planning and zoning processes.
Blaine	Develop a watershed plan, including management, committee and protection
Arcadia	Develop a Watershed Plan.
Manistee Twp.	Encourage buffers around lakes & streams



5.2 Volunteer card



Lakes to Land
REGIONAL INITIATIVE

Name: _____

Address: _____

Email: _____

Shared Priorities

- A. Agriculture
- B. Reduce Blight and Nuisances
- C. Improve Communications
- D. Economic Development
- E. Expand and Improve Infrastructure
- F. M-22 Scenic Highway
- G. Expand Recreation and Improve Facilities
- H. Special Regulations / Zoning
- I. Trails Systems (Land and Water)
- J. Water Quality

I am interested in working on one of these priorities:

First choice

Second choice

Third choice

Thank you!

four sticker “dots” and asked to vote for the four topics they considered to be of the highest priority. As indicated by the table below, the topics that received the greatest number of votes were trail systems, infrastructure, and economic development. Each participant was also given a card with all ten of the priorities listed and asked to provide their names, contact information, and their top three choices of topics on which

they would like to work. Based on that selection, they convened with other interested parties at the table marked with that topic’s letter for a discussion about that issue. In this way, the meeting both created a communication mechanism for future committee work and began to foster the relationships required to build it.

In many ways, the Priority Sharing Meeting accomplished much of

what was hoped would be done at the Convention of Communities by providing a forum to view and discuss the collaboration as a whole with fresh plans in hand, and by presenting the collaboration to a wider audience. Accordingly, later discussions among the Leadership began exploring the best format for the collaboration’s next steps with an eye toward turning the Convention of Communities into an event meant for a future purpose.

5.3 Regional Collective Priorities table

REGIONAL COLLECTIVE PRIORITIES	
Priority	Votes
Trail Systems: Land and Water	31
Infrastructure: Expand and Improve	29
Economic development	28
Special Regulations / Zoning	25
Reduce Blight and Nuisances	23
Recreation: Expand Opportunities and Improve Facilities	19
Water Quality	16
Agriculture	15
M-22 Scenic Highway	9
Improve Communications	7



Collaboration

As the project's focus began to shift from planning to implementation, it became clear that the structure of the collaboration may also need to adapt.

Planning commissions are designated by Michigan law as the principal authors of a master plan, and so the candidates for members of a planning collaborative were relatively easy to identify. Implementation, on the other hand, is best practiced with all available hands. The preliminary work committees suggested at the Priority Sharing Meeting represented a possible pool of participants, but need a firmer formation and leadership.

Items that rose to the top of the collaboration's immediate needs included a new organizational structure to replace the one that had been guided by the project's initial documents, the capacity to assume responsibility for that structure without the constant oversight of consultants, and partnerships with state agencies, foundations, and other entities who could assist with the implementation. An important step toward capacity building came with the training of 23 of the planning commissioners serving

jurisdictions within the collaboration through the Michigan State University Extension Citizen Planner program. Those who took the class reported learning a great deal about planning in general and also had yet another opportunity to interact with other planning commissioners, sharing strategies and forming relationships.

Being armed with knowledge is important, but putting that knowledge to use is what L2L is all about. With the master plans written, communities are faced with the charge of implementing them. After several meetings and discussions, a core group of Lakes to Land leaders with the help of Manistee Alliance for Economic Success recommended creation of a 501(c)(3) as the appropriate structure under which to organize the collaboration's future efforts towards implementing the newly adopted master plans. Much of the work at developing this backbone entity is still being determined, but it is assured that the philosophy is based

on a community collective action model. The desire is to help communities collaborate and co-generate knowledge in order to achieve community change. This organization would be a framework for cross sector implementation and collaboration, providing a backbone of support services to L2L participants to help implement and achieve their priorities and goals. The entity would be a hub for a collective action model that would develop and “connect the dots” between public agency, private foundation, academic and other resources and master plan priorities, including those involving multiple jurisdictions. The application and supporting documentation has been prepared and the official filing with the Internal Revenue Service is anticipated in 2014.

