

A MASTER PLAN for GRAND TRAVERSE COUNTY



Prepared by the
Grand Traverse County Planning Commission
*In concert with all the planning commissioners
from around the County*



2013

available online at
masterplan.grandtraverse.org

THANK YOU PARTICIPANTS

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Courtesy of East Bay Township



*Grand Traverse County
has always been an
attractive tourist
destination, known for its
pristine natural beauty.*



The citizens of Grand Traverse County take advantage of a generally healthy economy and a quality of life that offers the amenities of a modern urban environment centered in Traverse City and situated in close proximity to the unspoiled natural resources of the region.

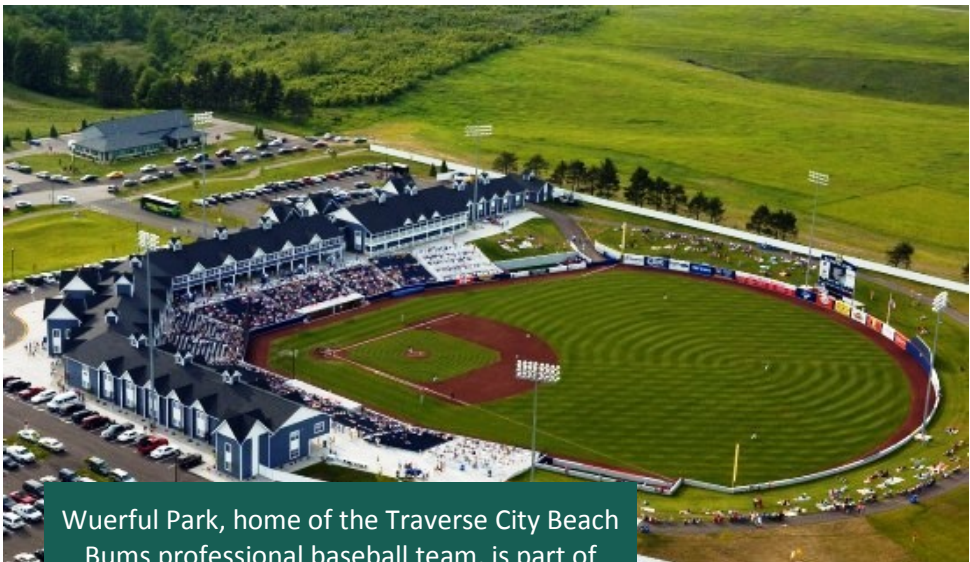
About the Plan

INTRODUCTION TO A NEW APPROACH

[Grand Traverse County](#) and the region have long maintained a tradition of planning balanced between the conservation of natural resources and the recognition of growth and development. While citizens defined their view of future growth and development in the [Grand Vision](#), there remains a gap between those desires and the master plans and zoning ordinances developed by local planning commissions. It will take a collaboration of local planning commissions to advance land use decision-making so that it is more inclusive, more cooperative and more informed. In order to match the principles of the Grand Vision with the goals and objectives of local master plans, a need emerged for a new way of working together so that all planning commissions could accomplish their goals in light of the broader regional discussion. A new master plan for Grand Traverse County was seen as the vehicle to make this happen.

Many conventional elements and the comprehensiveness of a master plan are not in place here. Rather, this plan is based on communication and collaboration amongst ALL of the planning commissions in the county. It identifies values and the strategies to enhance those values and places them at the forefront of land use decisions by continually reviewing trends, maintaining regular discussions and adjusting policy more frequently. In place of the typical list of goals and objectives, the values and strategies in this plan reflect the common principles of all the planning commissions. There is also a newly purposed role for the [Grand Traverse County Planning Commission](#) and its staff to act as conveners in this ongoing process; a process that functions more like a work plan focused first on the highest priorities but has the ability to address other land use issues as they become a priority. This ongoing approach will result in partnerships that build trust, maximize resources, and create strategies with improved results.

The [Grand Vision](#) is an ambitious, citizen-led vision for the future of land use, transportation, economic development and environmental stewardship across six counties in northwest lower Michigan. More than 15,000 citizens got involved, and voiced their opinions about this vision. Twelve thousand citizens voted for what they wanted for the future for their communities. Of those voters, nearly 75% asked that growth occur in existing developed areas.



Wuerful Park, home of the Traverse City Beach Bums professional baseball team, is part of Chum's Village in Blair Township.

Grand Traverse County Local Units of Government
Acme Township
Blair Township
East Bay Charter Township
Fife Lake Township
Garfield Charter Township
Grant Township
Green Lake Township
Long Lake Township
Mayfield Township
Paradise Township
Peninsula Township
Union Township
Whitewater Township
Village of Fife Lake
Village of Kingsley
City of Traverse City

Defining the Issues

In 2011, planning commissioners from all the communities in Grand Traverse County were invited to rank their most important current land use issues. Planning commissioners were then invited to a kickoff meeting and encouraged to become part of a study group on the issue of their interest. Several study groups were formed to identify the common values and strategies to protect those values as a part of this Plan. Understanding that their study group was a small representation of all planning commissioners in the county, study group members worked to develop questions that would be asked of all planning commissions so that their thoughts and concerns could be adequately addressed in the Plan. In 2012, County planning staff visited each local planning commission with the questions from each study group. Staff also met with the county planning commissions of neighboring counties. The study groups developed the values and strategies of this Plan using feedback from all the planning commissions, their own knowledge and experiences, looking at the current trends and reviewing a variety of maps and resources.

REDEFINING THE ROLE OF COUNTY PLANNING

Overall, the value that came up again and again in every one of the topic discussions was this one:

We value communication and collaboration among local governments while understanding that each has a unique context from which it operates.

Although the Plan strategies were formulated on a topic basis, there are several strategies that became common and may be considered additional common values. All of these overarching strategies called for some new definition of the role of and need for the County Planning Commission in local decision making. Follow-up on these strategies would put the County Planning Commission in the roles of:

Convener: Every topic group communicated their desire to have the County Planning Commission be the convener for discussions at some level among local units, county and state agencies, local non-profits, and user groups. There was much discussion about unique ways of identifying who should be included in the discussions and how the common issues would be grouped, but the overarching desire was for the County Planning Commission to help bring the groups together for the common good.

Educator: Six of the topic groups indicated that local planning commissions should be provided with education about a myriad of topics, and that the County Planning Commission would be the best entity to bring together the expertise needed to provide this education.

Resource Provider: Six of the topic groups asked that the County Planning Commission become the provider of lists of model ordinances, best practices, topic experts, and local government agencies or non-profits working in specific topic areas. Planning commissioners are looking for ways to stay informed on land use issues in the county and are looking for guidance, expertise, and information sharing that will provide cost savings for the smaller communities.

The strategies developed for this Plan are the first step in a new relationship between the County Planning Commission and local units, and a new collaborative system of land use planning in Grand Traverse County.

HOW TO USE THIS PLAN

Each subject chapter of this plan is comprised of four parts: Current Trends and Analysis; Community Values; Strategies to Enhance Community Values; and Resources.

Current Trends and Analysis contains collected data and information about the subject and includes conclusions.

Community Values are values or principles that almost always apply to the topic. Values should describe what are the desired outcomes of actions but do not necessarily determine how you achieve them. Values do not have to be equally important in all circumstances and may be prioritized.

Strategies to Enhance Community Values are actions taken to strengthen or build upon a community value. Strategies may include:

- **Direction** – Where is the community trying to go to?
- **Scope** – What kinds of activities are involved?
- **Resources** – What is needed to make it happen?
- **Stakeholders** – Who should be involved?

Resources are identified plans and agencies available that support the strategies.

A website containing an interactive version of this Plan along with a compilation of County data is available at: masterplan.grandtraverse.org

CONNECTION WITH LOCAL MASTER PLANS

This Plan recognizes the land use policies in the master plans developed by the local units of government in Grand Traverse County. The following table illustrates how local communities are working collectively to address similar land use related issues. This Plan provides a framework to coordinate these policy directives.

Summary of Policy Areas in Local Master Plans in Grand Traverse County

Policy Area	ACME	BLAIR	EAST BAY	FIFE LAKE TWP	FIFE LAKE VIL	GARFIELD	GRANT	GREEN LAKE	KINGSLEY	LONG LAKE	MAYFIELD	PARADISE	PENINSULA	TRAVERSE CITY	UNION	WHITWATER
Protection of Natural Resources	X	X	X	X		X	X	X		X	X	X	X	X	X	X
Agricultural and Rural Preservation	X	X	X			X	X			X	X	X	X		X	X
High Density Areas/Town Center/Village Center	X	X	X		X	X	X	X		X		X		X		
Transportation, Public Facilities and Services	X	X	X	X	X			X	X	X			X	X		X
Interjurisdictional/Regional Cooperation	X		X					X	X	X		X	X		X	X
Proactively Guide Growth/Development	X	X	X	X	X	X	X	X		X		X		X		X
Planned Corridors	X	X		X						X				X		X
Promote Recreational Opportunities		X	X	X	X			X	X	X	X		X	X	X	X
Diverse Housing Types		X	X	X	X			X	X		X	X		X		X
Economic Development			X	X	X			X	X	X	X	X	X	X		X
Historic Preservation					X	X	X	X	X	X		X		X		X

Source: Compilation of local master plans conducted by Grand Traverse County Planning & Development Department



Grand Traverse County residents have an appreciation for the Boardman River as it meanders through forests, fields and towns and empties into the Grand Traverse Bay. A river of this quality is a globally rare resource and a priceless community asset. The removal of dams on the Boardman will allow it to return to a more natural state as a free-flowing, cold-water river.

Community Profile

REGIONAL SETTING

Located in the northwest part of the lower peninsula of Michigan along the beautiful Grand Traverse Bay of Lake Michigan, Grand Traverse County provides residents and visitors some of the most beautiful countryside in the Midwest. The citizens of the county take advantage of a generally healthy economy and a quality of life that offers the amenities of a modern urban environment centered in Traverse City and situated in close proximity to the unspoiled natural resources of the region.



Grand Traverse County is northern Michigan's most popular resort destination. Centered on the 45th parallel, the area offers a temperate climate moderated by the Great Lakes. The climate, along with sandy loam soils, is ideal for growing cherries, grapes, and apples. The spectacular natural environment, miles of trails, neighborly communities, miles of Lake Michigan shoreline, many small lakes, and rural areas minutes from town centers offer living at its best.

Local governments include the county seat of Traverse City, thirteen townships and two villages, Kingsley and Fife Lake. Each municipality maintains its own master plan and zoning ordinance. The various jurisdictions within the county along with many other organizations have proven themselves to be willing to cooperate with one another for the overall benefit of the region.



Courtesy of East Bay Township

In the heart of a region known for cherry production, Traverse City is home to the National Cherry Festival.

LAND USE

2010 Existing Land Use/Land Cover in Grand Traverse County

Classification	Acres	Percent
Residential	33,265	10.6%
Institutional	1,589	0.5%
Recreation	3,025	1.0%
Commercial	3,440	1.1%
Industrial	901	0.3%
Transportation/Utilities	1,347	0.4%
Agricultural	46,805	14.9%
Open Land	32,421	10.3%
Forest	133,966	42.6%
Wetlands	39,037	12.4%
Barren	1,568	0.5%
Water	17,336	5.5%
TOTAL ACREAGE	314,700	100.0%
Source: Grand Traverse County Planning & Development Department		

The total area of the county is approximately 314,700 acres or 492 square miles in area.

The predominant land use/land cover is, by far, forest which covers almost 43% of the land area. This is followed by a substantial amount of agricultural land at 14.9%, then wetlands and open land.

Agricultural land is concentrated on Old Mission Peninsula, in the northern halves of Acme and Whitewater Townships, on the fringe of the urban area of Traverse City, and throughout the southern portion of the county.

More intense land uses such as commercial, industrial, institutional and transportation are primarily found in the Traverse City area and to a lesser extent in village areas and in small parcels on major corridors throughout the county.

Commercial land is the largest intensive use category in the county with 3,440 acres.

Residential uses are found predominantly in and around Traverse City including Garfield Township and East Bay Township, village areas of Kingsley, Interlochen and Fife Lake, and around the Long Lake and Spider Lake areas.



About 15% of the land in Grand Traverse County is used for agriculture. Acme Township (foreground) and Peninsula Township (background) have established purchase of development rights (PDR) programs to preserve essential farmland.

POPULATION

In 2010, Grand Traverse County had a total population of 86,986, an increase of 12% from the 2000 population of 77,655 – making it the third fastest growing county in Michigan during this period. Garfield Township’s population increased 17% from 2000 to 2010 making it the most populated community in the county.

As a tourist destination and an area of many vacation homes, Grand Traverse County experiences an increased population due to its transient population. The annual average transient population is 11% higher than the permanent population counted by the U.S. Census. This translates into an addition of nearly 10,000 to the resident population. The month of July has the highest at 22% higher or almost 20,000.

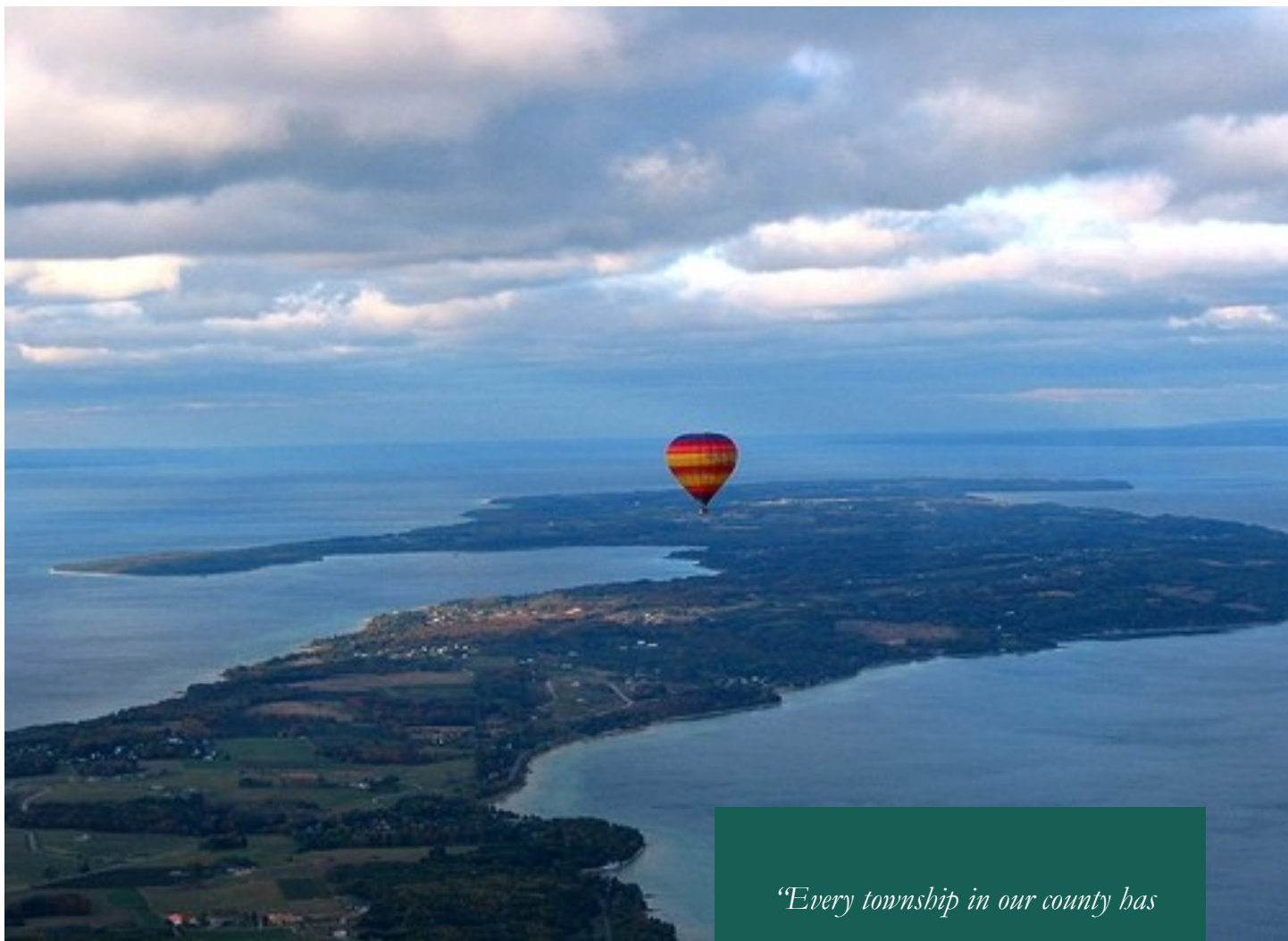
At 41.3 years, the median age of Grand Traverse County is higher than the state and national median ages. Locally, the lowest median age, 32.6, was in Kingsley where 31% of the population is under 18 years. The highest median age, 53.4, was in Peninsula Township where 26% of the population is over 65 years. In 2010, 22% of the population was under 18 years and 15% was 65 years or older. In 2040, 36% of the households are projected to be 65 years or older.



Population Trends by Municipality

Municipality	1980	1990	2000	2010	2020	2030	2010 Median Age	2010 Population Under 18 Yrs	2010 Population Over 65 Yrs
Acme Township	2,909	3,447	4,332	4,375	4,929	5,280	46.6	21.8%	18.7%
Blair Township	4,613	5,249	6,448	8,209	11,732	15,985	34.2	27.8%	8.3%
East Bay Charter Township	6,212	8,307	9,919	10,663	12,799	14,599	41.1	23.1%	11.9%
Fife Lake Township	1,056	1,344	1,517	2,791	2,709	2,969	38.4	12.3%	9.2%
Garfield Charter Township	8,747	10,516	13,840	16,256	21,861	27,641	43.0	20.1%	20.4%
Grant Township	676	745	947	1,066	1,415	1,744	44.9	22.7%	14.5%
Green Lake Township	2,997	3,677	5,009	5,784	7,441	9,105	39.5	24.2%	11.9%
Long Lake Township	3,823	5,977	7,648	8,662	11,066	13,375	41.4	25.1%	11.0%
Mayfield Township	806	967	1,271	1,550	2,169	2,852	37.7	27.1%	11.4%
Paradise Township	2,117	2,508	4,191	4,713	4,868	6,619	35.5	28.9%	9.2%
Peninsula Township	3,833	4,340	5,265	5,433	6,416	7,126	53.4	18.8%	25.9%
Union Township	185	255	417	405	498	553	45.9	23.5%	11.9%
Whitewater Township	1,409	1,825	2,467	2,597	3,224	3,718	46.1	21.8%	14.6%
Fife Lake Village	402	394	466	443	488	502	41.1	22.8%	15.6%
Kingsley Village	664	738	1,469	1,480	1,924	2,255	32.6	31.4%	9.5%
Traverse City	15,516	15,116	14,532	14,674	15,519	16,050	40.8	18.2%	16.7%
Grand Traverse County	54,899	64,273	77,655	86,986	106,600	125,244	41.3	22.1%	15.0%

Source: Counts for 1980, 1990, 2000 and 2010 by U.S. Census Bureau; Projections for 2020 and 2030 by Grand Traverse County Planning & Development Department



“Every township in our county has a different perspective on how to best protect its natural resources and open spaces. The idea of this master plan is to encourage townships to work together to preserve natural resources and open space.”

Laura Serocki,
Peninsula Township
Planning Commissioner

Areas of Focus

PROTECT NATURAL RESOURCES

CURRENT TRENDS AND ANALYSIS

The region's landscape is highlighted by Grand Traverse Bay and its 42 miles of shoreline along the north side of the county. At the heart of the county, the Boardman River meanders through our forests, fields, and towns to its outlet in Grand Traverse Bay. Residents view the river as a priceless community asset. Recently, Traverse City and Grand Traverse County decided to remove three of the four existing former hydroelectric dams on the Boardman River to return it to a more natural state as a free-flowing, cold-water river. The removal of the three dams is considered the largest dam removal project in Michigan's history, and the largest wetlands restoration in the Great Lakes Basin.

Grand Traverse County is largely a rural landscape with 81% of the land being undeveloped. Of the undeveloped land, 53% is comprised of forest land in the county. 19% of all land in Grand Traverse County is State forestland. Additionally there are protected lands in conservation easements and purchase of development rights (PDR) programs. These public and protected lands along with water features and wetlands have impacted the pattern of development within the county.

The [2008 Harris Interactive Values Research](#) study conducted for the Grand Vision states the local natural beauty and outdoor recreation figure prominently in the minds of Grand Traverse County residents. The strong positive feelings outweigh the concerns over availability of jobs and a relatively high cost of living in the region.



Courtesy of Long Lake Township

Water quality is often cited by county residents as their number one concern. Bullhead Lake in Long Lake Township.

Community Values

We value the natural resources, open spaces, and landscape of Grand Traverse County that provide the basis for the health of the local economy and the high quality of life of its residents.

Strategies to Enhance Community Values

Develop a comprehensive list of organizations in the Grand Traverse area that work in the area of natural resource protection, along with descriptions of the work they do and how their expertise may be used by local Planning Commissions.

Develop a system of monitoring inconsistencies between the Master Land Use Plans and Zoning Ordinances of neighbors so that County Planning could act as a convener to get the conversations started.

Develop incentives for local units and/or local non-profits to develop partnerships to work together on common areas of interest.

Gather together local units so that the connection of the County will bring strength to issues with state agencies.

Provide a reference list of model ordinances used to protect natural resources, open space, and the landscape that include notes on how they are working where they have been adopted.

Notify local units of new issues that are being addressed at the local Planning Commissions that might affect natural resource protection.

Provide educational resources for planning commissioners in the area of natural resource protection.

Team up with the TC Chamber of Commerce to educate the business community about the importance of protecting natural resources.

As the community has recognized the value of natural resources, there has been an effort to protect those resources through the purchase of development rights and establishment of conservation easements. Other approaches include mitigating the negative impacts of development on natural resources through the application of best practices. Stormwater management is one common approach. The Harris survey also found that 80% of county residents strongly to somewhat agree that open space should be preserved even if it means limiting some development opportunities.

Based on a variety of opinion surveys and master plans, water quality is often ranked as a top priority in Grand Traverse County. Most residents depend on groundwater for domestic water supplies while the urbanized area of Traverse City relies on a municipal system which pumps water from the East Arm of Grand Traverse Bay. Lakes and wetland areas are key locations for threatened or endangered species and provide the greatest amount of biodiversity. The community has also recognized the importance of water quality and all natural resources for economic development. The area's natural resources attract tourists to the region and also provide an increased quality of life that helps attract workers needed by area employers.

Natural resources can be important to the economic performance of Grand Traverse County. A 2012 study by the Michigan State University Land Policy Institute, "Drivers of Economic Performance in Michigan: Natural Features, Green Infrastructure and Social/Cultural Amenities", concluded that natural assets have a considerably positive impact on population, income and/or employment levels. These natural assets, often called "green infrastructure," are the physical environment within and between our cities, towns and villages. It is a network of multi-functional open spaces, including formal parks, gardens, woodlands, green corridors, waterways, wetlands, forest, and open countryside. It includes all environmental resources.





The following Public and Protected Areas map identifies natural resource areas within the County that are important to the community and currently restricted from development. These areas include state-owned forestland, state and local parks and land restricted by conservation easements for the protection of farmland or natural resources.

Resources

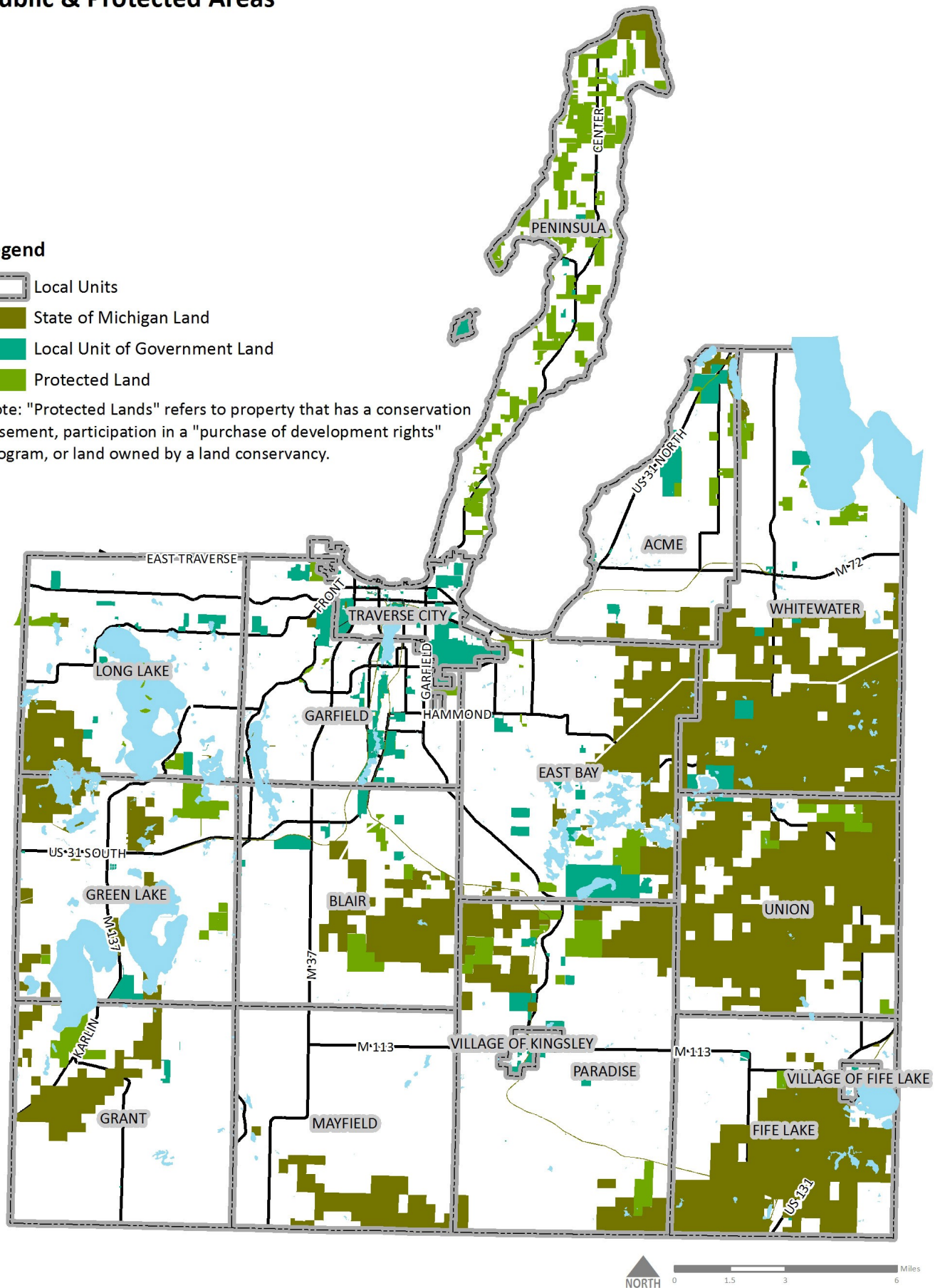
[A Natural Solution: An Introduction to Low Impact Development for Commercial and Residential Applications in the Grand Traverse Region](#)
[The New Designs for Growth](#)
[The Grand Vision Natural Resources Network](#)
[Boardman River Watershed Prosperity Plan](#)
[Grand Traverse Regional Land Conservancy](#)
[Grand Traverse Conservation District](#)

Public & Protected Areas

Legend

-  Local Units
-  State of Michigan Land
-  Local Unit of Government Land
-  Protected Land

Note: "Protected Lands" refers to property that has a conservation easement, participation in a "purchase of development rights" program, or land owned by a land conservancy.



PRESERVE AGRICULTURE AND RURAL LAND

CURRENT TRENDS AND ANALYSIS

Courtesy of Peacefall Photography



“While change is inevitable, progress is not. Progress can also be achieved by lessening the impact of change. This holds true for townships primarily composed of agricultural land. As planners we should first turn to agricultural communities themselves for input on current and future regulations.”

- Phil Scott, Mayfield Township
Planning Commissioner

With a combination of rolling topography, ideal soil types, and the micro climate conditions presented by Lake Michigan, Grand Traverse County and the entire region possesses a unique environment ideal for fruit production. 15% of the land in Grand Traverse County, or 46,805 acres, is utilized for agriculture, including 9,007 acres in orchard and vineyards. Based on the varying soil types and topography, agriculture in Grand Traverse County is generally comprised of two general areas of production. The southern part of the county is primarily row crops. The northern part of the County is primarily fruit production. Two township purchase of development rights (PDR) programs (Peninsula and Acme Townships) have been established due to the high value of farmland and the demand for residential land. Over 4,000 acres of farmland are permanently protected land through conservation easements.

The Grand Traverse region is vital to the national cherry industry. Grand Traverse County ranks as the fourth highest county in the nation for growing tart cherries and the fifteenth highest county for growing sweet cherries. Michigan produces 75% of the nation’s total tart cherries. The Traverse City area is also home to an increasing number of vintners who grow grapes and bottle wines, including the scenic Old Mission Peninsula where there are several wineries.

The [2008 Harris Interactive Values Research](#) revealed that 83% of County residents strongly or somewhat agree that agricultural lands should be preserved even if it means limiting some development opportunities.

Commissioned by the Michigan Land Use Institute in 2009, the [“Northwest Michigan’s Farm Factor: Economic Impacts, Challenges and Opportunities”](#) report documents the economic impact of agriculture in the six-county region of Antrim, Benzie, Leelanau, Grand Traverse, Kalkaska, and Wexford. Key findings cited in the report include:

Farms in Grand Traverse County

	2002	2007
Number of Farms	522	489
Total Farm Sales	\$7,878,000	\$11,366,000
Average Sales per Farm	\$23,243	\$36,865

Source: 2007 Census of Agriculture

- Agriculture contributes as much as \$97.7 million annually to the local economy in the form of agricultural products sold. It employs more than 2,000 farm proprietors with net farm earnings of \$6.6 million and more than 3,000 workers with a total payroll of \$12.8 million. If indirect impacts are included, the total annual economic impact may be as high \$138.9 million.
- Agriculture is not the largest economic sector in the region, but it is locally important. Sales of agricultural products are one-half of those for retail trade and over a third the size of sales in the manufacturing sector.
- The region has a climate ideally suited to fruit production and consequently contains 80 percent of the state's sweet cherry orchard acres, 52 percent of tart cherries, 34 percent of plums, and 10 percent of apples.
- The region enjoys an active tourism industry that brings in as many as 1.4 million visitors annually, many of whom travel around the countryside and purchase agricultural products.
- More than 12 percent of farms in the region sold some products directly to consumers in 2007 compared to only 9 percent statewide. More than 6 percent of the region's farms produced and sold value-added commodities in 2007 compared to 4 percent statewide.

Agriculture in the region is expanding in diversity. More recently is the raising of hops.



Community Values

We value the individual working farms in Grand Traverse County and recognize that the community has the responsibility to allow farmers to farm, to support their products, and to not hinder their viability.

Strategies to Enhance Community Values

Coordinate meetings between local farmers and local Planning Commissions in small groups at the local level to help identify issues that would be improved with county or local government support.

Convene and facilitate meetings of all planning commissioners with farming within their local units to share ideas and mutual concerns.

Provide a reference list of model ordinances used to protect agriculture that include notes on how they are working where they have been adopted.

Develop a comprehensive list of organizations in the Grand Traverse area that work on farmland issues, along with descriptions of the work they do and how their expertise may be used by local planning commissions and farmers

Provide education to local planning commissioners that will help them look out for farmers' interests when making land use decisions so that they do not hinder the use of land for agriculture.

Resources

[Michigan State University Extension](#)
[Grand Traverse Conservation District](#)
[Grand Traverse Regional Land Conservancy](#)
[Northwest Michigan's Farm Factor: Economic Impacts, Challenges, and Opportunities](#)
[Census of Agriculture Grand Traverse County Profile](#)
[Taste the Local Difference](#)
[The Grand Vision Food & Farming Network](#)

REVISE DEVELOPMENT STANDARDS

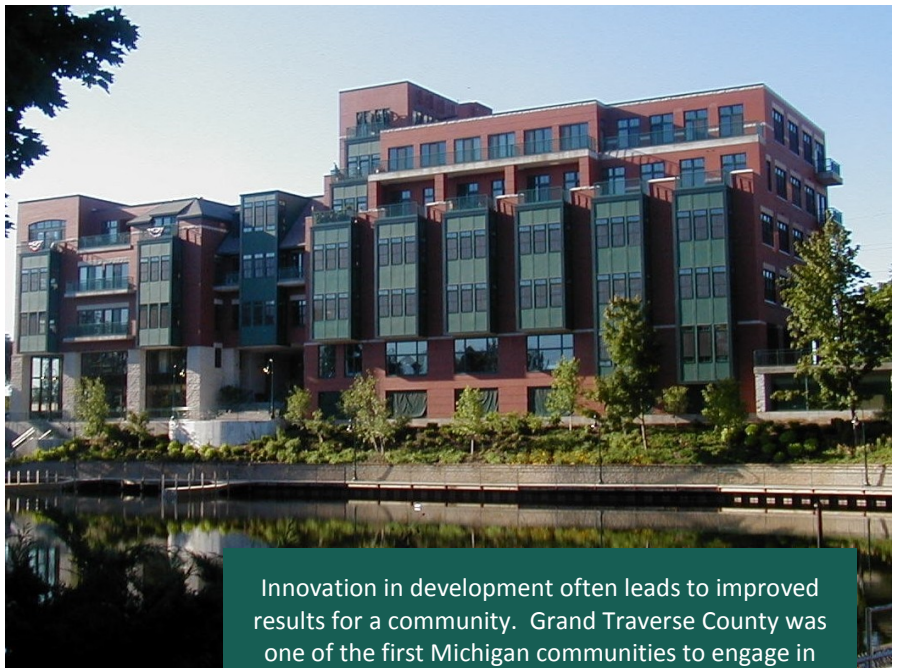
CURRENT TRENDS AND ANALYSIS

"If we want developers to play by the rules, let's make sure we have the right set of rules. We need to make sure the regulations are helping us achieve our vision and not move us in the opposite direction."

- Russ Soyring, Traverse City
Planning Director

Zoning became established in an era in which the key purpose for land use regulation was to separate residential from commercial and industrial activities. Over the years, the factors affecting land use have changed. Advances in transportation and communication, the migration of people and industry from urban centers to suburban and rural locations, changes in lifestyles and living arrangements, and the changing demands for natural resources present a challenge to traditional zoning techniques. Today, zoning often discourages the very development that communities need and want.

In the early 1990s, residents from around the region recognized the need for development that complements and protects the region's unique beauty, diverse natural resources, and exceptional recreational opportunities. This awareness prompted the creation of the Grand Traverse Bay Region Development Guidebook. This effort evolved into the current [New Designs for Growth Development Guidebook](#) which provides communities with examples of development practices that accommodate growth while maintaining and improving quality of life for residents for years to come.

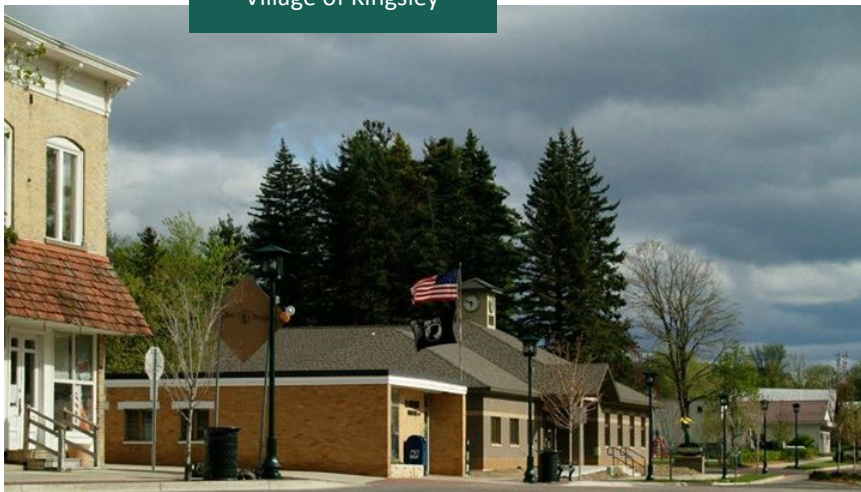


Innovation in development often leads to improved results for a community. Grand Traverse County was one of the first Michigan communities to engage in brownfield redevelopment with the conversion of the old Traverse City Iron Works into River's Edge in the City of Traverse City.

Local master plans also started to address the issues of land use, design and density patterns. Some townships identified new village centers as an alternative to traditional rural and suburban development patterns. Many of the principles in the New Designs for Growth Development Guidebook were expounded in the Grand Vision which reaffirmed interest in developing the villages and towns of this region. However, these policy documents and guidelines only provide direction for development and are not regulatory requirements. Zoning remains the single most important tool for managing development and aiding communities in achieving their vision.

Local communities in Grand Traverse County have responded to development trends with various zoning changes. These include the provision for planned unit developments, clustered development, and incentivized zoning (providing bonuses to developers for certain development considerations). More recently, form-based codes have been recognized. Form-based codes place more emphasis on regulating the form and scale of buildings and their placement along and within public spaces (such as sidewalks, street trees, and street furniture). This approach is well suited for village forms of development. Recognizing the need to be flexible in order to achieve the goals of their master plans, communities are increasingly modifying their development standards. To be successful, this effort also requires flexible development standards by other public agencies that regulate development including the road commission, fire departments, and the health department, among others.

Brownson Avenue in the Village of Kingsley



Community Values

We value Grand Traverse County's overall unique up-north character, even as many communities seek ways to embrace and brand their own local identities.

We value reinvestment in existing areas of development to best use the community resources currently available.

Strategies to Enhance Our Values

Develop a county-wide asset/market study that would identify and define tangible and intangible benefits to businesses seeking to locate in Grand Traverse County; including current businesses, schools, cultural aspects, and recreation.

Develop a reference list of what is needed to make certain types of development successful and/or inhibits others from being successful that can be used by zoning administrators, building code administrators, and planning commissioners during development reviews.

Develop a reference list of best practices in energy efficient building and development standards that can be used by Zoning Administrators, building code administrators, and planning commissioners during reviews.

Develop an outline for a county-wide codification system for zoning ordinances to simplify the process of comparing ordinance language throughout the county for developers and economic investors.

Provide a system of review by external agencies (fire department, road commission, soil erosion, etc.) when planning commissions begin their work on major changes to their zoning ordinances.

Convene county-wide discussions of road and fire standards by local planning commissions to identify areas that might be best approached together.

Develop an interactive webpage that provides current information about what Grand Traverse communities are working on.

Resources

[New Designs for Growth Guidebook](#)
[Grand Vision Growth & Investment Network](#)
[Grand Traverse County Traditional Town Center Handbook](#)
[Redevelopment Ready Communities](#)

PLAN FOR TOWN CENTERS, VILLAGE CENTERS AND HIGH DENSITY AREAS

“Arriving at your destination is always a good feeling. Whether traveling home, to a vacation spot or to a family relatives’, all provide a sense of anticipation and accomplishment. Town centers and village centers, when planned properly, can give our communities the same sense of place and provide both economic and social benefits to local residents.”

- Mark Humitz, local architect
and Long Lake Township
Planning Commissioner

CURRENT TRENDS AND ANALYSIS

In 1995, “Focus 20/20 – The Future of Grand Traverse County,” led by the County Planning Commission, envisioned “a set of policies intended to encourage the growth of ‘village centers’ in such places as Kingsley, Fife Lake, Williamsburg, Mapleton and Interlochen. These villages should be encouraged to develop as smaller, self-contained communities with a broad range of economic and social amenities. In addition, green areas formed by open lands, agricultural uses and/or forests should be used to provide buffers that will enable these centers to retain their separate identities.” Since that time, many local master plans in the County have identified building upon an existing village center or creating a new village center.

The [2008 Harris Interactive Values Research](#) study noted that 78% of County residents strongly or somewhat agree that new growth should be directed primarily to existing cities, towns, and villages. In a follow-up [2009 Public Policy Associates, Inc.](#) survey, 80% of residents in the six-county region, including Grand Traverse County, believe “As the region develops in the future, it is important that we create a group of unique villages and cities that are active and charming places with a main street or a downtown.”



The Best Fourth in the North
in the Village of Fife Lake.

Courtesy of the Village of Fife Lake

It is this kind of community support for growth in existing, developed areas that has led to the success of the Grand Traverse County Brownfield Redevelopment Authority which has cleaned-up and redeveloped 17 urban sites. These sites have brought in over \$250 million in private investment and created more than 1,650 jobs in the urban environs in and around Traverse City.

More recently, the trend towards focusing development in existing cities and villages has become a state priority for economic and community development. As promoted by the Governor and state agencies, a new, [state-wide economic development strategy](#) focuses on “placemaking” so that “creating and sustaining great places and using a new, collaborative approach towards economic development built on broad, community-based partnerships makes it possible for the creative entrepreneurial spirit of Michigan’s citizens to emerge. A community without place amenities will have a difficult time attracting and retaining talented workers and entrepreneurs, or being attractive to business.”

A Case Study: The **Village of Kingsley** is one of many places for growth and investment.

M-113 is a major east-west corridor through the Village that is ready for infill development. Development here may match the traditional town building form and provide for an array of uses. The following conceptual development contains first floor commercial uses, such as a hardware store and a restaurant, with second floor residential units. Two-story town homes along the street may also match the fabric of the Village. Outdoor activities, such as café seating, can add to the Village’s ambiance.



Before



After

Community Values

We value concentrated, walkable, community nodes that offer connections among a variety of public, commercial, and private uses.

Strategies to Enhance Our Values

Prepare a Market Study for the entire county to determine where town centers would be viable and where services are needed.

Bring together local jurisdictions working on town/village centers to discuss the topic from different perspectives and needs.

Provide a clearinghouse with lists of grant or funding options and designers that specialize in town/village centers.

Convene discussions with local units and the Road Commission to talk about road standards, connectivity, and non-motorized uses of roads.

Study the possibilities of a county-wide broadband, particularly in areas where it would be most attractive to businesses. Define and distill information to understand what is needed from a business standpoint and if there is a competitive advantage to broadband being publicly offered.

Conduct informational workshops for local government officials, including planning commissioners about town/village center planning, funding opportunities, design options, walkability, and infrastructure needs.

A review of local master plans finds that town and village centers are planned in various stages. Well defined existing village centers include Interlochen, Kingsley and Fife Lake. Places with plans that are being developed further or need to be refined include Acme, East Bay (Hammond & 3 Mile Roads) and Long Lake (North Long Lake and Strait Roads). There are also hamlets with no formal plans for development including Mapleton, Old Mission, Karlin, Mayfield and Williamsburg. These master plans combined with the Grand Vision principle of “creating a group of unique villages” led to the identification of “growth & investment areas” throughout the county by the Grand Traverse County Planning Commission.

Growth & Investment Areas are based on the existing development pattern, zoning, and community assets like schools and post offices, and infrastructure. In these areas, growth centers on existing development and established contiguous areas where infrastructure and services are available. Land uses in these areas are of a mixed-use village form and provide excellent opportunities for new businesses and housing modeled after the region’s pattern of traditional towns and villages. The following Growth & Investment Areas map identifies priority locations for development and redevelopment as encouraged by local units of government and the County.

Resources

[Community Placemaking Guidebook](#)

[New Designs for Growth Guidebook](#)

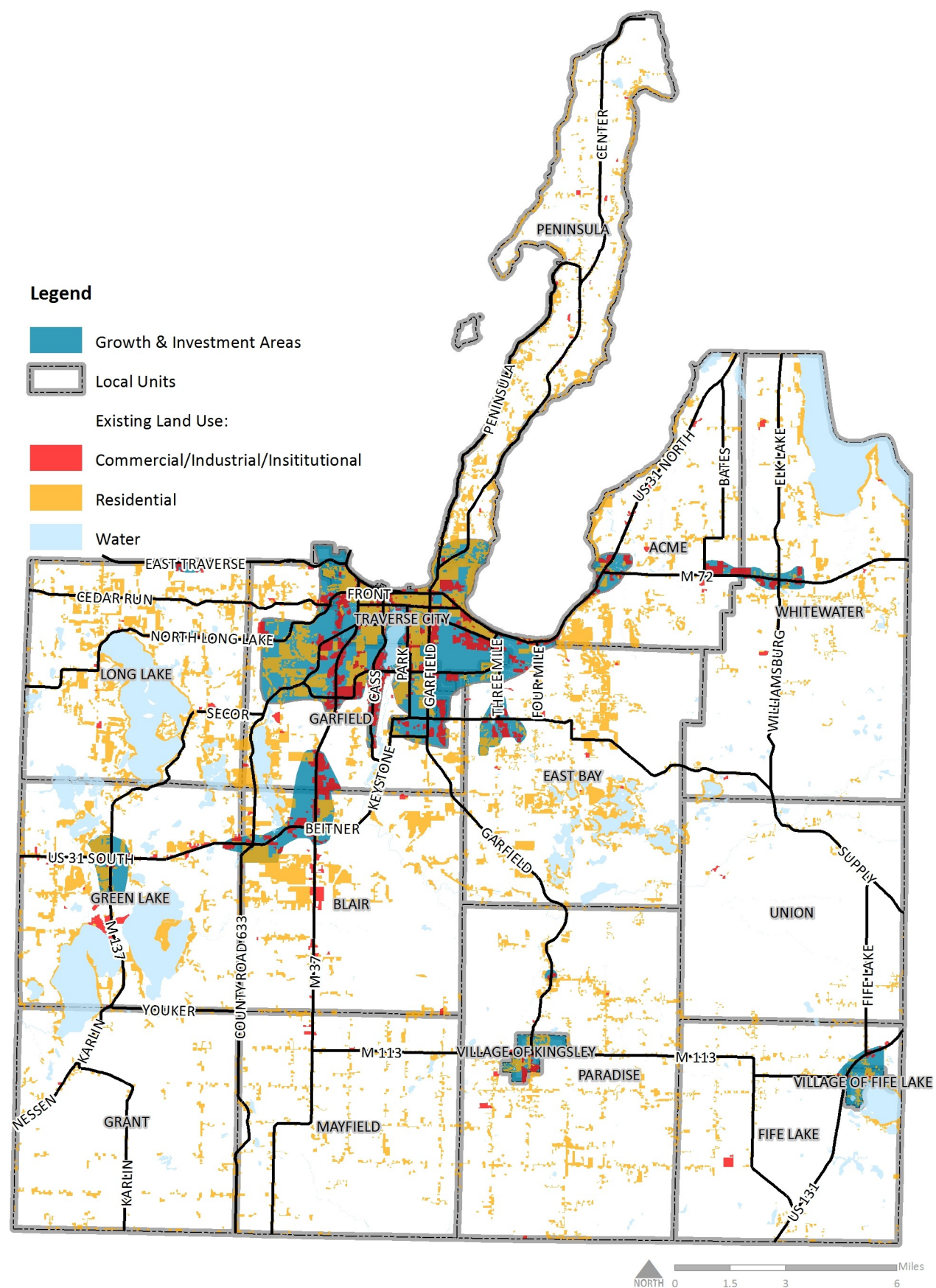
[Grand Vision Growth & Investment Network](#)

[Grand Traverse County Traditional Town Center Handbook](#)



Transformation of the old historic state hospital has resulted into an active community known as the Village at Grand Traverse Commons.

Growth & Investment Areas



PLAN FOR TRANSPORTATION, INFRASTRUCTURE AND CORRIDORS

CURRENT TRENDS AND ANALYSIS

“Not unlike other communities in Grand Traverse County, in Green Lake Township we have a major intersection that involves two state highways, a major entrance into the county from Benzie County, an interest in non-motorized transportation, and a desire to maintain our village identity. It was important to be involved in the transportation, infrastructure, and corridor committee to make sure that Green Lake could be a part of any future changes.”

- Sara Kopriva,
Green Lake
Township Planning
Commissioner and
Long Lake
Township Zoning
Administrator

Transportation Planning: The Traverse City Transportation and Land Use Study (TC-TALUS) provides coordination of transportation planning and funding for the Traverse City area and was the lead in the development of the Grand Vision which contains a strong transportation emphasis. Highlights of the transportation system in Grand Traverse County includes the following:

Transit: Bay Area Transportation Authority (BATA) provides transit services for Grand Traverse and Leelanau Counties and recently launched a new service model. The new system offers expanded hours and more frequent stops while eliminating 55,000 miles from its routes annually. A system of loops and links provide increased options to riders and represents another step in a rapid transformation of BATA to meet community needs.

Non-motorized Transportation: The TART Trails system currently consists of eight multi-use trails in Grand Traverse and Leelanau counties as well as a cross-town bike route totaling nearly 60 miles. TART Trails, Inc formed in 1998 to provide transportation and recreation opportunities as well as preserving open space corridors through a network of trails. TART Trails is a non-profit organization that builds trails, advocates for active living and outdoor recreation. Its system is widely used and supported by the community.

Airport: The Cherry Capital Airport is owned jointly by Grand Traverse County and Leelanau County and serves much of northern Michigan and provides an essential gateway for the community. Since opening its new terminal in 2004, the Airport has continued to grow with various carriers adding seasonal service and destinations. In 2012, the Airport had 182,616 passenger boardings (enplanements) making it the fifth busiest airport in Michigan.

Corridors: Recognizing the focus of local master plans and the Grand Vision on new development in areas that have already experienced growth, transportation planning along road corridors will place an emphasis on moving travelers from one destination point to the other with minimal conflict and delay. The Grand Vision solidified this emphasis by identifying Corridors of Significance in the Traverse City urban area. This emphasis includes preserving capacity on the existing road system, prioritizing new investment in roads within the existing grid network, and creating a multi-modal system, including non-motorized, that is a viable transportation option for all users in every season. These actions will be achieved through access management plans, intersection safety improvements, curve safety improvements, road diet, capacity improvements and signal optimization.

Focus on new and emerging corridors along with older urbanized corridors is also a priority. The City of Traverse City has studied five streets (Garfield Avenue, Eighth Street, Fourteenth Street, East Front Street and West Front Street) to develop a corridor redevelopment plan that focuses on increasing economic vitality, increasing housing choices and improving public infrastructure.

Complete Streets: As shown in the [2008 Harris Interactive Values Research](#) study conducted for the Grand Vision, 91% of Grand Traverse County residents strongly or somewhat agree that it should be convenient to walk or bike in new developing areas. Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, bicycle to work and allow buses to run on time. Recent Complete Streets policies and endorsements by communities represent the priority to create transportation facilities that accommodate all users.