The implementation arm of the L2L Initiative is also faced with a larger question centered on the involvement of partners. Many, such as the Michigan Department of Natural Resources, had very clearly-outlined procedures for any given community to request grant funds and other assistance, but no procedures at all to accommodate a request shared among many communities. This represented more of an opportunity than an insurmountable hurdle, especially given the gubernatorial administration’s overall emphasis on collaboration as evidenced by a complete restructuring of the state’s revenue sharing program to reward communities that could demonstrate wise use of resources through shared services. However, it is always challenging to make broad changes to business-as-usual in a large bureaucracy, and several methods of

communication were bandied about: Would it be better to have the agency present all its options and then try to fit one as closely as possible? Or should L2L representatives lay their case on the table and ask the agency to design a procedure around it? Would it be better to talk to a number of partners at once to garner a “big-picture” discussion, or would one-on-one meetings allow for more attention to detail? Meetings have been held with regional representatives from the Michigan Department of Natural Resources, Michigan Department of Environmental Quality, and the Michigan Department

“The master plan is not the most valuable thing that has come from this. Building relationships has been the biggest value. The network is being built from the citizens up.”

of Agriculture and Rural Development, and both the “backbone entity” and the implementation partners are learning together how to collaborate to fulfill each others’ goals. This is a process that will no doubt continue into the future.

At the time of this writing, the above mentioned questions continue to be a topic of discussion and action among the Leadership Team members, a roster that has swelled over the last two years to include the Little River Band of Ottawa Indians as well as additional planning commissioners and other officials who have taken an interest in the project as it has grown. Even as attention to the master planning