Water & Wastewater: Public water systems serve the City of Traverse City and portions of East Bay, Garfield, Peninsula and Elmwood Townships. Kingsley and Blair Township also maintain public water systems. Water to serve these systems is drawn from both surface and ground water sources. The Traverse City system utilizes water from the East Arm of Grand Traverse Bay. Other systems, including private systems, utilize groundwater supplies. Public wastewater plants are found in Traverse City, Fife Lake and Kingsley. The wastewater treatment plant in Traverse City services the City, East Bay, Garfield, Peninsula and Acme Townships and Elmwood Township in Leelanau County. A septage treatment facility is operated by the Grand Traverse County Board of Public Works.

Electric, Heating & Cooling: Increased awareness of electricity consumption and energy for heating and cooling buildings has led to efforts to reduce energy demand, improve energy efficiency and transition to renewable sources of energy. Wind energy systems have been increasingly installed across the state of Michigan; however few, if any, commercial systems have been installed in Grand Traverse County.

Broadband: Though high-speed Internet is now available for most residents, some pockets in southern Grand Traverse County remain including near Kingsley, Interlochen and around the Spider Lakes area. Given the county's mainly rural setting, broadband service is essential for e-commerce, education, tourism and entertainment services.

Community Values

We see great value in a coordinated effort of all jurisdictions throughout Grand Traverse County to solve transportation and infrastructure issues.

Strategies to Enhance Our Values

Coordinate discussions/reviews with transportation and infrastructure providers at the beginning of any jurisdiction's master plan process that will help all planning commissioners understand the plans for and availability of utilities, roads, and public transportation and will help providers understand the key land-use issues that are facing local units.

Convene discussions among local jurisdictions along key corridors to help coordinate transportation and land use efforts.

Coordinate discussions about overall plans for infrastructure growth plans, such as sewer/septic, options for electricity generation, internet services, and others. This would include local unit representatives so that identification of opposing plans/goals can be identified and worked through.

Work with those coordinating trail systems to identify missing trail links to help line up an interconnected system



Courtesy of City of Traverse City

Resources

[TC-TALUS](#)

[Citizens' Guide to Transportation Planning](#)
[Regional Non-Motorized Comprehensive Strategy](#)

[Planning for Pathways](#)

[The Grand Vision Transportation Reports](#)
[Grand Vision Transportation Network](#)

ADDRESS HOUSING NEEDS

CURRENT TRENDS AND ANALYSIS

“Housing represents one of our most basic needs. Housing that is unaffordable, deteriorating, or inadequate in terms of size or type has enormous consequences for the health, safety, and welfare of individual households and the community as a whole.”

- Kim Pontius,
Traverse Area
Association of
Realtors



Over the years, Grand Traverse County has recognized the challenge of affordable housing facing residents. Programmatic changes started in 2006 with Grand Traverse County establishing a Land Bank Authority to manage tax foreclosed properties. A primary goal of the Land Bank Authority is to address affordable housing. In 2010, Grand Traverse County established an affordable housing trust fund to provide a local, sustainable funding source for affordable housing projects. Finally, beginning in 2012, Grand Traverse County aligned its housing programs with its Planning and Development Department to maximize all funding resources with its tools to address the issue. Recognizing the realignment of County resources, Grand Traverse County, with the assistance of the Northwest Michigan Council of Governments, developed the 2012 Housing Inventory and 2013 Housing Strategy.

The Housing Inventory also focused on the affordability of housing in Grand Traverse County. A housing unit is considered affordable to a household if housing costs total 30% or less of that household's income—with “costs” referring either to rent, or, for ownership units, mortgage interest and principal, taxes, and insurance. When households pay more than 30% of their income for housing, they are considered cost over-burdened; a financial strain that creates a higher risk of foreclosure or homelessness.

2012 HOUSING INVENTORY KEY FINDINGS

The majority of the County's housing stock consists of single-family, owner occupied housing. In some townships, this housing type accounts for 90% or more of the stock.

Most rental and multi-family housing is concentrated in Garfield Township and the City of Traverse City.

High numbers of single-person rental households contrast with low numbers of one-bedroom or efficiency rentals.

Mobile homes are concentrated in Garfield, Blair, and Paradise Townships, all of which are home to mobile/manufactured home parks. Mobile homes are an important affordable housing option for low-income households, particularly in rural areas with limited options for rentals, making up about 18% of the County's affordable ownership housing. However, many of these homes are aging and/or of poor construction quality, leading to higher rates of deterioration.

Like the nation, the County's population is aging, creating different housing needs—particularly accessibility. Available data suggests that few of the County's existing homeownership or rental units include barrier-free or accessibility features.

The typical household in Grand Traverse County spends 57% of their income on housing and transportation costs combined. In many parts of the County, particularly those in rural areas that are home to the County's more “affordable” housing, combined housing and transportation costs total well over 60% of a typical household budget.

While nearly 40% of owner-occupied households are considered low income, only 26% of owner-occupied housing is of an “affordable” value to low-income households. Over half (57%) of that housing is located in East Bay, Blair, and Green Lake Townships. To afford the monthly costs of owning a home in Grand Traverse County, a household would need to earn about \$52,650 per year. To afford a median priced rental, a household would need to earn about \$31,560 per year.

The adequacy of housing is usually measured by the physical condition of the home, but may also include factors such as overcrowding or accessibility for the disabled and elderly. In this analysis, adequacy is addressed in the context of housing condition.

About 800 homes in Grand Traverse County are classified as being in poor condition. This classification indicates that the home is approaching the end of its usable life, pointing to a possible need for significant repairs or replacement. Another 3,196 are classified as being in “fair” condition, which signals marked deterioration. Mobile homes make up 80% of housing that’s classified as being in “poor” condition.



Integrated within the Village at Grand Traverse Commons, the 630 Lofts provide housing at reduced rents to qualified individuals who often represent the community's workforce.

Community Values

We value a diverse mix of regional housing options that fit in with the unique character of the neighborhoods, villages, and cities as well as rural housing, which are all important to the area.

Strategies to Enhance Community Values

Support and encourage new housing development that is affordable, well-designed, and compatible with the region’s unique character

Expand location- and energy-efficient housing choices to lower utility and transportation costs, decrease emissions and energy usage, and promote public health.

Target housing activities toward existing communities to increase community revitalization, improve the efficiency of public works investments, and preserve and protect the region’s agriculture and natural resources.

Encourage affordable housing that is accessible to the growing numbers of seniors and persons with disabilities.

Develop greater financial and programmatic capacities to support and enhance housing efforts of existing nonprofits.

Coordinate planning and zoning policies that encourage greater housing choices across government boundaries.

Raise awareness and support of affordable housing issues among the

Resources

[Grand Traverse County 2012 Housing Inventory](#)

[Grand Traverse County 2013 Housing Strategy](#)

GROW THE LOCAL ECONOMY

CURRENT TRENDS AND ANALYSIS

While Grand Traverse County and the entire state of Michigan are experiencing a severe downturn in the economy, it appears through unemployment figures that the worst is over. Unemployment rates peaked in 2009; however, the labor force has shrunk, which is a significant reason why the rates have dropped.

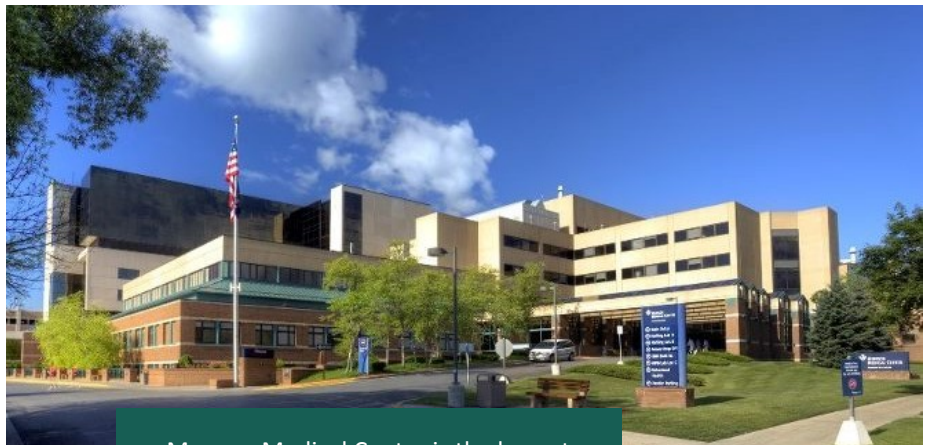
Grand Traverse County had a total of 49,224 persons in its workforce at the end of 2006 and a relatively low unemployment rate of 5.9%. In 2009, the county's unemployment rose to 11.8 with the labor force shrinking somewhat to 48,330 persons. However, at the end of 2012, the county's unemployment rate decreased 7.6% while the labor force declined to 45,712 persons.

The largest private and/or institutional employers in the county include Munson Medical Center, Traverse City Area Public Schools, Grand Traverse Resort & Casino, Northwestern Michigan College, Traverse Bay Intermediate School District, Grand Traverse County Government, Sara Lee Bakery, Grand Traverse Pavilions, Hagerty Insurance, and Interlochen Center for the Arts.

A total of 3,440 acres, about 1.1% of Grand Traverse County's land area, are currently used for retail and commercial activities. The major retail locations in the County are the urban area of Traverse City (City of Traverse City, Garfield Township and East Bay Township) along with Acme, Chum's Corner, Fife Lake, Grawn, Interlochen, Kingsley, and Williamsburg. A total of 901 acres, about 0.3% of Grand Traverse County's land area, are currently used for industrial activities. The major industrial locations in the County include several business parks and the Cass Road, Hammond Road, M-37, and US-31 corridors.

"When I look at Grand Traverse County as a whole I see the best well-kept secret around. It is a great place to live, work and play. I want to see it stay that way and the only way that will happen is if we have jobs and affordable housing that will enable people to provide their families with the quality of life that they desire."

-Tracey Bartlett, East Bay Township
Treasurer and Planning Commissioner



Munson Medical Center is the largest employer in Grand Traverse County and all of northern Michigan with over 3,000 employees.

Grand Traverse County comprises approximately 65% of the total regional employment. Health care and social assistance is the largest employment industry in the county. In its outlook through 2040, the University of Michigan's [Institute for Research on Labor, Employment, and the Economy](#) states Grand Traverse County is located in one of five fastest-growing areas in the state with employment growth projected to be 150% higher than the state average. The report notes, "The most rapid job growth will occur in the northwest corner of the Lower Peninsula, suburban Grand Rapids, and the Ann Arbor area."

A number of organizations are active in economic development issues including the Traverse City Area Chamber of Commerce, Traverse Bay Economic Development Corporation, Grand Traverse County and many local units of government. Most recently, the urban core communities of Grand Traverse County (City, Garfield Charter Township, East Bay Charter Township and Blair Township) united in economic development with the creation of the Next Michigan Development Corporation. Next Michigan is a series of incentives for businesses that ship their goods out of the region by both road and air. More importantly, this effort provides opportunity for a more collaborative approach from the public sector in private-public partnerships and related projects.



Value-added agriculture is a significant part of economic development in Grand Traverse County.

Community Values

We value and want to attract business that is community oriented and able to provide living wage jobs so that current residents are able to maintain their current standard of living and young, educated, career-oriented people will want to live and work in Grand Traverse County.

We value the unique assets in every Grand Traverse County community and understand that we all have a stake in attracting business, but that economic development should be encouraged only in those communities that are interested in creating a place for business to exist and grow.

Strategies to Enhance Our Values

A community-by-community inventory list of assets that would be tangible and intangible benefits to businesses seeking to locate in Grand Traverse County; including current businesses, schools, cultural aspects, and recreation.

An inventory of properties in the county currently zoned or planned for commercial development; including specific zoning limitations, and in-place infrastructure.

Work with the Traverse Area Chamber of Commerce to develop a list of businesses in the county that are currently thriving and providing livable wages and the reasons why they think they are successful so that interested communities are able to work toward providing those important business needs.

Conduct informational workshops for local government officials, including planning commissioners, about the definition of economic development, why it is important to all communities, and the repercussions of zoning decisions on their ability to attract the types of businesses they would like.

Work with Northwestern Michigan College and universities involved in the University Center to provide training to the types of workers needed by local businesses and those that the communities are trying to attract.

Conduct an informational workshop for local government officials, including planning commissioners that would use a local business case study to illustrate the steps that were taken and the obstacles that were overcome to make the process of locating in Grand Traverse County successful.

Work with the Traverse City Chamber of Commerce to reach out to all Grand Traverse County communities to help them understand their role in the larger community and the importance of each role to economic development; including infrastructure, zoning restrictions, and community assets.

Resources

2012 Economic Outlook for the 5-County Region of Antrim, Benzie, Grand Traverse, Kalkaska, and Leelanau Counties

Traverse City Area Chamber of Commerce

Traverse Bay Economic Development Corporation

Grand Traverse County Land Bank Authority

Grand Traverse County Brownfield Redevelopment Authority

Grand Traverse County Economic Development Corporation

Grand Traverse Region Next Michigan Development Corporation

Michigan Economic Development Corporation

COLLABORATE AND PLAN TOGETHER

CURRENT TRENDS AND ANALYSIS

In Michigan, land development regulation is generally a local responsibility. This means that individuals can have a great influence on the policies and regulations that affect their community. Land use planning and zoning is a priority in Grand Traverse County as every local unit of government maintains a planning commission and has prepared a master plan and zoning ordinance. The [2008 Harris Interactive Values Research](#) study indicated that 77% of County residents believe it is extremely important or very important that the County have a vision or long range plan for growth. When asked how they would rate the performance of the County when it comes to planning and preparing for the future of the region, 60% of Grand Traverse County residents replied “fair” or “poor.”

With 16 local units of government and 119 planning commissioners in Grand Traverse County, there is opportunity for collaboration and planning together. In addition, each of the surrounding counties has a planning commission along with many planning commissions for the local units of government adjacent to Grand Traverse County. Many planning commissions in the County have opened lines of communication with their neighboring planning commissions to coordinate on land use issues of common concern. To date, there have been some formal collaborative efforts, most notably the joint planning commission created for the Grand Traverse Commons by the City of Traverse City and Garfield Township.

Beyond county borders, Grand Traverse County is the most populated county in the region. The urbanized area of Traverse City functions as a regional hub for jobs and services. Coordination with adjacent counties is important to address many issues that go beyond county boundaries including transportation, protection of natural resources, etc.

In the report, “[Breaking Down Barriers to Cooperative Land Use Planning](#)” by the Land Information Access Association (LIAA), barriers to multijurisdictional planning and land use decision making can be gradually lowered or removed with the help of:

- Interjurisdictional diplomacy that respects the unique histories and needs of townships, villages and cities, recognizes both common

“Collaborative planning can be a learning process wherein participants share ideas and challenge their opinions to learn from each other and thereby create shared understandings which hopefully will enable solutions to what often are contentious and complex planning issues.”

- Bob Carstens, Acme Township and
Grand Traverse County
Planning Commissioner



Planning together
for pathways in
the Village of Kingsley
and Paradise Township.

interests and fundamental differences between cooperating municipalities, builds trust and works toward shared city-township goals.

- Professional planning support that offers a sophisticated understanding of municipal governments, state statutes and local powers, and helps communities problem-solve.
- Technical assistance that supports local planning and decision making such as geographic data development, integration, and analysis (e.g., using geographic information systems) as well as community-wide information sharing and public participation processes (e.g., citizen task teams, survey research, and community-active Web sites).
- Training and educational workshops supported by a growing library of successful model projects providing a clear record of success and lessons learned from an assortment of multijurisdictional projects.

Grand Traverse County shares borders with Antrim, Benzie, Kalkaska, Leelanau, and Wexford Counties which have either all county or a mixture of county and local zoning. Other than the City of Cadillac in Wexford County, these areas are primarily rural where residents often travel to the Traverse City area for work, air transportation, shopping, college, medical care, and recreation. Residents of Grand Traverse County are more apt to travel through these adjacent counties or explore recreational opportunities. Although the discussion has begun through the process of this plan, there is currently little collaboration among the counties on land use issues.

REGIONAL CONNECTIONS

Recognizing the importance of reaching out beyond its boundaries and relating to the larger region, the Grand Traverse County Planning Commission engaged the county planning commissions of the surrounding counties, including Antrim, Benzie, Kalkaska, Leelanau and Wexford by visiting with each county planning commission and asking a series of questions:

- What are some of the best practices in land use planning in your county?
- What do you see as areas of cooperation to our mutual benefit?
- What are the challenges for this region?

Transportation (road, air and rail), economic development, water resources and ecological issues, post K-12 education, and medical services were all identified by multiple counties as areas of possible collaboration. In addition, many planning commissioners could see value in combining resources in their own education as new land-use issues come to light.

It was also clear from these discussions that people from these areas of northern Michigan value that “up-north feel” and beauty with its abundant natural resources. They all want their children to be able to find affordable housing and jobs in the region without negatively impacting the environment. They want to be able to retire here and have the ability to enjoy the recreational opportunities that abound in the area. These were clear common threads through all of the discussions, both in and out of Grand Traverse County and are prime for collaboration.

Community Values

We value the creation of opportunities for local governmental units, the grass-roots decision makers, to communicate and collaborate with each other, government agencies, local non-profits, and community members on issues of interest or those that will impact beyond their own borders.

Strategies to Enhance Our Values

Invite local Planning Commissions of different communities to meet together to talk about identified common interests.

Develop a list of Planning and/or subject matter experts that could help communities with specific topics of concern with little or no cost to the community.

Develop a list of collaboration facilitators to help communities design processes for involving members of the public in decision-making with little or no cost to the community.

Provide for a system of communications between the county and local planning commissions through county staff discussions or local meetings on a planned, regular basis.

Provide an on-line clearing house of best practices on a variety of planning issues easily available to local units.

Provide educational opportunities for planning commissioners to help them understand their roles in the greater Grand Traverse community and to encourage them to have more discussions about issues of interest to their communities.

Introduce placemaking to communities as a way for them to work their communities. They don’t have to figure everything out, they can let the community have a real role in doing it.

Provide workshops for planning commissions that allow them to learn and then brainstorm about ways to include

Resources

[Kingsley-Paradise Community Pathway Plan](#)

[Fife Lake Community Recreation Plan](#)
[Grand Traverse Commons Joint Planning Commission Master Plan and Zoning Ordinance](#)

[Grand Vision – Grand Traverse County Perspective](#)



*Planning helps communities find
the right balance between
development and protecting the
natural environment.*

Action Plan

The County Planning Commission reviewed the overall Values and Strategies to Enhance those Values in order to identify common threads and to discern priorities and most easily achievable results. Each strategy has an associated action in the Action Plan.

After further review of the actions, the County Planning Commission narrowed the actions into succinct, measurable actions and formed the Action Plan for the Master Plan. The Action Plan is laid out in a matrix divided into three categories: Convene Participants, Deliver Education and Provide Resources. Each category lists the following:

- **Outcomes** are the results gained by the community from implementation of the plan.
- **Actions** are precise, measurable activities that support the completion of a goal.
- **Partners** are the people that need to collaborate together to make an action happen.
- **Required Resources** are, where applicable, the assets, whether funding or services, needed to implement the action.

Actions are evaluated and prioritized on an annual basis by the County Planning Commission. Priority is determined by the complexity of the action, the demand for action and the needed partners and resources.

Green Lake and Duck Lake in
Green Lake Township



A. CONVENE PARTICIPANTS

OUTCOME	ACTION	PARTNERS	REQUIRED RESOURCES
A1: ANNUAL PLANNING SUMMIT OF LOCAL PLANNING COMMISSIONERS	Convene and facilitate an annual summit of all planning commissioners to receive an update on current planning trends, identify community priorities and build a collaborative strategy on issues of common interest.	Local and county planning commissioners, planners and zoning administrators	Internet-based outreach program
A2: TOWN & VILLAGE CENTERS CONNECTED BY MULTI-MODAL TRANSPORTATION CORRIDORS	Assist local jurisdictions planning for town and village centers and the corridors that connect them, including coordination of transportation and land use, economic development and housing.	Local and county planning commissioners, elected officials, planners and zoning administrators	Professional technical assistance, implementation funding
A3: PROTECTED FARMLAND & NATURAL RESOURCES	Convene a team of local government and non-profit organizations engaged in land conservation efforts to assist individual communities with farmland protection and natural resource conservation strategies.	Local and county planning commissioners, planners, zoning administrators and conservation	Internet-based outreach program, professional technical assistance
A4: COORDINATED DELIVERY OF ECONOMIC DEVELOPMENT, REDEVELOPMENT AND HOUSING SERVICES	Facilitate strategic alignment of the County Planning Commission, Economic Development Corporation, Brownfield Redevelopment Authority, Grand Traverse Next Michigan Development Corporation, Farmland Board, Land Bank Authority and Housing Initiatives.	Representatives and staff from all boards	
A5: UPDATED DEVELOPMENT STANDARDS THAT MEET TRANSPORTATION AND LAND USE GOALS	Convene county-wide discussions of road and fire standards by local Planning Commissions to identify areas that might be best approached together, including road standards, connectivity and non-motorized uses of roads.	Local and county planning commissioners, elected officials, planners, zoning administrators, engineers, fire officials and developers	Facilitator, professional technical assistance

B. DELIVER EDUCATION

OUTCOME	ACTION	PARTNERS	REQUIRED RESOURCES
B1: ANNUAL WORKSHOPS FOR LOCAL PLANNING COMMISSIONERS	Provide annual workshops on key issues for local planning commissioners on the following issues: <ul style="list-style-type: none"> • Natural resource protection • Planning for town & village centers • Role of the planning commissioner in the greater Grand Traverse community • Placemaking • Consensus decision making • Farmland protection • Economic development • Streamlining the development review process 	Local and county planning commissioners, elected officials, planners, zoning administrators, conservation representatives, developers, facilitators	Annual funding, professional technical assistance
B2: WORKSHOPS FOR LOCAL ZONING ADMINISTRATORS	Provide technical training to zoning administrators on key issues, including developing “plain” language in zoning ordinances that is easily understood by the community.	Local zoning administrators	Funding, professional technical assistance
B3: COMMUNITY PLANNING FORUMS	Provide forums for residents to learn about planning and land use issues facing the community. Also, team up with the Traverse City Area Chamber of Commerce to inform the business community about the value of planning.	Local officials, residents, business owners, non-profit organizations	Professional technical assistance

C. PROVIDE RESOURCES

OUTCOME	ACTION	PARTNERS	REQUIRED RESOURCES
C1: MARKET STUDY FOR EACH GROWTH & INVESTMENT AREA	Develop market studies for growth & investment areas, including identifying business, institutional, cultural and recreational assets.	Local and county planning commissioners, elected officials, planners and zoning administrators	Professional technical assistance
C2: ASSET INVENTORY FOR EACH COMMUNITY	Develop community-by-community lists of assets that provide tangible and intangible benefits to businesses, including current businesses, infrastructure, data and marketing information, development processes and available properties for development.	Local and county planning commissioners, planners and zoning administrators	
C3: PLANNING RESOURCE DIRECTORY	Develop an online, comprehensive planning resource directory, including: <ul style="list-style-type: none"> • Area organizations engaged in natural resource conservation and farmland protection. • Funding resources, planners and designers specializing in town and village centers. • Experts that assist communities with specific topics of concern. • Case studies of successful development. • Facilitators to assist communities in designing processes for involving the public in decision-making. • Best planning practices on a variety of topics. 	Local and county planning commissioners, planners and zoning administrators	Professional technical assistance, website development
C4: MONITORING SYSTEM FOR PLAN AND ORDINANCE UPDATES	Develop a system of monitoring inconsistencies between the master plans and zoning ordinances of neighbors so that County Planning could act as a convener to get the conversations started.	Local planners and zoning administrators	Website development
C5: PRE-PLANNING MEETINGS	At the onset of a new master plan or zoning ordinance process, provide a review meeting of external agencies (fire department, road commission, soil erosion, etc.) for local planning commissions to discuss and coordinate key land use issues and developments.	Local planning commissioners, planners, zoning administrators, agency representatives	
C6: WEB-BASED FORUM FOR PLANNING COMMISSIONERS	Provide an interactive forum for local and county planning commissioners to learn about land use topics, educational workshops, key planning efforts and important meetings.	Local and county planning commissioners, planners, zoning administrators and elected officials	Professional technical assistance
C7: MODEL CODES AND ORDINANCES	Provide model codes and ordinances on various land use and development issues, including their level of success and where the communities where they have been adopted.	Local zoning administrators	Professional technical assistance
C8: LOCAL UNIT AND NON-PROFIT PARTNERSHIPS	Develop incentives for local units and/or local non-profits to develop partnerships to work together on common areas of interest.	Local and county planning commissioners, planners, zoning administrators, elected officials and non-profit representatives	
C9: COUNTY-WIDE ZONING CODIFICATION	Develop a county-wide codification system for zoning ordinances to help in comparing ordinance language throughout the county.	Local zoning administrators and planners	Professional technical assistance
C10: COUNTY-WIDE ACCESS TO BROADBAND	Assist in efforts for complete, county-wide broadband, particularly in growth & investment areas.	Local zoning administrators and planners	Professional technical assistance

Resolutions of Adoption

GRAND TRAVERSE COUNTY, MICHIGAN

RESOLUTION OF ADOPTION OF THE MASTER PLAN FOR GRAND TRAVERSE COUNTY

BY THE GRAND TRAVERSE COUNTY PLANNING COMMISSION

WHEREAS, the Michigan Planning Enabling Act, Act 33 of 2008, as amended, authorizes the Planning Commission to prepare a Master Plan for the future development of the County; and

WHEREAS, the Planning Commission prepared a new Master Plan in accordance with the requirements of the Michigan Planning Enabling Act; and

WHEREAS, on June 12, 2013, the Grand Traverse County Board of Commissioners approved distribution of the new Master Plan for Grand Traverse County to municipalities for their review and comment;

WHEREAS, the Planning Commission held a public hearing on October 15, 2013 to consider public comment on the new Master Plan and to further review and comment on the proposed new Master Plan.

NOW, THEREFORE, BE IT RESOLVED that the Grand Traverse County Planning Commission hereby approves the Master Plan for Grand Traverse County and recommends approval of same to the Board of Commissioners.

Moved: Dave Bieganowski

Seconded: Jeff Cockfield

Yeas: Peter Albers, Dave Bieganowski, Phil Case, Jeff Cockfield, Kelly Hall, Sara Kopriva, Dan Morley, Cori Nielson, Charlie Renny, Sarna Salzman

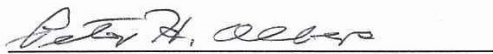
Nays: none

Absent: none

Attested to this 15th day of October, 2013



Sarna Salzman, Planning Commission Chair



Peter Albers, Planning Commission Secretary

Resolutions of Adoption

RESOLUTION

161-2013

To Adopt the Master Plan for Grand Traverse County

WHEREAS, the Michigan Planning Enabling Act, Public Act 33 of 2008, as amended, authorizes the Planning Commission to prepare a Master Plan for the use, development and preservation of all lands in the County, and

WHEREAS, the Planning Commission prepared a new Master Plan in accordance with the requirements of the Michigan Planning Enabling Act; and,

WHEREAS, the Planning Commission held a public hearing on October 15, 2013 to consider public comment on the new Master Plan, and,

WHEREAS, the Planning Commission approved the new Master Plan on October 15, 2013 and made a recommendation for approval of the new Master Plan to the Board of Commissioners; and,

WHEREAS the Board of Commissioners finds that the new Master Plan is desirable and proper and furthers the use, development and preservation goals and strategies of the County;

WHEREAS, the Board of Commissioners has asserted by resolution its right to approve or reject the new Master Plan in accordance with the Michigan Planning Enabling Act;

NOW THEREFORE BE IT RESOLVED THAT:

- 1) The Grand Traverse County Board of Commissioners hereby approves and adopts the 2013 Master Plan for Grand Traverse County.
- 2) The Grand Traverse County Board of Commissioners approves distribution of the adopted Plan.

The Plan shall be effective as of the date of adoption of this resolution

APPROVED: November 27, 2013

I HEREBY CERTIFY THIS COPY TO BE A
TRUE AND CORRECT COPY OF THE RECORD ON
FILE WITH THE OFFICE OF COUNTY CLERK
BONNIE SCHEELE
GRAND TRAVERSE COUNTY CLERK
BY: [Signature]
CLERK/DEPUTY COUNTY CLERK
DATE: 12/13/2013

Master Plan for Grand Traverse County



Appendix A: Tables and Charts

1980 – 2030 Population and Age for Grand Traverse County and Local Units
1980 – 2040 Grand Traverse County and Surrounding Counties (Six County Region)
2010 Housing Units and Occupancy for Grand Traverse County and Local Units
2010 – 2040 Grand Traverse County Household Projections
2010 Race and Ethnicity for Grand Traverse County and Local Units
2010 Educational Attainment for Grand Traverse County and Local Units
2010 Income for Grand Traverse County and Local Units
1990 – 2012 Grand Traverse County Annual Employment
2010 – 2012 Grand Traverse County Monthly Employment
2010 Employment for Grand Traverse County and Local Units
2010 Travel to Work for Grand Traverse County and Local Units
2006-2010 Top Ten Counties for Commuting to Grand Traverse County
2010 – 2040 Grand Traverse County Industry Projections
2010 Top Seven Counties for Tourism Spending in Michigan
2000 – 2010 Building Permits for Grand Traverse County and Local Units
2010 Land Use/Land Cover for Grand Traverse County and Local Units
Grand Traverse County Agricultural Land, Farms and Sales

1980 - 2030 Population and Age for Grand Traverse County and Local Units



Source: U.S. Census Bureau; Projections: Grand Traverse County Planning & Development Department

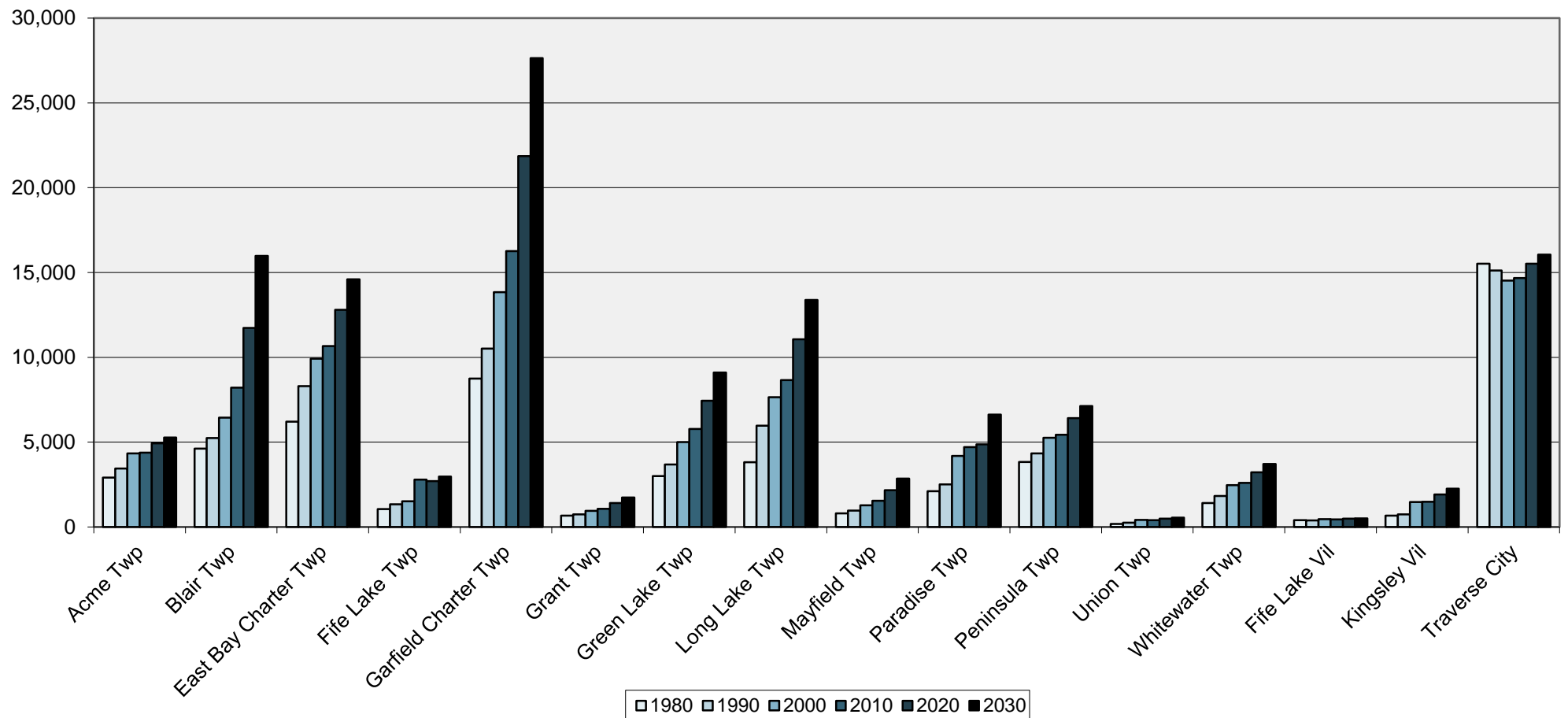
							2010 Median Age	2010 Percent of Population Under 18 Yrs	2010 Percent of Population Over 65 Yrs			
	Count				Projections							
	1980	1990	2000	2010	2020	2030						
POPULATION AND AGE												
Acme Twp	2,909	3,447	4,332	4,375	4,929	5,280	46.6	21.8	18.7			
Blair Twp	4,613	5,249	6,448	8,209	11,732	15,985	34.2	27.8	8.3			
East Bay Charter Twp	6,212	8,307	9,919	10,663	12,799	14,599	41.1	23.1	11.9			
Fife Lake Twp	1,056	1,344	1,517	2,791	2,709	2,969	38.4	12.3	9.2			
Garfield Charter Twp	8,747	10,516	13,840	16,256	21,861	27,641	43.0	20.1	20.4			
Grant Twp	676	745	947	1,066	1,415	1,744	44.9	22.7	14.5			
Green Lake Twp	2,997	3,677	5,009	5,784	7,441	9,105	39.5	24.2	11.9			
Long Lake Twp	3,823	5,977	7,648	8,662	11,066	13,375	41.4	25.1	11.0			
Mayfield Twp	806	967	1,271	1,550	2,169	2,852	37.7	27.1	11.4			
Paradise Twp	2,117	2,508	4,191	4,713	4,868	6,619	35.5	28.9	9.2			
Peninsula Twp	3,833	4,340	5,265	5,433	6,416	7,126	53.4	18.8	25.9			
Union Twp	185	255	417	405	498	553	45.9	23.5	11.9			
Whitewater Twp	1,409	1,825	2,467	2,597	3,224	3,718	46.1	21.8	14.6			
Fife Lake Vil	402	394	466	443	488	502	41.1	22.8	15.6			
Kingsley Vil	664	738	1,469	1,480	1,924	2,255	32.6	31.4	9.5			
Traverse City	15,516	15,116	14,532	14,674	15,519	16,050	40.8	18.2	16.7			
Grand Traverse County	54,899	64,273	77,655	86,986	106,600	125,244	41.3	22.1	15.0			

1980 - 2030 Population and Age for Grand Traverse County and Local Units



Source: U.S. Census Bureau; Projections: Grand Traverse County Planning & Development Department

1980 - 2030 Population Counts and Projections



1980 - 2040 Grand Traverse County and Surrounding Counties



Source: U.S. Census Bureau; Projections: MDOT-Statewide & Urban Model Travel Analysis Section & University of Michigan Institute for Research on Labor, Employment, and the Economy

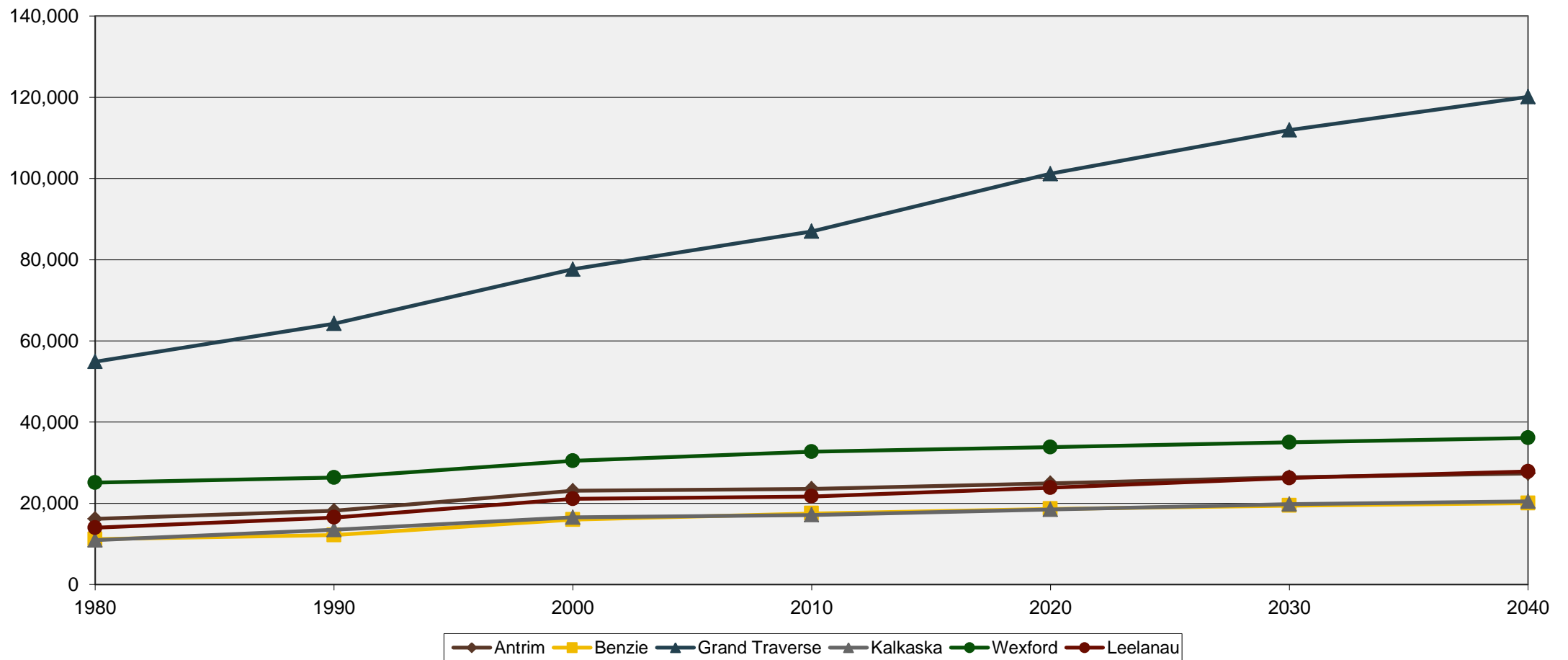
								2000-2010 Number Change	2000-2010 Percent Change	2010-2040 Number Change	2010-2040 Percent Change	
	Counts				Projections							
	1980	1990	2000	2010	2020	2030	2040					
POPULATION												
Antrim	16,194	18,185	23,110	23,580	24,951	26,427	27,387	470	2.0%	3,807	16.1%	
Benzie	11,205	12,200	15,998	17,525	18,648	19,460	20,077	1,527	9.5%	2,552	14.6%	
Grand Traverse	54,899	64,273	77,654	86,986	101,164	111,925	120,127	9,332	12.0%	33,141	38.1%	
Kalkaska	10,952	13,497	16,571	17,153	18,475	19,784	20,507	582	3.5%	3,354	19.6%	
Leelanau	14,007	16,527	21,119	21,708	23,848	26,237	27,854	589	2.8%	6,146	28.3%	
Wexford	25,102	26,360	30,484	32,735	33,846	35,022	36,117	2,251	7.4%	3,382	10.3%	
Six County Region	132,359	151,042	184,936	199,687	220,931	238,854	252,068	14,751	8.0%	52,381	26.2%	

1980 - 2040 Grand Traverse County and Surrounding Counties



Source: U.S. Census Bureau; Projections: MDOT-Statewide & Urban Model Travel Analysis Section & University of Michigan Institute for Research on Labor, Employment, and the Economy

1980 - 2040 Grand Traverse County and Surrounding Counties Population



2010 - 2040 Grand Traverse County Household Projections



Source: U.S. Census Bureau; Projections: MDOT-Statewide & Urban Model Travel Analysis Section & University of Michigan Institute for Research on Labor, Employment, and the Economy

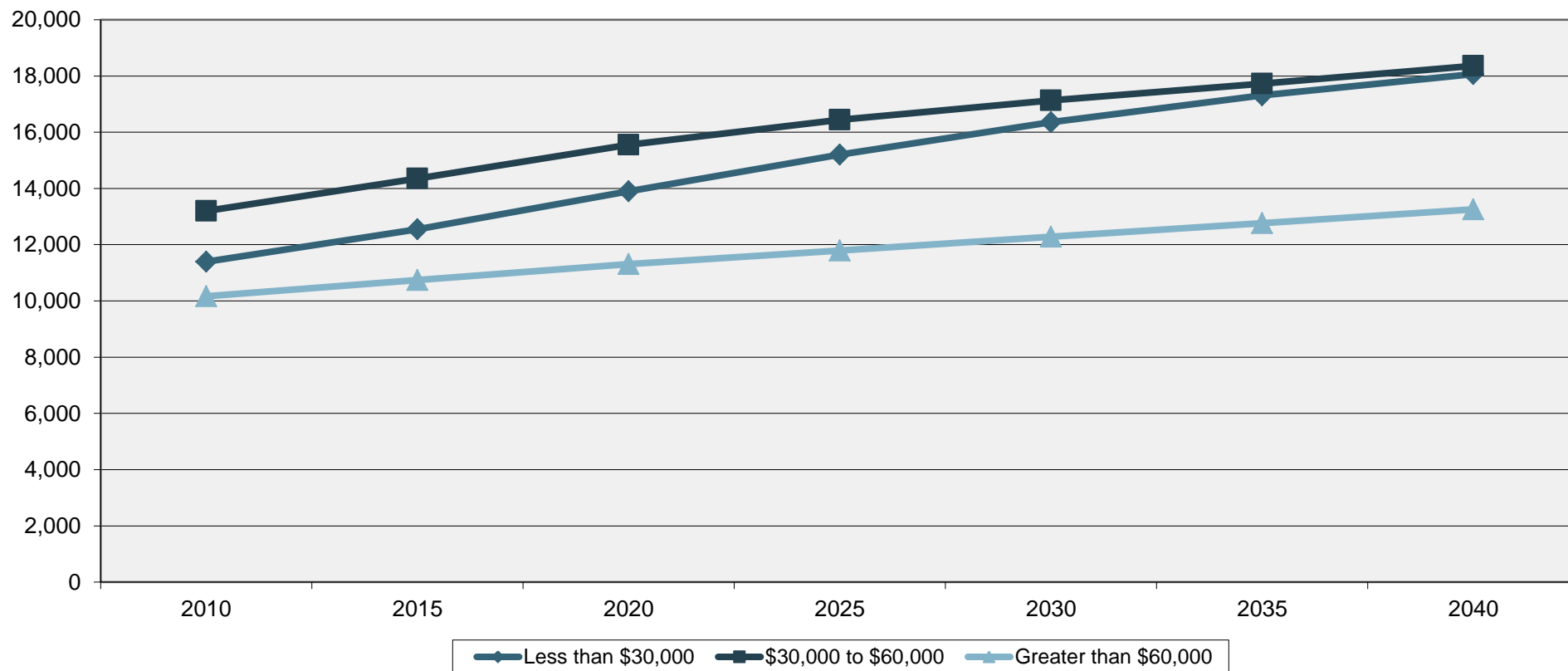
	2010	2015	2020	2025	2030	2035	2040	2010-2040 Number Change	2010-2040 Percent (%) Change
HOUSEHOLDS									
Total Households	34,757	37,646	40,763	43,442	45,769	47,808	49,679	14,921	70.0%
Households by Age Group:									
Aged 18-24	981	973	999	1,051	1,114	1,160	1,222	241	80.3%
Aged 25-34	4,991	5,715	6,131	6,038	5,975	6,175	6,434	1,442	77.6%
Aged 35-44	5,748	6,031	6,919	7,702	7,999	7,789	7,709	1,961	74.6%
Aged 45-54	7,835	7,173	6,669	6,927	7,745	8,512	8,826	991	88.8%
Aged 55-64	7,037	7,996	8,014	7,350	6,794	7,027	7,850	813	89.6%
Aged 65-74	4,208	5,446	7,064	8,064	8,113	7,490	6,976	2,768	60.3%
Aged 75 or more	3,957	4,311	4,966	6,310	8,029	9,655	10,662	6,706	37.1%
Households by Number of Persons:									
1 persons	8,557	9,374	10,342	11,379	12,379	13,243	13,896	5,339	61.6%
2 persons	14,351	15,896	17,279	18,259	19,029	19,828	20,685	6,335	69.4%
3 persons	4,729	4,979	5,264	5,494	5,705	5,888	6,073	1,344	77.9%
4 persons	4,506	4,673	4,975	5,256	5,482	5,605	5,715	1,209	78.8%
5 or more persons	2,615	2,724	2,903	3,054	3,175	3,245	3,310	695	79.0%
Household Income:									
Less than \$30,000	11,392	12,550	13,903	15,202	16,358	17,314	18,066	6,674	63.1%
\$30,000 to \$60,000	13,200	14,355	15,554	16,445	17,131	17,729	18,357	5,157	71.9%
Greater than \$60,000	10,166	10,741	11,306	11,795	12,280	12,766	13,256	3,090	76.7%
Household with Vehicles:									
0 vehicles	1,683	1,835	2,030	2,286	2,574	2,842	3,028	1,346	55.6%
1 vehicle	10,754	11,823	13,064	14,238	15,273	16,127	16,806	6,052	64.0%
2 vehicles	15,710	17,130	18,528	19,472	20,139	20,743	21,460	5,750	73.2%
3 or more vehicles	6,611	6,858	7,141	7,446	7,782	8,096	8,384	1,774	78.8%
Households and Children:									
Without children	24,364	26,802	29,208	31,306	33,177	34,952	36,562	12,199	66.6%
With children	10,394	10,844	11,555	12,136	12,592	12,856	13,116	2,723	79.2%

2010 - 2040 Grand Traverse County Household Projections



Source: U.S. Census Bureau; Projections: MDOT-Statewide & Urban Model Travel Analysis Section & University of Michigan Institute for Research on Labor, Employment, and the Economy

2010 - 2040 Household Income Projections

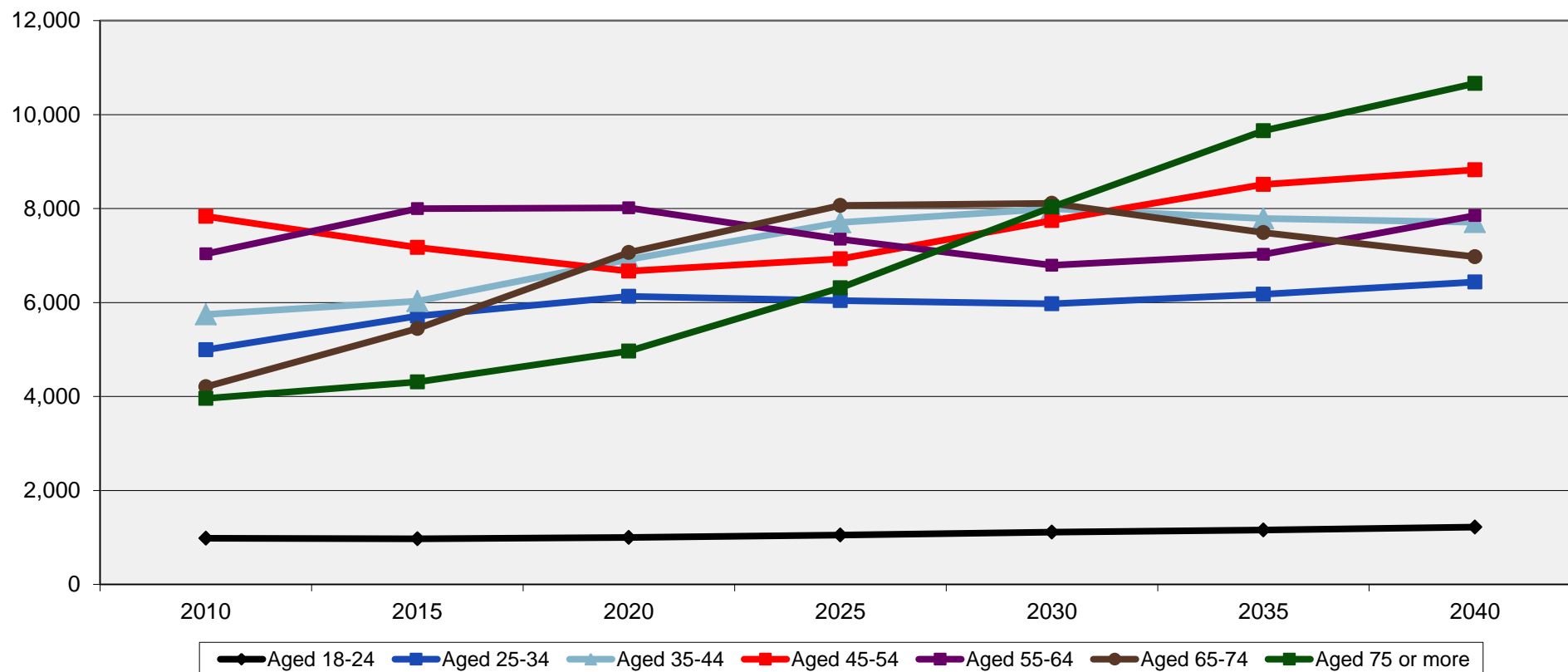


2010 - 2040 Grand Traverse County Household Projections



Source: U.S. Census Bureau; Projections: MDOT-Statewide & Urban Model Travel Analysis Section & University of Michigan Institute for Research on Labor, Employment, and the Economy

2010 - 2040 Household Age Projections



2010 Race and Ethnicity for Grand Traverse County and Local Units



Source: U.S. Census Bureau. *Hispanic or Latino refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. People who identify their origin as Hispanic or Latino Origin may be any race.

RACE AND ETHNICITY	Percent (%)							Percent (%)				
	White	African-American	Alaska Native or Native American	Asian	Hawaiian or Other Pacific Islander	Some Other Race	Two or More Races	Hispanic or Latino Origin*				
Acme Twp	96.3	0.3	0.8	0.6	0.0	0.4	1.7	1.5				
Blair Twp	93.1	0.4	1.9	1.0	0.1	1.2	2.4	3.5				
East Bay Charter Twp	96.1	0.3	1.0	0.7	0.0	0.4	1.5	1.6				
Fife Lake Twp	74.2	23.0	1.2	0.4	0.0	0.0	1.1	3.4				
Garfield Charter Twp	93.9	0.8	1.2	1.1	0.0	0.7	2.4	2.5				
Grant Twp	98.1	0.1	0.4	0.1	0.0	0.2	1.1	1.1				
Green Lake Twp	96.4	0.3	1.2	0.6	0.1	0.2	1.7	1.8				
Long Lake Twp	96.7	0.2	0.9	0.5	0.0	0.5	1.3	2.0				
Mayfield Twp	97.9	0.3	0.3	0.3	0.2	0.0	1.0	0.4				
Paradise Twp	96.8	0.7	0.7	0.1	0.1	0.1	1.4	2.3				
Peninsula Twp	96.7	0.1	0.4	0.9	0.0	1.2	0.7	2.3				
Union Twp	97.5	0.0	1.0	0.5	0.3	0.0	0.7	1.7				
Whitewater Twp	96.5	0.2	0.9	0.5	0.0	0.7	1.2	1.6				
Fife Lake Vil	95.7	0.7	1.6	0.0	0.0	0.0	2.0	1.8				
Kingsley Vil	95.6	0.7	1.1	0.1	0.2	0.1	2.2	2.4				
Traverse City	94.4	0.7	1.8	0.7	0.0	0.5	1.9	1.9				
Grand Traverse County	94.7	1.2	1.2	0.7	0.5	0.6	1.7	2.2				
Michigan	78.9	14.2	0.6	2.4	0.0	1.5	2.3	4.4				

2010 Educational Attainment for Grand Traverse County and Local Units



Source: U.S. Census Bureau.

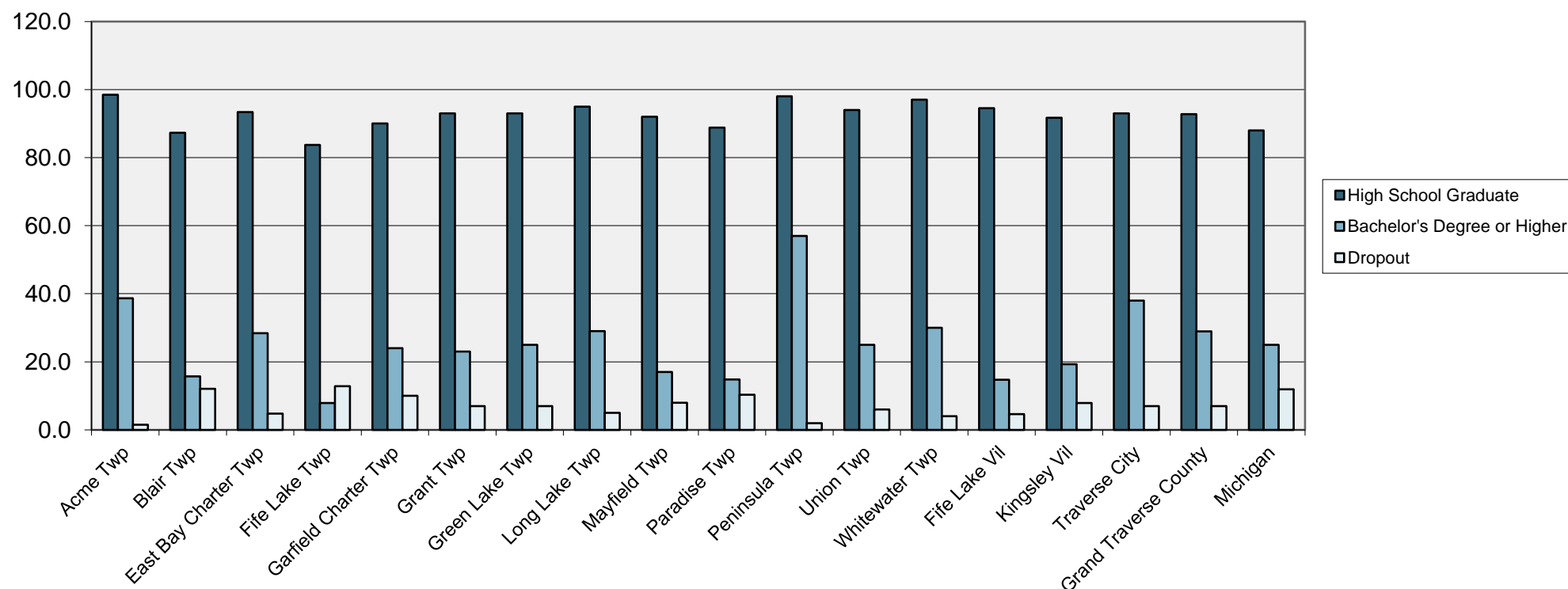
	Educational Attainment (%)			Enrollment (%)								
	High School Graduate	Bachelor's Degree or Higher	Dropout	Total	Nursery School to Kindergarten	Elementary to High School	College					
EDUCATION												
Acme Twp	98.5	38.7	1.5	0.6	0.0	0.4	1.7					
Blair Twp	87.3	15.7	12.1	1.0	0.1	1.2	2.4					
East Bay Charter Twp	93.4	28.4	4.8	0.7	0.0	0.4	1.5					
Fife Lake Twp	83.7	7.9	12.8	0.4	0.0	0.0	1.1					
Garfield Charter Twp	90.0	24.0	10.0	1.1	0.0	0.7	2.4					
Grant Twp	93.0	23.0	7.0	0.1	0.0	0.2	1.1					
Green Lake Twp	93.0	25.0	7.0	0.6	0.1	0.2	1.7					
Long Lake Twp	95.0	29.0	5.0	0.5	0.0	0.5	1.3					
Mayfield Twp	92.0	17.0	8.0	0.3	0.2	0.0	1.0					
Paradise Twp	88.8	14.8	10.3	0.1	0.1	0.1	1.4					
Peninsula Twp	98.0	57.0	2.0	0.9	0.0	1.2	0.7					
Union Twp	94.0	25.0	6.0	0.5	0.3	0.0	0.7					
Whitewater Twp	97.0	30.0	4.0	0.5	0.0	0.7	1.2					
Fife Lake Vil	94.5	14.7	4.6	0.0	0.0	0.0	2.0					
Kingsley Vil	91.7	19.3	7.9	0.1	0.2	0.1	2.2					
Traverse City	93.0	38.0	7.0	0.7	0.0	0.5	1.9					
Grand Traverse County	92.8	28.9	7.0	0.7	0.5	0.6	1.7					
Michigan	88.0	25.0	11.9	2.4	0.0	1.5	2.3					

2010 Educational Attainment for Grand Traverse County and Local Units



Source: U.S. Census Bureau.

2010 Educational Attainment for Grand Traverse County and Local Units



2010 Income for Grand Traverse County and Local Units



Source: U.S. Census Bureau.

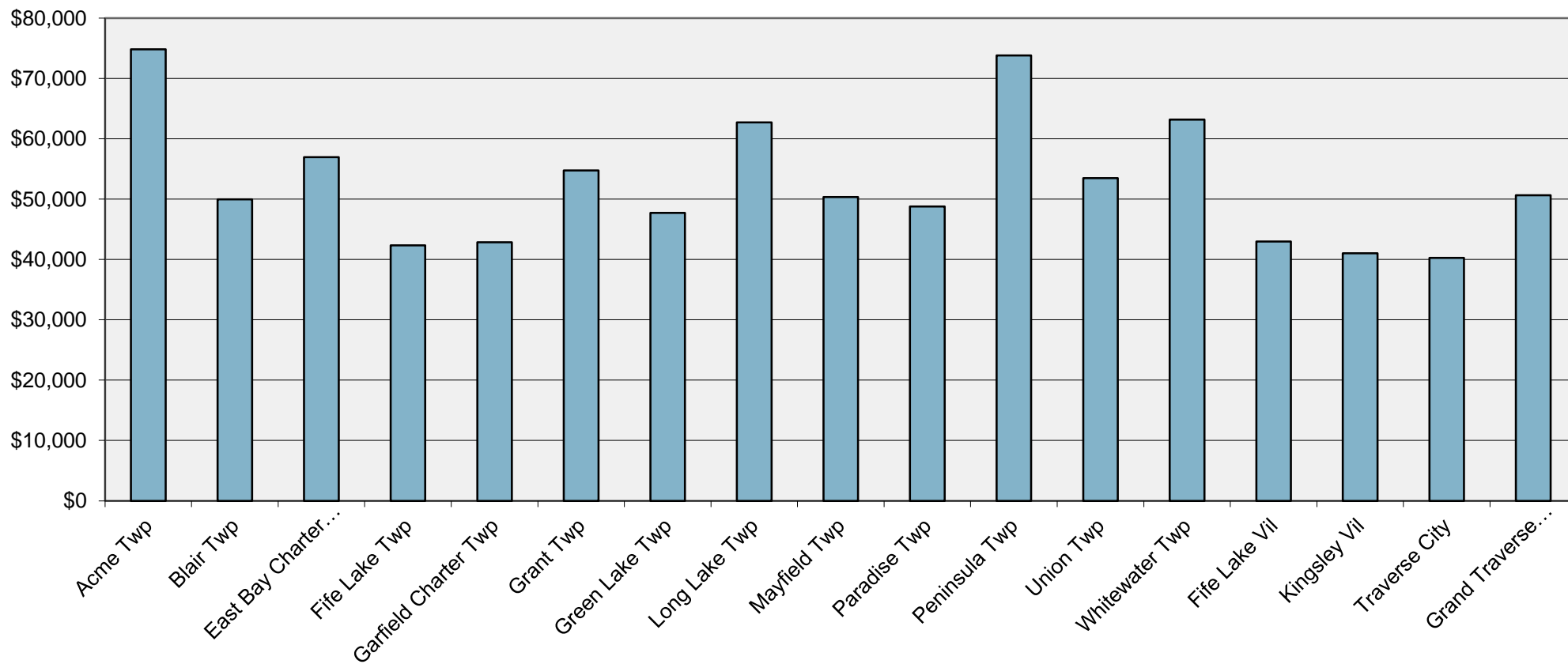
	Median Household Income	People in Poverty (%)			Per Capita Income	Median Family Income							
		Total	Under 18 Yrs Old	65 Yrs and Over									
INCOME													
Acme Twp	\$74,827	3.0	1.4	3.6	\$37,997	\$88,796							
Blair Twp	\$49,966	8.2	6.7	0.7	\$21,461	\$51,995							
East Bay Charter Twp	\$56,936	7.9	7.6	8.5	\$25,438	\$59,918							
Fife Lake Twp	\$42,344	12.4	21.0	6.6	\$13,993	\$46,818							
Garfield Charter Twp	\$42,856	10.0	5.0	8.0	\$24,750	\$55,000							
Grant Twp	\$54,750	2.0	0.5	3.0	\$23,670	\$49,808							
Green Lake Twp	\$47,716	7.0	10.0	1.0	\$22,711	\$53,184							
Long Lake Twp	\$62,722	4.0	3.0	5.0	\$27,070	\$72,804							
Mayfield Twp	\$50,344	15.0	22.0	2.0	\$19,209	\$51,413							
Paradise Twp	\$48,800	16.1	27.5	18.0	\$16,928	\$52,072							
Peninsula Twp	\$73,824	5.0	8.0	2.0	\$52,081	\$90,925							
Union Twp	\$53,472	9.0	15.0	0.5	\$24,933	\$63,333							
Whitewater Twp	\$63,173	3.0	3.0	4.0	\$34,148	\$70,298							
Fife Lake Vil	\$42,981	5.9	4.4	4.5	\$22,766	\$45,625							
Kingsley Vil	\$41,010	16.9	20.3	10.4	\$17,925	\$55,556							
Traverse City	\$40,256	14.0	18.0	7.0	\$28,479	\$61,620							
Grand Traverse County	\$50,647	9.7	11.0	6.0	\$27,091	\$61,780							
Michigan	\$48,432	14.8	20.5	8.3	\$25,135	\$46,846							

2010 Income for Grand Traverse County and Local Units



Source: U.S. Census Bureau.

2010 Median Household Income



1990 - 2012 Grand Traverse County Employment



Source: Michigan Department of Technology, Management and Budget

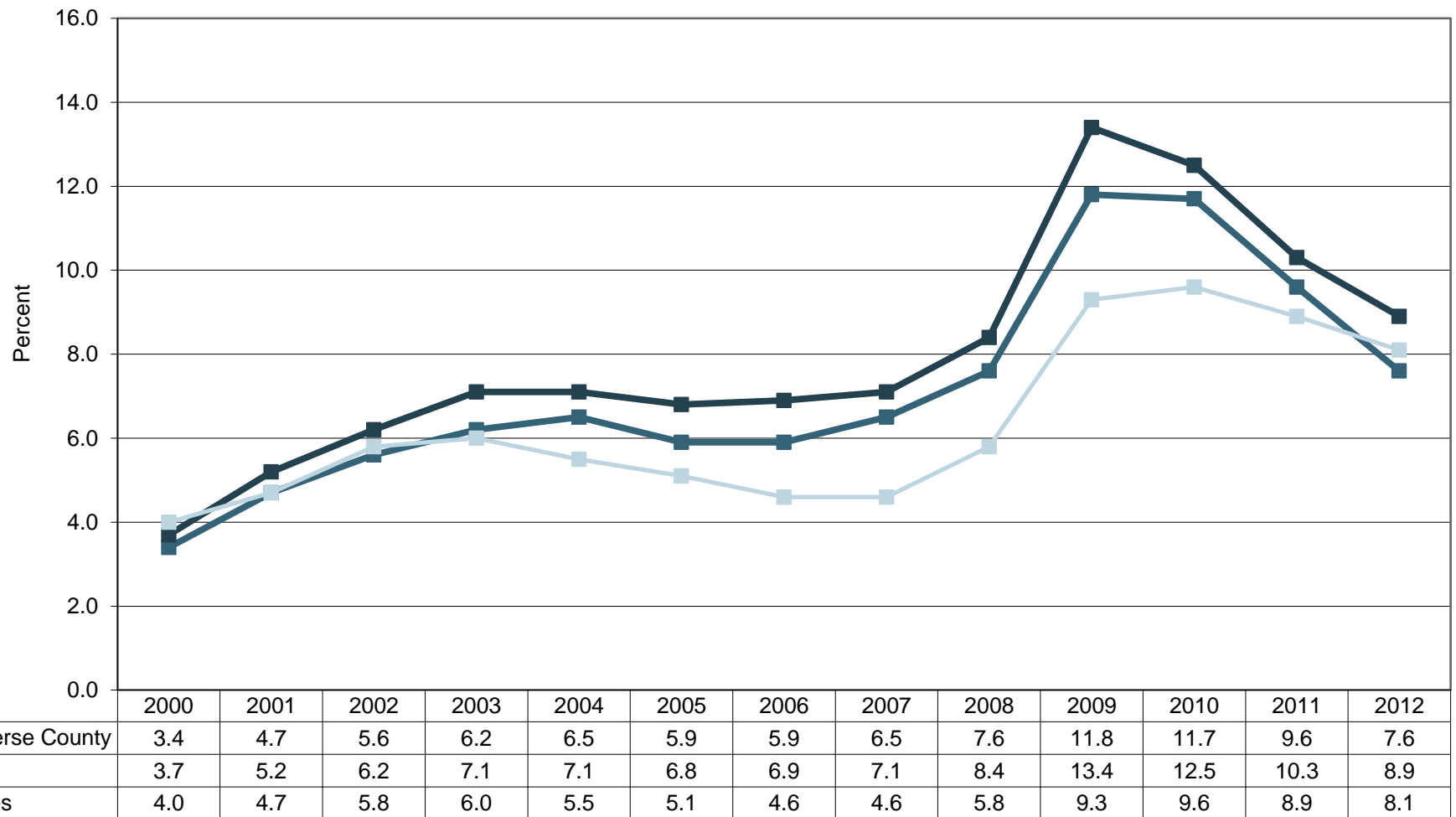
	Grand Traverse County				Michigan				United States			
	Total Labor Force	Employed	Unemployed	Percent Unemployed	Total Labor Force	Employed	Unemployed	Percent Unemployed		Percent Unemployed		
EMPLOYMENT												
1990	36,055	33,601	2,454	6.8	4,620,000	4,262,000	358,000	7.0		5.6		
1991	36,176	33,296	2,880	8.0	4,589,000	4,162,000	427,000	9.3		6.8		
1992	38,326	35,130	3,196	8.3	4,662,000	4,235,000	427,000	9.2		7.5		
1993	39,848	37,326	2,522	6.3	4,712,000	4,365,000	347,000	7.4		6.9		
1994	41,390	39,031	2,359	5.7	4,804,000	4,509,000	296,000	6.2		6.1		
1995	41,838	39,472	2,366	5.7	4,835,000	4,577,000	258,000	5.3		5.6		
1996	42,733	40,802	1,931	4.5	4,888,000	4,647,000	241,000	4.9		5.4		
1997	44,497	42,769	1,728	3.9	4,963,000	4,749,000	214,000	4.3		4.9		
1998	44,804	43,274	1,530	3.4	5,008,000	4,810,000	198,000	4.0		4.5		
1999	45,428	43,941	1,487	3.3	5,089,000	4,897,000	192,000	3.8		4.2		
2000	45,549	43,997	1,552	3.4	5,144,000	4,953,000	190,000	3.7		4.0		
2001	45,792	43,658	2,134	4.7	5,144,000	4,876,000	268,000	5.2		4.7		
2002	45,577	43,020	2,557	5.6	5,040,000	4,725,000	315,000	6.2		5.8		
2003	46,612	43,717	2,895	6.2	5,033,000	4,676,000	358,000	7.1		6.0		
2004	47,418	44,338	3,080	6.5	5,043,000	4,687,000	356,000	7.1		5.5		
2005	48,339	45,495	2,844	5.9	5,065,000	4,718,000	347,000	6.8		5.1		
2006	49,224	46,299	2,925	5.9	5,068,000	4,719,000	350,000	6.9		4.6		
2007	49,286	46,084	3,202	6.5	5,024,000	4,667,000	357,000	7.1		4.6		
2008	48,734	45,010	3,724	7.6	4,936,000	4,519,000	416,000	8.4		5.8		
2009	48,330	42,608	5,722	11.8	4,851,000	4,200,000	651,000	13.4		9.3		
2010	47,273	41,727	5,546	11.7	4,747,000	4,147,000	601,000	12.5		9.6		
2011	45,830	41,442	4,388	9.6	4,658,000	4,178,000	480,000	10.3		8.9		
2012	45,712	42,090	3,570	7.6	4,657,000	4,232,000	426,000	8.9		8.1		

1990 - 2012 Grand Traverse County Employment



Source: Michigan Department of Technology, Management and Budget

2000 - 2012 Unemployment Rates

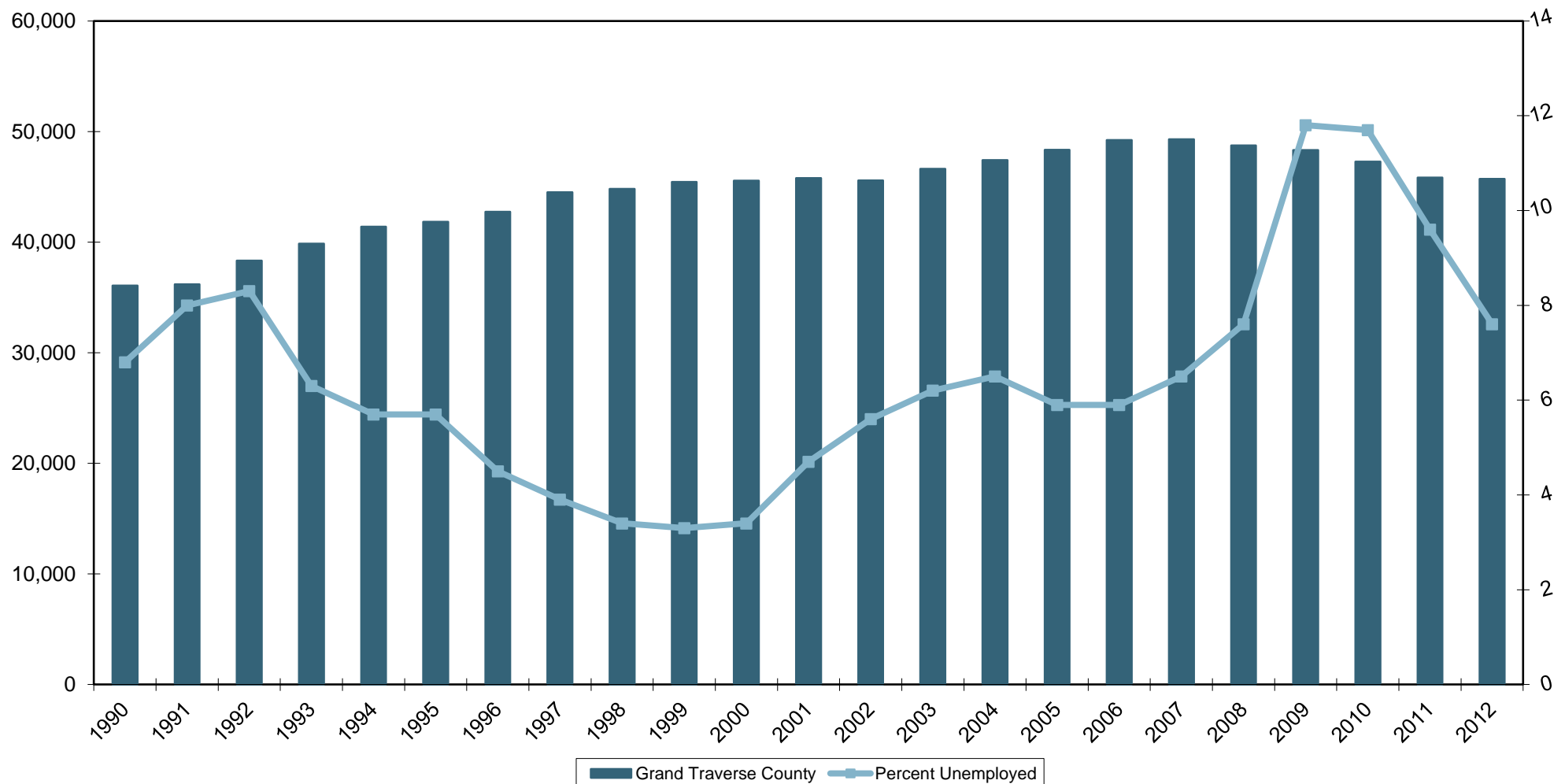


1990 - 2012 Grand Traverse County Employment



Source: Michigan Department of Technology, Management and Budget

1990 - 2012 Grand Traverse County Labor Force and Unemployment Rates



2010 - 2012 Grand Traverse County Employment



Source: Michigan Department of Technology, Management and Budget

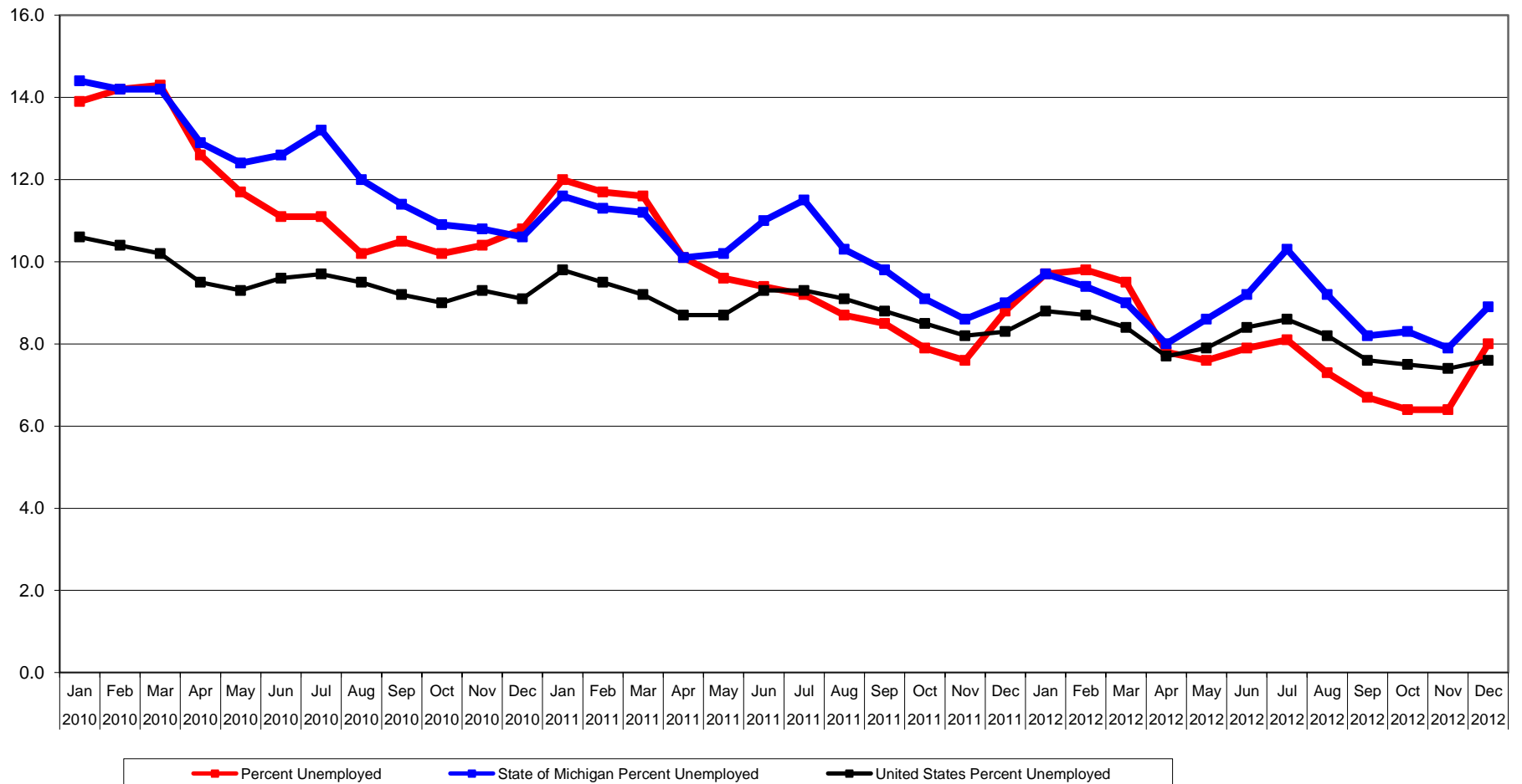
		Grand Traverse County				State of Michigan	United States
		Total Labor Force	Employed	Unemployed	Percent Unemployed	Percent Unemployed	Percent Unemployed
EMPLOYMENT							
2010	Jan	46,161	39,748	6,413	13.9	14.4	10.6
2010	Feb	46,116	39,563	6,553	14.2	14.2	10.4
2010	Mar	46,272	39,650	6,622	14.3	14.2	10.2
2010	Apr	46,064	40,257	5,807	12.6	12.9	9.5
2010	May	47,684	42,115	5,569	11.7	12.4	9.3
2010	Jun	49,568	44,046	5,522	11.1	12.6	9.6
2010	Jul	50,759	45,117	5,642	11.1	13.2	9.7
2010	Aug	49,339	44,321	5,018	10.2	12.0	9.5
2010	Sep	47,753	42,734	5,019	10.5	11.4	9.2
2010	Oct	46,353	41,634	4,719	10.2	10.9	9.0
2010	Nov	45,689	40,950	4,739	10.4	10.8	9.3
2010	Dec	45,517	40,584	4,933	10.8	10.6	9.1
2011	Jan	44,837	39,467	5,370	12.0	11.6	9.8
2011	Feb	44,601	39,366	5,235	11.7	11.3	9.5
2011	Mar	44,384	39,244	5,140	11.6	11.2	9.2
2011	Apr	44,494	39,995	4,499	10.1	10.1	8.7
2011	May	46,433	41,983	4,450	9.6	10.2	8.7
2011	Jun	48,117	43,573	4,544	9.4	11.0	9.3
2011	Jul	49,077	44,570	4,507	9.2	11.5	9.3
2011	Aug	48,101	43,928	4,173	8.7	10.3	9.1
2011	Sep	46,216	42,305	3,911	8.5	9.8	8.8
2011	Oct	45,009	41,451	3,558	7.9	9.1	8.5
2011	Nov	44,287	40,906	3,381	7.6	8.6	8.2
2011	Dec	44,402	40,512	3,890	8.8	9.0	8.3
2012	Jan	43,783	39,520	4,263	9.7	9.7	8.8
2012	Feb	43,999	39,689	4,310	9.8	9.4	8.7
2012	Mar	43,970	39,803	4,167	9.5	9.0	8.4
2012	Apr	43,890	40,467	3,423	7.8	8.0	7.7
2012	May	46,266	42,727	3,539	7.6	8.6	7.9
2012	Jun	48,321	44,497	3,824	7.9	9.2	8.4
2012	Jul	49,355	45,371	3,984	8.1	10.3	8.6
2012	Aug	48,172	44,632	3,540	7.3	9.2	8.2
2012	Sep	46,331	43,248	3,083	6.7	8.2	7.6
2012	Oct	45,559	42,651	2,908	6.4	8.3	7.5
2012	Nov	44,207	41,367	2,840	6.4	7.9	7.4
2012	Dec	44,655	42,090	3,570	8.0	8.9	7.6

2010 - 2012 Grand Traverse County Employment



Source: Michigan Department of Technology, Management and Budget

Unemployment Rate Jan/2010 - Dec/2012

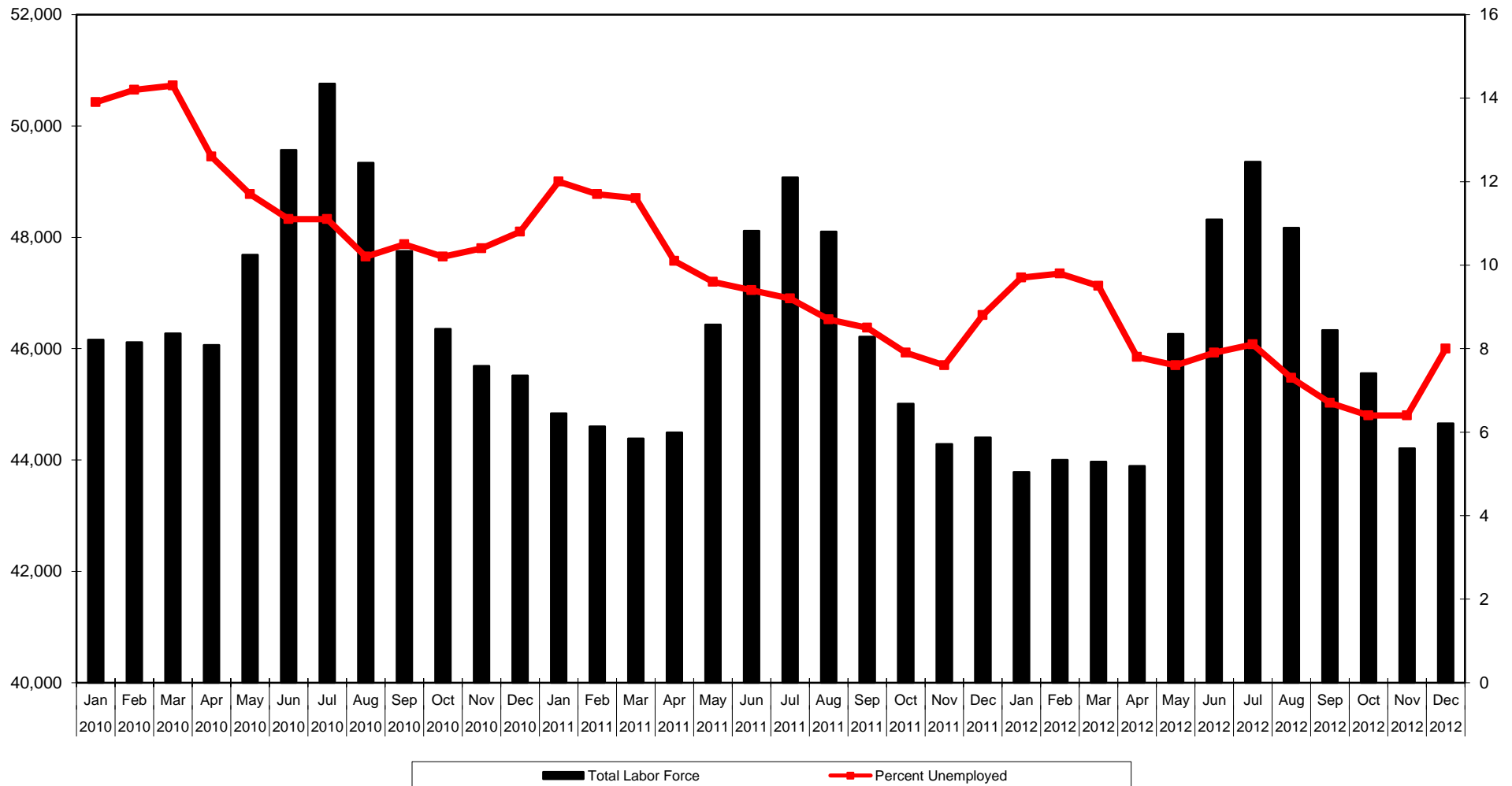


2010 - 2012 Grand Traverse County Employment



Source: Michigan Department of Technology, Management and Budget

Grand Traverse County Labor Force and Unemployment Rate Jan/2010 - Dec 2012



2010 Employment for Grand Traverse County and Local Units



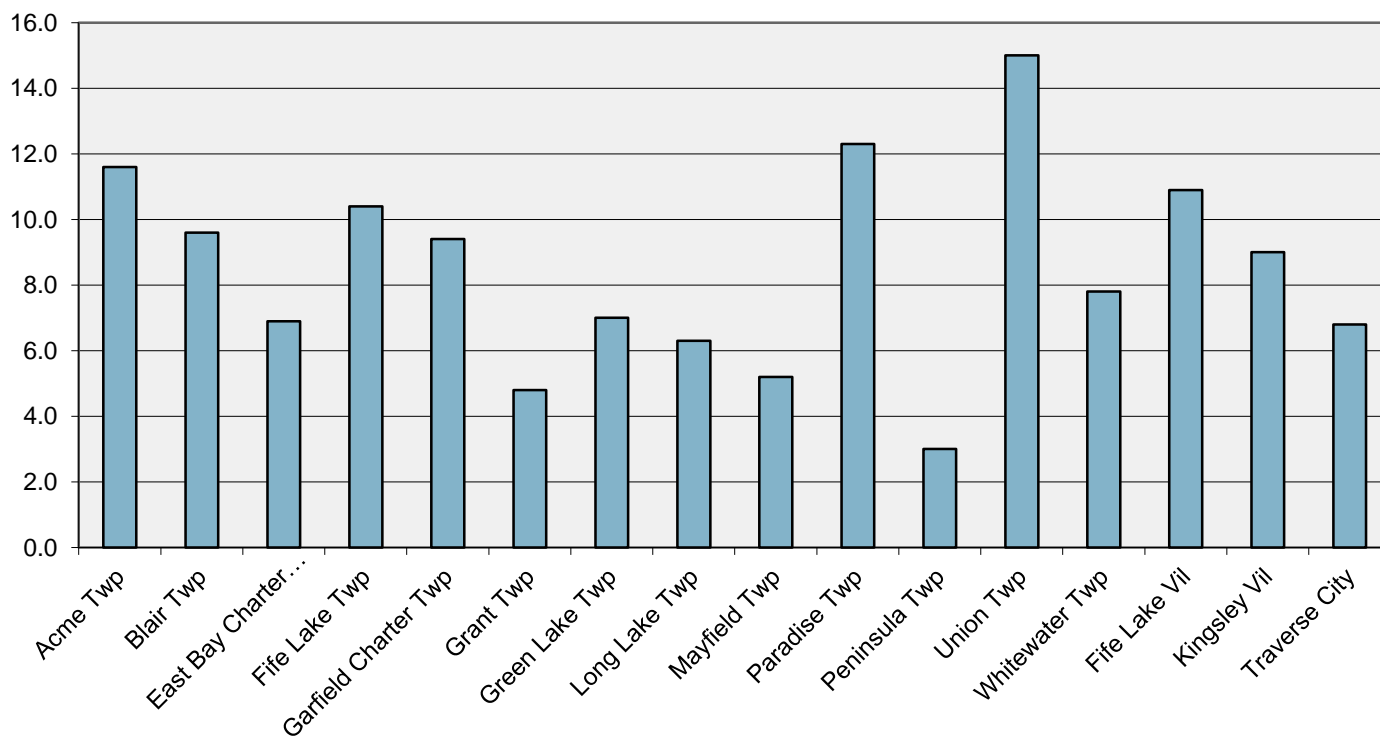
Source: U.S. Census Bureau

**Total
Work
Force** **Percent
Unemployed**

EMPLOYMENT

Acme Twp	2,700	11.6
Blair Twp	4,518	9.6
East Bay Charter Twp	6,205	6.9
Fife Lake Twp	684	10.4
Garfield Charter Twp	9,112	9.4
Grant Twp	686	4.8
Green Lake Twp	2,916	7.0
Long Lake Twp	4,569	6.3
Mayfield Twp	977	5.2
Paradise Twp	2,302	12.3
Peninsula Twp	2,741	3.0
Union Twp	253	15.0
Whitewater Twp	1,428	7.8
Fife Lake Vil	193	10.9
Kingsley Vil	799	9.0
Traverse City	7,979	6.8
Grand Traverse Co	47,273	11.7
Michigan	4,944,003	11.5

2010 Unemployment Rate for Local Units



2010 Travel to Work for Grand Traverse County and Local Units



Source: U.S. Census Bureau.

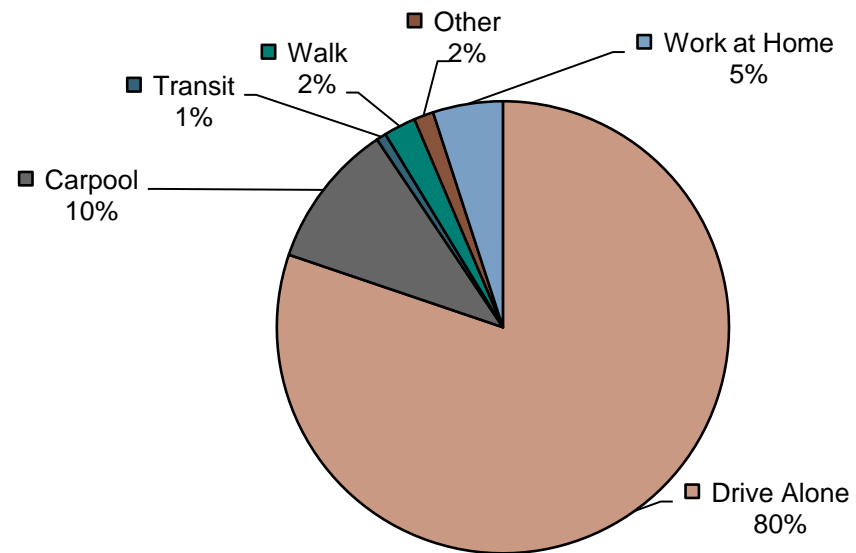
	Travel to Work											
	Drive Alone	Carpool	Transit	Walk	Other	Work at Home	Commuting Time (Minutes)					
TRAVEL TO WORK												
Acme Twp	85.0	6.0	0.5	0.5	0.9	7.1	20.0					
Blair Twp	75.9	17.9	0.0	0.8	1.3	4.1	19.4					
East Bay Charter Twp	84.9	8.8	0.2	0.6	0.8	4.7	19.9					
Fife Lake Twp	84.2	10.2	1.8	2.0	0.0	1.8	30.2					
Garfield Charter Twp	81.9	9.9	1.1	1.5	0.4	5.3	15.9					
Grant Twp	70.9	16.2	0.0	1.0	0.0	11.9	28.4					
Green Lake Twp	85.2	9.7	0.3	0.5	0.4	3.9	25.3					
Long Lake Twp	85.4	10.6	0.3	1.1	0.3	2.4	20.2					
Mayfield Twp	79.5	11.2	0.0	1.7	1.4	6.1	26.8					
Paradise Twp	67.1	25.5	0.0	0.5	2.1	4.9	26.5					
Peninsula Twp	76.9	5.6	0.0	1.0	2.6	13.8	21.6					
Union Twp	83.2	13.2	0.0	0.0	0.0	3.6	26.7					
Whitewater Twp	79.2	9.8	0.0	2.1	3.6	5.3	23.0					
Fife Lake Vil	89.5	5.2	1.2	4.1	0.0	0.0	30.3					
Kingsley Vil	73.3	18.6	0.0	1.2	2.1	4.8	29.7					
Traverse City	75.8	7.0	2.3	8.2	3.5	3.2	14.5					
Grand Traverse County	80.2	10.4	0.7	2.3	1.4	5.0	19.5					
Michigan	82.9	8.9	1.3	2.3	1.1	35.0	23.7					

2010 Travel to Work for Grand Traverse County and Local Units



Source: U.S. Census Bureau.

2010 Travel to Work for Grand Traverse County and Local Units



2006-2010 Top Ten Counties Commuting to Grand Traverse County



Source: U.S. Census Bureau, 2006-2010 American Community Survey

Of the 51,558 workers in Grand Traverse County, 38,009 or 73.72% come from within Grand Traverse County.

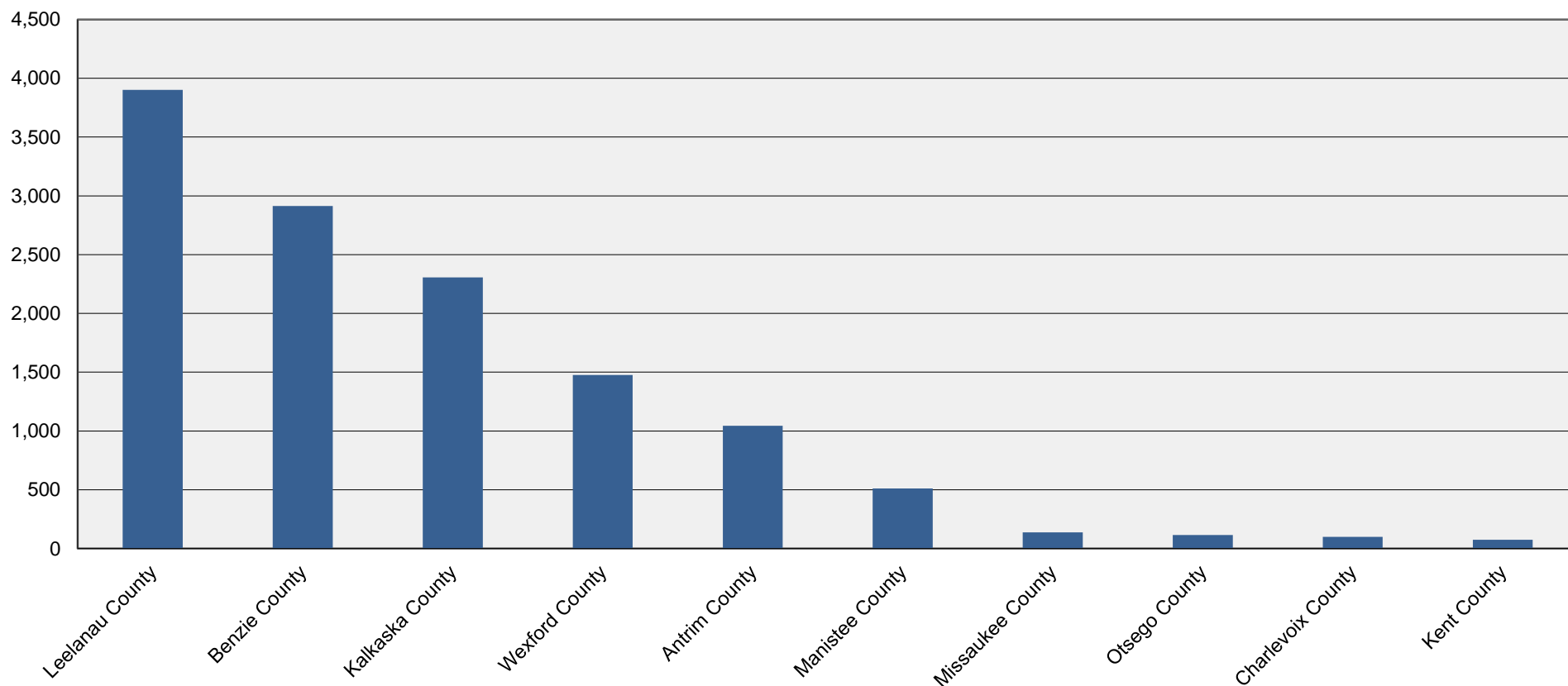
County of Residence	Residents Travelling to Grand Traverse County for Work	Percentage of Total Workers in Grand Traverse County					
WORKER FLOW							
Leelanau County	3,901	7.57%					
Benzie County	2,914	5.65%					
Kalkaska County	2,306	4.47%					
Wexford County	1,477	2.86%					
Antrim County	1,045	2.03%					
Manistee County	510	0.99%					
Missaukee County	138	0.27%					
Otsego County	115	0.22%					
Charlevoix County	99	0.19%					
Kent County	74	0.14%					
Total Workers in Grand Traverse County	51,558						

2006-2010 Top Ten Counties Commuting to Grand Traverse County



Source: U.S. Census Bureau, 2006-2010 American Community Survey

Total Number of Residents Travelling to Grand Traverse County for Work



2010 - 2040 Grand Traverse County Industry Projections



Source: U.S. Census Bureau; Projections: MDOT-Statewide & Urban Model Travel Analysis Section & University of Michigan Institute for Research on Labor, Employment, and the Economy

	2010	2015	2020	2025	2030	2035	2040	2010-2040 Number Change	2010-2040 Percent Change
INDUSTRY									
Total	63,941	70,423	74,688	77,218	79,967	83,630	87,259	23,318	26.7%
State government	558	576	621	649	677	711	745	187	25.1%
Local government	5,315	5,473	5,911	6,193	6,462	6,782	7,101	1,785	25.1%
Federal civilian	518	480	463	452	444	438	432	-86	-19.9%
Federal military	304	303	316	298	281	264	249	-56	-22.5%
Farm	507	487	463	436	416	403	393	-114	-28.9%
Forestry and logging; Fishing, hunting, and trapping	6	7	7	7	7	8	8	2	27.9%
Agriculture and forestry support activities; Other	321	335	349	382	411	438	461	140	30.4%
Oil and gas extraction	1,148	964	724	394	295	278	263	-886	-337.4%
Mining (except oil and gas)	0	0	0	0	0	0	0	0	0.0%
Support activities for mining	117	127	136	150	166	177	187	70	37.4%
Utilities	236	235	219	202	188	177	167	-69	-41.1%
Construction	3,732	4,617	5,097	5,243	5,404	5,616	5,814	2,082	35.8%
Wood product manufacturing	31	36	35	33	33	34	36	5	13.3%
Nonmetallic mineral product manufacturing	113	136	139	136	137	139	142	28	20.1%
Primary metal manufacturing	41	41	35	29	27	28	29	-12	-41.7%
Fabricated metal product manufacturing	587	580	537	533	548	568	590	4	0.6%
Machinery manufacturing	728	802	803	812	825	828	823	95	11.6%
Computer and electronic product manufacturing	135	126	133	131	131	131	131	-5	-3.8%
Electrical equipment and appliance manufacturing	95	107	106	101	101	101	101	6	6.4%
Motor vehicles, bodies, and trailers, parts manufacturing	748	683	590	538	509	479	475	-273	-57.4%
Other transportation equipment manufacturing	0	0	0	0	0	0	0	0	0.0%
Furniture and related product manufacturing	213	221	214	175	144	132	118	-95	-80.7%
Miscellaneous manufacturing	92	100	101	100	100	100	100	8	7.8%
Food manufacturing	1,037	1,009	977	945	918	901	881	-156	-17.7%
Beverage and tobacco product manufacturing	191	190	195	212	227	240	247	56	22.7%
Textile mills	0	0	0	0	0	0	0	0	0.0%
Textile product mills	223	178	173	177	184	193	205	-18	-8.9%
Apparel manufacturing	0	0	0	0	0	0	0	0	0.0%
Leather and allied product manufacturing	0	0	0	0	0	0	0	0	0.0%
Paper manufacturing	13	11	10	8	8	7	7	-7	-99.4%
Printing and related support activities	204	190	168	149	135	124	114	-90	-78.6%
Petroleum and coal product manufacturing	0	0	0	0	0	0	0	0	0.0%
Chemical manufacturing	122	126	126	123	122	122	122	0	-0.3%
Plastics and rubber product manufacturing	68	68	66	67	68	69	70	2	3.3%
Wholesale trade	1,358	1,434	1,442	1,441	1,432	1,435	1,432	74	5.2%
Retail trade	8,498	8,878	8,990	9,132	9,210	9,435	9,613	1,115	11.6%
Air transportation	52	55	56	58	60	62	64	12	19.2%
Rail transportation	0	0	0	0	0	0	0	0	0.0%
Water transportation	0	0	0	0	0	0	0	0	0.0%
Truck transportation; Couriers and messengers	608	658	677	717	766	823	883	275	31.2%
Transit and ground passenger transportation	51	57	59	61	64	67	71	20	28.2%
Pipeline transportation	0	0	0	0	0	0	0	0	0.0%
Scenic and sightseeing transportation; support activities	75	86	92	100	112	126	142	68	47.6%
Warehousing and storage	49	54	56	60	65	72	80	31	38.9%
Publishing industries, except Internet	275	262	262	249	238	231	224	-50	-22.4%
Motion picture, video, and sound recording industries	73	78	83	82	83	89	95	22	23.6%
Internet publishing; ISPs, search portals, and data processing	79	96	111	112	107	101	93	15	15.7%
Broadcasting, except Internet; Telecommunications	681	736	772	754	736	722	707	26	3.7%
Monetary authorities; Credit intermediation and related; Funds, trusts	967	1,033	1,056	1,057	1,053	1,051	1,041	75	7.2%
Securities, commodity contracts, investments	1,005	1,110	1,249	1,357	1,421	1,472	1,506	502	33.3%
Insurance carriers and related activities	1,113	1,217	1,257	1,258	1,255	1,253	1,239	126	10.2%
Real estate	3,589	4,290	4,619	4,770	4,896	5,062	5,237	1,647	31.5%
Rental and leasing services; Lessors of nonfinancial intangible assets	501	532	534	519	512	514	517	16	3.2%
Professional and technical services	4,303	5,409	6,189	6,652	7,199	7,880	8,627	4,323	50.1%