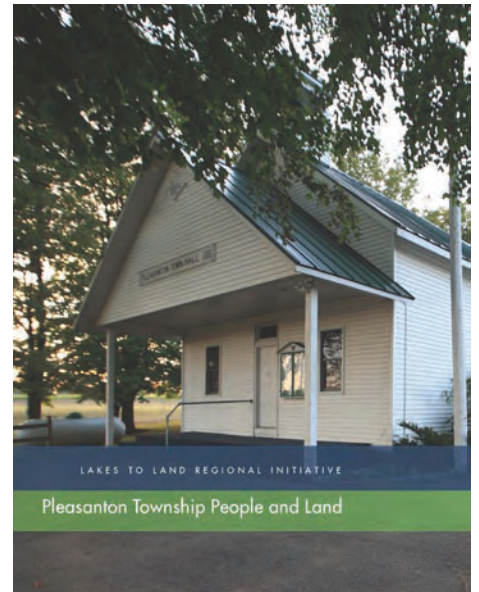
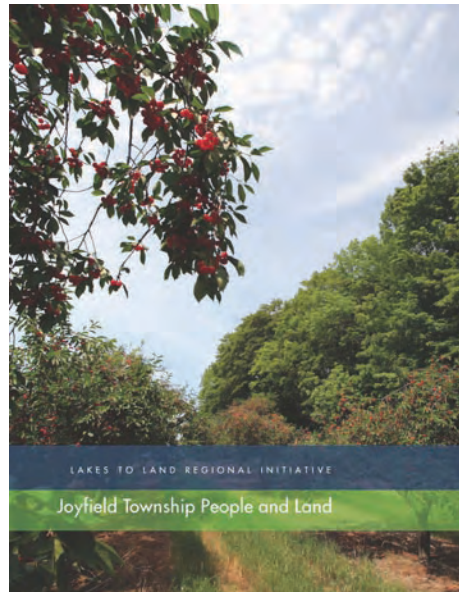
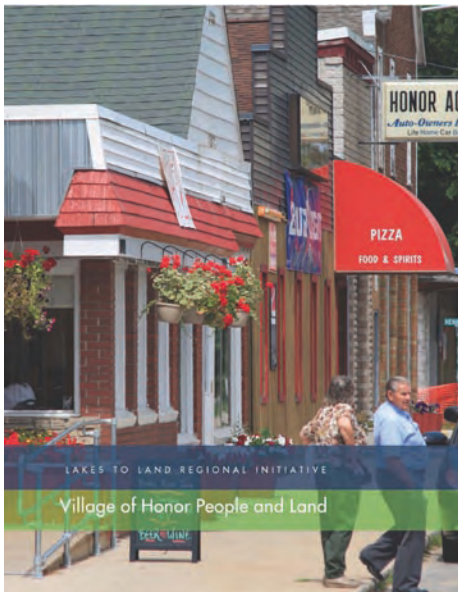
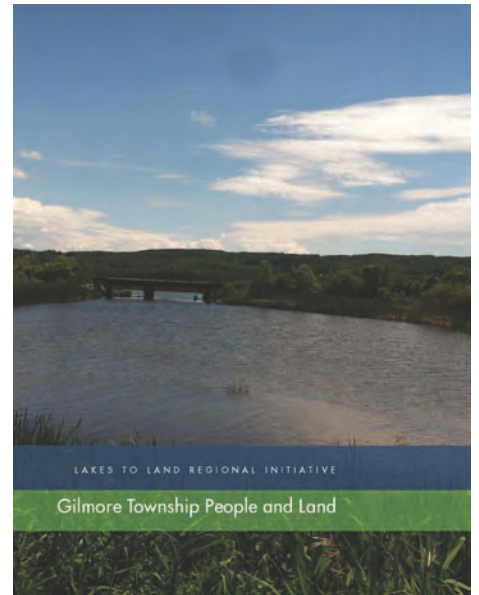
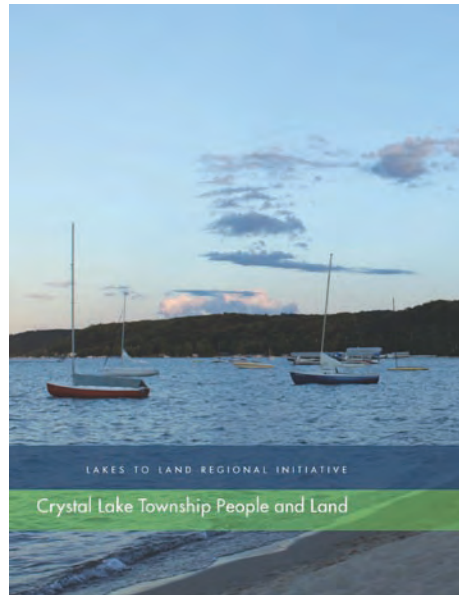
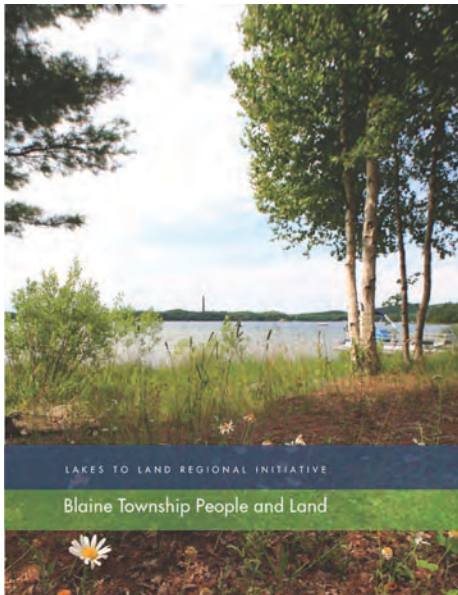
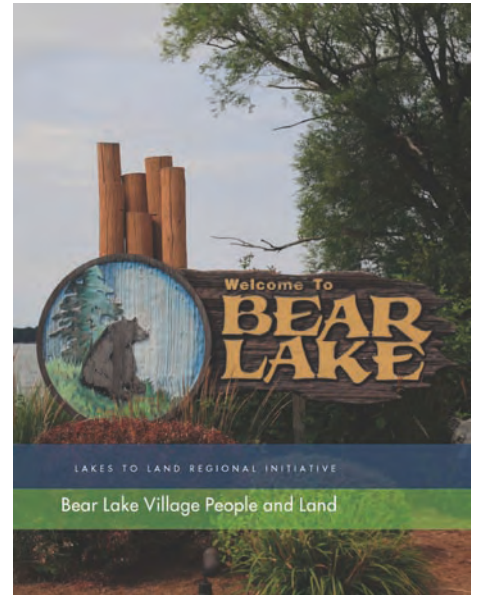
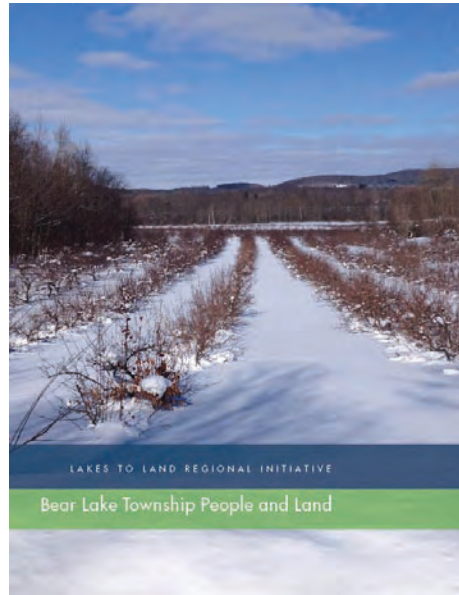
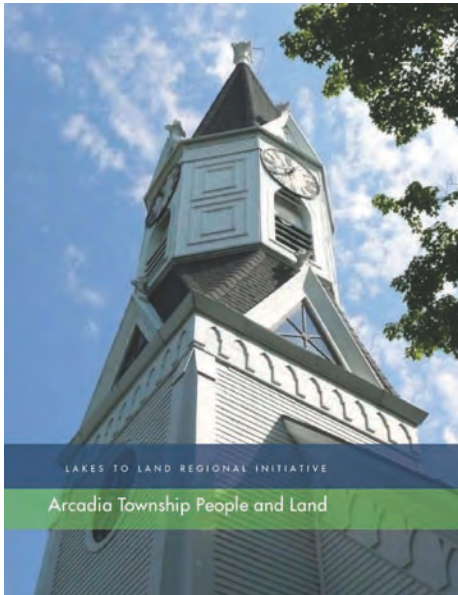
process is waning to a narrow focus on adoption procedures, the collaborative structure that produced an unprecedented nine coordinated plans, woven together with shared geography and concerns, continues to hum with anticipation. Work has begun on launching a food innovation district, designating an M-22 scenic byway, and new protections for the Arcadia Lake watershed. With the assistance of the Executive Office, a meeting has been held with State department leadership to review the process, results, and priorities of the L2L. In addition, L2L is also on the agenda for