2010 - 2040 Grand Traverse County Industry Projections



Source: U.S. Census Bureau; Projections: MDOT-Statewide & Urban Model Travel Analysis Section & University of Michigan Institute for Research on Labor, Employment, and the Economy

	2010	2015	2020	2025	2030	2035	2040	2010-2040 Number Change	2010-2040 Percent Change
INDUSTRY									
Management of companies and enterprises	89	94	93	96	100	104	108	19	17.5%
Administrative and support services	2,451	2,771	2,975	3,113	3,263	3,449	3,631	1,180	32.5%
Waste management and remediation services	97	113	125	131	134	135	135	38	27.9%
Educational services	835	968	1,037	1,057	1,079	1,108	1,131	296	26.2%
Ambulatory health care services	3,716	4,474	5,337	5,897	6,441	7,078	7,716	3,999	51.8%
Hospitals	3,571	3,956	4,259	4,448	4,614	4,809	4,999	1,428	28.6%
Nursing and residential care facilities	785	917	1,020	1,130	1,236	1,358	1,480	695	47.0%
Social assistance	1,448	1,685	1,895	2,049	2,195	2,348	2,490	1,041	41.8%
Performing arts and spectator sports	443	483	496	517	549	597	655	212	32.4%
Museums, historical sites, zoos, and parks	31	37	41	45	48	52	57	25	44.9%
Amusement, gambling, and recreation	875	946	988	1,027	1,061	1,101	1,135	260	22.9%
Accommodation	1,447	1,543	1,545	1,568	1,597	1,643	1,689	242	14.3%
Food services and drinking places	4,231	4,574	4,692	4,948	5,196	5,491	5,785	1,554	26.9%
Repair and maintenance	695	741	761	791	818	853	888	194	21.8%
Personal and laundry services	884	1,049	1,182	1,246	1,302	1,374	1,445	561	38.8%
Membership associations and organizations	809	918	981	1,021	1,062	1,112	1,160	351	30.3%
Private households	855	965	1,041	1,077	1,100	1,135	1,174	319	27.2%

2010 Top Seven Counties for Tourism Spending in Michigan



Source: 2012-2017 Michigan Tourism Strategic Plan

	Annual Dollars (\$)	Percent of Total Spending (%)	2010 Population	Annual Spending Per Capita (\$)								
TOURISM SPENDING												
Wayne County	\$4,408,000,000	25.6	1,820,584	\$2,421								
Kent County	\$1,004,000,000	5.8	602,622	\$1,666								
Saginaw County	\$804,000,000	4.7	200,169	\$4,017								
Oakland County	\$716,000,000	4.2	1,202,362	\$595								
Grand Traverse County	\$693,000,000	4.0	86,986	\$7,967								
Ingham County	\$639,000,000	3.7	280,895	\$2,275								
Washtenaw County	\$595,000,000	3.5	344,791	\$1,726								

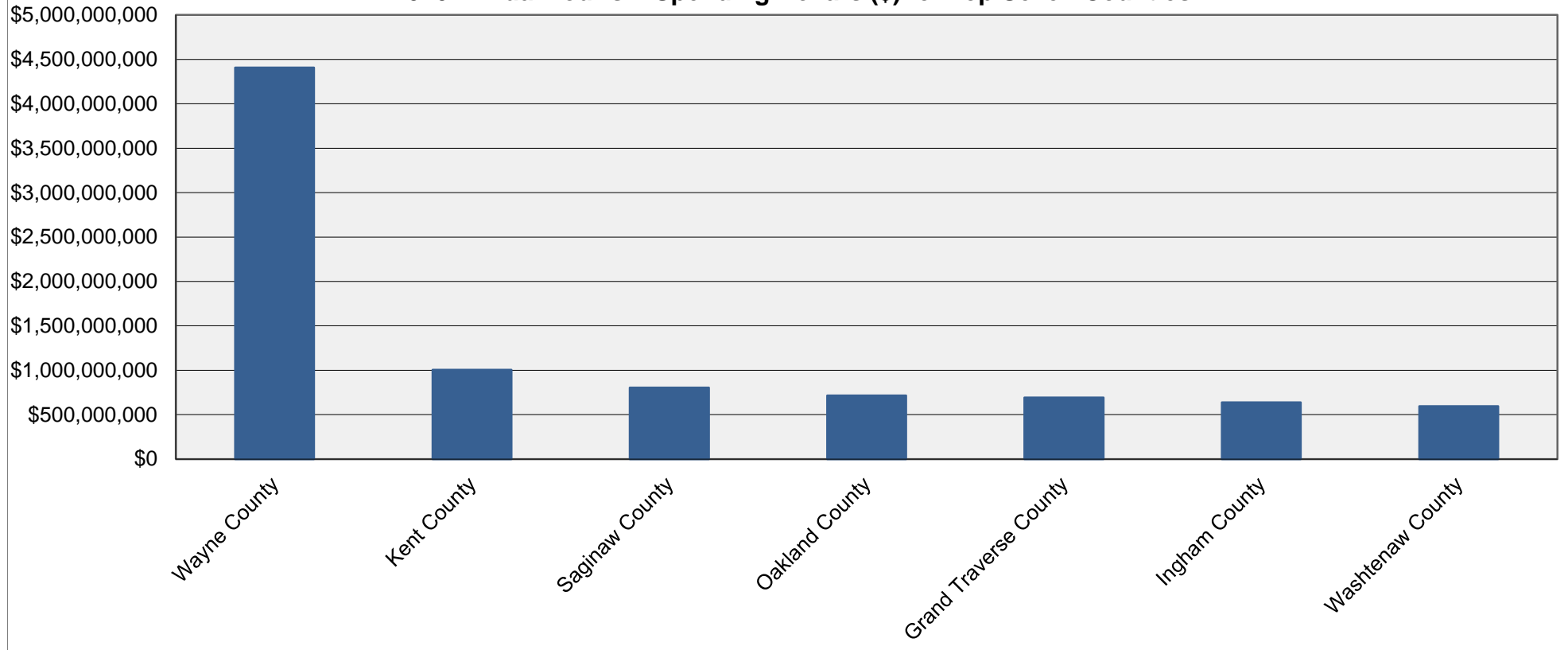
2010 Total Tourism Spending in Michigan: \$17.2 billion

2010 Top Seven Counties for Tourism Spending in Michigan



Source: 2012-2017 Michigan Tourism Strategic Plan

2010 Annual Tourism Spending Dollars (\$) for Top Seven Counties

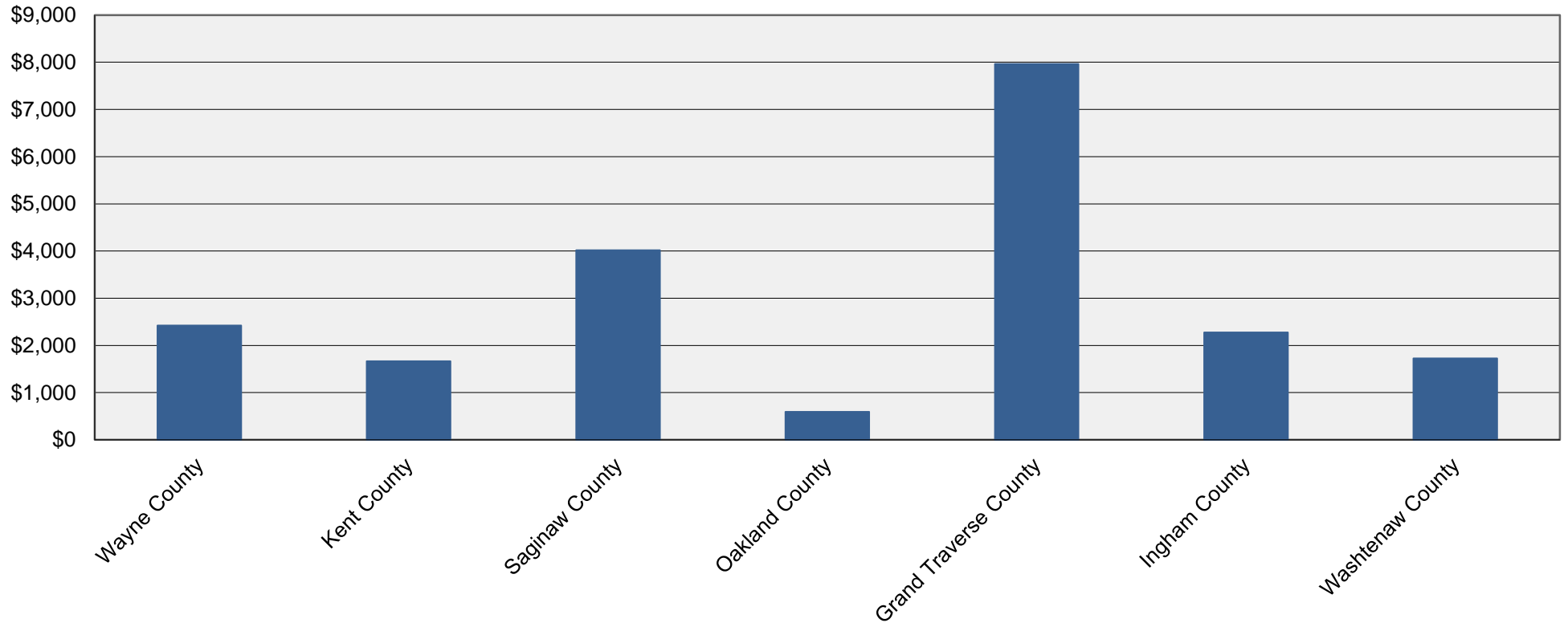


2010 Top Seven Counties for Tourism Spending in Michigan



Source: 2012-2017 Michigan Tourism Strategic Plan

2010 Annual Tourism Spending Per Capita (\$) for Top Seven Counties



2000 - 2010 Building Permits for Grand Traverse County and Local Units

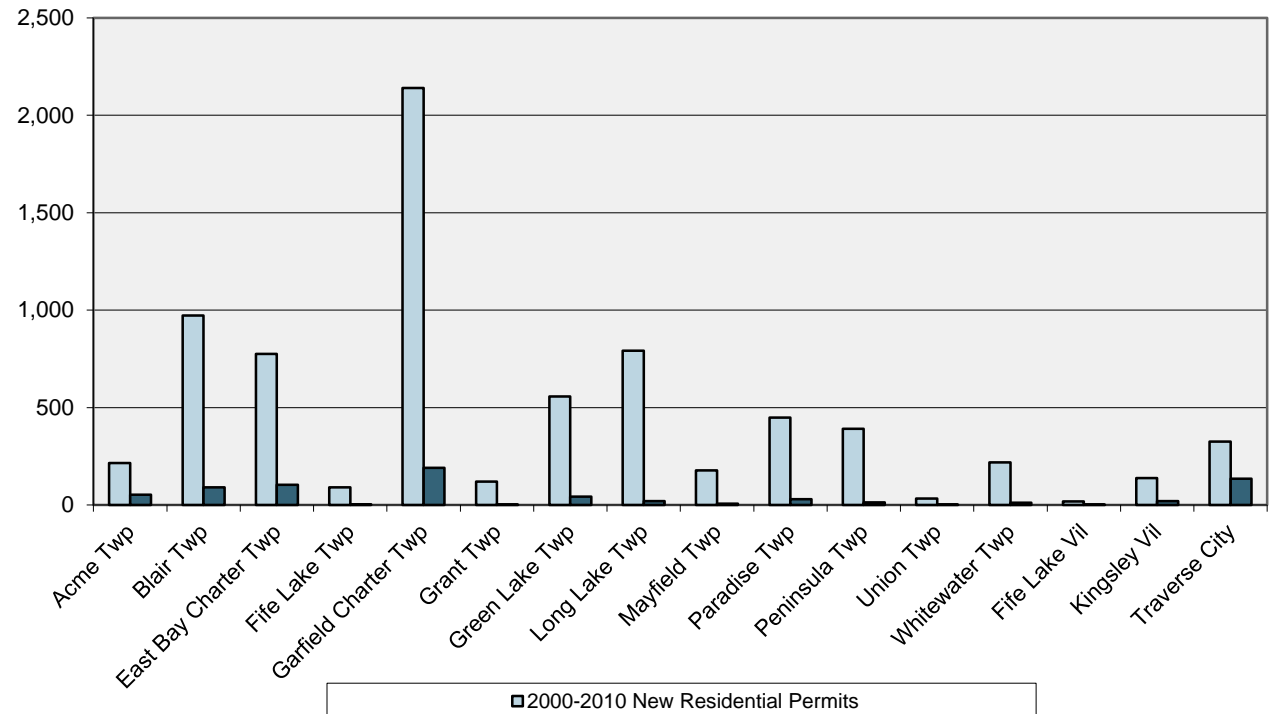


Source: Grand Traverse County Construction Code Department, Garfield Charter Township, Fife Lake Township

2000-2010 New Residential Permits	2000-2010 New Commercial Permits	2007-2010 New Residential Permits
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BUILDING PERMITS

Acme Twp	216	53	25
Blair Twp	972	90	142
East Bay Charter Twp	775	103	95
Fife Lake Twp	90	4	9
Garfield Charter Twp	2,140	191	250
Grant Twp	120	2	16
Green Lake Twp	556	43	85
Long Lake Twp	792	19	115
Mayfield Twp	178	7	18
Paradise Twp	449	30	71
Peninsula Twp	391	13	66
Union Twp	33	1	6
Whitewater Twp	218	12	36
Fife Lake Vil	18	2	3
Kingsley Vil	138	20	18
Traverse City	326	135	77
Grand Traverse Co	7,179	698	1,018



2010 Land Use & Land Cover for Grand Traverse County and Local Units



Source: Grand Traverse County Planning & Development Department

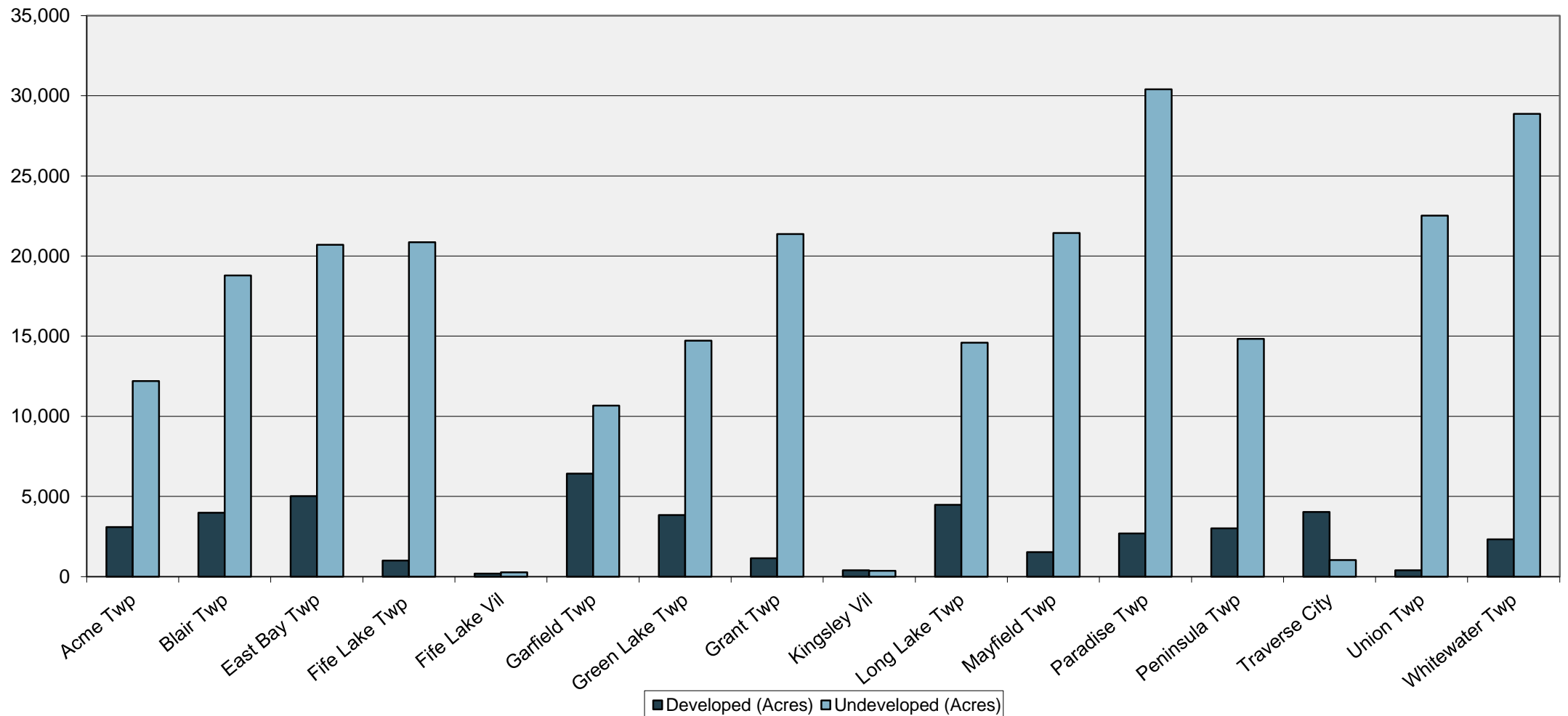
	Grand Traverse County	Acme Twp	Blair Twp	East Bay Twp	Fife Lake Twp	Fife Lake Vil	Garfield Twp	Green Lake Twp	Grant Twp	Kingsley Vil	Long Lake Twp	Mayfield Twp	Paradise Twp	Peninsula Twp	Traverse City	Union Twp	Whitewater Twp
LAND USE/LAND COVER (ACRES)																	
Residential	33,265	1,876	3,177	4,011	811	139	3,823	3,013	1,130	254	4,195	1,462	2,342	2,876	1,859	368	1,929
Single Family/Duplex Residential	32,246	1,795	3,138	3,840	809	139	3,341	3,011	1,130	210	4,156	1,456	2,342	2,870	1,712	368	1,929
Multiple Family Residential (Low Rise)	522	35	0	102	2	0	213	0	0	3	26	6	0	6	130	0	0
Multiple Family Residential (Med/Hi Rise)	23	0	0	7	0	0	1	0	0	0	0	0	0	0	14	0	0
Manufactured Home Park	436	46	39	40	0	0	255	2	0	41	13	0	0	0	1	0	0
Group/Transient Quarters	38	0	0	22	0	0	13	0	0	0	0	0	0	0	2	0	0
Institutional	1,589	41	53	163	49	11	409	204	1	76	59	15	37	23	418	2	29
Recreation	3,025	772	199	491	37	22	470	295	11	29	71	25	213	55	284	13	38
Indoor Cultural/Assembly/Recreation	38	0	1	0	0	3	3	2	0	0	7	0	0	0	22	0	0
Open Land Recreation	2,987	772	198	491	37	19	467	293	11	29	64	25	213	55	262	13	38
Commercial	3,440	310	492	205	33	14	1,216	224	10	41	141	21	46	43	498	15	130
Industrial	901	33	33	51	6	0	451	28	0	0	0	0	0	17	240	0	41
Transportation/Communication/Utilities	1,347	60	22	101	59	2	58	75	1	3	7	1	52	4	741	4	155
Agricultural	46,805	3,960	2,775	2,132	2,452	0	2,060	551	5,947	97	2,108	9,224	5,584	6,529	0	230	3,154
Cropland	36,358	2,142	2,511	1,619	2,452	0	1,496	509	5,867	97	1,760	9,172	5,369	1,865	0	170	1,328
Orchards/Vineyards	9,007	1,632	230	502	0	0	95	4	0	0	161	0	0	4,591	0	0	1,792
Confined Feeding Operations	35	0	8	0	0	0	10	0	6	0	0	4	7	0	0	0	0
Permanent Pasture Lands	1,139	115	0	0	0	0	355	31	68	0	177	45	208	44	0	60	34
Other Agricultural Lands	267	71	26	11	0	0	104	7	6	0	10	3	0	29	0	0	0
Grass/Shrublands	32,241	2,151	2,868	2,290	1,075	29	2,927	1,749	2,224	55	2,698	2,368	3,907	1,796	175	2,547	3,383
Forest	133,966	3,708	8,068	13,335	15,158	197	3,576	7,388	11,750	131	8,060	6,851	15,781	5,598	427	15,356	18,584
Broadleaved Forest	55,204	1,248	4,907	4,663	4,574	55	1,761	2,519	7,639	69	4,011	4,345	5,958	3,590	293	2,702	6,870
Coniferous Forest	55,281	1,553	2,742	6,880	8,779	93	1,074	2,597	2,155	60	3,275	2,179	7,548	976	69	7,294	8,008
Mixed Conifer/Broadleaved Forest	23,481	907	419	1,792	1,805	49	741	2,272	1,956	2	774	327	2,275	1,032	65	5,360	3,706
Wetlands	39,037	2,288	4,784	2,827	2,181	37	1,873	5,008	1,304	80	1,706	2,788	5,071	746	428	4,334	3,583
Wooded Wetlands	33,190	1,667	4,667	2,519	1,372	8	1,742	4,570	1,022	74	1,372	2,255	4,154	618	264	3,713	3,173
Non-Wooded Wetlands	5,847	621	117	308	809	29	131	438	282	6	334	533	917	128	164	621	410
Barren	1,568	90	288	121	0	7	235	28	140	2	15	209	61	155	2	53	164
Beach/Riverbank	355	76	6	52	0	1	37	0	22	0	0	6	0	147	2	0	7
Sand Dune/Exposed Bluff	216	0	0	26	0	0	36	0	7	1	0	0	18	0	0	15	114
Extractive	996	14	282	43	0	6	162	28	111	1	15	203	43	8	0	38	43
Water	17,336	233	297	1,703	912	15	701	4,732	479	2	3,827	116	94	50	229	192	3,752
TOTAL	314,700	15,523	23,056	27,430	22,773	473	17,799	23,295	22,997	770	22,887	23,080	33,188	17,892	5,301	23,114	34,942
Developed (Acres)	43,567	3,093	3,977	5,022	995	188	6,428	3,839	1,153	402	4,473	1,524	2,691	3,018	4,040	402	2,323
Undeveloped (Acres)	253,617	12,197	18,783	20,705	20,866	270	10,671	14,724	21,365	365	14,587	21,440	30,404	14,824	1,032	22,520	28,868
Percent Developed (Acres)	17.2%	25.4%	21.2%	24.3%	4.8%	69.9%	60.2%	26.1%	5.4%	110.4%	30.7%	7.1%	8.8%	20.4%	391.6%	1.8%	8.0%

2010 Land Use & Land Cover for Grand Traverse County and Local Units



Source: Grand Traverse County Planning & Development Department

2010 Developed and Undeveloped Land



Grand Traverse County Agricultural Land, Farms and Sales



Source: USDA, National Agricultural Statistics Service; Grand Traverse County Planning & Development Department

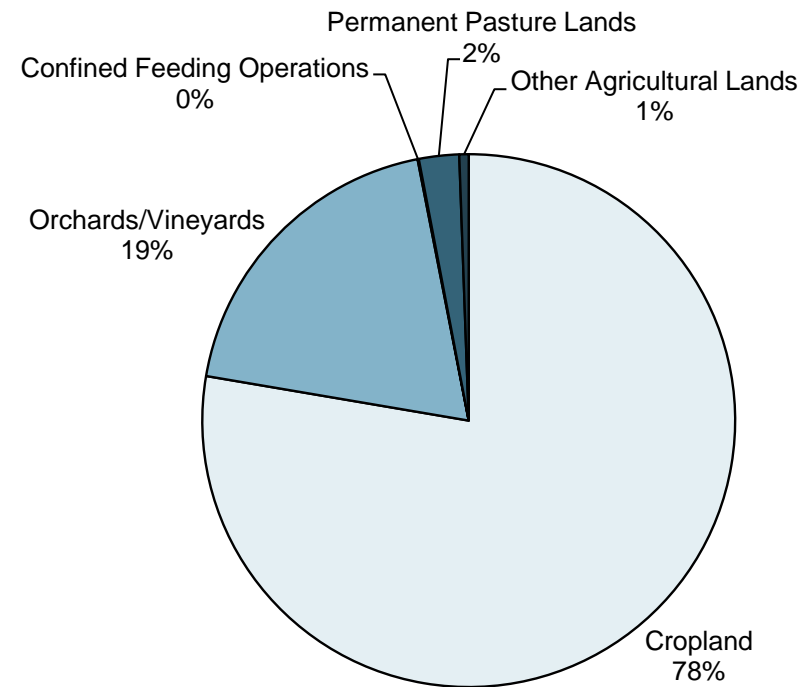
	1997	2002	2007	Change from 1997 to 2007													
FARMS AND SALES																	
Total Number of Farms	485	489	522	37													
Average Acreage of Farms	138	127	120	-18													
Total Sales of Agriculture Products	\$18,791,000	\$11,366,000	\$19,244,000	\$453,000													
Average Sales Per Farm	\$38,744	\$23,243	\$36,865	\$1,879													
	Grand Traverse Co	Acme Twp	Blair Twp	East Bay Twp	Fife Lake Twp	Fife Lake Vil	Garfield Twp	Green Lake Twp	Grant Twp	Kingsley Vil	Long Lake Twp	Mayfield Twp	Paradise Twp	Peninsula Twp	Traverse City	Union Twp	Whitewater Twp
AGRICULTURAL LAND CLASSIFICATIONS (ACRES)																	
Total Agricultural Land	46,805	3,960	2,775	2,132	2,452	0	2,060	551	5,947	97	2,108	9,224	5,584	6,529	0	230	3,154
Cropland	36,358	2,142	2,511	1,619	2,452	0	1,496	509	5,867	97	1,760	9,172	5,369	1,865	0	170	1,328
Orchards/Vineyards	9,007	1,632	230	502	0	0	95	4	0	0	161	0	0	4,591	0	0	1,792
Confined Feeding Operations	35	0	8	0	0	0	10	0	6	0	0	4	7	0	0	0	0
Permanent Pasture Lands	1,139	115	0	0	0	0	355	31	68	0	177	45	208	44	0	60	34
Other Agricultural Lands	267	71	26	11	0	0	104	7	6	0	10	3	0	29	0	0	0

Grand Traverse County Agricultural Land, Farms and Sales



Source: USDA, National Agricultural Statistics Service; Grand Traverse County Planning & Development Department

2010 Grand Traverse County Agricultural Land Classifications



Master Plan for Grand Traverse County

Appendix B: County Maps

Change in Population 1960 – 2010

2010 Land Use Inventory

2010 Agricultural Land Use and Prime Soils

Soil Slopes

Hydrology

Groundwater Contours and Water Table Depth

Michigan Natural Features Inventory Probability Value

Michigan Natural Features Inventory Rarity Index

Protected and Public Lands

Housing Density and Type

Affordable Homes as Percent of Total

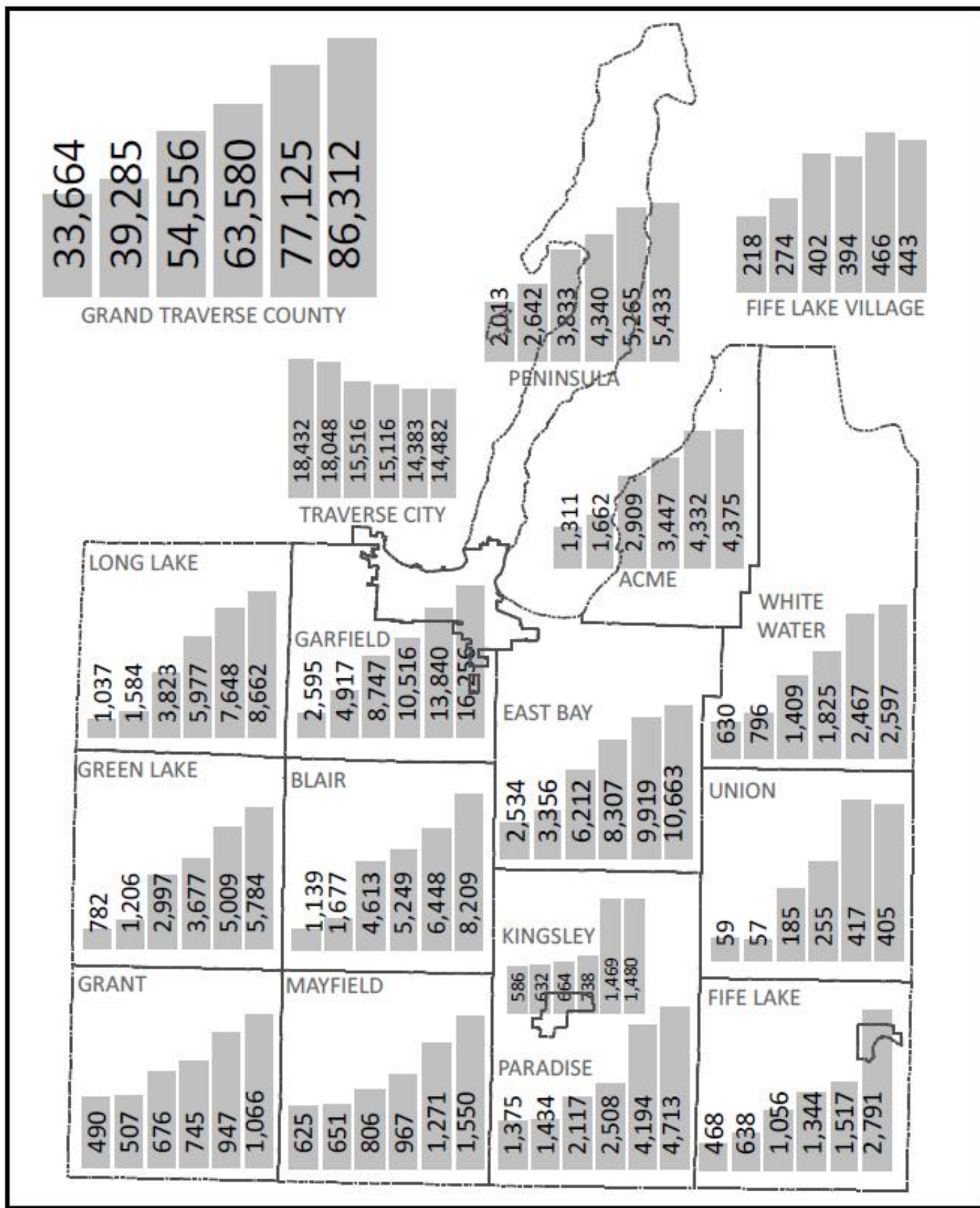
House Heating Fuel – Bottled Gas

House Heating Fuel – Utility Gas

Vehicle Miles Traveled

Transportation Costs

Combined Housing and Transportation Costs



CHANGE IN POPULATION - 1960 THROUGH 2010

Legend

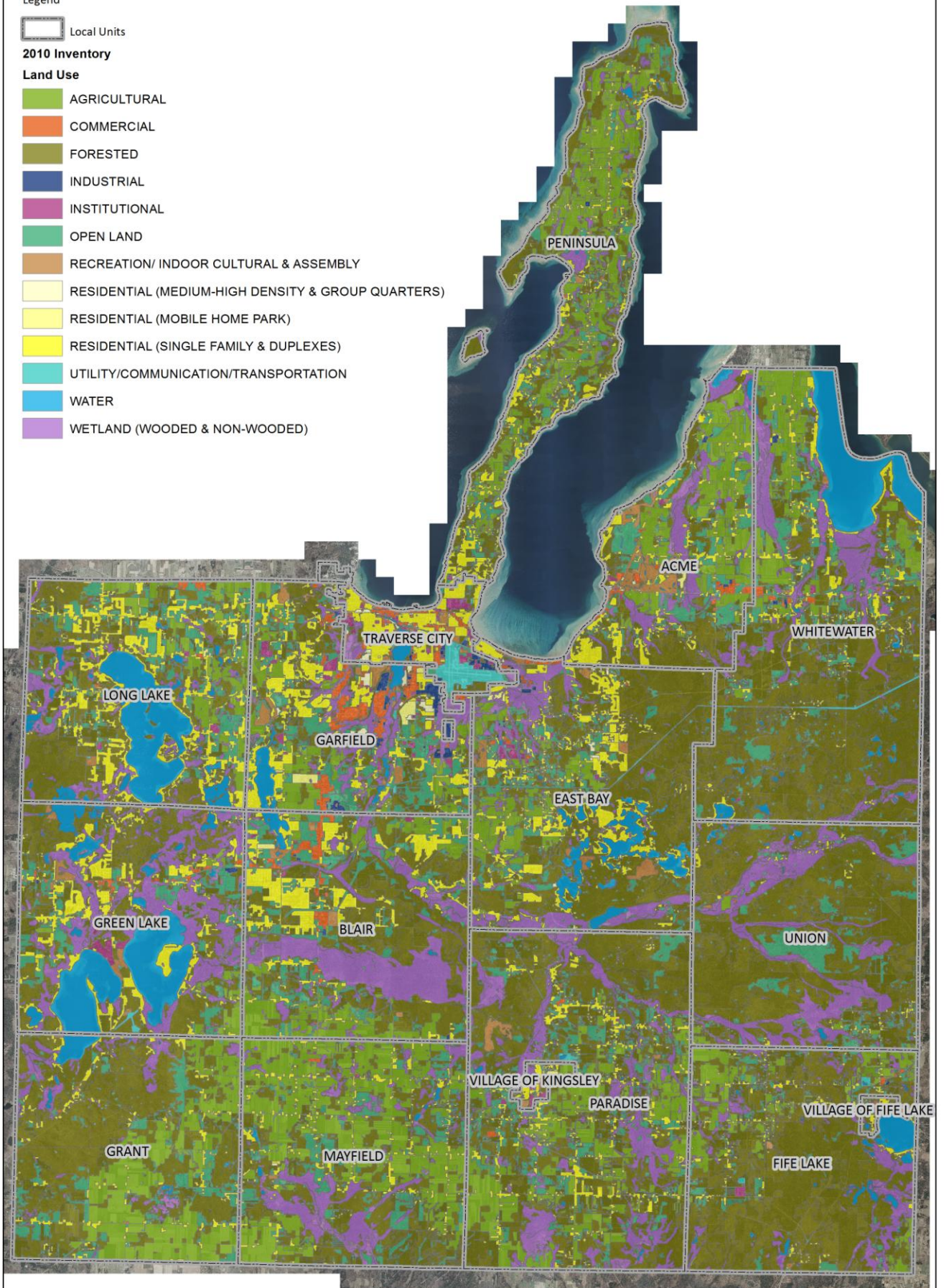


Local Units

2010 Inventory

Land Use

- AGRICULTURAL
- COMMERCIAL
- FORESTED
- INDUSTRIAL
- INSTITUTIONAL
- OPEN LAND
- RECREATION/ INDOOR CULTURAL & ASSEMBLY
- RESIDENTIAL (MEDIUM-HIGH DENSITY & GROUP QUARTERS)
- RESIDENTIAL (MOBILE HOME PARK)
- RESIDENTIAL (SINGLE FAMILY & DUPLEXES)
- UTILITY/COMMUNICATION/TRANSPORTATION
- WATER
- WETLAND (WOODED & NON-WOODED)



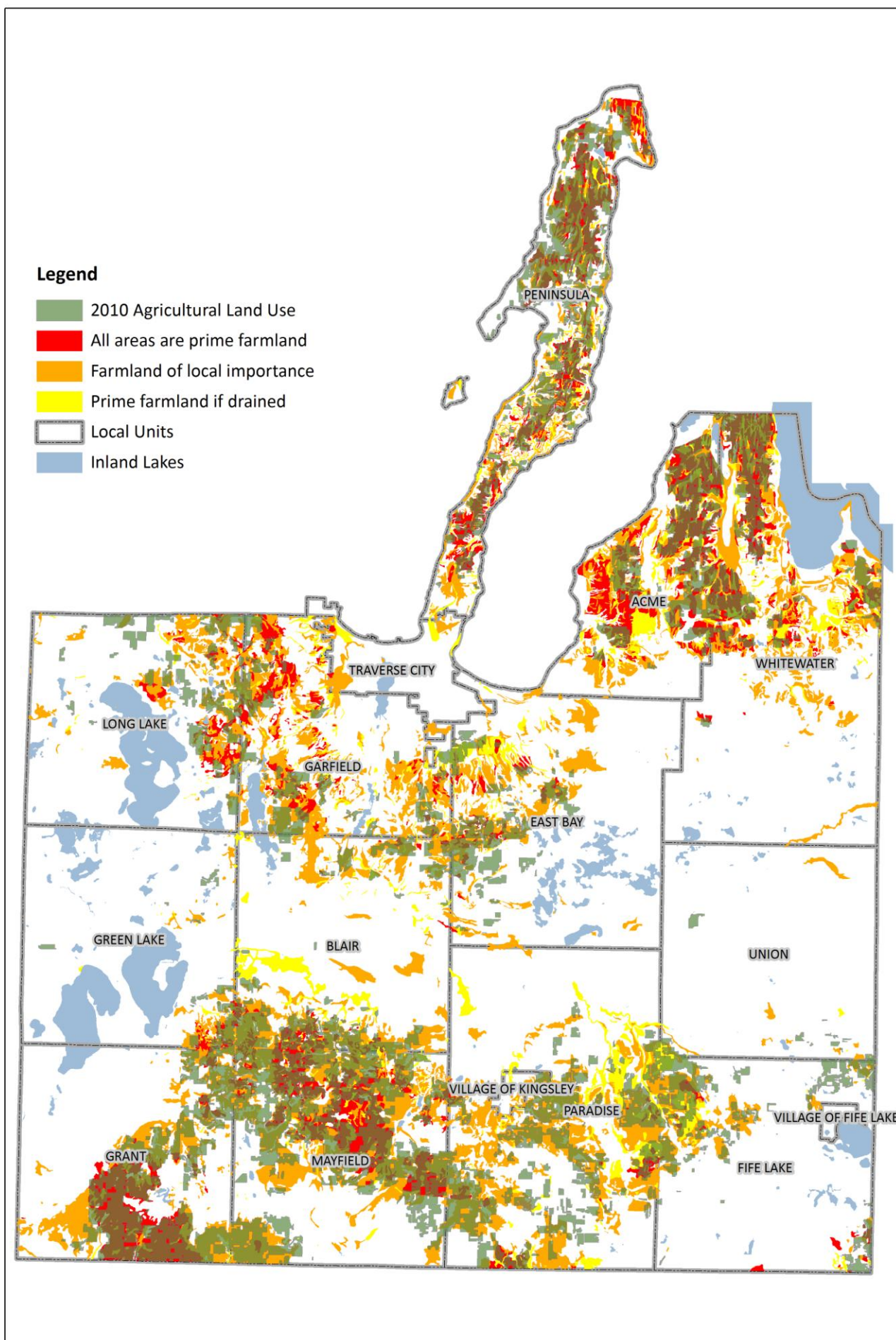
210 Land Use Inventory

Grand Traverse County, Planning & Development

0 0.5 1 2 3 Miles



8.13.12



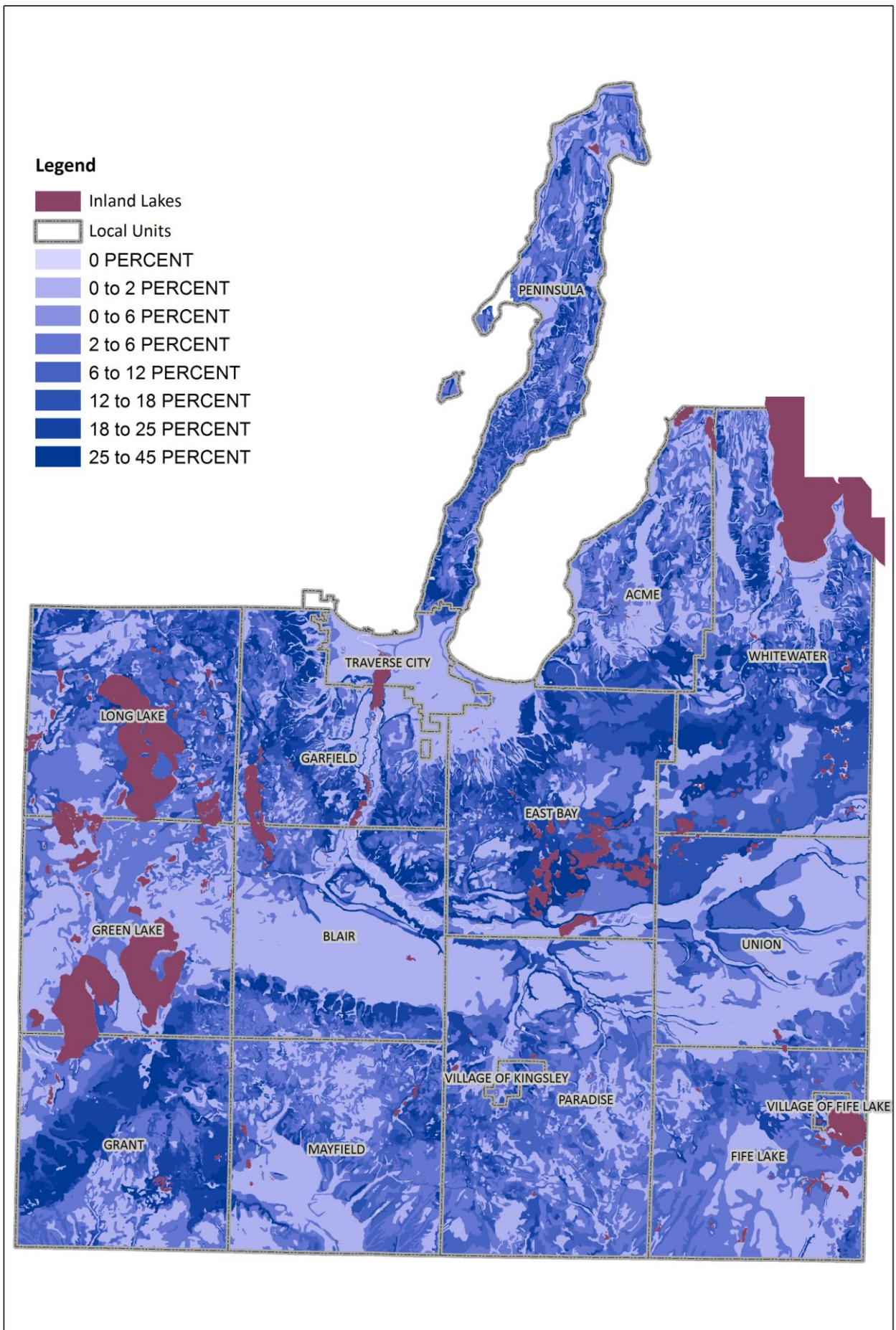
2010 Agricultural Land Use and Prime Soils

Grand Traverse County, Planning & Development

0 0.5 1 2 3 Miles



8.13.12



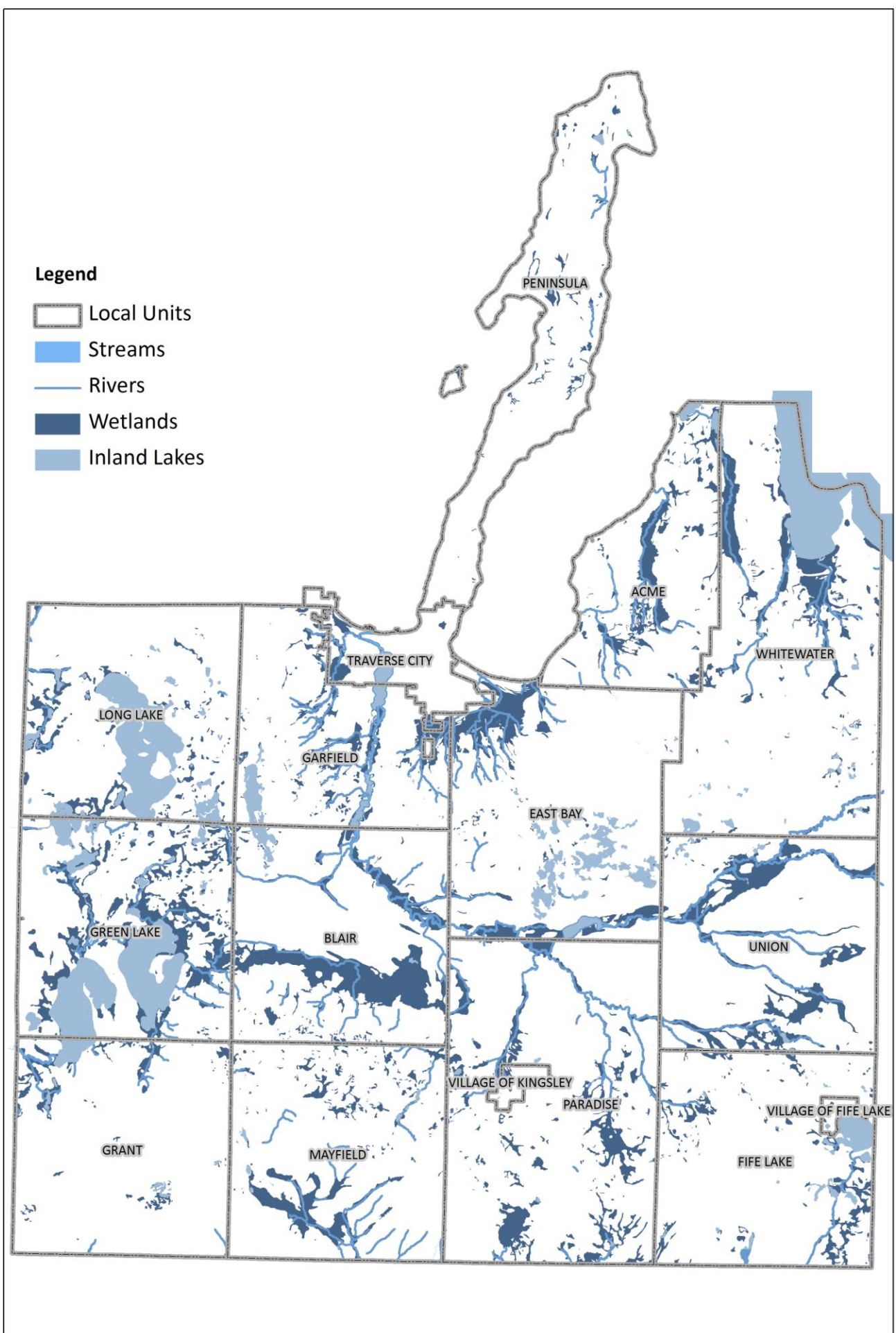
Soil Slopes

Grand Traverse County, Planning & Development

0 0.5 1 2 3 Miles



8.13.12



Hydrology

Grand Traverse County, Planning & Development

0 0.5 1 2 3 Miles



8.13.12

Legend

Groundwater Contours Water Table Depth

CONTOUR

580 - 630
631 - 680
681 - 740
741 - 800
801 - 850
851 - 900
901 - 950
951 - 1000
1001 - 1050
1051 - 1130

Value

High : 219



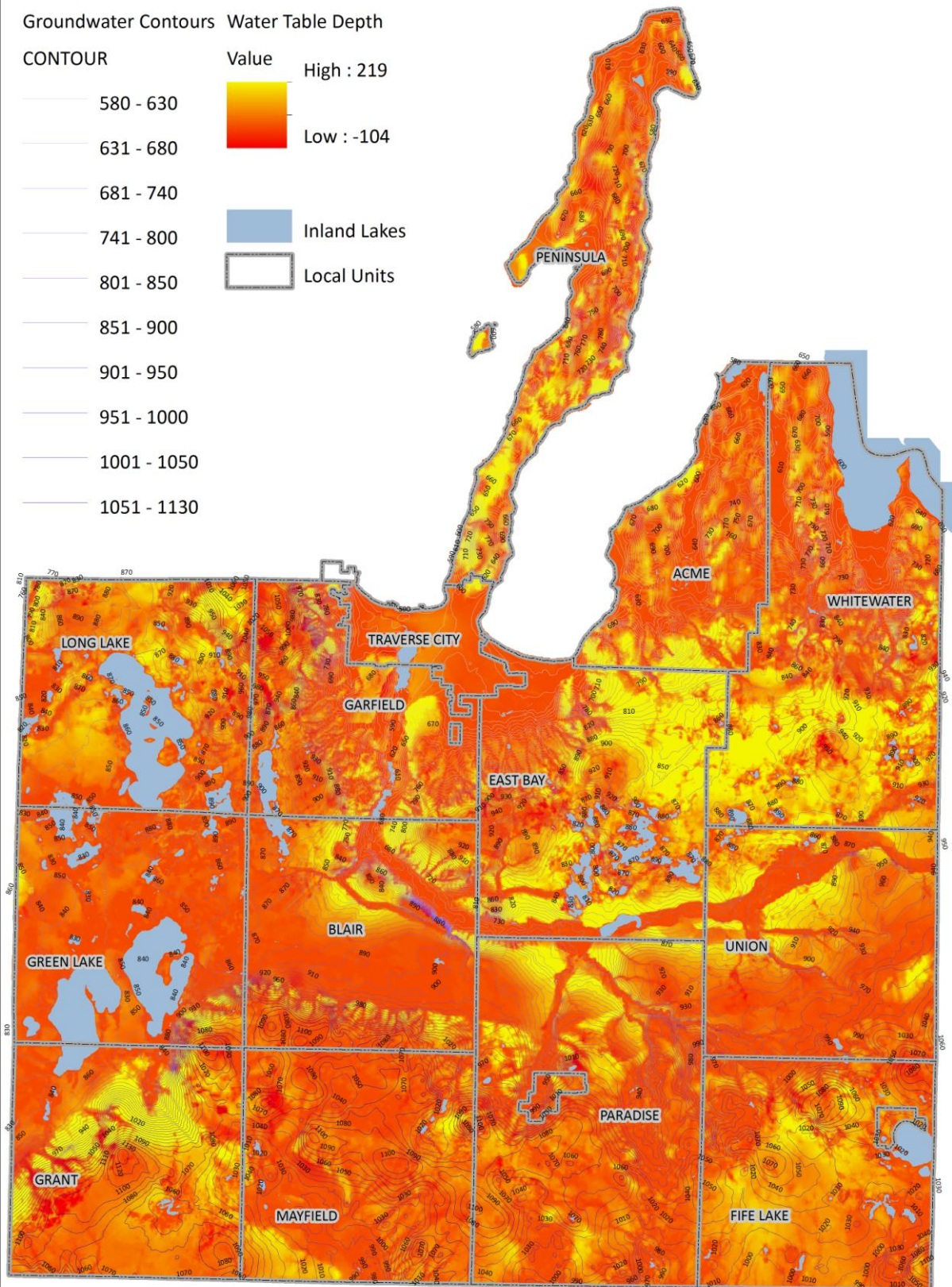
Low : -104



Inland Lakes



Local Units



Groundwater Contours and Water Table Depth

Grand Traverse County, Planning & Development

0 0.5 1 2 3 Miles



J. Vinton
8.13.12

Legend

 Local Units

MNFI Biological Probability Value

PROB

 High

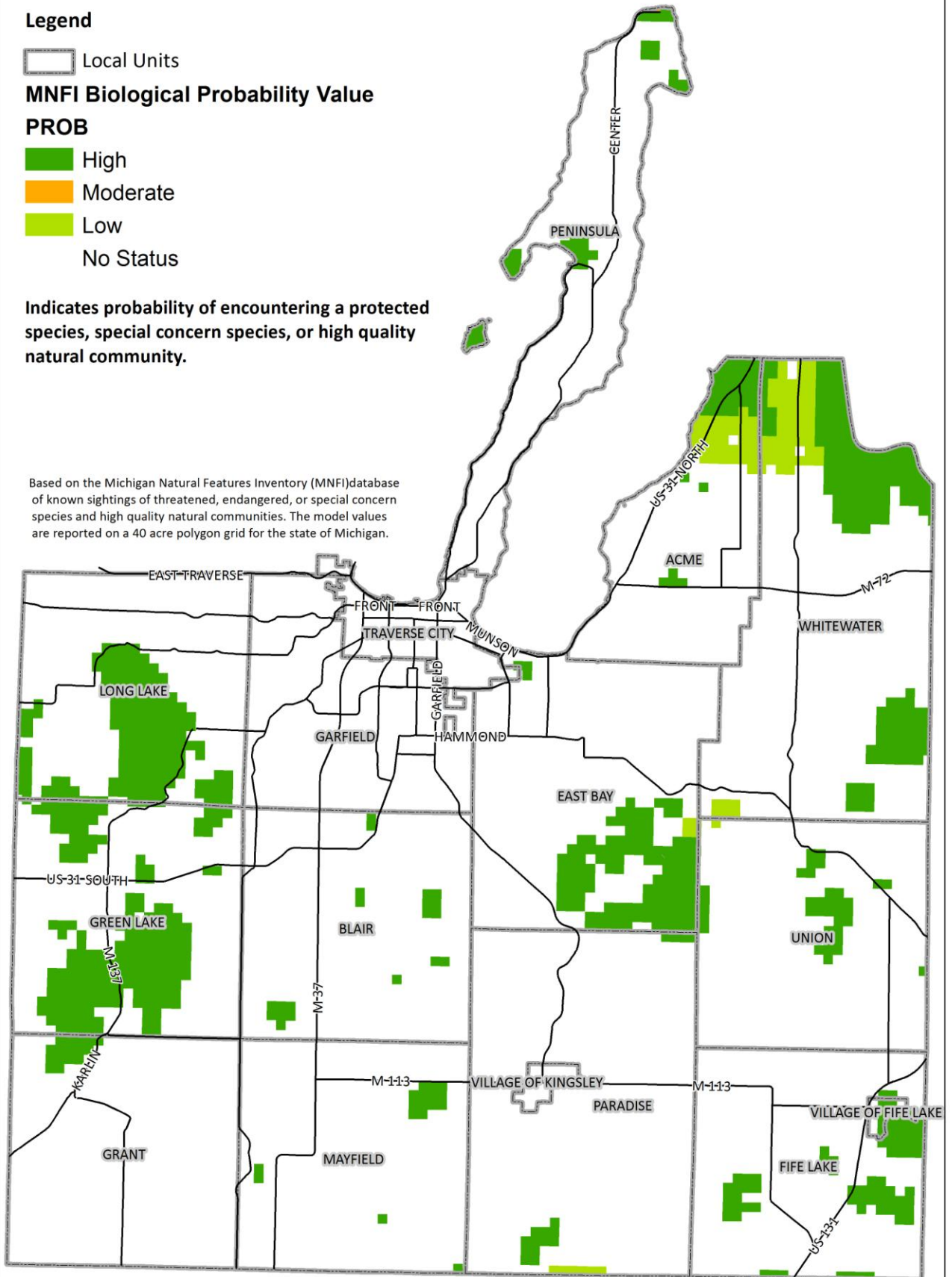
 Moderate

 Low

No Status

Indicates probability of encountering a protected species, special concern species, or high quality natural community.