the October Annual Meeting of the Council of Michigan Foundations. Foundations will learn about L2L and, more importantly, have an opportunity to become part of a collective action framework for implementation. Another

implementation grant opportunity is being developed that would design a water and land trail system within the region, connecting with trails outside of the region and look at ways that L2L participants can better manage and develop recreational assets.

Even as these steps toward tangible progress are underway, it is also appropriate to reflect on a passage from the April 2014 minutes of the L2L Leadership Team: “The master plan is not the most valuable thing that has come from this. Building relationships has been the biggest value. The network is being built from the citizens up.”

5.4 Lakes to Land Master Plan covers



Crystal Lake Township
1651 Frankfort Highway – P.O. Box 2129
Frankfort, MI 49635
Phone: (231-352-9791 Fax: (231) 352-6689

Resolution Number: 2014-01

Date: 5/21/14

Resolution to Adopt the Crystal Lake Township Master Plan

Whereas, Crystal Lake Township Planning Commission pursuant to the Michigan Planning Enabling Act Public Act 33 of 2008 as amended, has studied and prepared recommendations for the development of a the township; and

Whereas the Planning Commission has developed a Master Plan consisting of research and analysis dealing with land use, demographics, character, transportation, recreation and other pertinent topics; and

Whereas the Planning Commission has used the Master Plan to prepare a Future Land Use Map that allocates land in appropriate amounts for future development of residential uses, commercial, public and institutional uses; and

Whereas the Planning Commission held a Public Hearing on May 21, 2014 and considered all comments and concerns of the public; and

Whereas the Planning Commission recognizes that the Master Plan and Future Land Use Map are guides for public and private decision-making that will keep the township in motion toward its vision to maintain outstanding quality of life for all residents;

Now therefore, be it resolved that the Crystal Lake Township Planning Commission adopts the Master Plan and Future Land Use Map together as a guide to the overall development of the township.

Moved by: Sharron May
Seconded by William Herd

Roll Call Vote:

Sharron May yes
Secretary

Gregory Wright yes
Chair

Tammy May yes
Trustee

William Herd yes
Member

Jessica Carland absent
Vice Chair

Resolution carried and duly adopted.

Sharron May Sharron May, Planning Commission Secretary