Based on the Michigan Natural Features Inventory (MNFI) database of known sightings of threatened, endangered, or special concern species and high quality natural communities. The model values are reported on a 40 acre polygon grid for the state of Michigan.

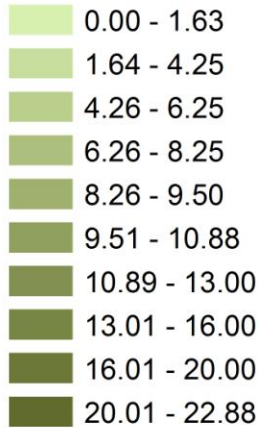


Legend

 Local Units

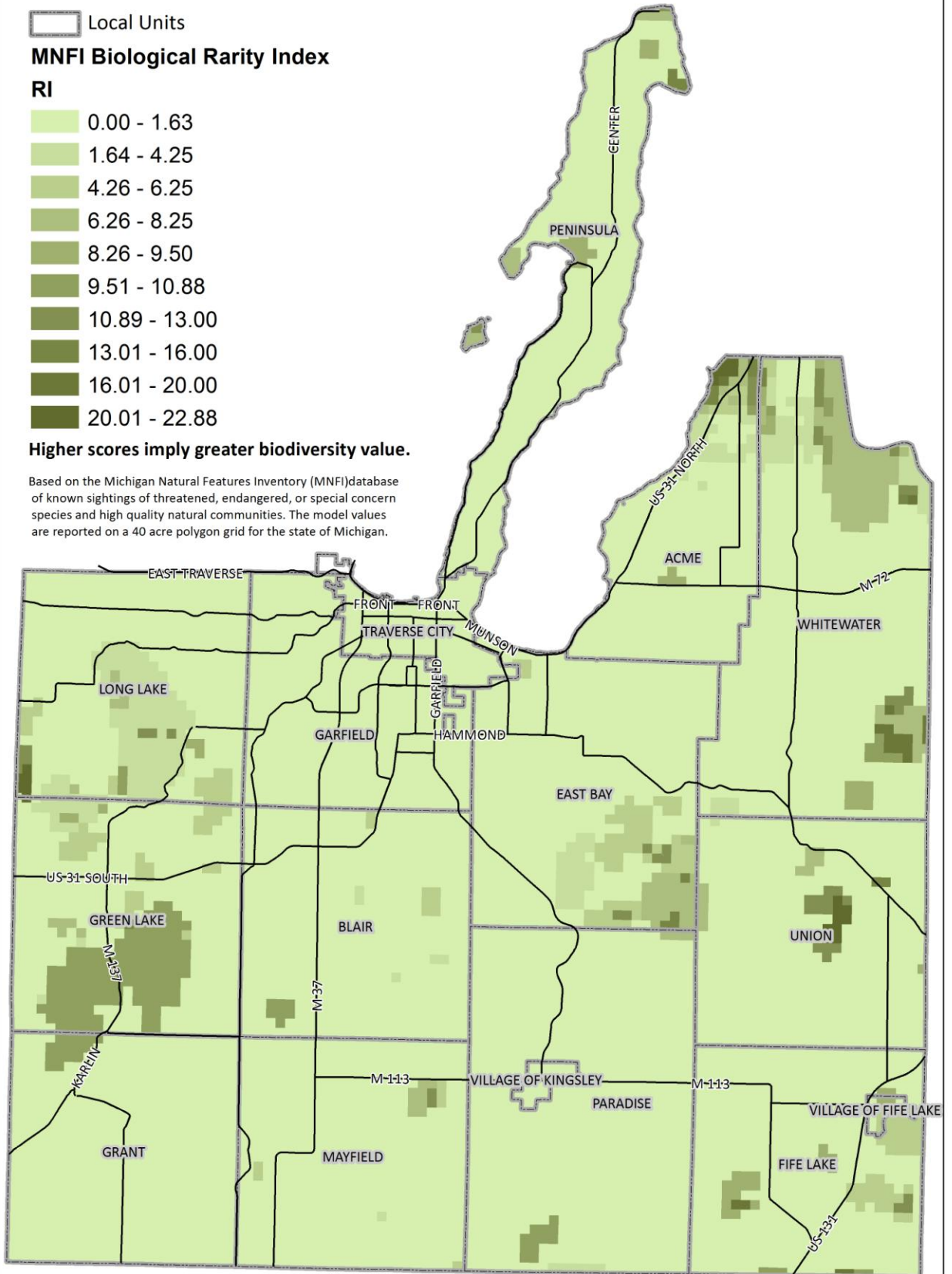
MNFI Biological Rarity Index

RI



Higher scores imply greater biodiversity value.

Based on the Michigan Natural Features Inventory (MNFI) database of known sightings of threatened, endangered, or special concern species and high quality natural communities. The model values are reported on a 40 acre polygon grid for the state of Michigan.



Michigan Natural Features Inventory Rarity Index

Grand Traverse County, Planning & Development





0 0.5 1 2 3 Miles

NORTH

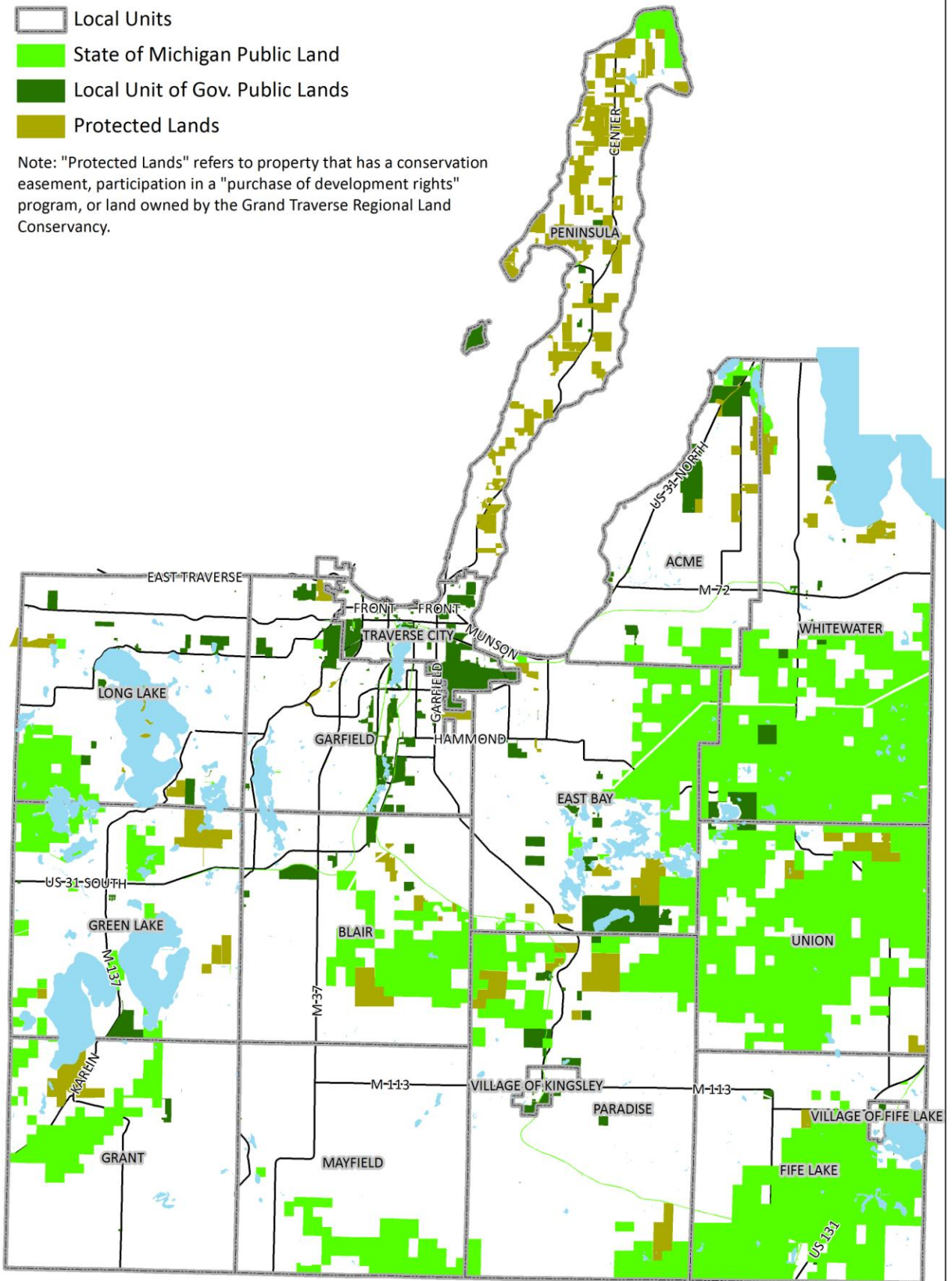


8.13.12

Legend

-  Local Units
-  State of Michigan Public Land
-  Local Unit of Gov. Public Lands
-  Protected Lands

Note: "Protected Lands" refers to property that has a conservation easement, participation in a "purchase of development rights" program, or land owned by the Grand Traverse Regional Land Conservancy.



Protected & Public Lands

Grand Traverse County, Planning & Development

0 0.5 1 2 3 Miles



8.13.12

Master Plan for Grand Traverse County

Appendix C: 2010 Grand Traverse County and Local Units Population Age/Sex Distribution

Grand Traverse County

Acme Township

Blair Township

East Bay Charter Township

Fife Lake Township

Fife Lake Village

Garfield Charter Township

Grant Township

Green Lake Township

Kingsley Village

Long Lake Township

Mayfield Township

Paradise Township

Peninsula Township

Traverse City

Union Township

Whitewater Township



Prepared by:

Grand Traverse County

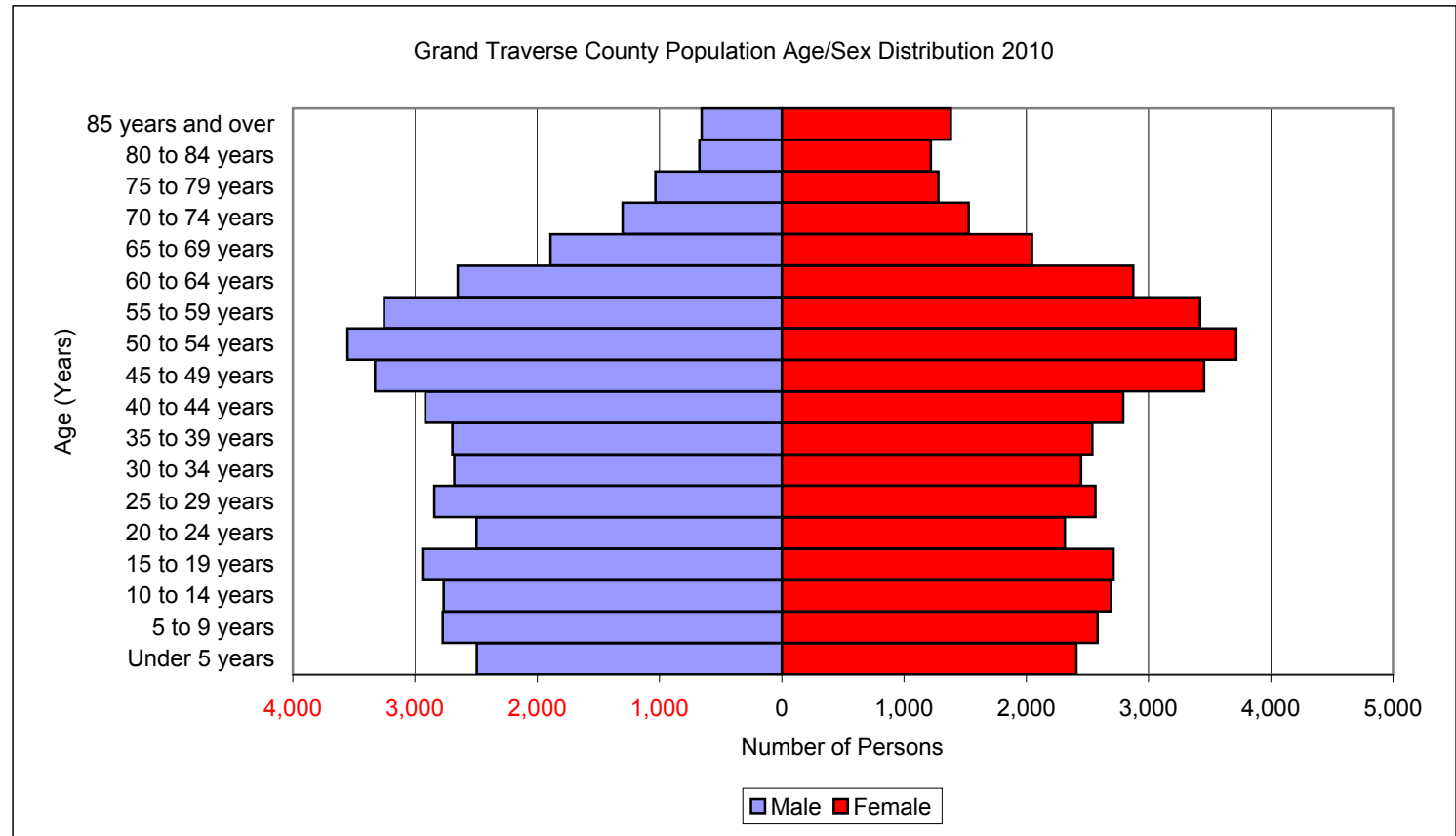
Planning & Development Department

Grand Traverse County

Michigan

Age Group	Male	Female
Under 5 years	-2,495	2,412
5 to 9 years	-2,773	2,587
10 to 14 years	-2,766	2,696
15 to 19 years	-2,939	2,715
20 to 24 years	-2,497	2,318
25 to 29 years	-2,844	2,569
30 to 34 years	-2,678	2,451
35 to 39 years	-2,695	2,543
40 to 44 years	-2,918	2,795
45 to 49 years	-3,328	3,458
50 to 54 years	-3,554	3,721
55 to 59 years	-3,255	3,423
60 to 64 years	-2,651	2,877
65 to 69 years	-1,893	2,049
70 to 74 years	-1,302	1,530
75 to 79 years	-1,033	1,283
80 to 84 years	-674	1,221
85 years and over	-657	1,386

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does indicate a decline or loss of male population.



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Grand Traverse County
Planning & Development Department

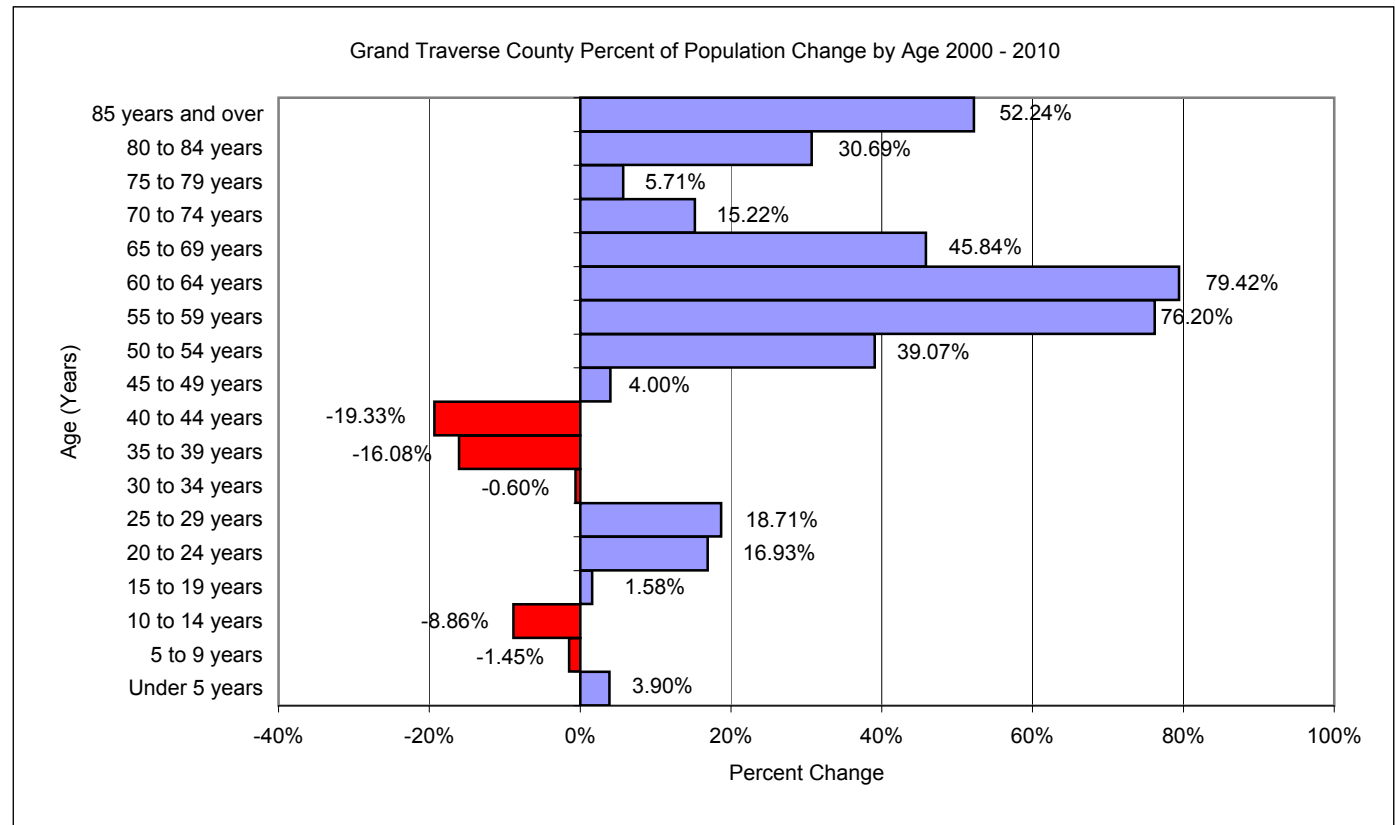
Grand Traverse County
Michigan

	2000	2010	Percent Change
Total population	77,654	86,986	12.02%
Under 5 years	4,723	4,907	3.90%
5 to 9 years	5,439	5,360	-1.45%
10 to 14 years	5,993	5,462	-8.86%
15 to 19 years	5,566	5,654	1.58%
20 to 24 years	4,118	4,815	16.93%
25 to 29 years	4,560	5,413	18.71%
30 to 34 years	5,160	5,129	-0.60%
35 to 39 years	6,242	5,238	-16.08%
40 to 44 years	7,082	5,713	-19.33%
45 to 49 years	6,525	6,786	4.00%
50 to 54 years	5,231	7,275	39.07%
55 to 59 years	3,790	6,678	76.20%
60 to 64 years	3,081	5,528	79.42%
65 to 69 years	2,703	3,942	45.84%
70 to 74 years	2,458	2,832	15.22%
75 to 79 years	2,191	2,316	5.71%
80 to 84 years	1,450	1,895	30.69%
85 years and over	1,342	2,043	52.24%
Median age (years)	37.7	41.3	

Source: U.S. Census



Prepared by:
Grand Traverse County
Planning & Development Department

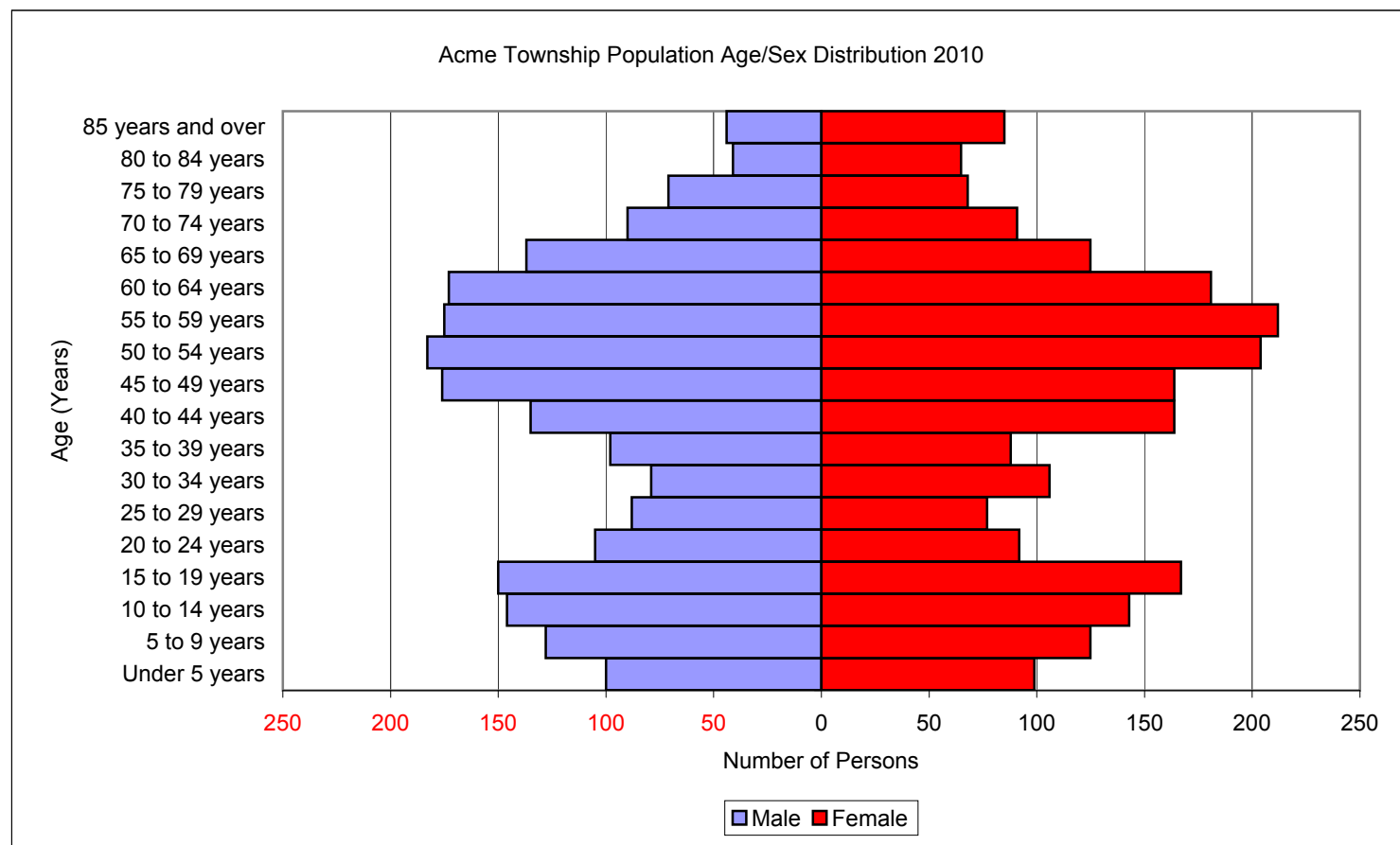


Acme Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-100	99
5 to 9 years	-128	125
10 to 14 years	-146	143
15 to 19 years	-150	167
20 to 24 years	-105	92
25 to 29 years	-88	77
30 to 34 years	-79	106
35 to 39 years	-98	88
40 to 44 years	-135	164
45 to 49 years	-176	164
50 to 54 years	-183	204
55 to 59 years	-175	212
60 to 64 years	-173	181
65 to 69 years	-137	125
70 to 74 years	-90	91
75 to 79 years	-71	68
80 to 84 years	-41	65
85 years and over	-44	85

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



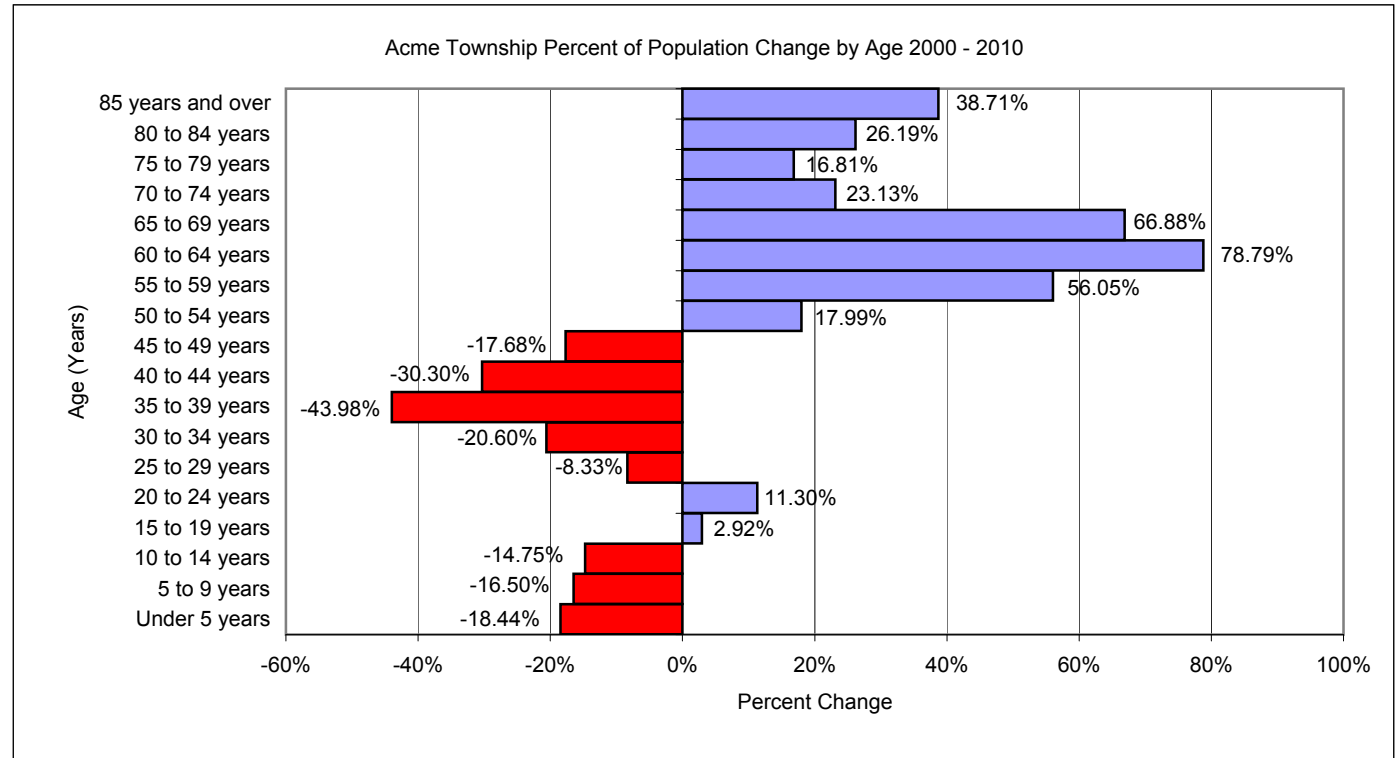
Prepared by:
Grand Traverse County
Planning & Development Department

Acme Township

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	244	199	-18.44%
5 to 9 years	303	253	-16.50%
10 to 14 years	339	289	-14.75%
15 to 19 years	308	317	2.92%
20 to 24 years	177	197	11.30%
25 to 29 years	180	165	-8.33%
30 to 34 years	233	185	-20.60%
35 to 39 years	332	186	-43.98%
40 to 44 years	429	299	-30.30%
45 to 49 years	413	340	-17.68%
50 to 54 years	328	387	17.99%
55 to 59 years	248	387	56.05%
60 to 64 years	198	354	78.79%
65 to 69 years	157	262	66.88%
70 to 74 years	147	181	23.13%
75 to 79 years	119	139	16.81%
80 to 84 years	84	106	26.19%
85 years and over	93	129	38.71%

Source: U.S. Census



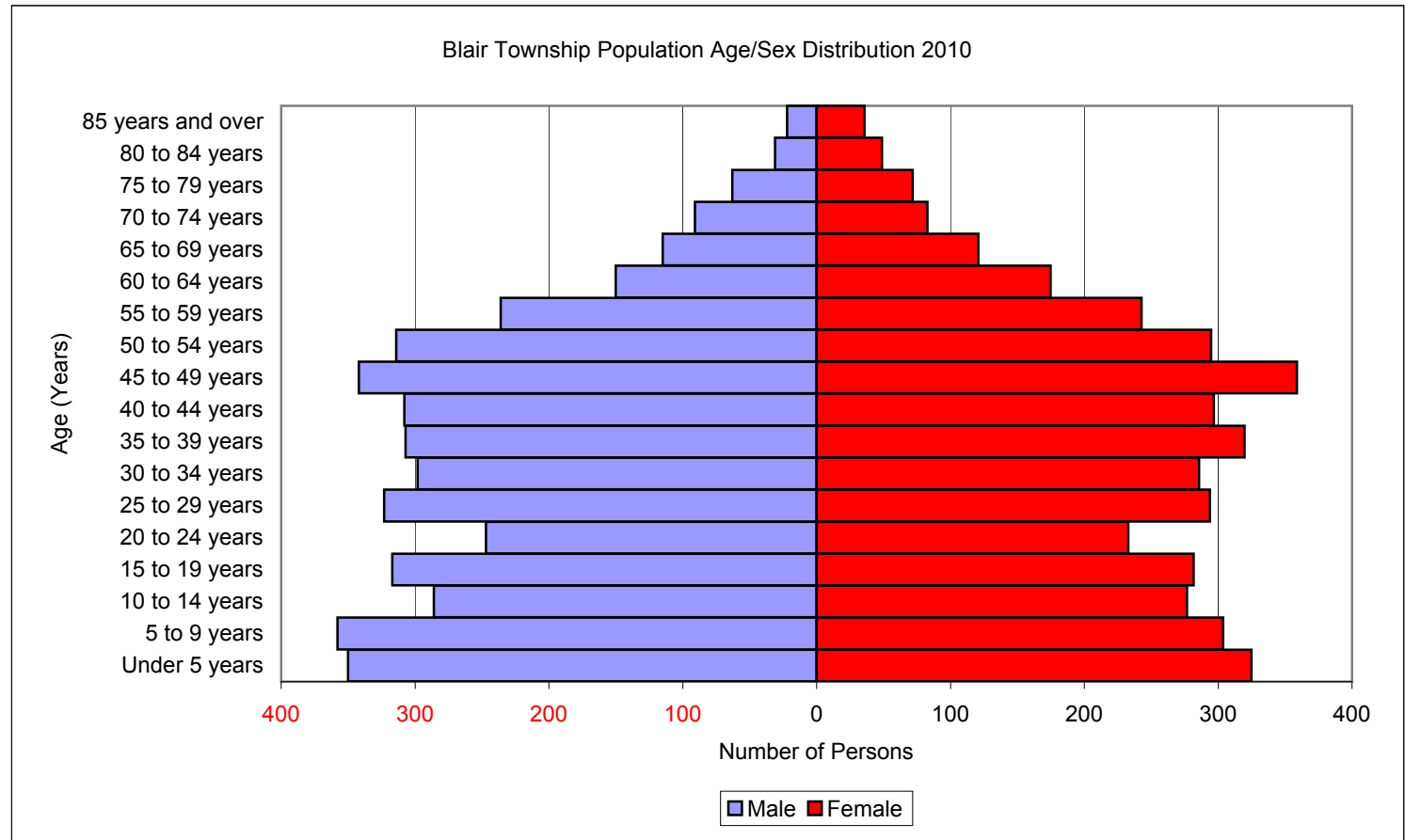
Prepared by:
Grand Traverse County
Planning & Development Department

Blair Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-350	325
5 to 9 years	-358	304
10 to 14 years	-286	277
15 to 19 years	-317	282
20 to 24 years	-247	233
25 to 29 years	-323	294
30 to 34 years	-298	286
35 to 39 years	-307	320
40 to 44 years	-308	297
45 to 49 years	-342	359
50 to 54 years	-314	295
55 to 59 years	-236	243
60 to 64 years	-150	175
65 to 69 years	-115	121
70 to 74 years	-91	83
75 to 79 years	-63	72
80 to 84 years	-31	49
85 years and over	-22	36

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



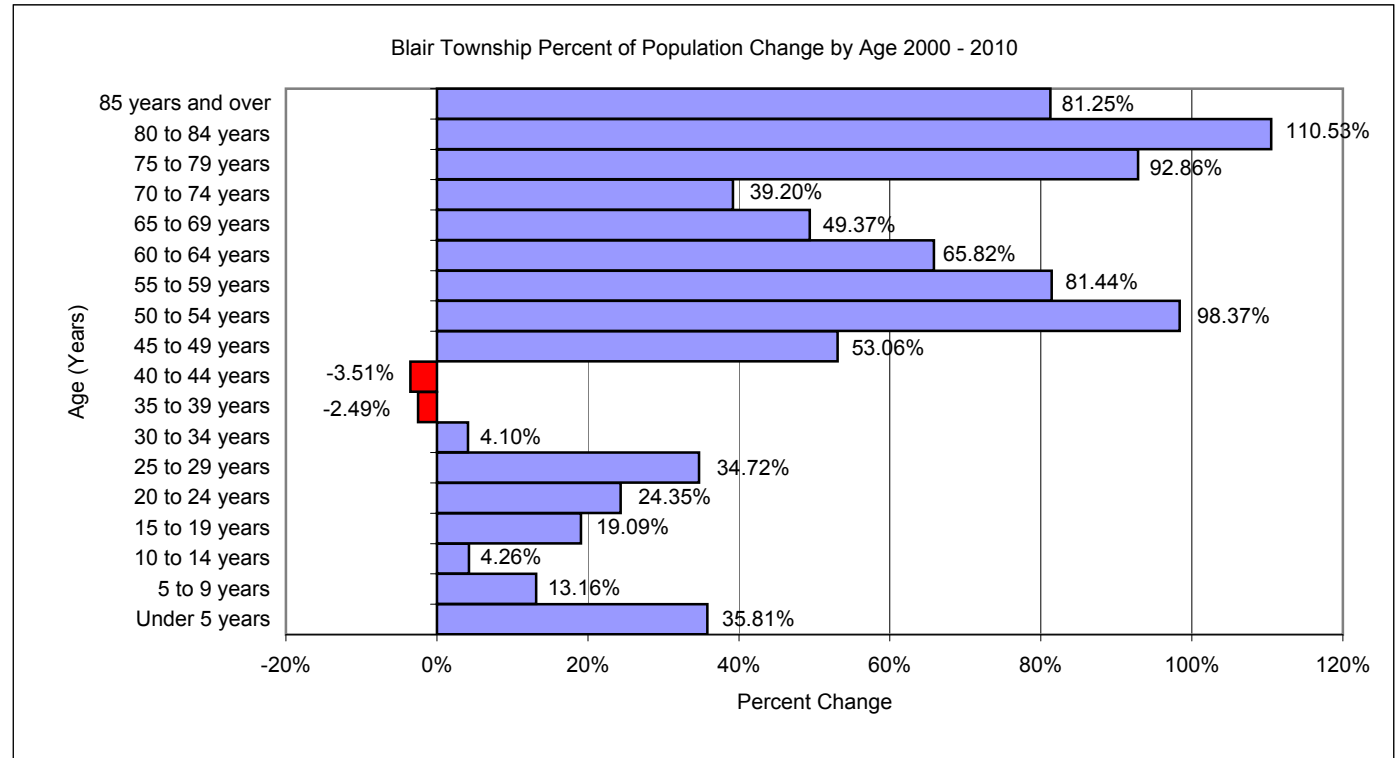
Prepared by:
Grand Traverse County
Planning & Development Department

Blair Township

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	497	675	35.81%
5 to 9 years	585	662	13.16%
10 to 14 years	540	563	4.26%
15 to 19 years	503	599	19.09%
20 to 24 years	386	480	24.35%
25 to 29 years	458	617	34.72%
30 to 34 years	561	584	4.10%
35 to 39 years	643	627	-2.49%
40 to 44 years	627	605	-3.51%
45 to 49 years	458	701	53.06%
50 to 54 years	307	609	98.37%
55 to 59 years	264	479	81.44%
60 to 64 years	196	325	65.82%
65 to 69 years	158	236	49.37%
70 to 74 years	125	174	39.20%
75 to 79 years	70	135	92.86%
80 to 84 years	38	80	110.53%
85 years and over	32	58	81.25%

Source: U.S. Census

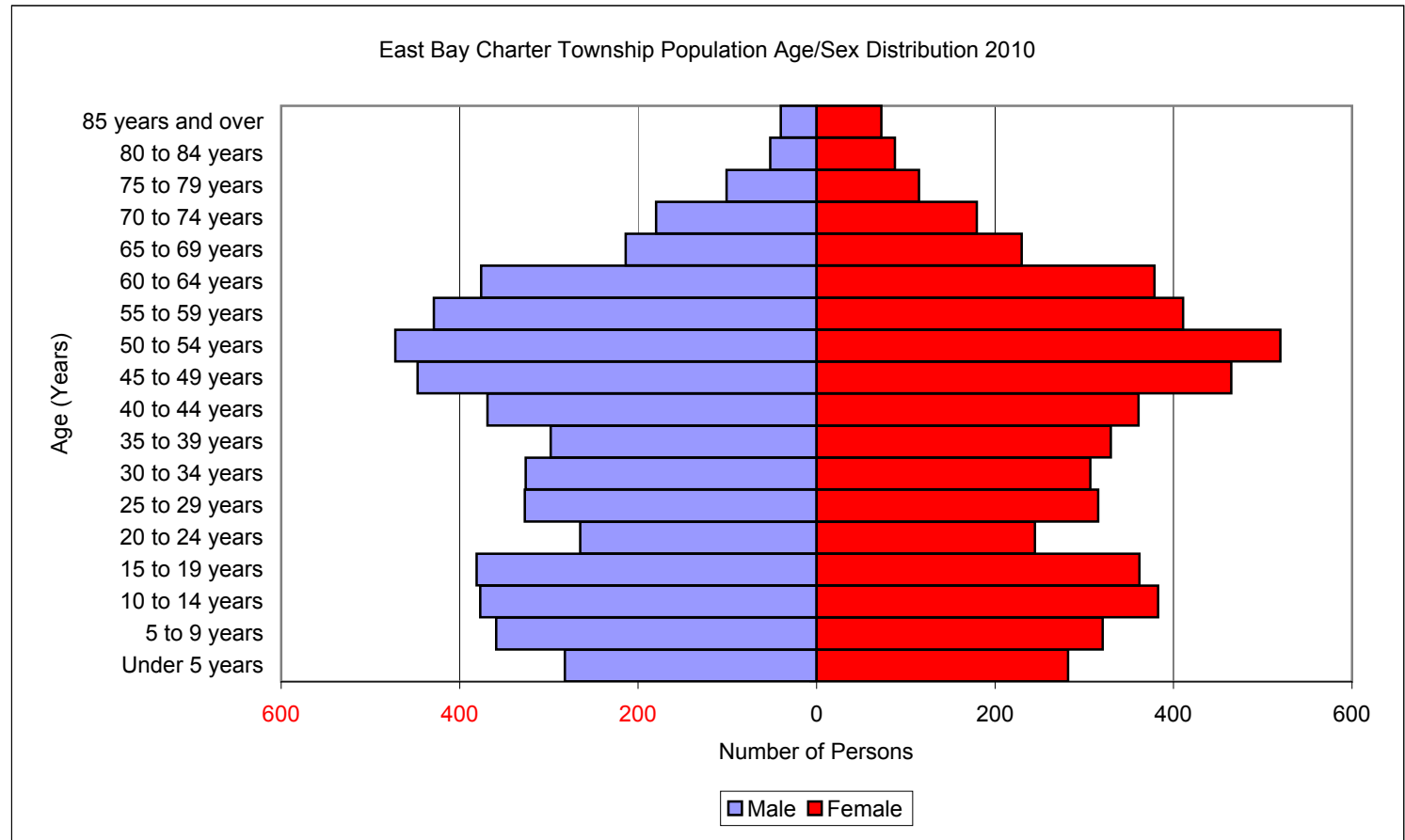


Prepared by:
Grand Traverse County
Planning & Development Department

East Bay Charter Township
Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-282	282
5 to 9 years	-359	321
10 to 14 years	-377	383
15 to 19 years	-381	362
20 to 24 years	-265	245
25 to 29 years	-327	316
30 to 34 years	-326	307
35 to 39 years	-298	330
40 to 44 years	-369	361
45 to 49 years	-447	465
50 to 54 years	-472	520
55 to 59 years	-429	411
60 to 64 years	-376	379
65 to 69 years	-214	230
70 to 74 years	-180	180
75 to 79 years	-101	115
80 to 84 years	-52	88
85 years and over	-40	73

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.

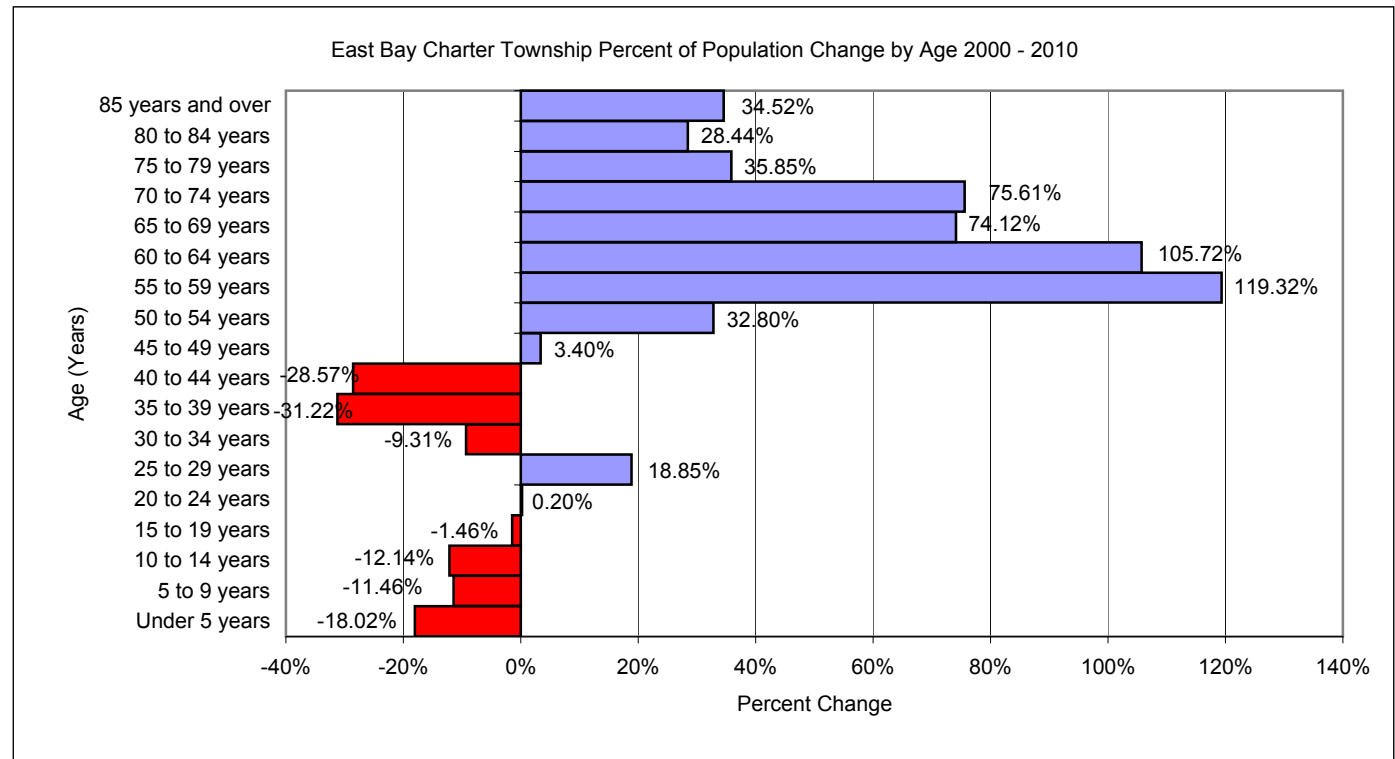


Prepared by:
Grand Traverse County
Planning & Development Department

East Bay Charter Township
Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	688	564	-18.02%
5 to 9 years	768	680	-11.46%
10 to 14 years	865	760	-12.14%
15 to 19 years	754	743	-1.46%
20 to 24 years	509	510	0.20%
25 to 29 years	541	643	18.85%
30 to 34 years	698	633	-9.31%
35 to 39 years	913	628	-31.22%
40 to 44 years	1,022	730	-28.57%
45 to 49 years	882	912	3.40%
50 to 54 years	747	992	32.80%
55 to 59 years	383	840	119.32%
60 to 64 years	367	755	105.72%
65 to 69 years	255	444	74.12%
70 to 74 years	205	360	75.61%
75 to 79 years	159	216	35.85%
80 to 84 years	109	140	28.44%
85 years and over	84	113	34.52%

Source: U.S. Census



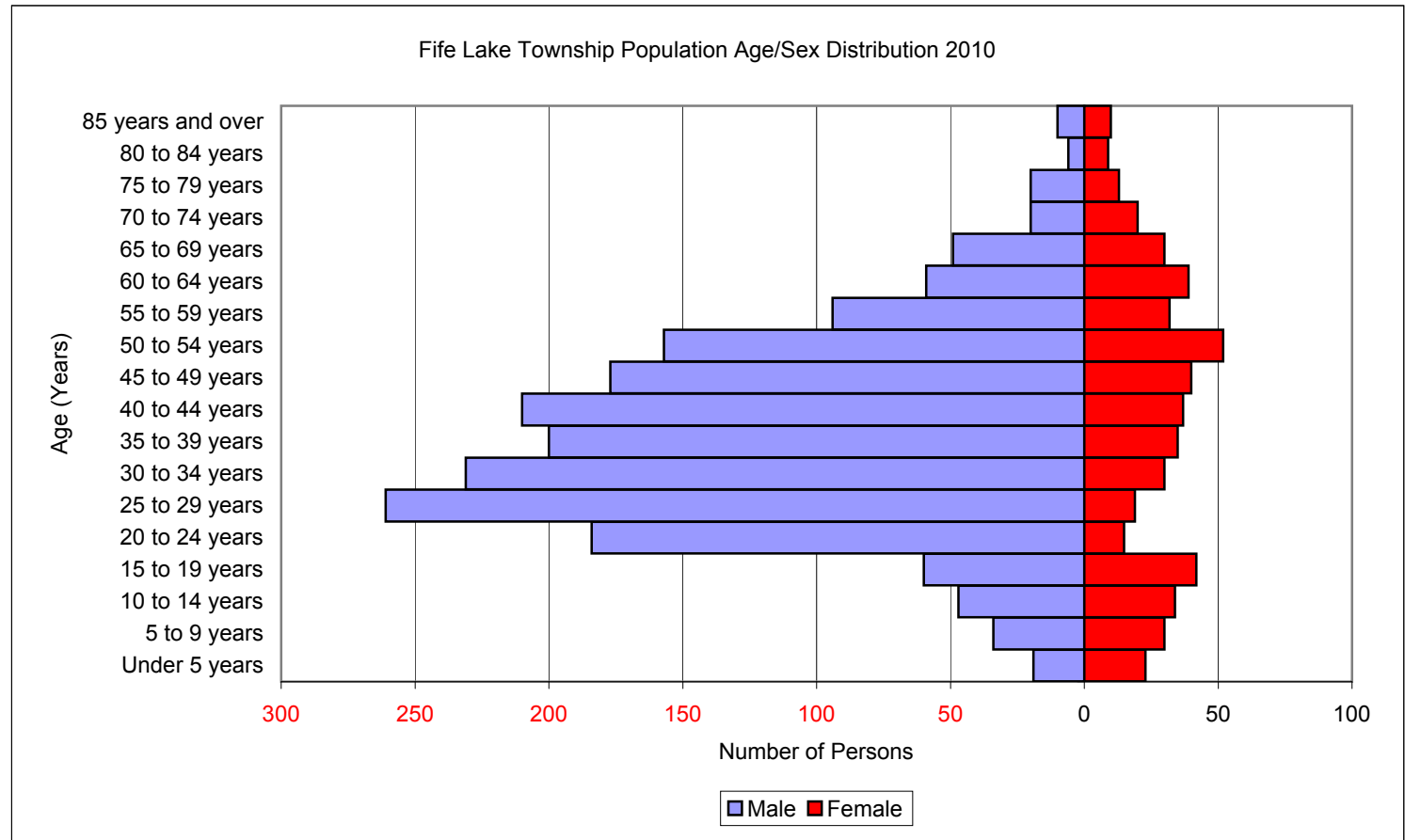
Prepared by:
Grand Traverse County
Planning & Development Department

Fife Lake Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-19	23
5 to 9 years	-34	30
10 to 14 years	-47	34
15 to 19 years	-60	42
20 to 24 years	-184	15
25 to 29 years	-261	19
30 to 34 years	-231	30
35 to 39 years	-200	35
40 to 44 years	-210	37
45 to 49 years	-177	40
50 to 54 years	-157	52
55 to 59 years	-94	32
60 to 64 years	-59	39
65 to 69 years	-49	30
70 to 74 years	-20	20
75 to 79 years	-20	13
80 to 84 years	-6	9
85 years and over	-10	10

Source: U.S. Census



Note: The Population Age/Sex Distribution includes inmates of the Pugsley Correctional Facility. Starting in 2003, the U.S. Census Bureau started including inmates of the Pugsley Correctional Facility.

Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



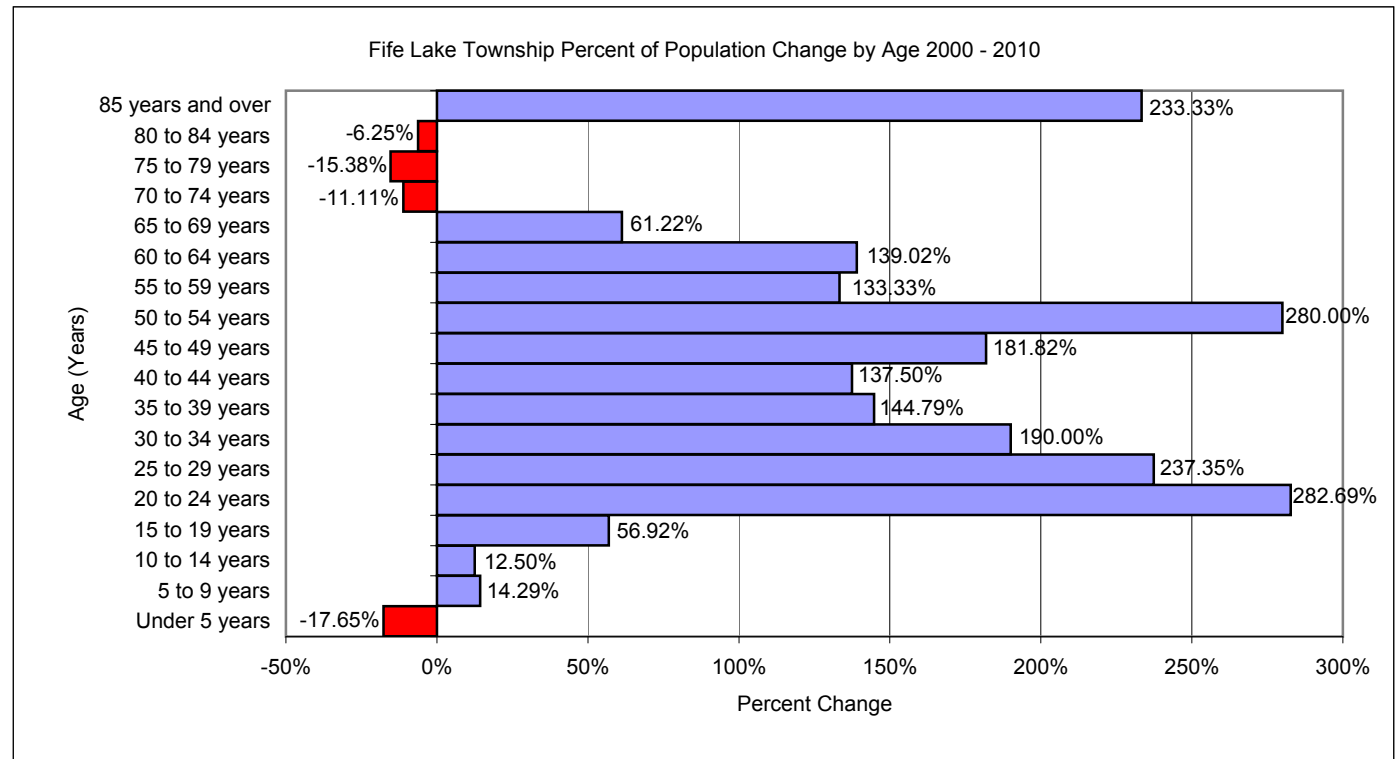
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Grand Traverse County
Planning & Development Department

Fife Lake Township

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	51	42	-17.65%
5 to 9 years	56	64	14.29%
10 to 14 years	72	81	12.50%
15 to 19 years	65	102	56.92%
20 to 24 years	52	199	282.69%
25 to 29 years	83	280	237.35%
30 to 34 years	90	261	190.00%
35 to 39 years	96	235	144.79%
40 to 44 years	104	247	137.50%
45 to 49 years	77	217	181.82%
50 to 54 years	55	209	280.00%
55 to 59 years	54	126	133.33%
60 to 64 years	41	98	139.02%
65 to 69 years	49	79	61.22%
70 to 74 years	45	40	-11.11%
75 to 79 years	39	33	-15.38%
80 to 84 years	16	15	-6.25%
85 years and over	6	20	233.33%

Source: U.S. Census



Note: The Population Age/Sex Distribution includes inmates of the Pugsley Correctional Facility. Starting in 2003, the U.S. Census Bureau started including inmates of the Pugsley Correctional Facility.



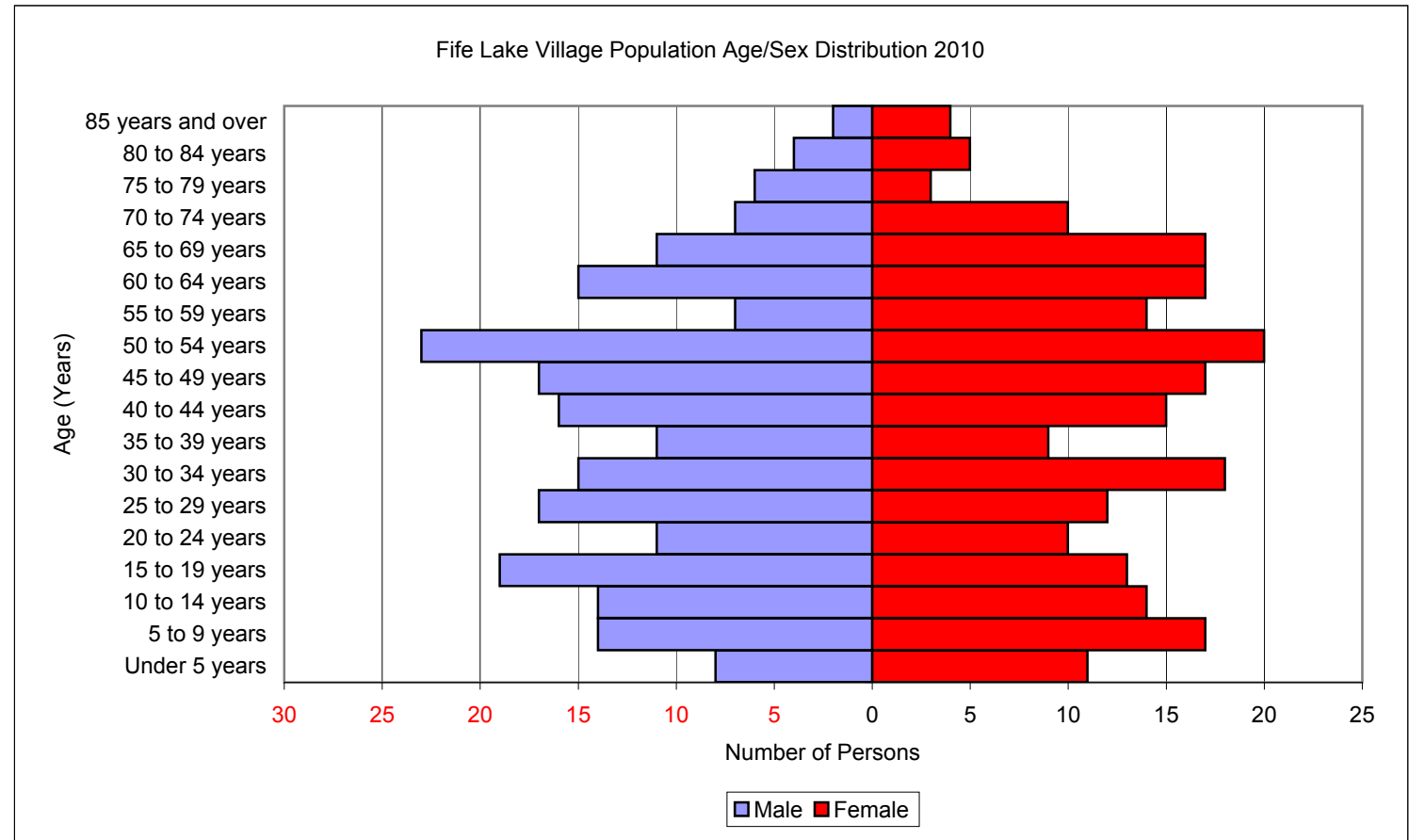
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Fife Lake Village

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-8	11
5 to 9 years	-14	17
10 to 14 years	-14	14
15 to 19 years	-19	13
20 to 24 years	-11	10
25 to 29 years	-17	12
30 to 34 years	-15	18
35 to 39 years	-11	9
40 to 44 years	-16	15
45 to 49 years	-17	17
50 to 54 years	-23	20
55 to 59 years	-7	14
60 to 64 years	-15	17
65 to 69 years	-11	17
70 to 74 years	-7	10
75 to 79 years	-6	3
80 to 84 years	-4	5
85 years and over	-2	4

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



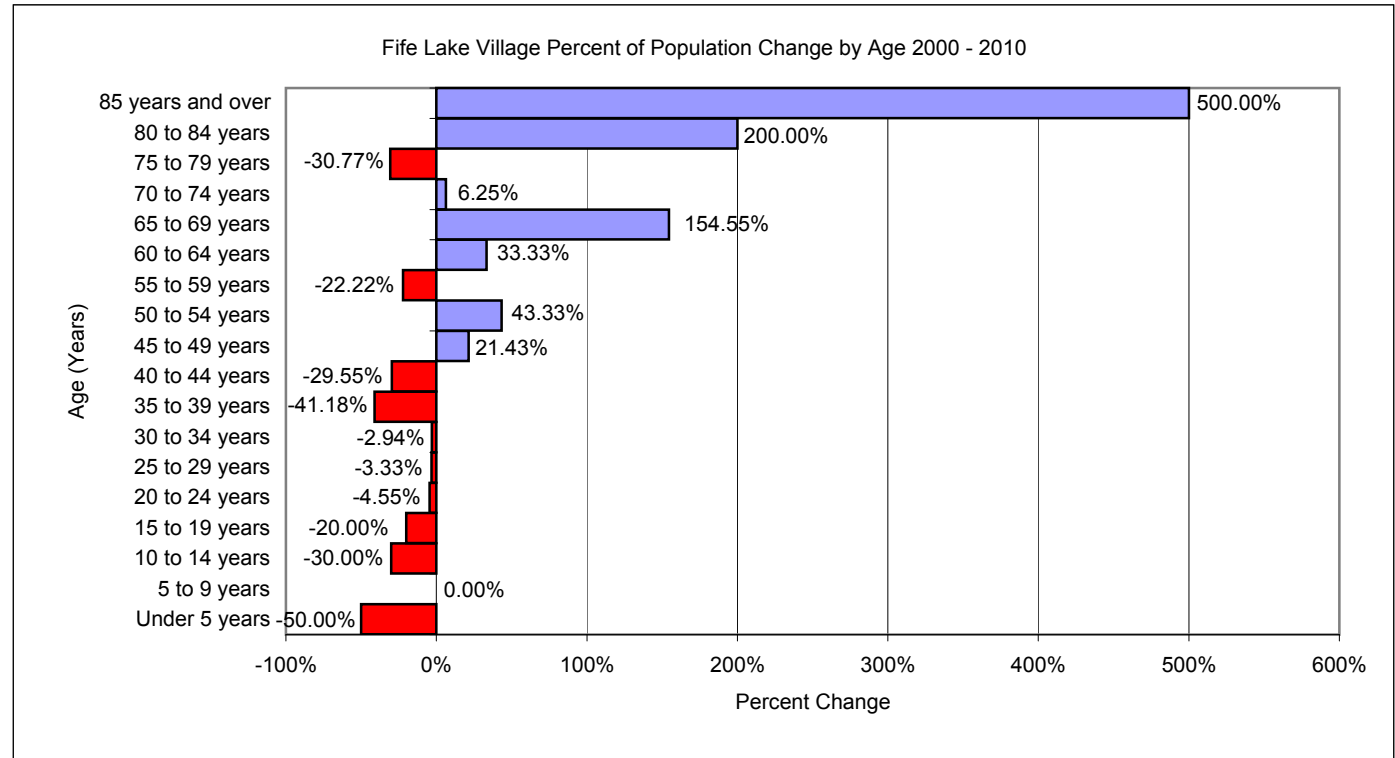
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Fife Lake Village

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	38	19	-50.00%
5 to 9 years	31	31	0.00%
10 to 14 years	40	28	-30.00%
15 to 19 years	40	32	-20.00%
20 to 24 years	22	21	-4.55%
25 to 29 years	30	29	-3.33%
30 to 34 years	34	33	-2.94%
35 to 39 years	34	20	-41.18%
40 to 44 years	44	31	-29.55%
45 to 49 years	28	34	21.43%
50 to 54 years	30	43	43.33%
55 to 59 years	27	21	-22.22%
60 to 64 years	24	32	33.33%
65 to 69 years	11	28	154.55%
70 to 74 years	16	17	6.25%
75 to 79 years	13	9	-30.77%
80 to 84 years	3	9	200.00%
85 years and over	1	6	500.00%

Source: U.S. Census



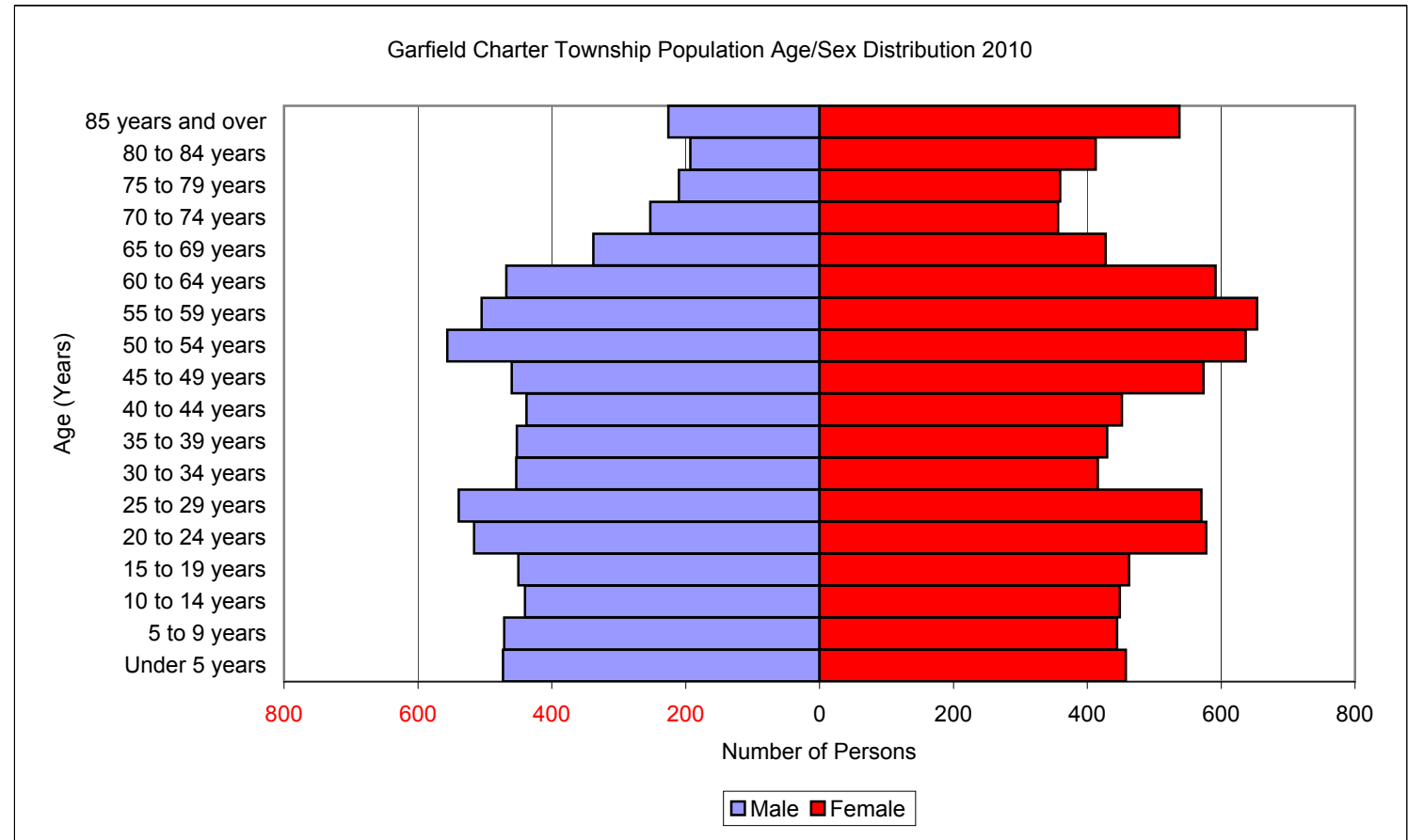
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Garfield Charter Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-473	458
5 to 9 years	-471	445
10 to 14 years	-440	449
15 to 19 years	-450	463
20 to 24 years	-516	578
25 to 29 years	-539	571
30 to 34 years	-453	416
35 to 39 years	-452	430
40 to 44 years	-438	452
45 to 49 years	-460	574
50 to 54 years	-556	637
55 to 59 years	-505	654
60 to 64 years	-468	592
65 to 69 years	-338	428
70 to 74 years	-253	357
75 to 79 years	-210	360
80 to 84 years	-193	413
85 years and over	-226	538

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.

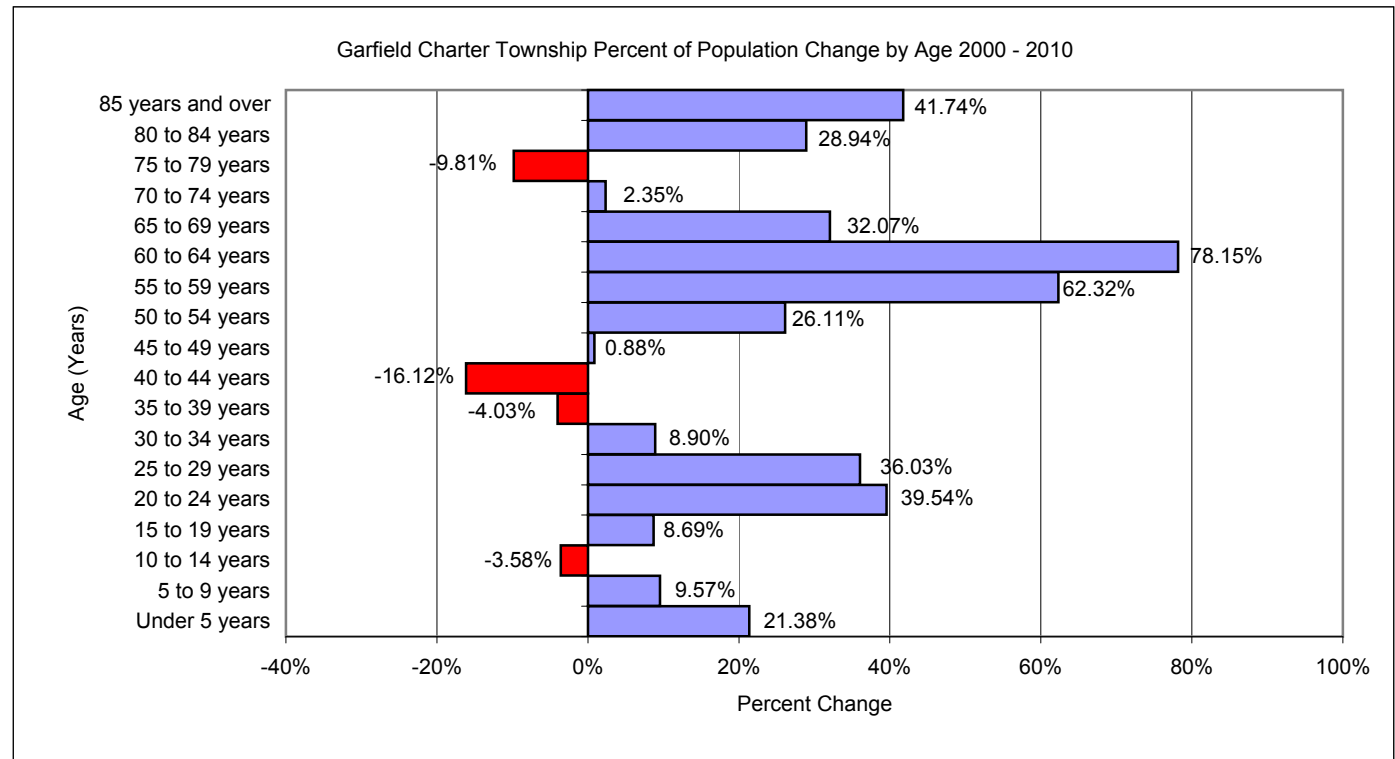


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Garfield Charter Township
Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	767	931	21.38%
5 to 9 years	836	916	9.57%
10 to 14 years	922	889	-3.58%
15 to 19 years	840	913	8.69%
20 to 24 years	784	1,094	39.54%
25 to 29 years	816	1,110	36.03%
30 to 34 years	798	869	8.90%
35 to 39 years	919	882	-4.03%
40 to 44 years	1,061	890	-16.12%
45 to 49 years	1,025	1,034	0.88%
50 to 54 years	946	1,193	26.11%
55 to 59 years	714	1,159	62.32%
60 to 64 years	595	1,060	78.15%
65 to 69 years	580	766	32.07%
70 to 74 years	596	610	2.35%
75 to 79 years	632	570	-9.81%
80 to 84 years	470	606	28.94%
85 years and over	539	764	41.74%

Source: U.S. Census



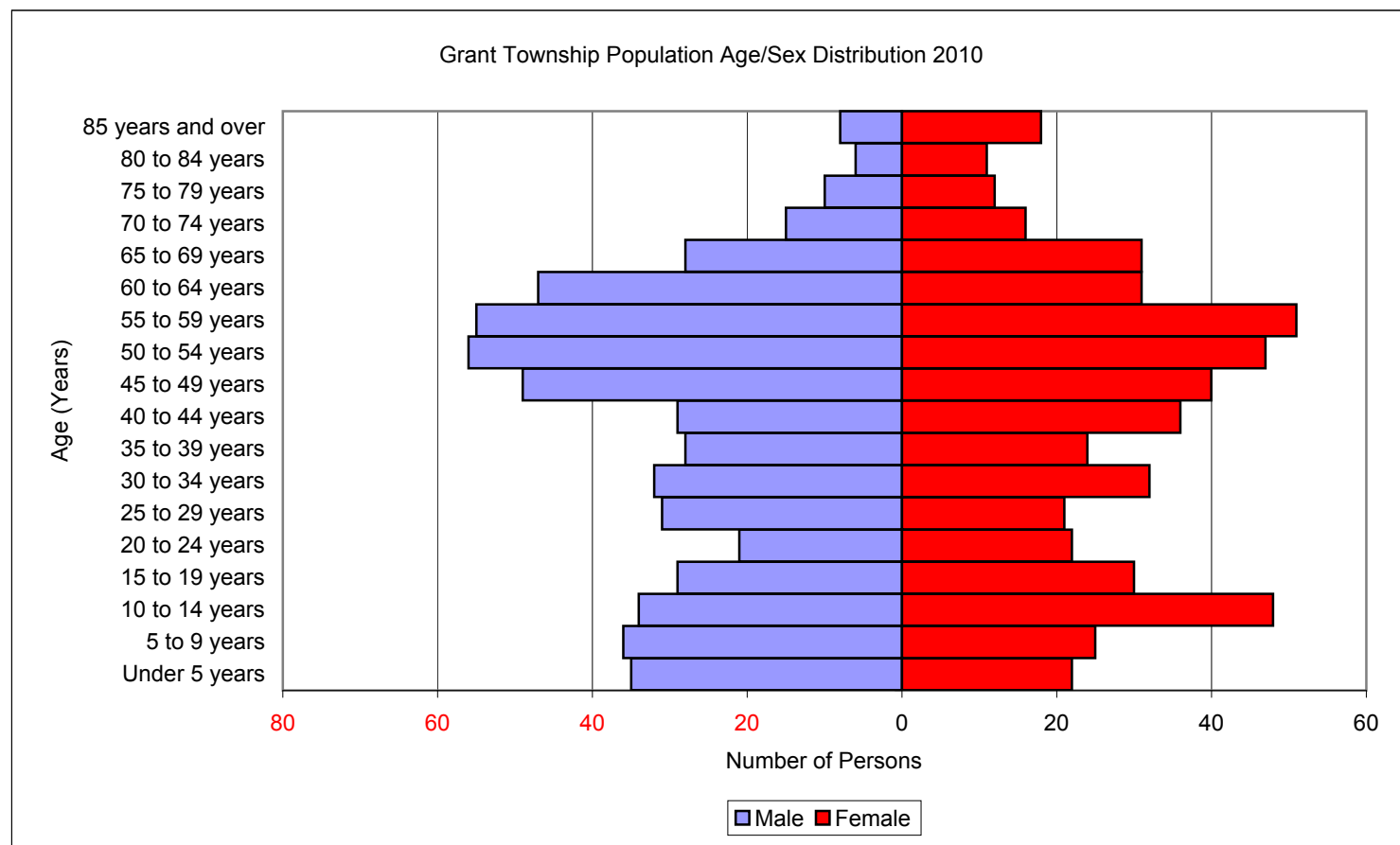
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Grant Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-35	22
5 to 9 years	-36	25
10 to 14 years	-34	48
15 to 19 years	-29	30
20 to 24 years	-21	22
25 to 29 years	-31	21
30 to 34 years	-32	32
35 to 39 years	-28	24
40 to 44 years	-29	36
45 to 49 years	-49	40
50 to 54 years	-56	47
55 to 59 years	-55	51
60 to 64 years	-47	31
65 to 69 years	-28	31
70 to 74 years	-15	16
75 to 79 years	-10	12
80 to 84 years	-6	11
85 years and over	-8	18

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



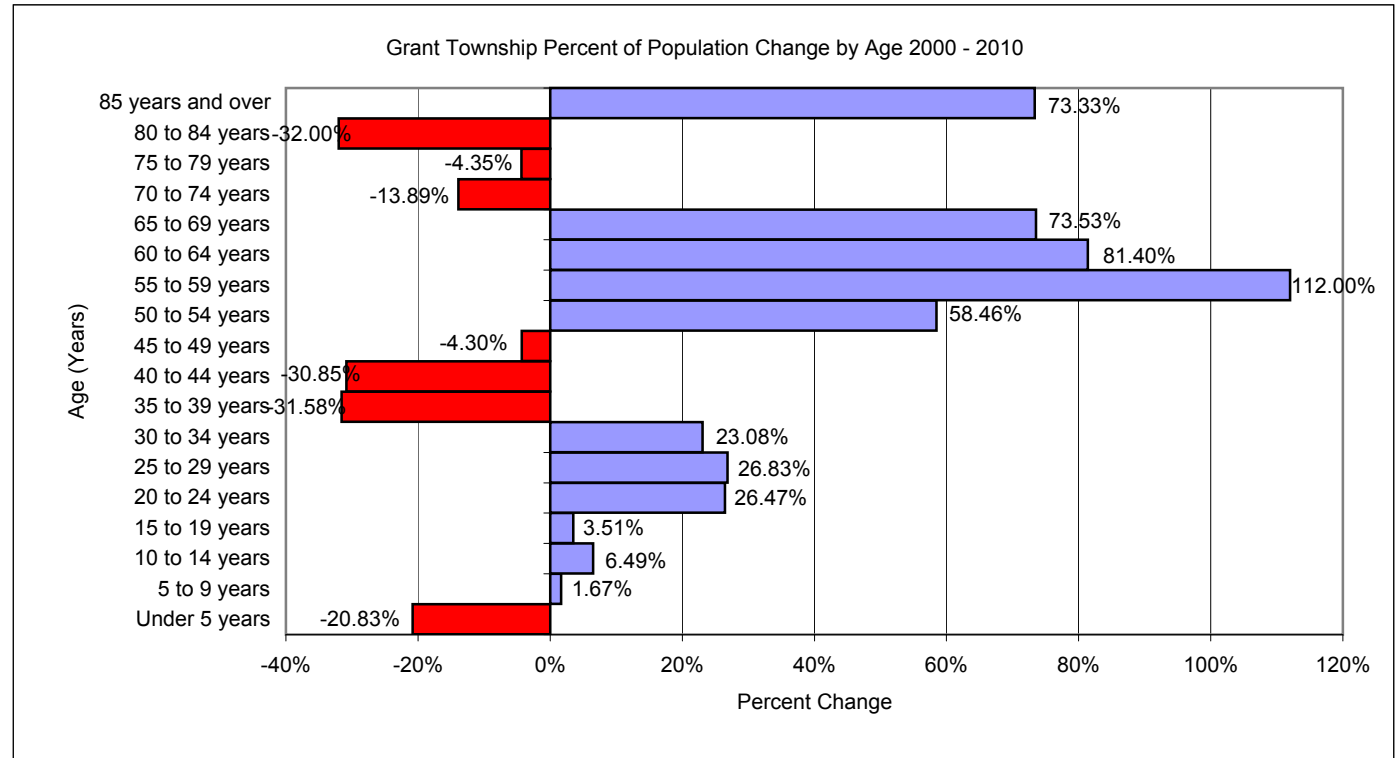
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Planning & Development Department

Grant Township

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	72	57	-20.83%
5 to 9 years	60	61	1.67%
10 to 14 years	77	82	6.49%
15 to 19 years	57	59	3.51%
20 to 24 years	34	43	26.47%
25 to 29 years	41	52	26.83%
30 to 34 years	52	64	23.08%
35 to 39 years	76	52	-31.58%
40 to 44 years	94	65	-30.85%
45 to 49 years	93	89	-4.30%
50 to 54 years	65	103	58.46%
55 to 59 years	50	106	112.00%
60 to 64 years	43	78	81.40%
65 to 69 years	34	59	73.53%
70 to 74 years	36	31	-13.89%
75 to 79 years	23	22	-4.35%
80 to 84 years	25	17	-32.00%
85 years and over	15	26	73.33%

Source: U.S. Census



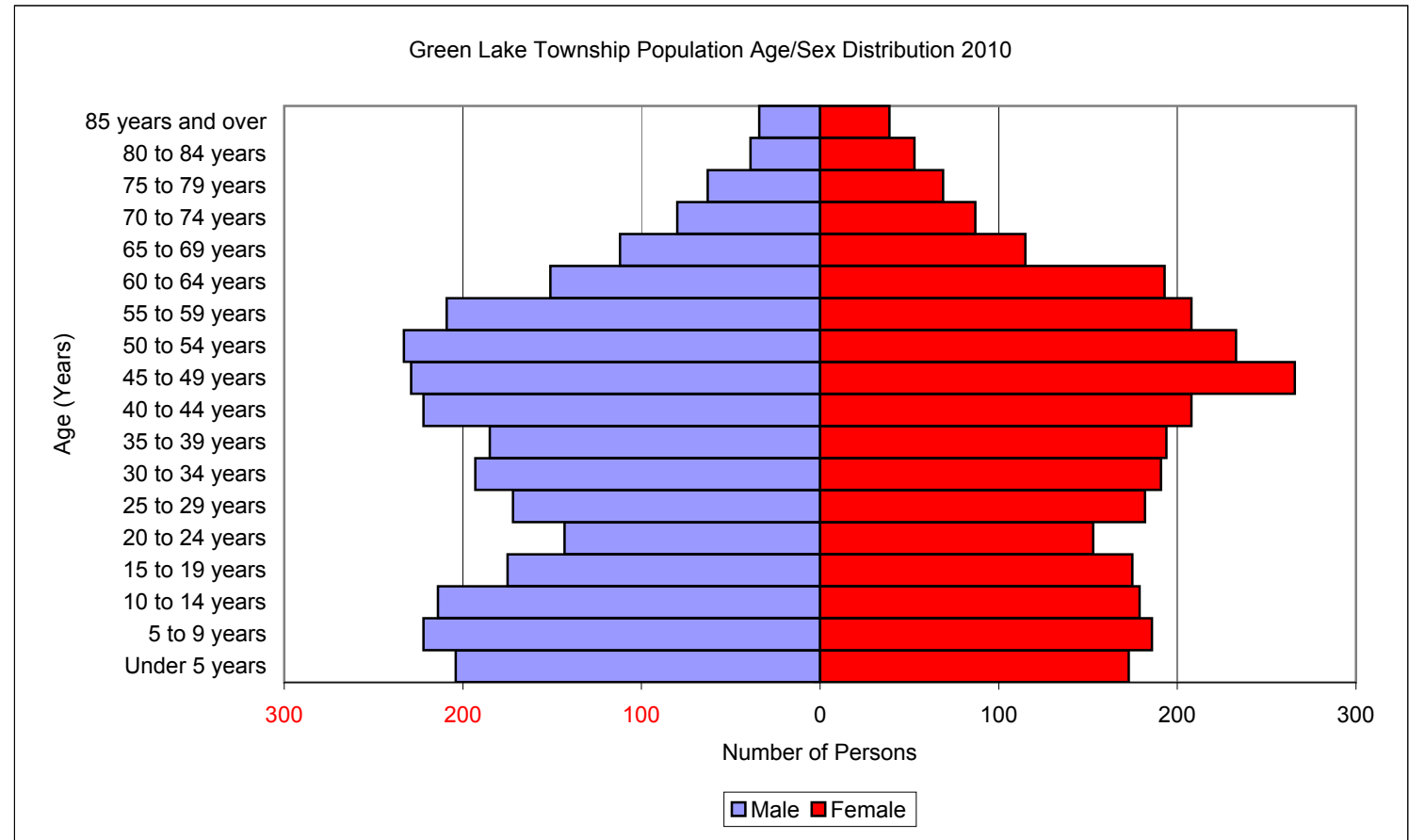
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Green Lake Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-204	173
5 to 9 years	-222	186
10 to 14 years	-214	179
15 to 19 years	-175	175
20 to 24 years	-143	153
25 to 29 years	-172	182
30 to 34 years	-193	191
35 to 39 years	-185	194
40 to 44 years	-222	208
45 to 49 years	-229	266
50 to 54 years	-233	233
55 to 59 years	-209	208
60 to 64 years	-151	193
65 to 69 years	-112	115
70 to 74 years	-80	87
75 to 79 years	-63	69
80 to 84 years	-39	53
85 years and over	-34	39

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.

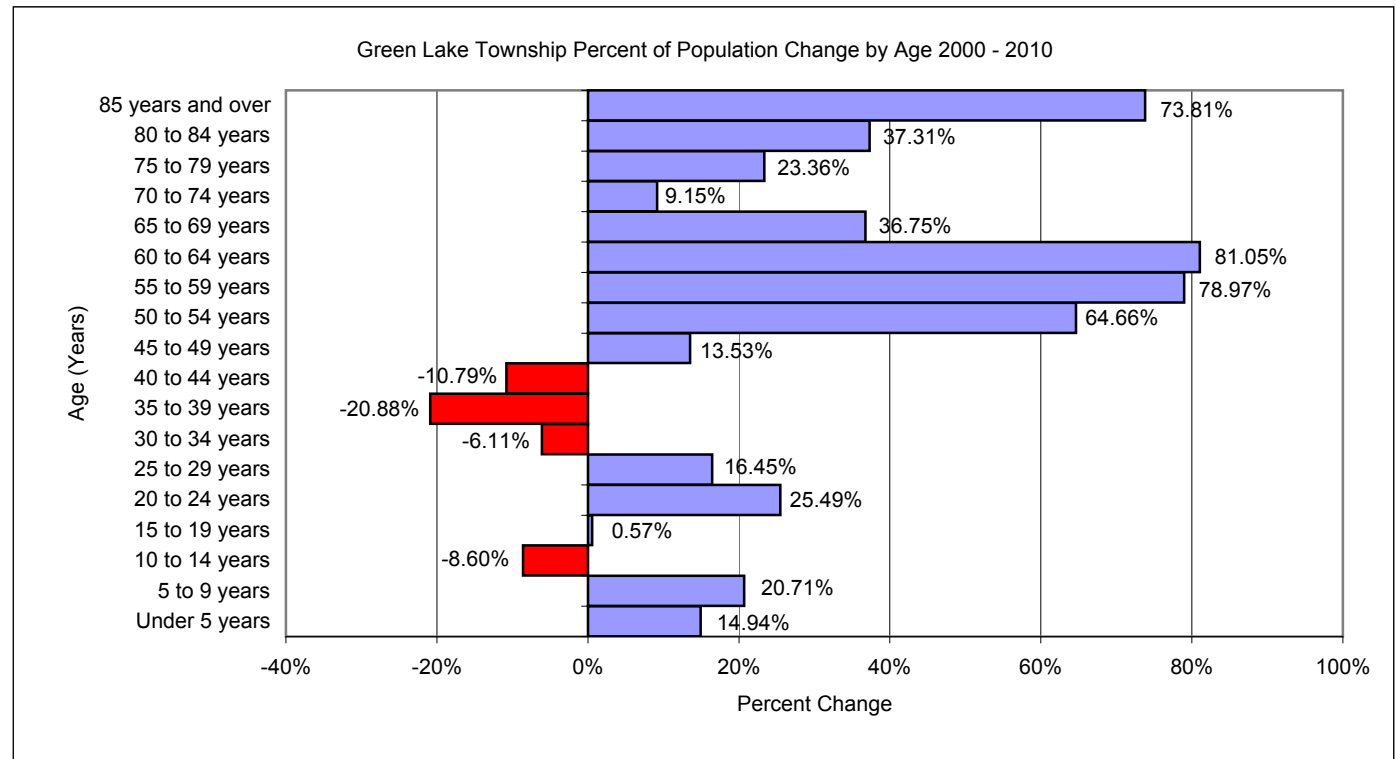


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Green Lake Township
Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	328	377	14.94%
5 to 9 years	338	408	20.71%
10 to 14 years	430	393	-8.60%
15 to 19 years	348	350	0.57%
20 to 24 years	204	256	25.49%
25 to 29 years	304	354	16.45%
30 to 34 years	409	384	-6.11%
35 to 39 years	479	379	-20.88%
40 to 44 years	482	430	-10.79%
45 to 49 years	436	495	13.53%
50 to 54 years	283	466	64.66%
55 to 59 years	233	417	78.97%
60 to 64 years	190	344	81.05%
65 to 69 years	166	227	36.75%
70 to 74 years	153	167	9.15%
75 to 79 years	107	132	23.36%
80 to 84 years	67	92	37.31%
85 years and over	42	73	73.81%

Source: U.S. Census



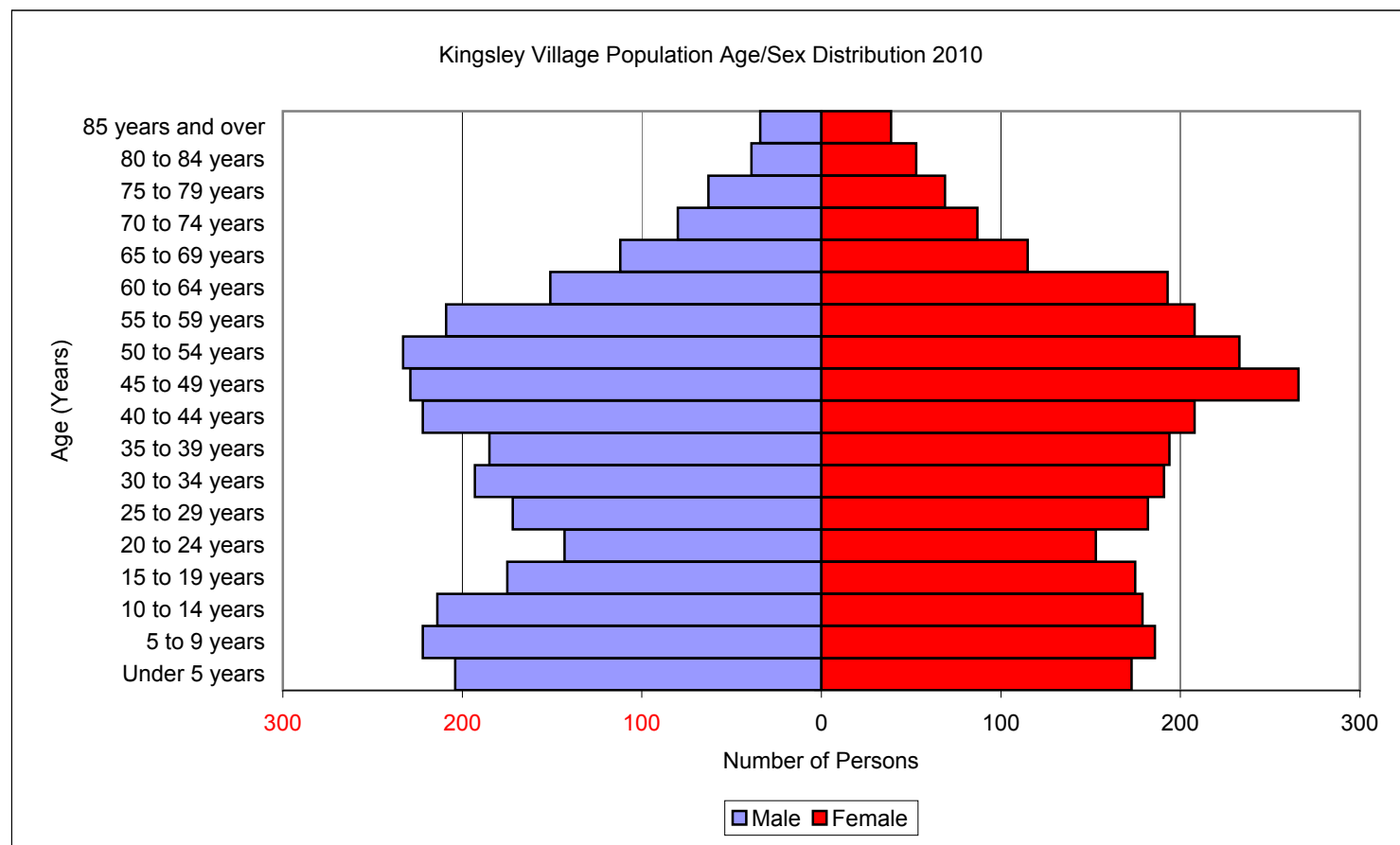
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Kingsley Village

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-62	60
5 to 9 years	-70	61
10 to 14 years	-65	79
15 to 19 years	-67	56
20 to 24 years	-35	46
25 to 29 years	-34	42
30 to 34 years	-59	57
35 to 39 years	-62	56
40 to 44 years	-49	51
45 to 49 years	-43	58
50 to 54 years	-54	50
55 to 59 years	-25	39
60 to 64 years	-25	34
65 to 69 years	-17	24
70 to 74 years	-19	21
75 to 79 years	-14	16
80 to 84 years	-7	9
85 years and over	-5	9

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



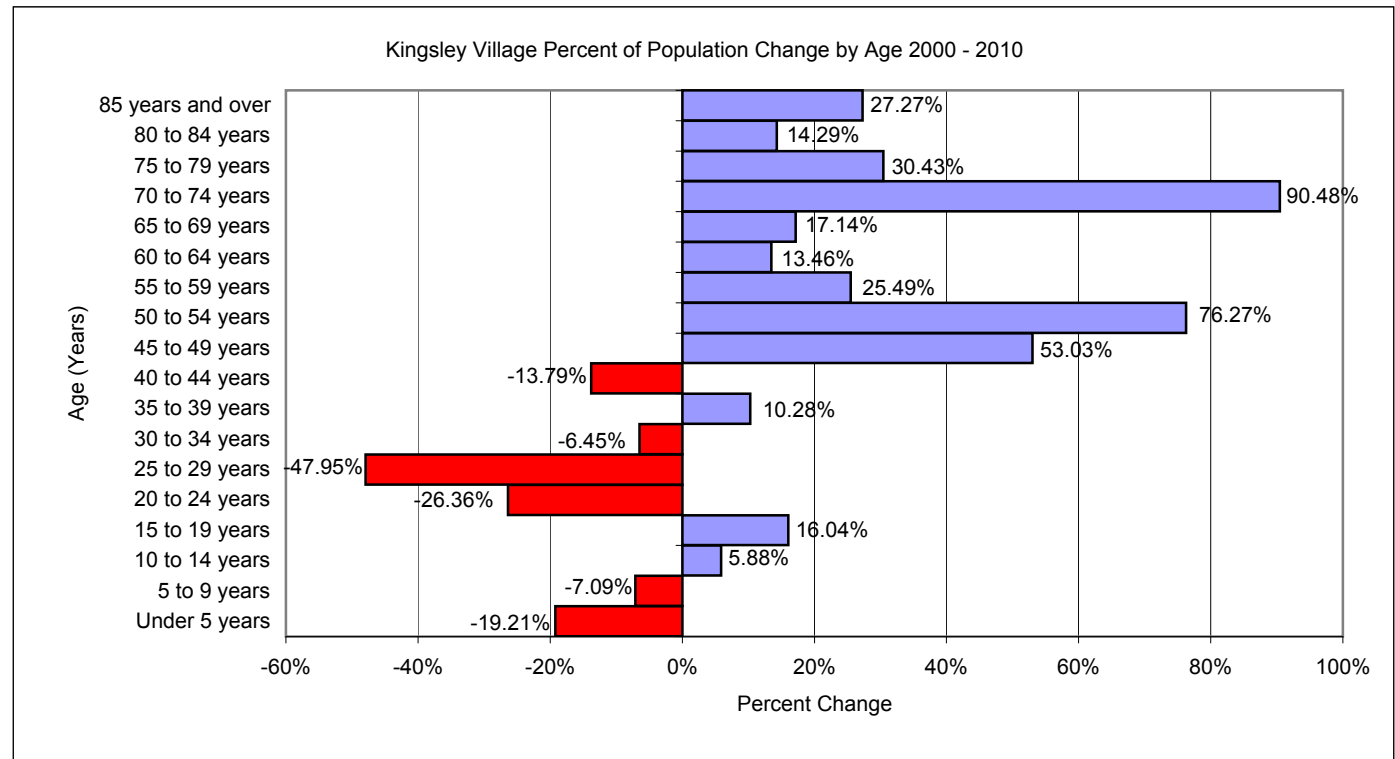
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Kingsley Village

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	151	122	-19.21%
5 to 9 years	141	131	-7.09%
10 to 14 years	136	144	5.88%
15 to 19 years	106	123	16.04%
20 to 24 years	110	81	-26.36%
25 to 29 years	146	76	-47.95%
30 to 34 years	124	116	-6.45%
35 to 39 years	107	118	10.28%
40 to 44 years	116	100	-13.79%
45 to 49 years	66	101	53.03%
50 to 54 years	59	104	76.27%
55 to 59 years	51	64	25.49%
60 to 64 years	52	59	13.46%
65 to 69 years	35	41	17.14%
70 to 74 years	21	40	90.48%
75 to 79 years	23	30	30.43%
80 to 84 years	14	16	14.29%
85 years and over	11	14	27.27%

Source: U.S. Census



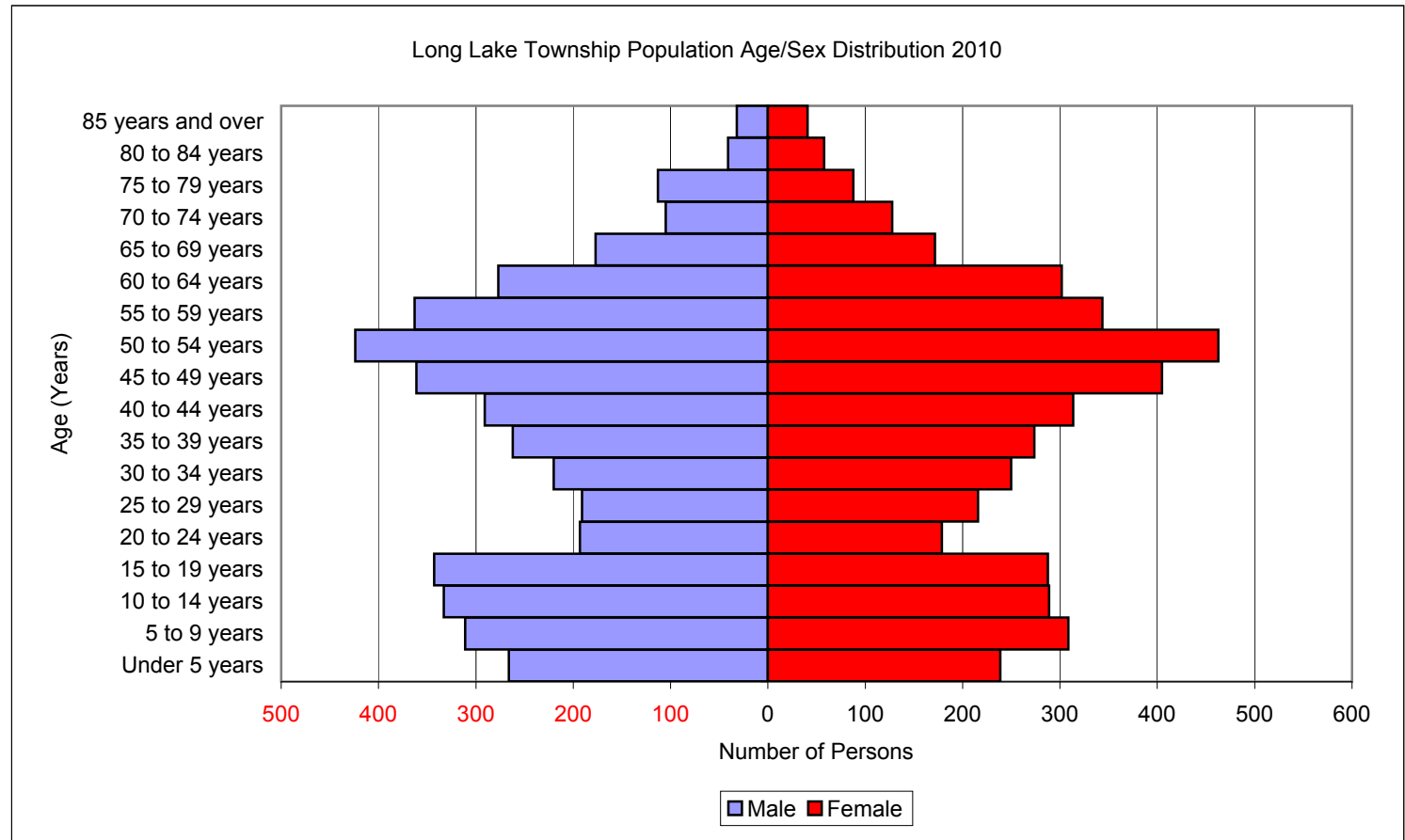
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Planning & Development Department

Long Lake Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-266	239
5 to 9 years	-311	309
10 to 14 years	-333	289
15 to 19 years	-343	288
20 to 24 years	-193	179
25 to 29 years	-191	216
30 to 34 years	-220	250
35 to 39 years	-262	274
40 to 44 years	-291	314
45 to 49 years	-361	405
50 to 54 years	-424	463
55 to 59 years	-363	344
60 to 64 years	-277	302
65 to 69 years	-177	172
70 to 74 years	-105	128
75 to 79 years	-113	88
80 to 84 years	-41	58
85 years and over	-32	41

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.

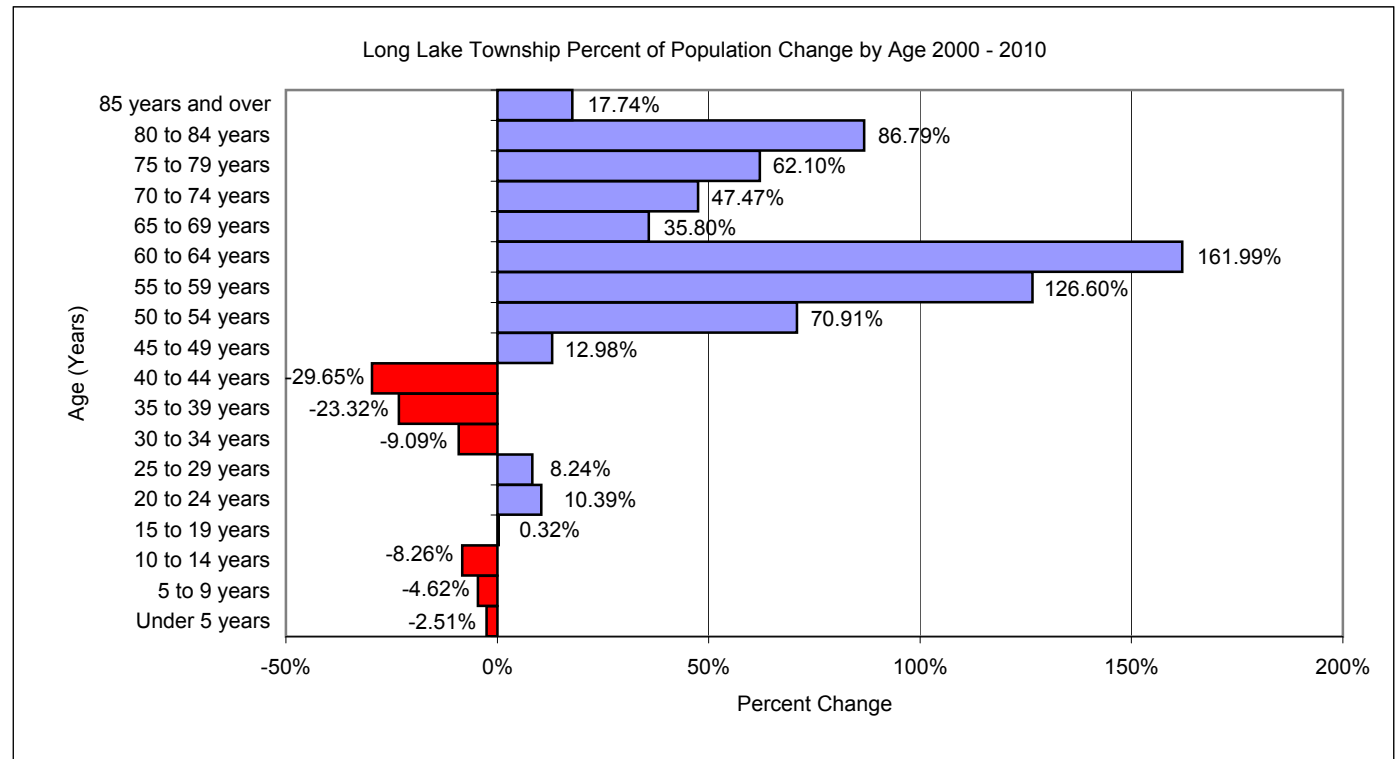


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Planning & Development Department

Long Lake Township
Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	518	505	-2.51%
5 to 9 years	650	620	-4.62%
10 to 14 years	678	622	-8.26%
15 to 19 years	629	631	0.32%
20 to 24 years	337	372	10.39%
25 to 29 years	376	407	8.24%
30 to 34 years	517	470	-9.09%
35 to 39 years	699	536	-23.32%
40 to 44 years	860	605	-29.65%
45 to 49 years	678	766	12.98%
50 to 54 years	519	887	70.91%
55 to 59 years	312	707	126.60%
60 to 64 years	221	579	161.99%
65 to 69 years	257	349	35.80%
70 to 74 years	158	233	47.47%
75 to 79 years	124	201	62.10%
80 to 84 years	53	99	86.79%
85 years and over	62	73	17.74%

Source: U.S. Census



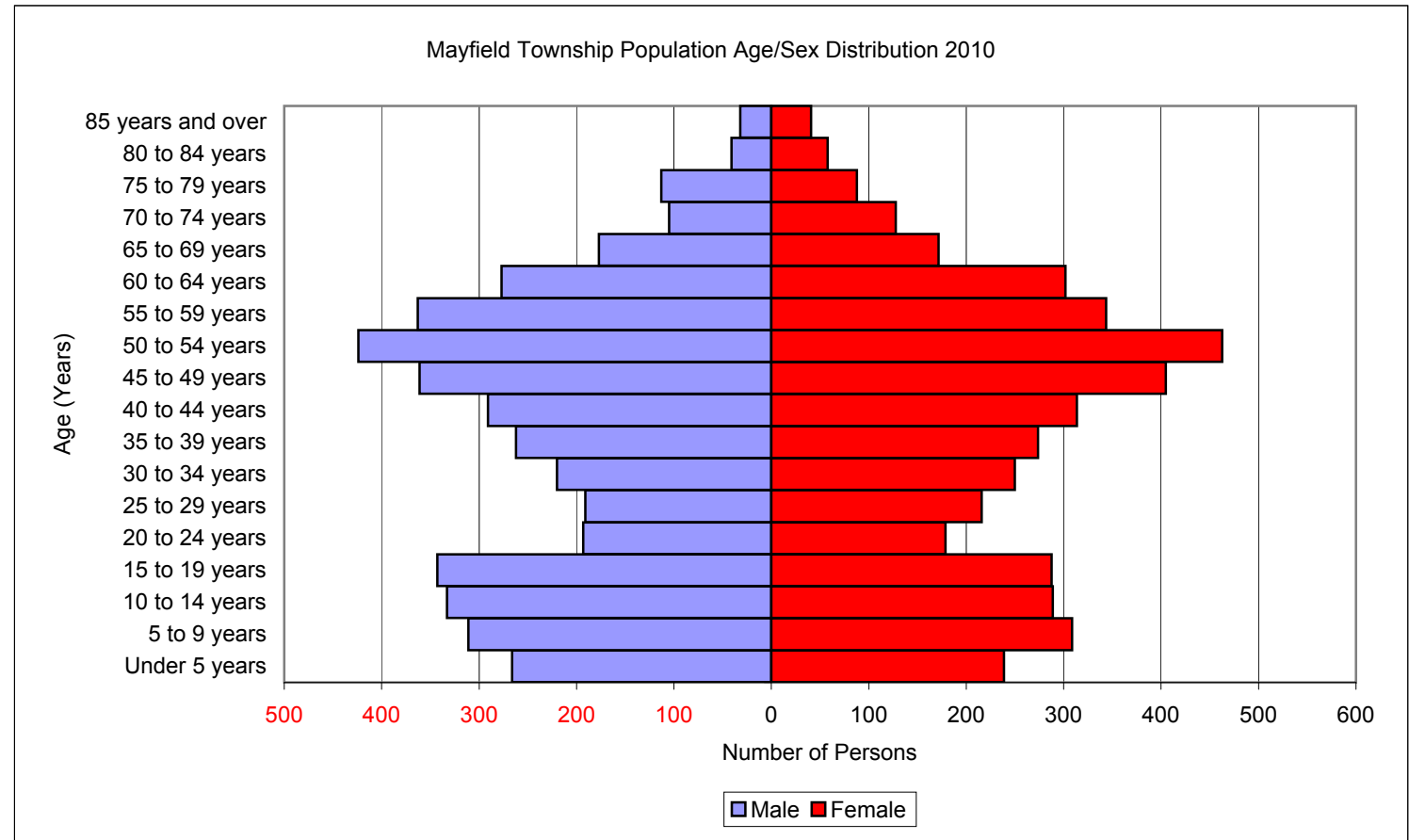
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Planning & Development Department

Mayfield Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-54	59
5 to 9 years	-47	66
10 to 14 years	-54	61
15 to 19 years	-63	62
20 to 24 years	-28	30
25 to 29 years	-44	50
30 to 34 years	-57	54
35 to 39 years	-49	43
40 to 44 years	-55	68
45 to 49 years	-66	51
50 to 54 years	-64	68
55 to 59 years	-58	54
60 to 64 years	-38	30
65 to 69 years	-39	32
70 to 74 years	-15	23
75 to 79 years	-17	18
80 to 84 years	-10	11
85 years and over	-6	6

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



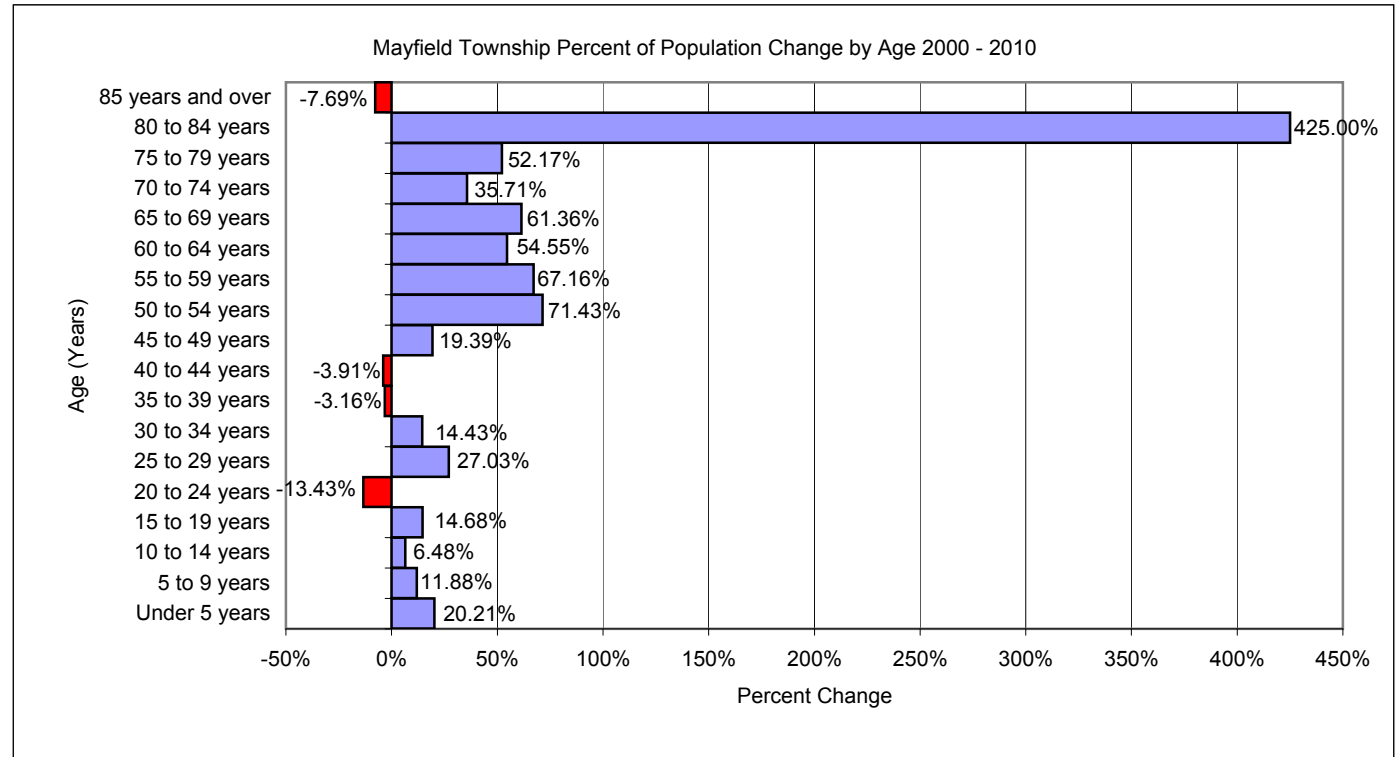
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Mayfield Township

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	94	113	20.21%
5 to 9 years	101	113	11.88%
10 to 14 years	108	115	6.48%
15 to 19 years	109	125	14.68%
20 to 24 years	67	58	-13.43%
25 to 29 years	74	94	27.03%
30 to 34 years	97	111	14.43%
35 to 39 years	95	92	-3.16%
40 to 44 years	128	123	-3.91%
45 to 49 years	98	117	19.39%
50 to 54 years	77	132	71.43%
55 to 59 years	67	112	67.16%
60 to 64 years	44	68	54.55%
65 to 69 years	44	71	61.36%
70 to 74 years	28	38	35.71%
75 to 79 years	23	35	52.17%
80 to 84 years	4	21	425.00%
85 years and over	13	12	-7.69%

Source: U.S. Census



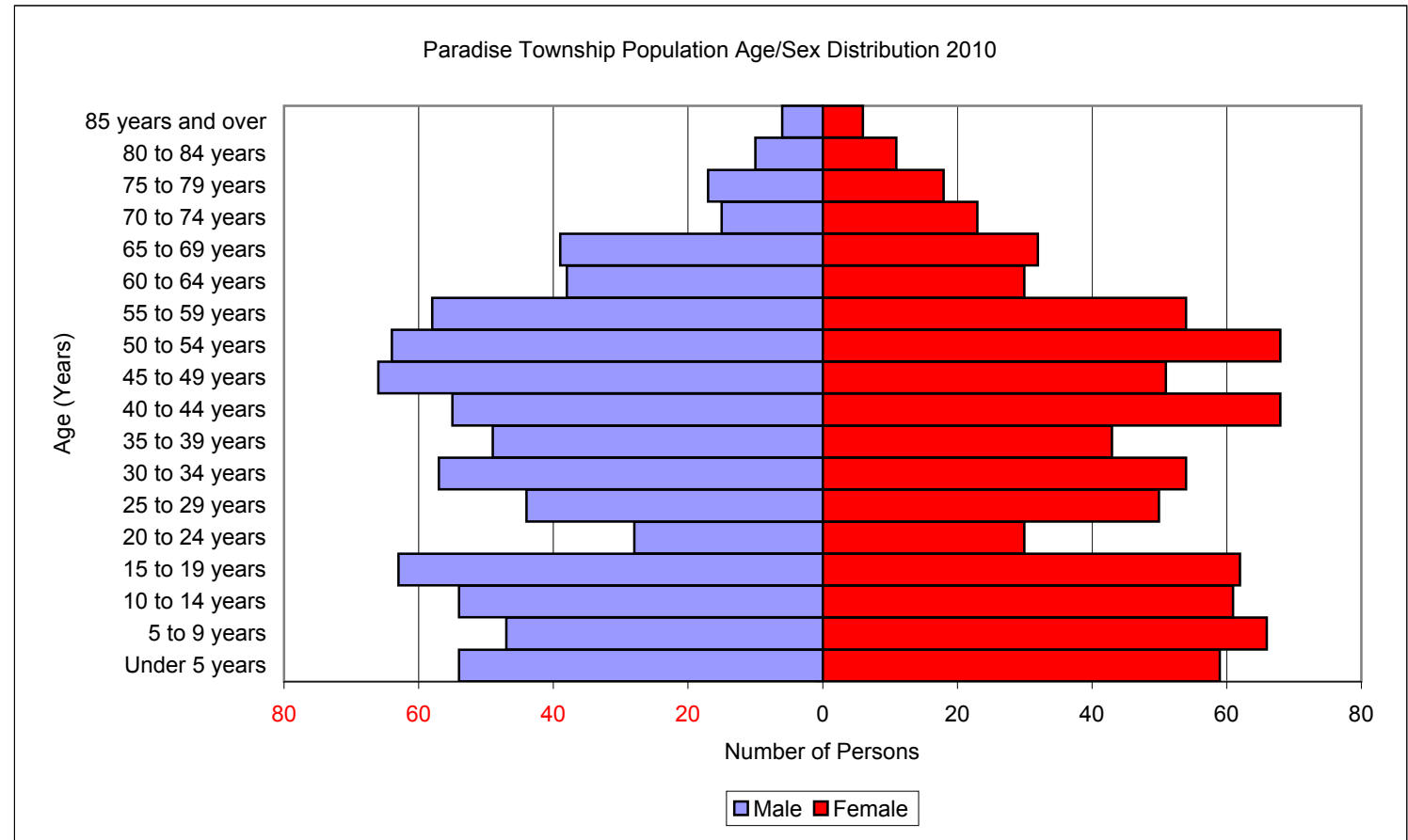
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Paradise Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-99	95
5 to 9 years	-118	119
10 to 14 years	-154	139
15 to 19 years	-138	129
20 to 24 years	-79	74
25 to 29 years	-91	86
30 to 34 years	-99	109
35 to 39 years	-134	121
40 to 44 years	-129	127
45 to 49 years	-156	132
50 to 54 years	-127	135
55 to 59 years	-114	99
60 to 64 years	-79	58
65 to 69 years	-58	63
70 to 74 years	-35	32
75 to 79 years	-19	31
80 to 84 years	-11	13
85 years and over	-15	16

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



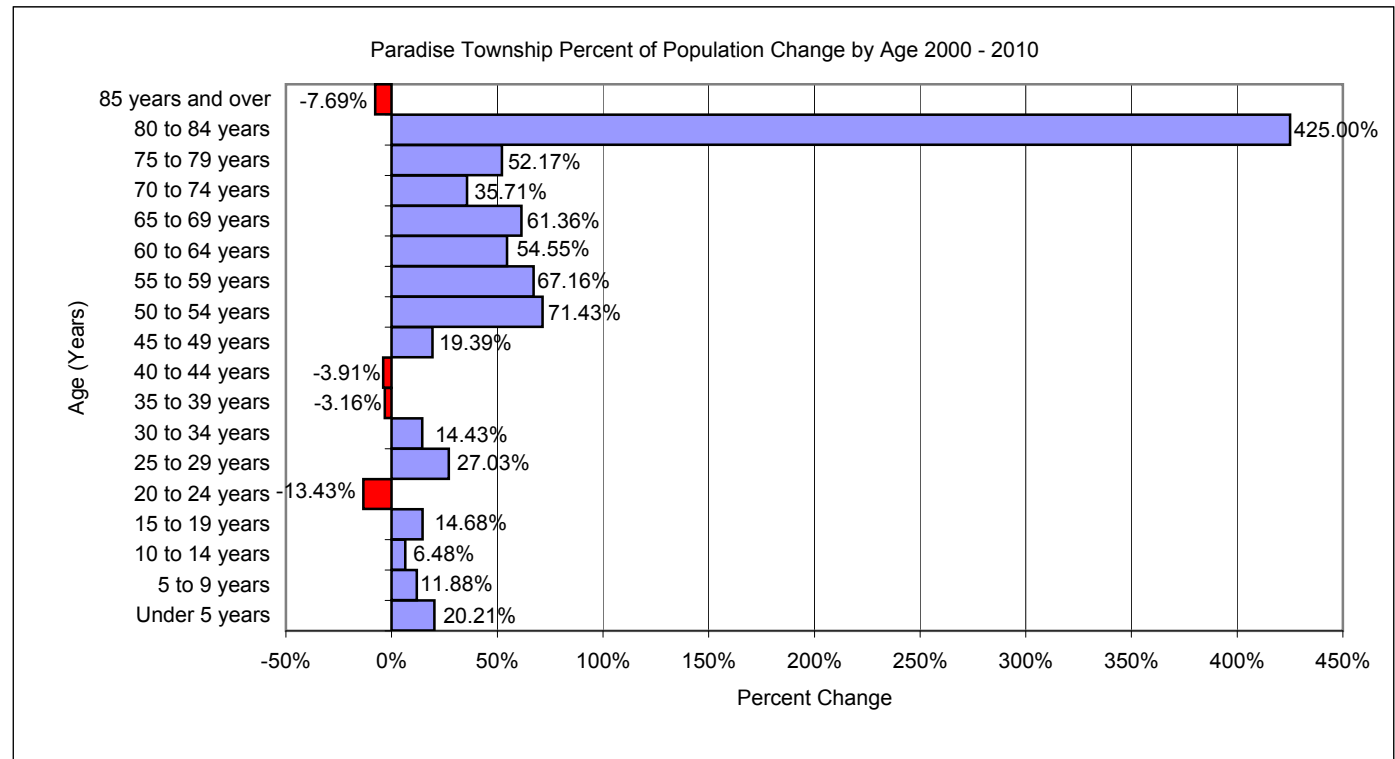
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Paradise Township

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	94	113	20.21%
5 to 9 years	101	113	11.88%
10 to 14 years	108	115	6.48%
15 to 19 years	109	125	14.68%
20 to 24 years	67	58	-13.43%
25 to 29 years	74	94	27.03%
30 to 34 years	97	111	14.43%
35 to 39 years	95	92	-3.16%
40 to 44 years	128	123	-3.91%
45 to 49 years	98	117	19.39%
50 to 54 years	77	132	71.43%
55 to 59 years	67	112	67.16%
60 to 64 years	44	68	54.55%
65 to 69 years	44	71	61.36%
70 to 74 years	28	38	35.71%
75 to 79 years	23	35	52.17%
80 to 84 years	4	21	425.00%
85 years and over	13	12	-7.69%

Source: U.S. Census



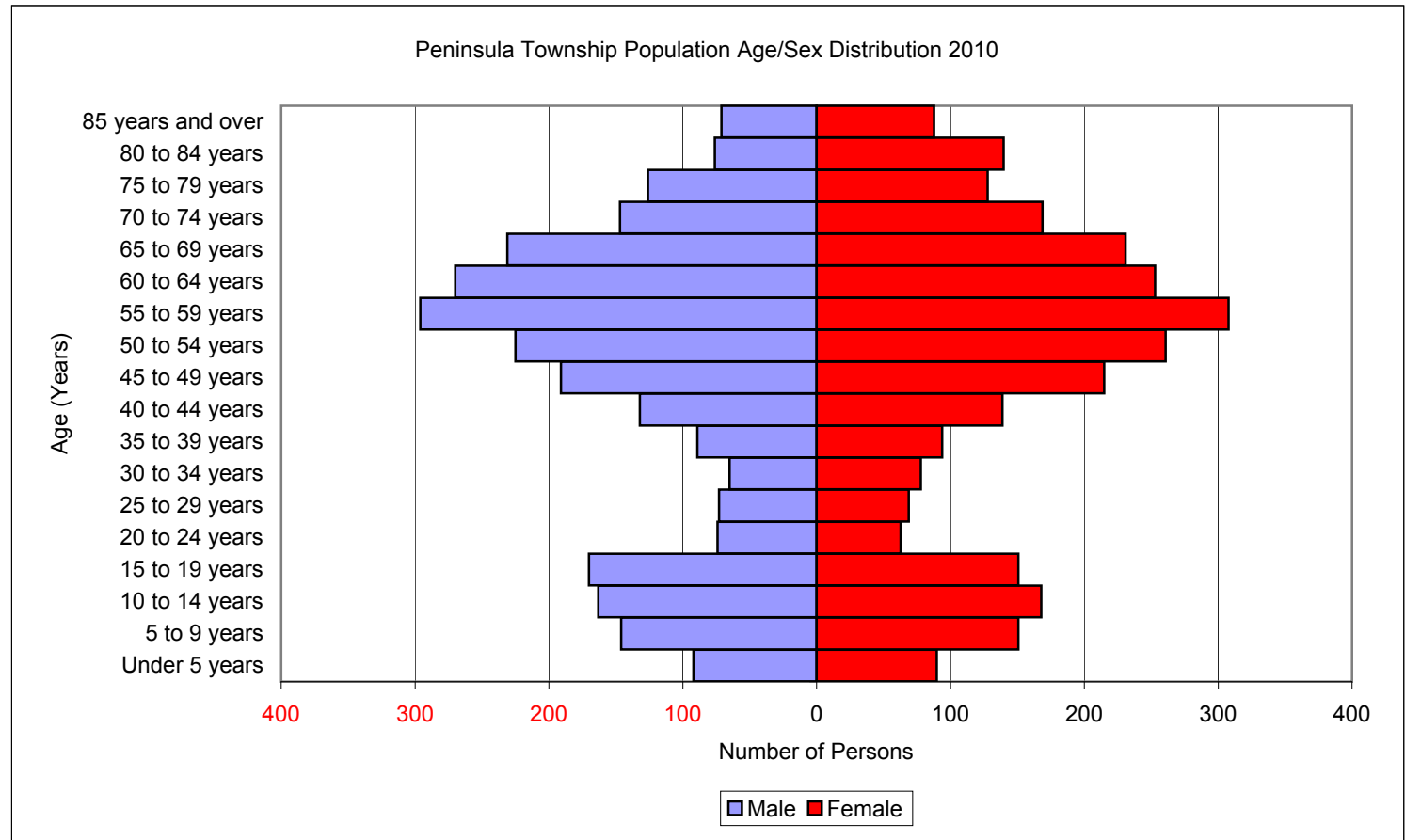
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Planning & Development Department

Peninsula Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-92	90
5 to 9 years	-146	151
10 to 14 years	-163	168
15 to 19 years	-170	151
20 to 24 years	-74	63
25 to 29 years	-73	69
30 to 34 years	-65	78
35 to 39 years	-89	94
40 to 44 years	-132	139
45 to 49 years	-191	215
50 to 54 years	-225	261
55 to 59 years	-296	308
60 to 64 years	-270	253
65 to 69 years	-231	231
70 to 74 years	-147	169
75 to 79 years	-126	128
80 to 84 years	-76	140
85 years and over	-71	88

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.

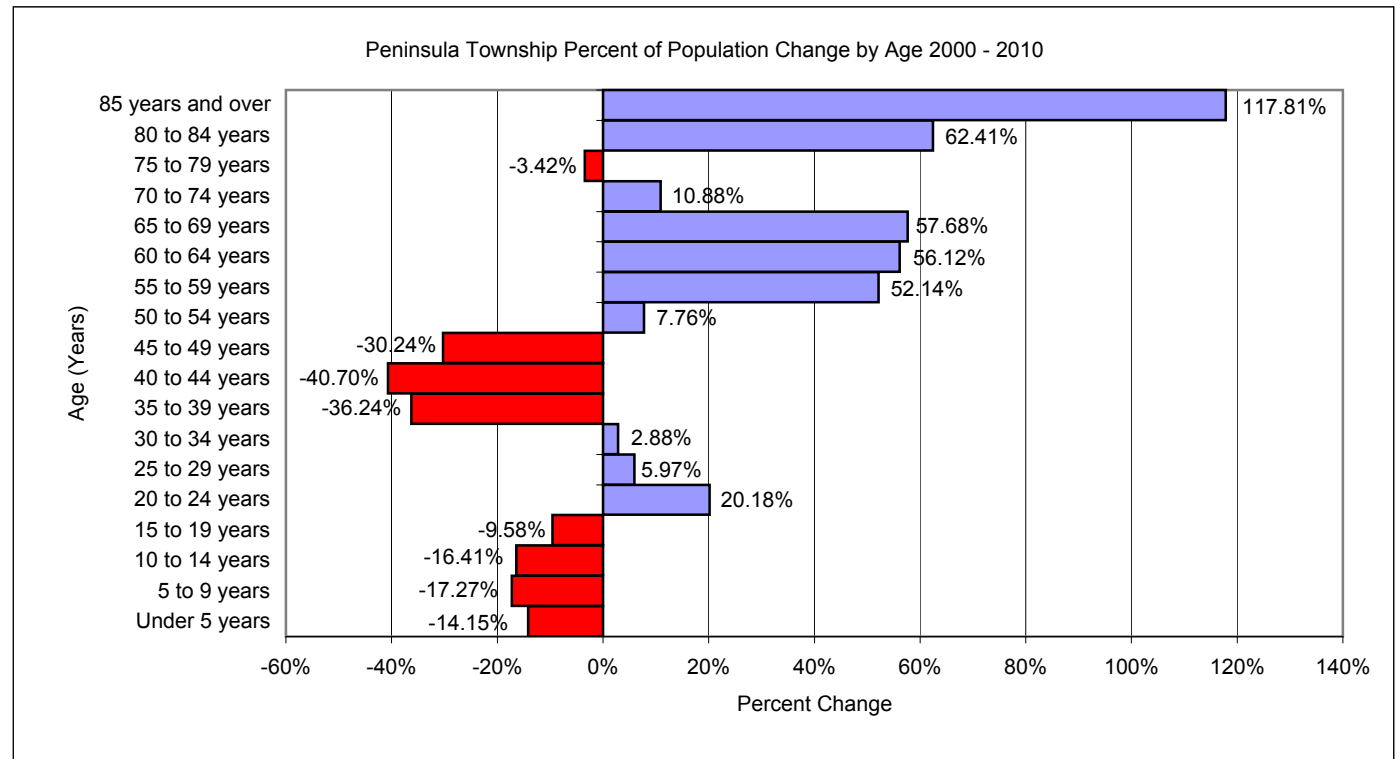


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Planning & Development Department

Peninsula Township
Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	212	182	-14.15%
5 to 9 years	359	297	-17.27%
10 to 14 years	396	331	-16.41%
15 to 19 years	355	321	-9.58%
20 to 24 years	114	137	20.18%
25 to 29 years	134	142	5.97%
30 to 34 years	139	143	2.88%
35 to 39 years	287	183	-36.24%
40 to 44 years	457	271	-40.70%
45 to 49 years	582	406	-30.24%
50 to 54 years	451	486	7.76%
55 to 59 years	397	604	52.14%
60 to 64 years	335	523	56.12%
65 to 69 years	293	462	57.68%
70 to 74 years	285	316	10.88%
75 to 79 years	263	254	-3.42%
80 to 84 years	133	216	62.41%
85 years and over	73	159	117.81%

Source: U.S. Census



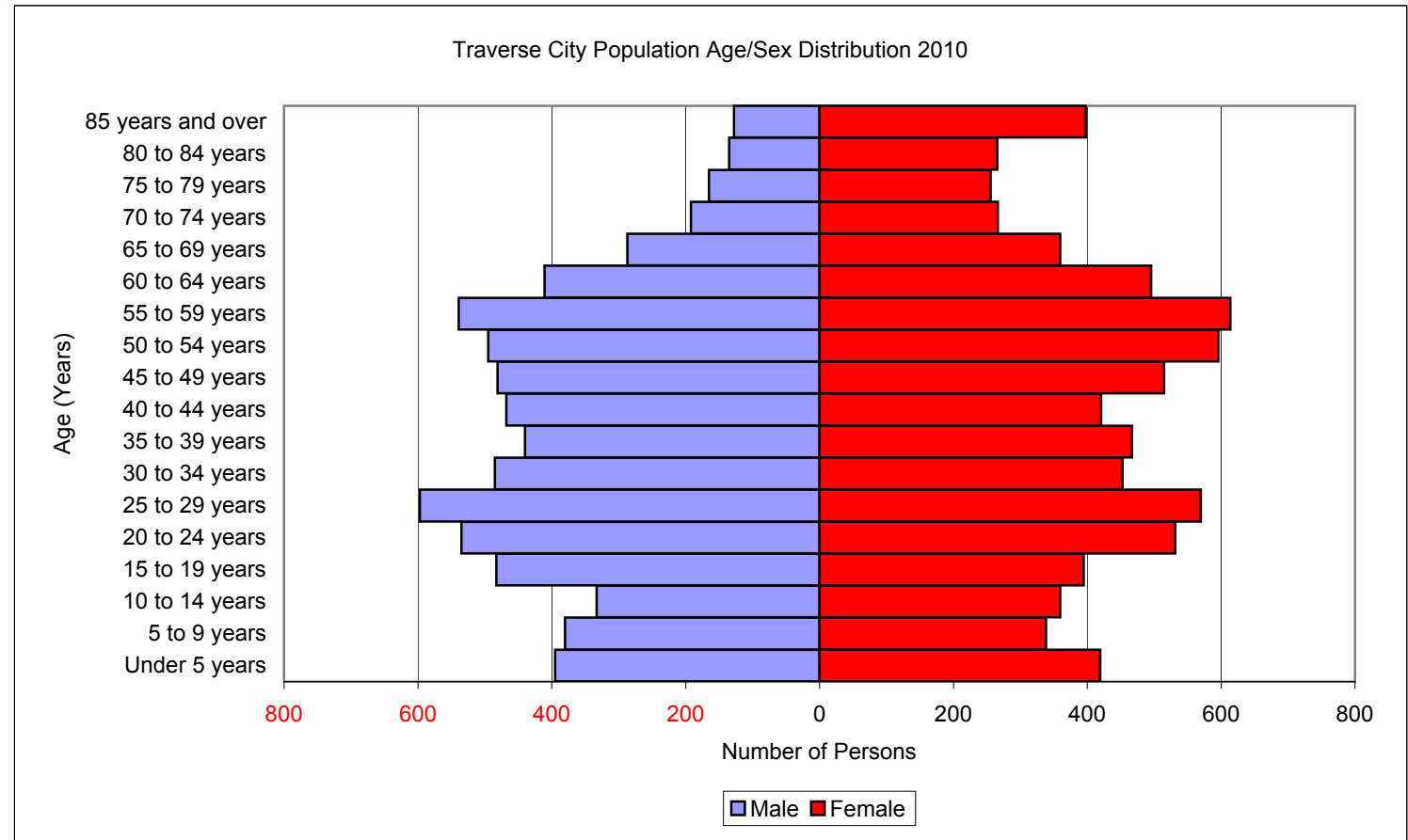
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Planning & Development Department

City of Traverse City

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-395	420
5 to 9 years	-380	339
10 to 14 years	-333	360
15 to 19 years	-483	395
20 to 24 years	-535	532
25 to 29 years	-597	570
30 to 34 years	-485	453
35 to 39 years	-440	467
40 to 44 years	-468	421
45 to 49 years	-481	515
50 to 54 years	-495	596
55 to 59 years	-539	614
60 to 64 years	-411	496
65 to 69 years	-287	360
70 to 74 years	-192	267
75 to 79 years	-165	256
80 to 84 years	-135	266
85 years and over	-128	398

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



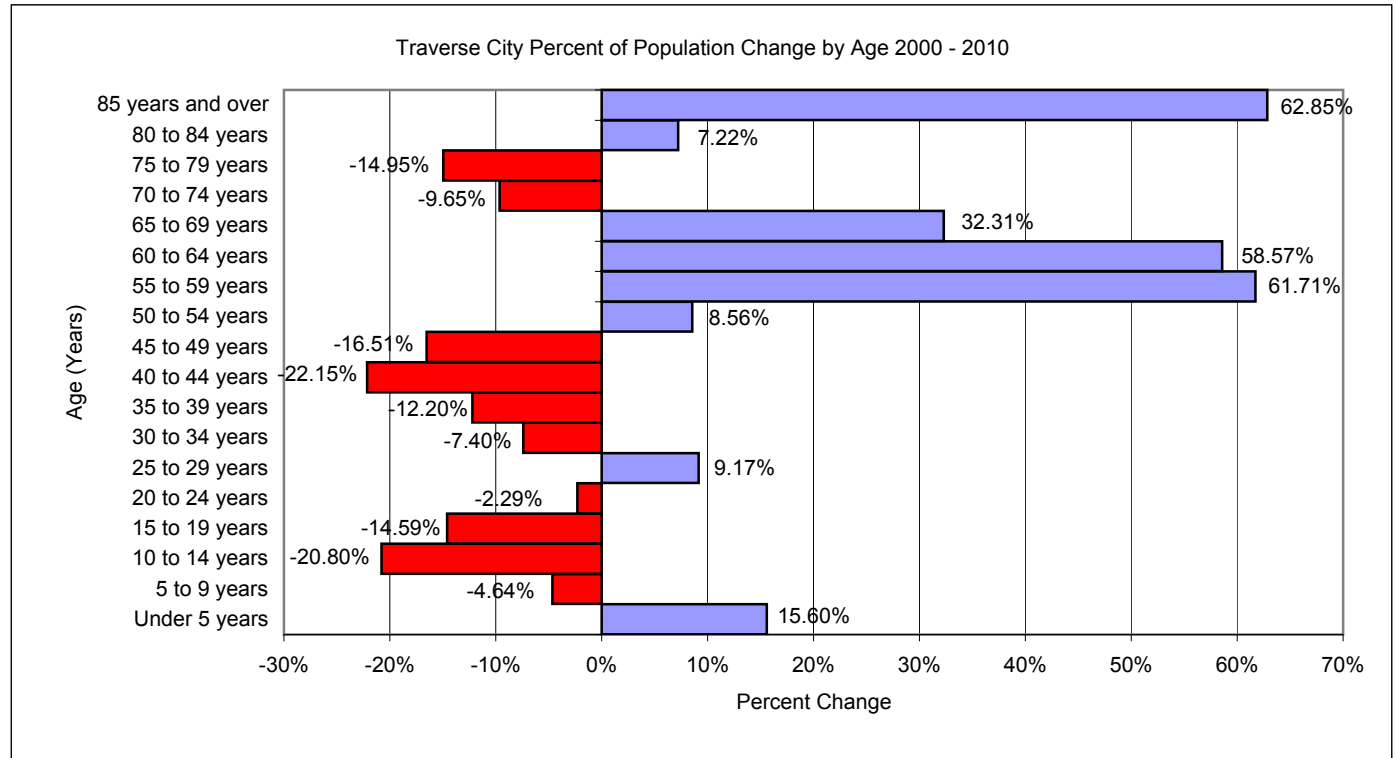
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City of Traverse City

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	705	815	15.60%
5 to 9 years	754	719	-4.64%
10 to 14 years	875	693	-20.80%
15 to 19 years	1,028	878	-14.59%
20 to 24 years	1,092	1,067	-2.29%
25 to 29 years	1,069	1,167	9.17%
30 to 34 years	1,013	938	-7.40%
35 to 39 years	1,033	907	-12.20%
40 to 44 years	1,142	889	-22.15%
45 to 49 years	1,193	996	-16.51%
50 to 54 years	1,005	1,091	8.56%
55 to 59 years	713	1,153	61.71%
60 to 64 years	572	907	58.57%
65 to 69 years	489	647	32.31%
70 to 74 years	508	459	-9.65%
75 to 79 years	495	421	-14.95%
80 to 84 years	374	401	7.22%
85 years and over	323	526	62.85%

Source: U.S. Census



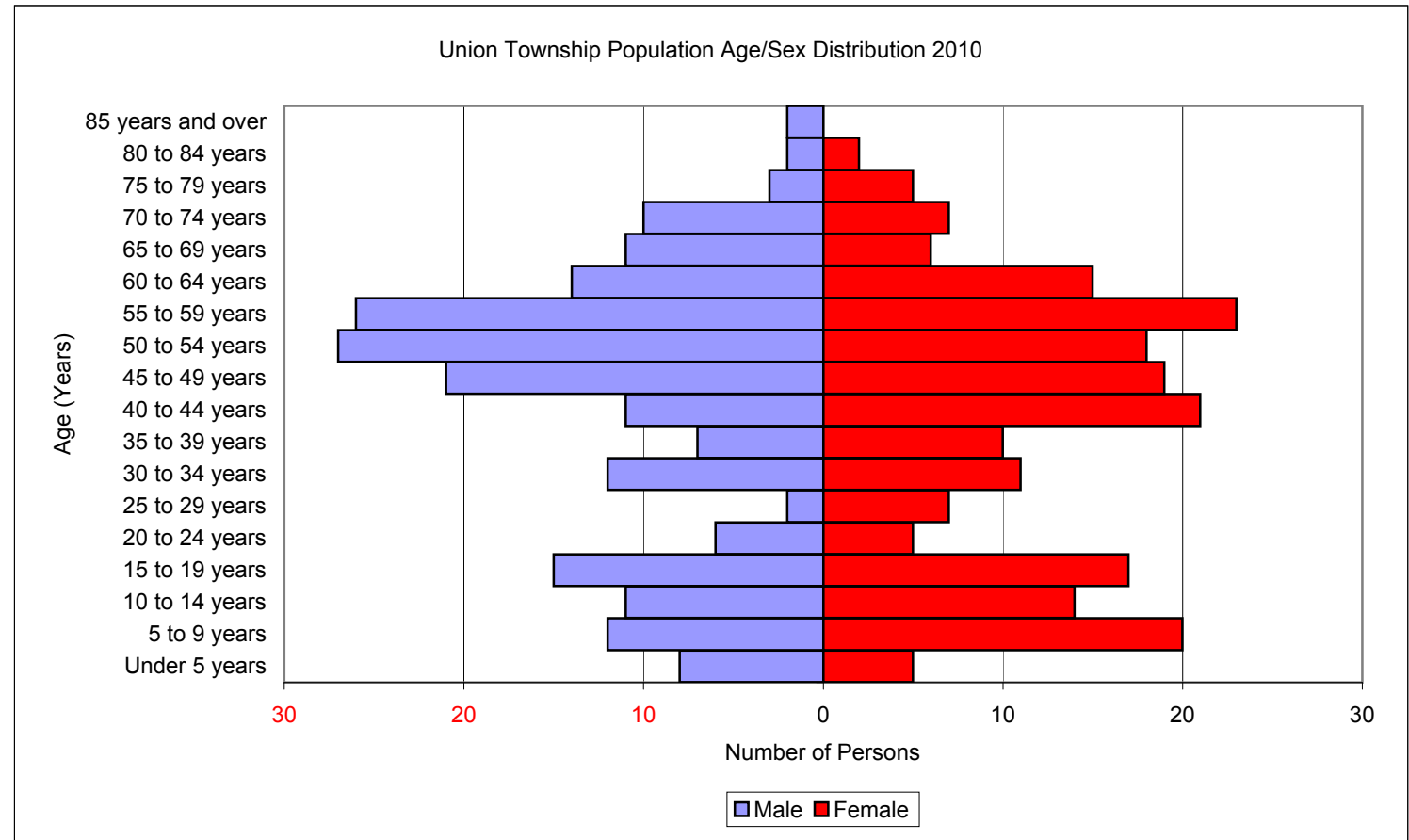
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Union Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-8	5
5 to 9 years	-12	20
10 to 14 years	-11	14
15 to 19 years	-15	17
20 to 24 years	-6	5
25 to 29 years	-2	7
30 to 34 years	-12	11
35 to 39 years	-7	10
40 to 44 years	-11	21
45 to 49 years	-21	19
50 to 54 years	-27	18
55 to 59 years	-26	23
60 to 64 years	-14	15
65 to 69 years	-11	6
70 to 74 years	-10	7
75 to 79 years	-3	5
80 to 84 years	-2	2
85 years and over	-2	0

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



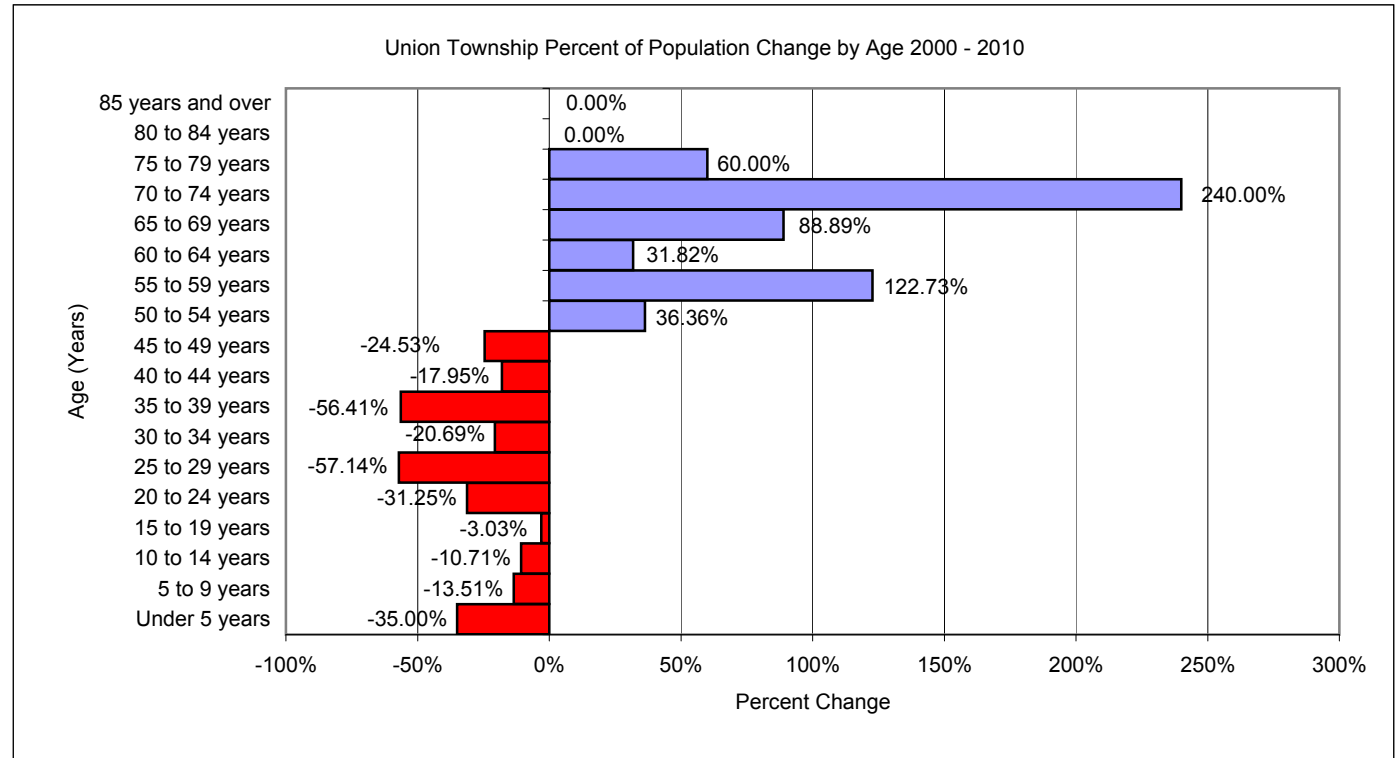
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Planning & Development Department

Union Township

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	20	13	-35.00%
5 to 9 years	37	32	-13.51%
10 to 14 years	28	25	-10.71%
15 to 19 years	33	32	-3.03%
20 to 24 years	16	11	-31.25%
25 to 29 years	21	9	-57.14%
30 to 34 years	29	23	-20.69%
35 to 39 years	39	17	-56.41%
40 to 44 years	39	32	-17.95%
45 to 49 years	53	40	-24.53%
50 to 54 years	33	45	36.36%
55 to 59 years	22	49	122.73%
60 to 64 years	22	29	31.82%
65 to 69 years	9	17	88.89%
70 to 74 years	5	17	240.00%
75 to 79 years	5	8	60.00%
80 to 84 years	4	4	0.00%
85 years and over	2	2	0.00%

Source: U.S. Census



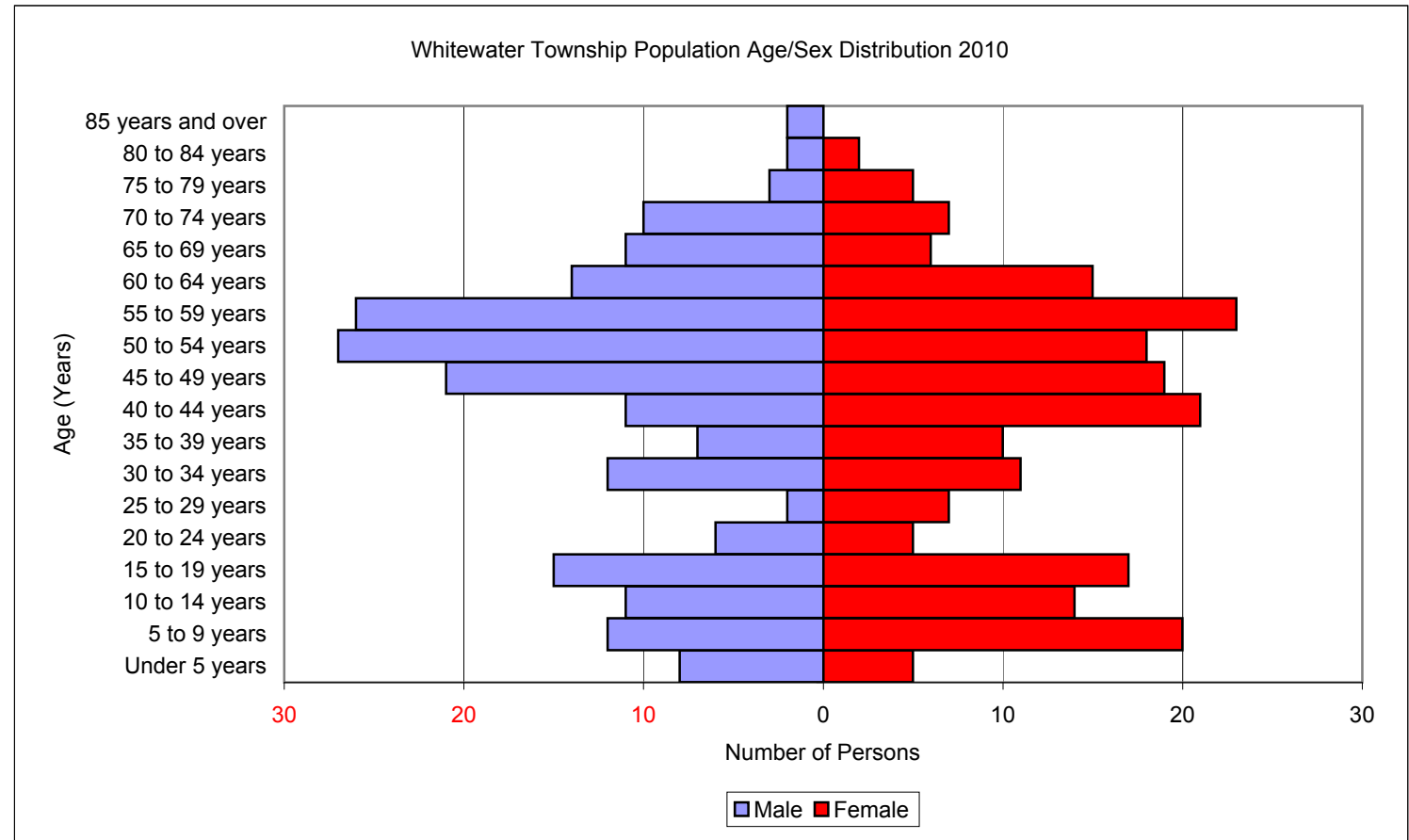
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Planning & Development Department

Whitewater Township

Grand Traverse County, Michigan

Age Group	Male	Female
Under 5 years	-60	57
5 to 9 years	-76	80
10 to 14 years	-104	72
15 to 19 years	-84	88
20 to 24 years	-62	46
25 to 29 years	-59	46
30 to 34 years	-60	62
35 to 39 years	-75	57
40 to 44 years	-62	93
45 to 49 years	-116	142
50 to 54 years	-147	127
55 to 59 years	-129	124
60 to 64 years	-102	87
65 to 69 years	-71	67
70 to 74 years	-45	43
75 to 79 years	-34	32
80 to 84 years	-21	30
85 years and over	-12	25

Source: U.S. Census



Note: The negative numbers in the male column is to allow for creation of the chart and does not indicate a decline or loss of male population.



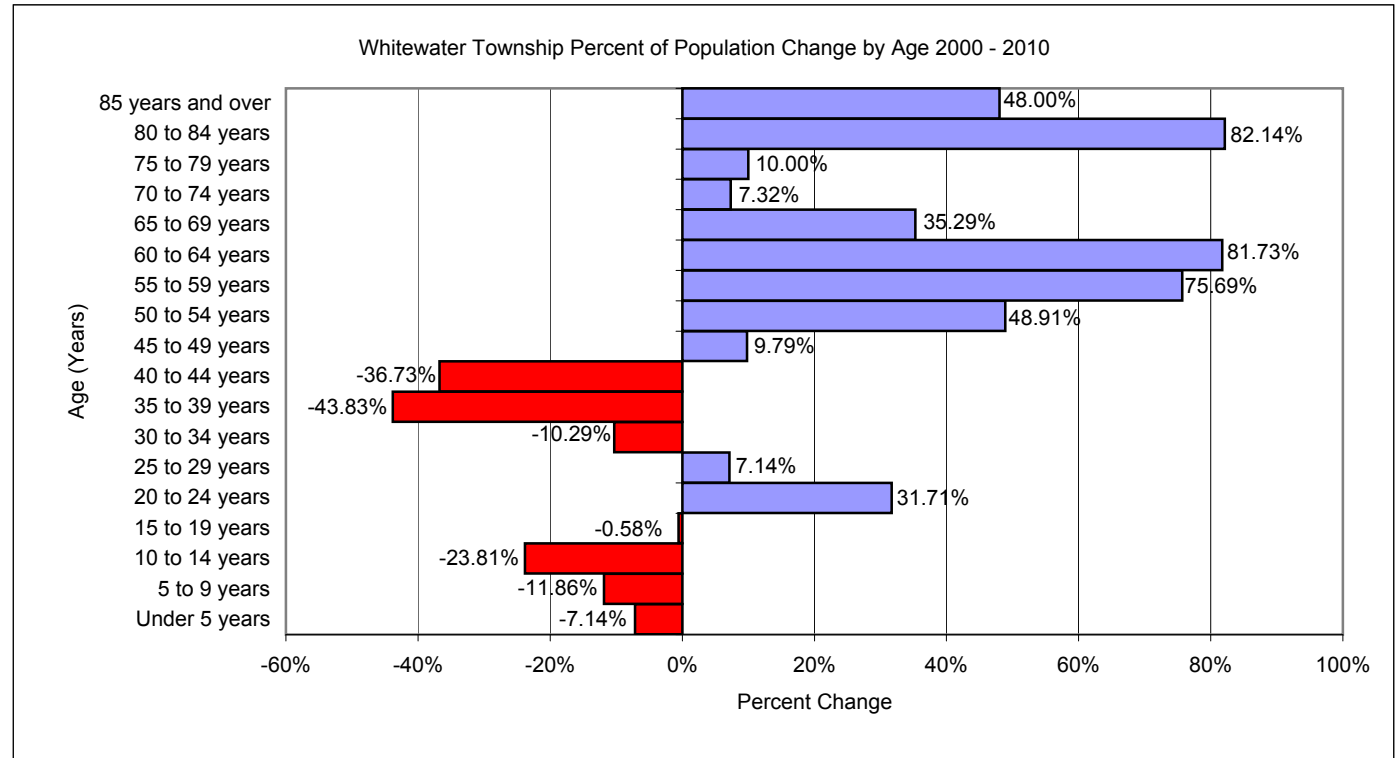
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Whitewater Township

Grand Traverse County, Michigan

	2000	2010	Percent Change
Under 5 years	126	117	-7.14%
5 to 9 years	177	156	-11.86%
10 to 14 years	231	176	-23.81%
15 to 19 years	173	172	-0.58%
20 to 24 years	82	108	31.71%
25 to 29 years	98	105	7.14%
30 to 34 years	136	122	-10.29%
35 to 39 years	235	132	-43.83%
40 to 44 years	245	155	-36.73%
45 to 49 years	235	258	9.79%
50 to 54 years	184	274	48.91%
55 to 59 years	144	253	75.69%
60 to 64 years	104	189	81.73%
65 to 69 years	102	138	35.29%
70 to 74 years	82	88	7.32%
75 to 79 years	60	66	10.00%
80 to 84 years	28	51	82.14%
85 years and over	25	37	48.00%

Source: U.S. Census



Prepared by:
Grand Traverse County
Planning & Development Department

Master Plan for Grand Traverse County

Appendix D: 2010 Grand Traverse County and Local Units Land Use/Land Cover

Grand Traverse County
Acme Township
Blair Township
East Bay Charter Township
Fife Lake Township
Fife Lake Village
Garfield Charter Township
Grant Township
Green Lake Township
Kingsley Village
Long Lake Township
Mayfield Township
Paradise Township
Peninsula Township
Traverse City
Union Township
Whitewater Township



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GIS Department and
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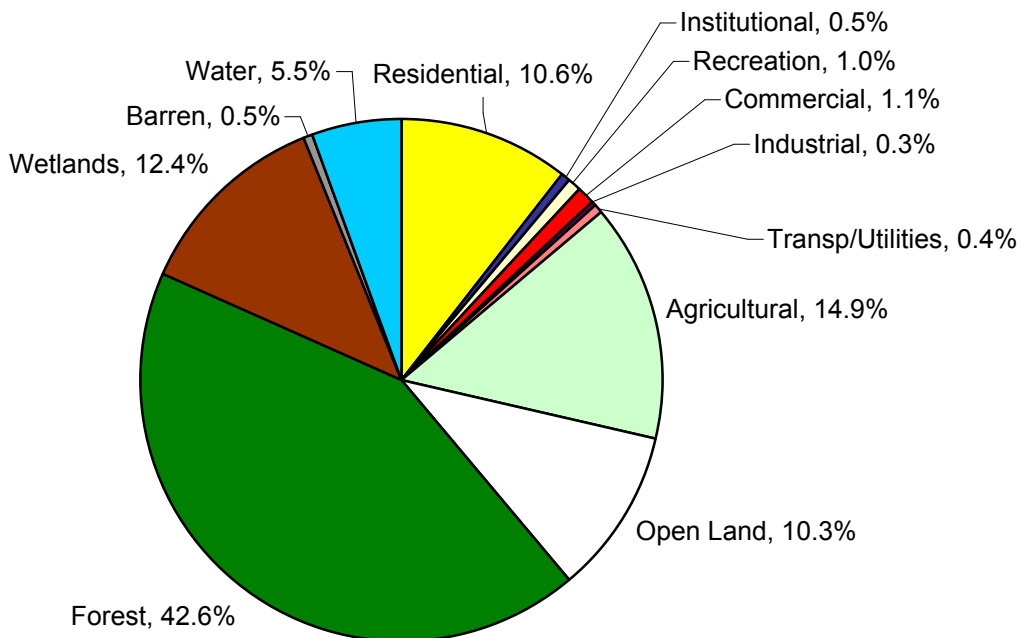
Grand Traverse County Land Use/Land Cover 2010

Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	33,265	10.6%	Residential	33,265
Institutional	1,589	0.5%	<i>Single Family/Duplex Residential</i>	32,246
Recreation	3,025	1.0%	<i>Multiple Family Residential (Low Rise)</i>	522
Commercial	3,440	1.1%	<i>Multiple Family Residential (Med/Hi Rise)</i>	23
Industrial	901	0.3%	<i>Manufactured Home Park</i>	436
Transp/Utilities	1,347	0.4%	<i>Group/Transient Quarters</i>	38
Agricultural	46,805	14.9%	Institutional	1,589
Open Land	32,421	10.3%	Recreation	3,025
Forest	133,966	42.6%	<i>Indoor Cultural/Assembly/Recreation</i>	38
Wetlands	39,037	12.4%	<i>Open Land Recreation</i>	2,987
Barren	1,568	0.5%	Commercial	3,440
Water	17,336	5.5%	Industrial	901
TOTAL ACREAGE	314,700	100.0%	Transportation/Communication/Utilities	1,347
			Agricultural	46,805
			<i>Cropland</i>	36,358
			<i>Orchards/Vineyards</i>	9,007
			<i>Confined Feeding Operations</i>	35
			<i>Permanent Pasture Lands</i>	1,139
			<i>Other Agricultural Lands</i>	267
			Grass/Shrublands	32,241
			Forest	133,966
			<i>Broadleaved Forest</i>	55,204
			<i>Coniferous Forest</i>	55,281
			<i>Mixed Conifer/Broadleaved Forest</i>	23,481
			Wetlands	39,037
			<i>Wooded Wetlands</i>	33,190
			<i>Non-Wooded Wetlands</i>	5,847
			Barren	1,568
			<i>Beach/Riverbank</i>	355
			<i>Sand Dune/Exposed Bluff</i>	216
			<i>Extractive</i>	996
			Water	17,336
			TOTAL ACREAGE	314,700



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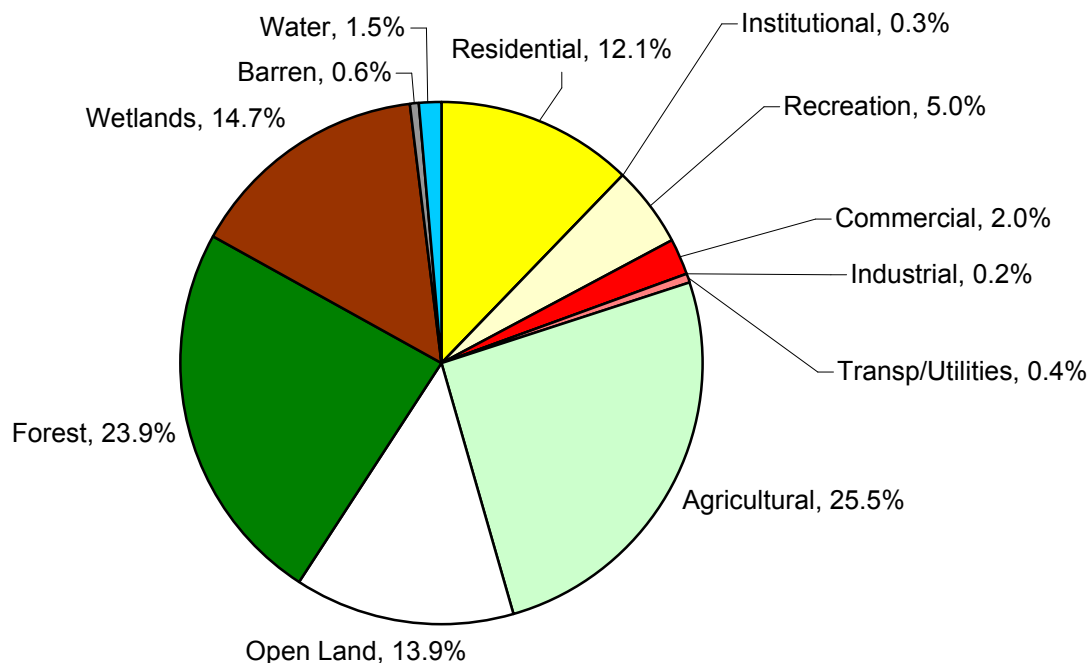
Acme Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	1,876	12.1%	Residential	1,876
Institutional	41	0.3%	<i>Single Family/Duplex Residential</i>	<i>1,795</i>
Recreation	772	5.0%	<i>Multiple Family Residential (Low Rise)</i>	<i>35</i>
Commercial	310	2.0%	<i>Multiple Family Residential (Med/Hi Rise)</i>	<i>0</i>
Industrial	33	0.2%	<i>Manufactured Home Park</i>	<i>46</i>
Transp/Utilities	60	0.4%	<i>Group/Transient Quarters</i>	<i>0</i>
Agricultural	3,960	25.5%	Institutional	41
Open Land	2,151	13.9%	Recreation	772
Forest	3,708	23.9%	<i>Indoor Cultural/Assembly/Recreation</i>	<i>0</i>
Wetlands	2,288	14.7%	<i>Open Land Recreation</i>	<i>772</i>
Barren	90	0.6%	Commercial	310
Water	233	1.5%	Industrial	33
TOTAL ACREAGE	15,523	100.0%	Transportation/Communication/Utilities	60
			Agricultural	3,960
			<i>Cropland</i>	<i>2,142</i>
			<i>Orchards/Vineyards</i>	<i>1,632</i>
			<i>Confined Feeding Operations</i>	<i>0</i>
			<i>Permanent Pasture Lands</i>	<i>115</i>
			<i>Other Agricultural Lands</i>	<i>71</i>
			Grass/Shrublands	2,151
			Forest	3,708
			<i>Broadleaved Forest</i>	<i>1,248</i>
			<i>Coniferous Forest</i>	<i>1,553</i>
			<i>Mixed Conifer/Broadleaved Forest</i>	<i>907</i>
			Wetlands	2,288
			<i>Wooded Wetlands</i>	<i>1,667</i>
			<i>Non-Wooded Wetlands</i>	<i>621</i>
			Barren	90
			<i>Beach/Riverbank</i>	<i>76</i>
			<i>Sand Dune/Exposed Bluff</i>	<i>0</i>
			<i>Extractive</i>	<i>14</i>
			Water	233
			TOTAL ACREAGE	15,523



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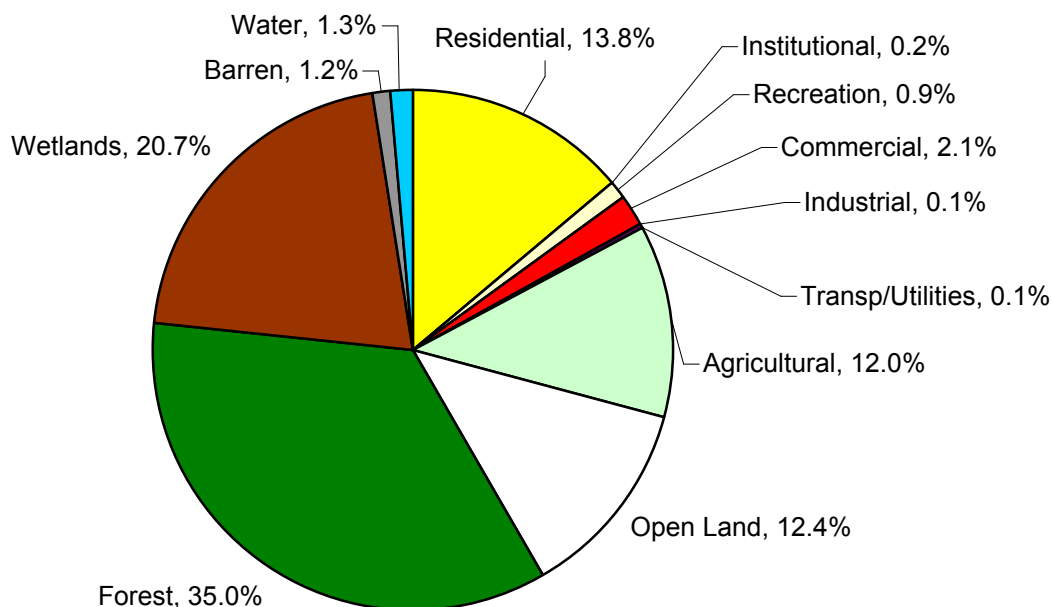
Blair Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	3,177	13.8%	Residential	3,177
Institutional	53	0.2%	<i>Single Family/Duplex Residential</i>	<i>3,138</i>
Recreation	199	0.9%	<i>Multiple Family Residential (Low Rise)</i>	<i>0</i>
Commercial	492	2.1%	<i>Multiple Family Residential (Med/Hi Rise)</i>	<i>0</i>
Industrial	33	0.1%	<i>Manufactured Home Park</i>	<i>39</i>
Transp/Utilities	22	0.1%	<i>Group/Transient Quarters</i>	<i>0</i>
Agricultural	2,775	12.0%	Institutional	53
Open Land	2,868	12.4%	Recreation	199
Forest	8,068	35.0%	<i>Indoor Cultural/Assembly/Recreation</i>	<i>1</i>
Wetlands	4,784	20.7%	<i>Open Land Recreation</i>	<i>198</i>
Barren	288	1.2%	Commercial	492
Water	297	1.3%	Industrial	33
TOTAL ACREAGE	23,056	100.0%	Transportation/Communication/Utilities	22
			Agricultural	2,775
			<i>Cropland</i>	<i>2,511</i>
			<i>Orchards/Vineyards</i>	<i>230</i>
			<i>Confined Feeding Operations</i>	<i>8</i>
			<i>Permanent Pasture Lands</i>	<i>0</i>
			<i>Other Agricultural Lands</i>	<i>26</i>
			Grass/Shrublands	2,868
			Forest	8,068
			<i>Broadleaved Forest</i>	<i>4,907</i>
			<i>Coniferous Forest</i>	<i>2,742</i>
			<i>Mixed Conifer/Broadleaved Forest</i>	<i>419</i>
			Wetlands	4,784
			<i>Wooded Wetlands</i>	<i>4,667</i>
			<i>Non-Wooded Wetlands</i>	<i>117</i>
			Barren	288
			<i>Beach/Riverbank</i>	<i>6</i>
			<i>Sand Dune/Exposed Bluff</i>	<i>0</i>
			<i>Extractive</i>	<i>282</i>
			Water	297
			TOTAL ACREAGE	23,056



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GIS Department and
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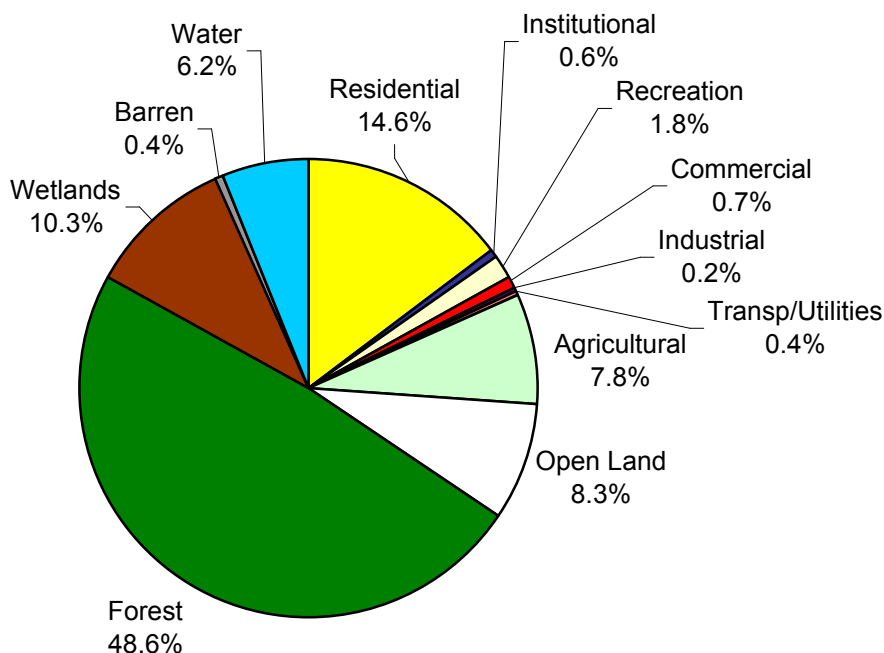
East Bay Charter Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	4,011	14.6%	Residential	4,011
Institutional	163	0.6%	<i>Single Family/Duplex Residential</i>	3,840
Recreation	491	1.8%	<i>Multiple Family Residential (Low Rise)</i>	102
Commercial	205	0.7%	<i>Multiple Family Residential (Med/Hi Rise)</i>	7
Industrial	51	0.2%	<i>Manufactured Home Park</i>	40
Transp/Utilities	101	0.4%	<i>Group/Transient Quarters</i>	22
Agricultural	2,132	7.8%	Institutional	163
Open Land	2,290	8.3%	Recreation	491
Forest	13,335	48.6%	<i>Indoor Cultural/Assembly/Recreation</i>	0
Wetlands	2,827	10.3%	<i>Open Land Recreation</i>	491
Barren	121	0.4%	Commercial	205
Water	1,703	6.2%	Industrial	51
TOTAL ACREAGE	27,430	100.0%	Transportation/Communication/Utilities	101
			Agricultural	2,132
			<i>Cropland</i>	1,619
			<i>Orchards/Vineyards</i>	502
			<i>Confined Feeding Operations</i>	0
			<i>Permanent Pasture Lands</i>	0
			<i>Other Agricultural Lands</i>	11
			Grass/Shrublands	2,290
			Forest	13,335
			<i>Broadleaved Forest</i>	4,663
			<i>Coniferous Forest</i>	6,880
			<i>Mixed Conifer/Broadleaved Forest</i>	1,792
			Wetlands	2,827
			<i>Wooded Wetlands</i>	2,519
			<i>Non-Wooded Wetlands</i>	308
			Barren	121
			<i>Beach/Riverbank</i>	52
			<i>Sand Dune/Exposed Bluff</i>	26
			<i>Extractive</i>	43
			Water	1,703
			TOTAL ACREAGE	27,430



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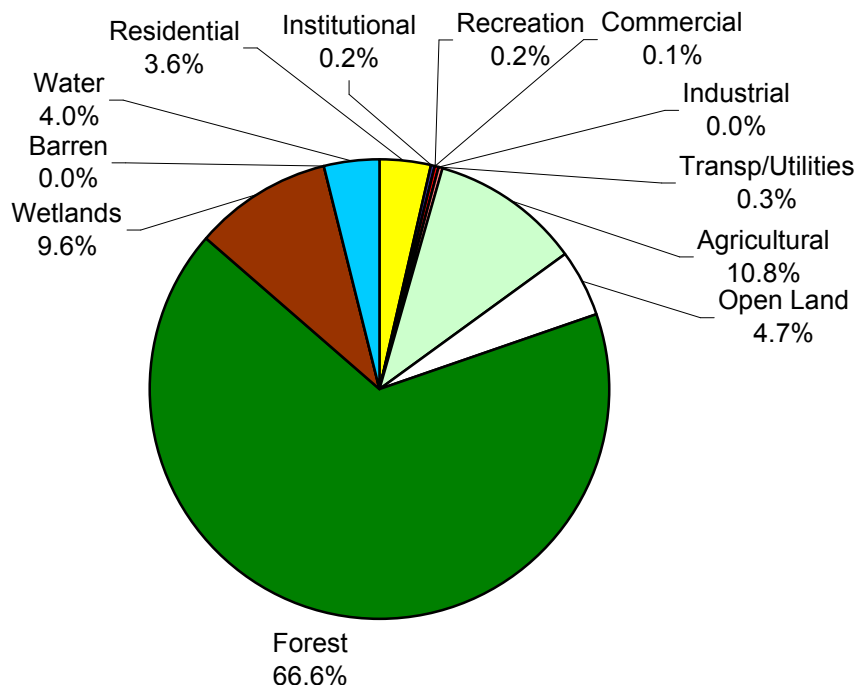
Fife Lake Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	811	3.6%	Residential	811
Institutional	49	0.2%	<i>Single Family/Duplex Residential</i>	<i>809</i>
Recreation	37	0.2%	<i>Multiple Family Residential (Low Rise)</i>	<i>2</i>
Commercial	33	0.1%	<i>Multiple Family Residential (Med/Hi Rise)</i>	<i>0</i>
Industrial	6	0.0%	<i>Manufactured Home Park</i>	<i>0</i>
Transp/Utilities	59	0.3%	<i>Group/Transient Quarters</i>	<i>0</i>
Agricultural	2,452	10.8%	Institutional	49
Open Land	1,075	4.7%	Recreation	37
Forest	15,158	66.6%	<i>Indoor Cultural/Assembly/Recreation</i>	<i>0</i>
Wetlands	2,181	9.6%	<i>Open Land Recreation</i>	<i>37</i>
Barren	0	0.0%	Commercial	33
Water	912	4.0%	Industrial	6
TOTAL ACREAGE	22,773	100.0%	Transportation/Communication/Utilities	59
			Agricultural	2,452
			<i>Cropland</i>	<i>2,452</i>
			<i>Orchards/Vineyards</i>	<i>0</i>
			<i>Confined Feeding Operations</i>	<i>0</i>
			<i>Permanent Pasture Lands</i>	<i>0</i>
			<i>Other Agricultural Lands</i>	<i>0</i>
			Grass/Shrublands	1,075
			Forest	15,158
			<i>Broadleaved Forest</i>	<i>4,574</i>
			<i>Coniferous Forest</i>	<i>8,779</i>
			<i>Mixed Conifer/Broadleaved Forest</i>	<i>1,805</i>
			Wetlands	2,181
			<i>Wooded Wetlands</i>	<i>1,372</i>
			<i>Non-Wooded Wetlands</i>	<i>809</i>
			Barren	0
			<i>Beach/Riverbank</i>	<i>0</i>
			<i>Sand Dune/Exposed Bluff</i>	<i>0</i>
			<i>Extractive</i>	<i>0</i>
			Water	912
			TOTAL ACREAGE	22,773



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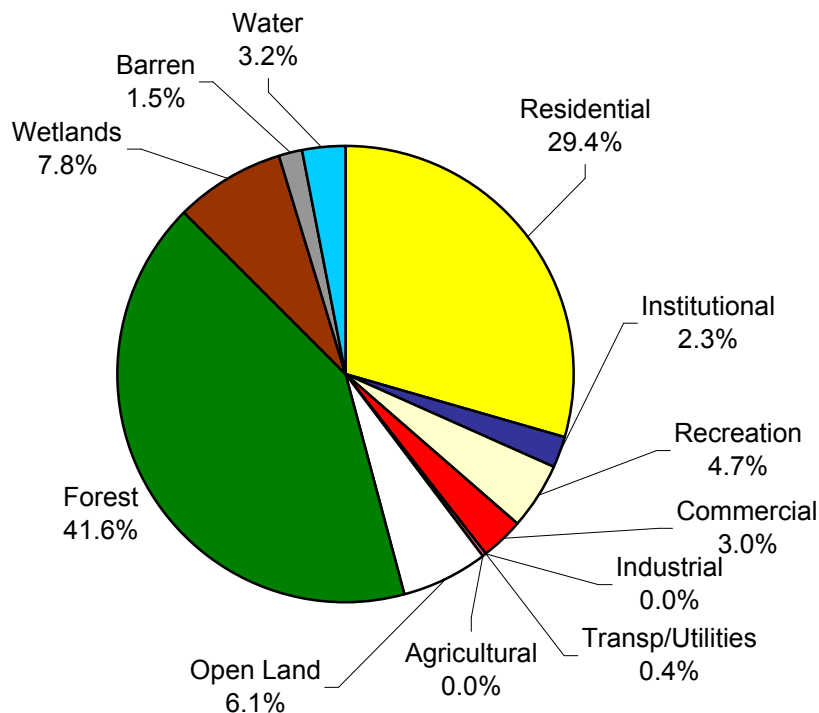
Fife Lake Village Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	139	29.4%	Residential	139
Institutional	11	2.3%	<i>Single Family/Duplex Residential</i>	139
Recreation	22	4.7%	<i>Multiple Family Residential (Low Rise)</i>	0
Commercial	14	3.0%	<i>Multiple Family Residential (Med/Hi Rise)</i>	0
Industrial	0	0.0%	<i>Manufactured Home Park</i>	0
Transp/Utilities	2	0.4%	<i>Group/Transient Quarters</i>	0
Agricultural	0	0.0%	Institutional	11
Open Land	29	6.1%	Recreation	22
Forest	197	41.6%	<i>Indoor Cultural/Assembly/Recreation</i>	3
Wetlands	37	7.8%	<i>Open Land Recreation</i>	19
Barren	7	1.5%	Commercial	14
Water	15	3.2%	Industrial	0
TOTAL ACREAGE	473	100.0%	Transportation/Communication/Utilities	2
			Agricultural	0
			<i>Cropland</i>	0
			<i>Orchards/Vineyards</i>	0
			<i>Confined Feeding Operations</i>	0
			<i>Permanent Pasture Lands</i>	0
			<i>Other Agricultural Lands</i>	0
			Grass/Shrublands	29
			Forest	197
			<i>Broadleaved Forest</i>	55
			<i>Coniferous Forest</i>	93
			<i>Mixed Conifer/Broadleaved Forest</i>	49
			Wetlands	37
			<i>Wooded Wetlands</i>	8
			<i>Non-Wooded Wetlands</i>	29
			Barren	7
			<i>Beach/Riverbank</i>	1
			<i>Sand Dune/Exposed Bluff</i>	0
			<i>Extractive</i>	6
			Water	15
			TOTAL ACREAGE	473



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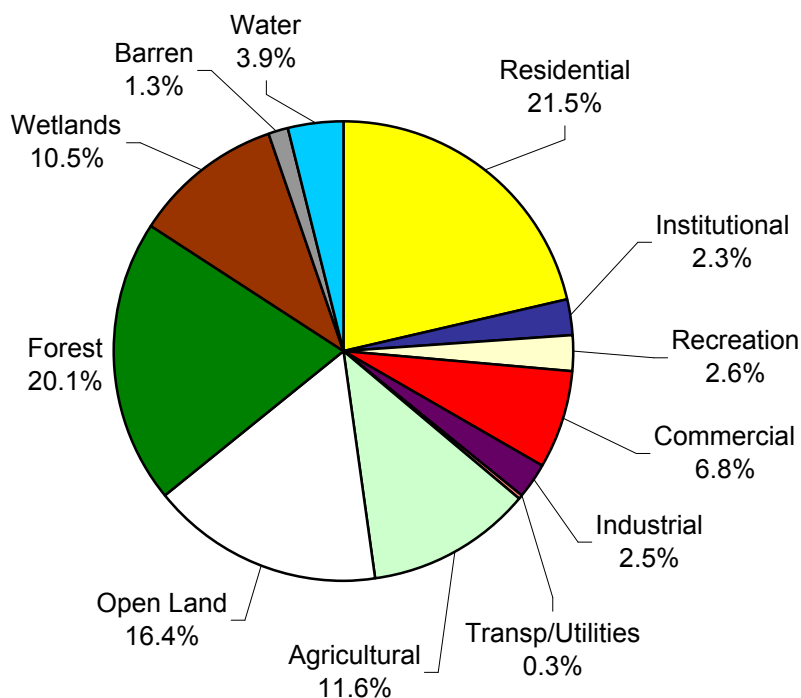
Garfield Charter Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	3,823	21.5%	Residential	3,823
Institutional	409	2.3%	<i>Single Family/Duplex Residential</i>	3,341
Recreation	470	2.6%	<i>Multiple Family Residential (Low Rise)</i>	213
Commercial	1,216	6.8%	<i>Multiple Family Residential (Med/Hi Rise)</i>	1
Industrial	451	2.5%	<i>Manufactured Home Park</i>	255
Transp/Utilities	58	0.3%	<i>Group/Transient Quarters</i>	13
Agricultural	2,060	11.6%	Institutional	409
Open Land	2,927	16.4%	Recreation	470
Forest	3,576	20.1%	<i>Indoor Cultural/Assembly/Recreation</i>	3
Wetlands	1,873	10.5%	<i>Open Land Recreation</i>	467
Barren	235	1.3%	Commercial	1,216
Water	701	3.9%	Industrial	451
TOTAL ACREAGE	17,799	100.0%	Transportation/Communication/Utilities	58
			Agricultural	2,060
			<i>Cropland</i>	1,496
			<i>Orchards/Vineyards</i>	95
			<i>Confined Feeding Operations</i>	10
			<i>Permanent Pasture Lands</i>	355
			<i>Other Agricultural Lands</i>	104
			Grass/Shrublands	2,927
			Forest	3,576
			<i>Broadleaved Forest</i>	1,761
			<i>Coniferous Forest</i>	1,074
			<i>Mixed Conifer/Broadleaved Forest</i>	741
			Wetlands	1,873
			<i>Wooded Wetlands</i>	1,742
			<i>Non-Wooded Wetlands</i>	131
			Barren	235
			<i>Beach/Riverbank</i>	37
			<i>Sand Dune/Exposed Bluff</i>	36
			<i>Extractive</i>	162
			Water	701
			TOTAL ACREAGE	17,799



Prepared by:
Grand Traverse County
GIS Department and
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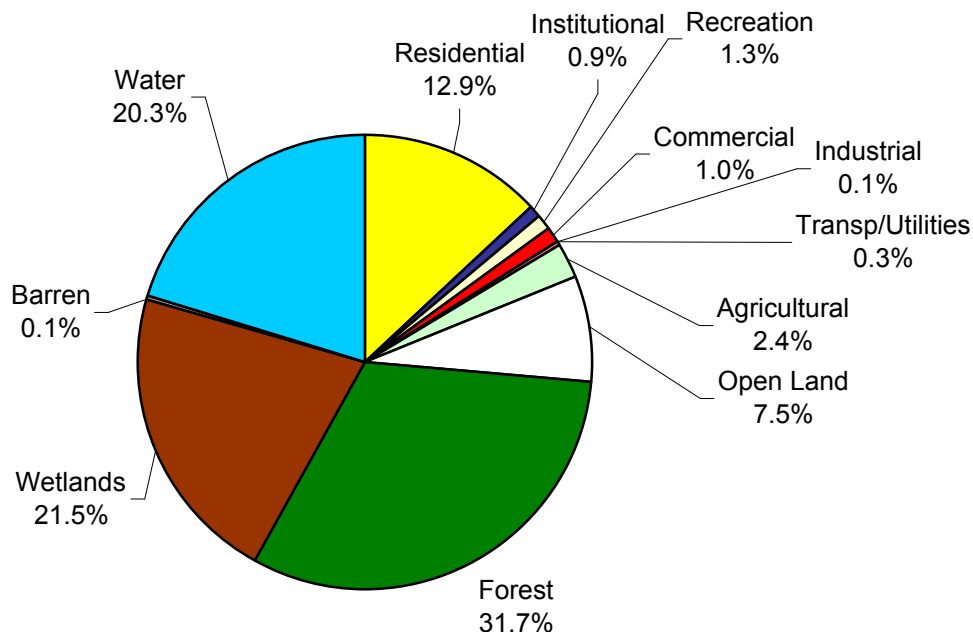
Green Lake Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	3,013	12.9%	Residential	3,013
Institutional	204	0.9%	<i>Single Family/Duplex Residential</i>	<i>3,011</i>
Recreation	295	1.3%	<i>Multiple Family Residential (Low Rise)</i>	<i>0</i>
Commercial	224	1.0%	<i>Multiple Family Residential (Med/Hi Rise)</i>	<i>0</i>
Industrial	28	0.1%	<i>Manufactured Home Park</i>	<i>2</i>
Transp/Utilities	75	0.3%	<i>Group/Transient Quarters</i>	<i>0</i>
Agricultural	551	2.4%	Institutional	204
Open Land	1,749	7.5%	Recreation	295
Forest	7,388	31.7%	<i>Indoor Cultural/Assembly/Recreation</i>	<i>2</i>
Wetlands	5,008	21.5%	<i>Open Land Recreation</i>	<i>293</i>
Barren	28	0.1%	Commercial	224
Water	4,732	20.3%	Industrial	28
TOTAL ACREAGE	23,295	100.0%	Transportation/Communication/Utilities	75
			Agricultural	551
			<i>Cropland</i>	<i>509</i>
			<i>Orchards/Vineyards</i>	<i>4</i>
			<i>Confined Feeding Operations</i>	<i>0</i>
			<i>Permanent Pasture Lands</i>	<i>31</i>
			<i>Other Agricultural Lands</i>	<i>7</i>
			Grass/Shrublands	1,749
			Forest	7,388
			<i>Broadleaved Forest</i>	<i>2,519</i>
			<i>Coniferous Forest</i>	<i>2,597</i>
			<i>Mixed Conifer/Broadleaved Forest</i>	<i>2,272</i>
			Wetlands	5,008
			<i>Wooded Wetlands</i>	<i>4,570</i>
			<i>Non-Wooded Wetlands</i>	<i>438</i>
			Barren	28
			<i>Beach/Riverbank</i>	<i>0</i>
			<i>Sand Dune/Exposed Bluff</i>	<i>0</i>
			<i>Extractive</i>	<i>28</i>
			Water	4,732
			TOTAL ACREAGE	23,295



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Grant Township Land Use/Land Cover 2010

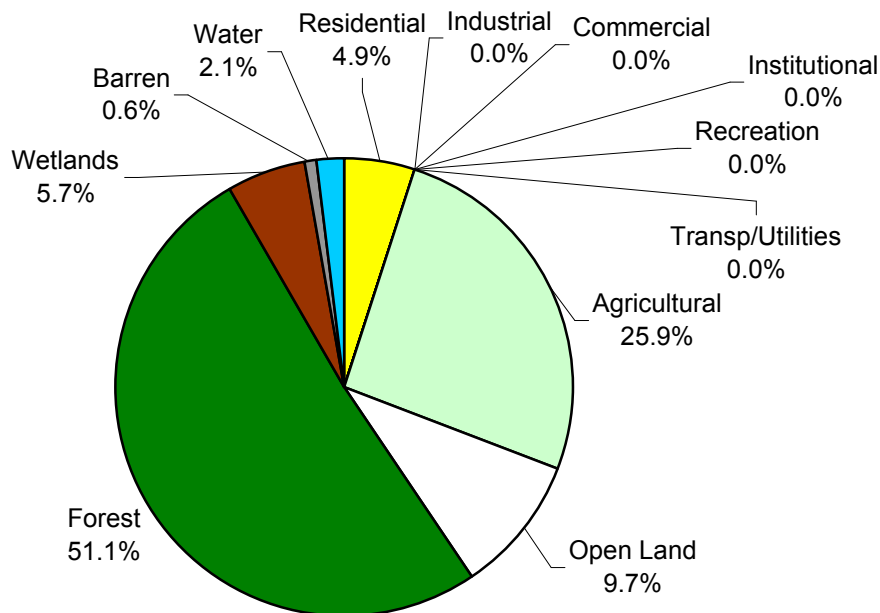
Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	1,130	4.9%	Residential	1,130
Institutional	1	0.0%	<i>Single Family/Duplex Residential</i>	<i>1,130</i>
Recreation	11	0.0%	<i>Multiple Family Residential (Low Rise)</i>	<i>0</i>
Commercial	10	0.0%	<i>Multiple Family Residential (Med/Hi Rise)</i>	<i>0</i>
Industrial	0	0.0%	<i>Manufactured Home Park</i>	<i>0</i>
Transp/Utilities	1	0.0%	<i>Group/Transient Quarters</i>	<i>0</i>
Agricultural	5,947	25.9%	Institutional	1
Open Land	2,224	9.7%	Recreation	11
Forest	11,750	51.1%	<i>Indoor Cultural/Assembly/Recreation</i>	<i>0</i>
Wetlands	1,304	5.7%	<i>Open Land Recreation</i>	<i>11</i>
Barren	140	0.6%	Commercial	10
Water	479	2.1%	Industrial	0
TOTAL ACREAGE	22,997	100.0%	Transportation/Communication/Utilities	1

Agricultural	5,947
<i>Cropland</i>	<i>5,867</i>
<i>Orchards/Vineyards</i>	<i>0</i>
<i>Confined Feeding Operations</i>	<i>6</i>
<i>Permanent Pasture Lands</i>	<i>68</i>
<i>Other Agricultural Lands</i>	<i>6</i>
Grass/Shrublands	2,224
Forest	11,750
<i>Broadleaved Forest</i>	<i>7,639</i>
<i>Coniferous Forest</i>	<i>2,155</i>
<i>Mixed Conifer/Broadleaved Forest</i>	<i>1,956</i>
Wetlands	1,304
<i>Wooded Wetlands</i>	<i>1,022</i>
<i>Non-Wooded Wetlands</i>	<i>282</i>
Barren	140
<i>Beach/Riverbank</i>	<i>22</i>
<i>Sand Dune/Exposed Bluff</i>	<i>7</i>
<i>Extractive</i>	<i>111</i>
Water	479
TOTAL ACREAGE	22,997



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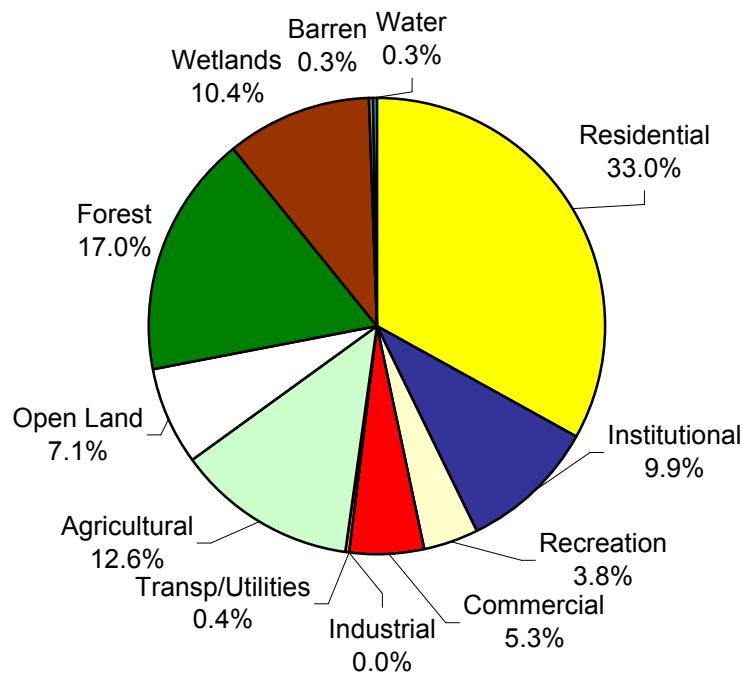
Kingsley Village Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	254	33.0%	Residential	254
Institutional	76	9.9%	<i>Single Family/Duplex Residential</i>	210
Recreation	29	3.8%	<i>Multiple Family Residential (Low Rise)</i>	3
Commercial	41	5.3%	<i>Multiple Family Residential (Med/Hi Rise)</i>	0
Industrial	0	0.0%	<i>Manufactured Home Park</i>	41
Transp/Utilities	3	0.4%	<i>Group/Transient Quarters</i>	0
Agricultural	97	12.6%	Institutional	76
Open Land	55	7.1%	Recreation	29
Forest	131	17.0%	<i>Indoor Cultural/Assembly/Recreation</i>	0
Wetlands	80	10.4%	<i>Open Land Recreation</i>	29
Barren	2	0.3%	Commercial	41
Water	2	0.3%	Industrial	0
TOTAL ACREAGE	770	100.0%	Transportation/Communication/Utilities	3
			Agricultural	97
			<i>Cropland</i>	97
			<i>Orchards/Vineyards</i>	0
			<i>Confined Feeding Operations</i>	0
			<i>Permanent Pasture Lands</i>	0
			<i>Other Agricultural Lands</i>	0
			Grass/Shrublands	55
			Forest	131
			<i>Broadleaved Forest</i>	69
			<i>Coniferous Forest</i>	60
			<i>Mixed Conifer/Broadleaved Forest</i>	2
			Wetlands	80
			<i>Wooded Wetlands</i>	74
			<i>Non-Wooded Wetlands</i>	6
			Barren	2
			<i>Beach/Riverbank</i>	0
			<i>Sand Dune/Exposed Bluff</i>	1
			<i>Extractive</i>	1
			Water	2
			TOTAL ACREAGE	770



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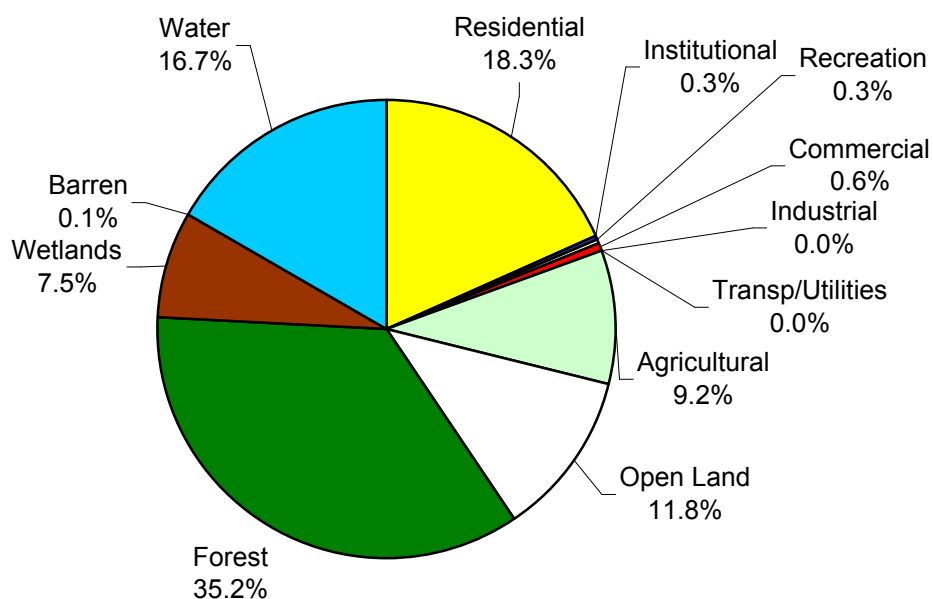
Long Lake Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	4,195	18.3%	Residential	4,195
Institutional	59	0.3%	<i>Single Family/Duplex Residential</i>	<i>4,156</i>
Recreation	71	0.3%	<i>Multiple Family Residential (Low Rise)</i>	<i>26</i>
Commercial	141	0.6%	<i>Multiple Family Residential (Med/Hi Rise)</i>	<i>0</i>
Industrial	0	0.0%	<i>Manufactured Home Park</i>	<i>13</i>
Transp/Utilities	7	0.0%	<i>Group/Transient Quarters</i>	<i>0</i>
Agricultural	2,108	9.2%	Institutional	59
Open Land	2,698	11.8%	Recreation	71
Forest	8,060	35.2%	<i>Indoor Cultural/Assembly/Recreation</i>	<i>7</i>
Wetlands	1,706	7.5%	<i>Open Land Recreation</i>	<i>64</i>
Barren	15	0.1%	Commercial	141
Water	3,827	16.7%	Industrial	0
TOTAL ACREAGE	22,887	100.0%	Transportation/Communication/Utilities	7
			Agricultural	2,108
			<i>Cropland</i>	<i>1,760</i>
			<i>Orchards/Vineyards</i>	<i>161</i>
			<i>Confined Feeding Operations</i>	<i>0</i>
			<i>Permanent Pasture Lands</i>	<i>177</i>
			<i>Other Agricultural Lands</i>	<i>10</i>
			Grass/Shrublands	2,698
			Forest	8,060
			<i>Broadleaved Forest</i>	<i>4,011</i>
			<i>Coniferous Forest</i>	<i>3,275</i>
			<i>Mixed Conifer/Broadleaved Forest</i>	<i>774</i>
			Wetlands	1,706
			<i>Wooded Wetlands</i>	<i>1,372</i>
			<i>Non-Wooded Wetlands</i>	<i>334</i>
			Barren	15
			<i>Beach/Riverbank</i>	<i>0</i>
			<i>Sand Dune/Exposed Bluff</i>	<i>0</i>
			<i>Extractive</i>	<i>15</i>
			Water	3,827
			TOTAL ACREAGE	22,887



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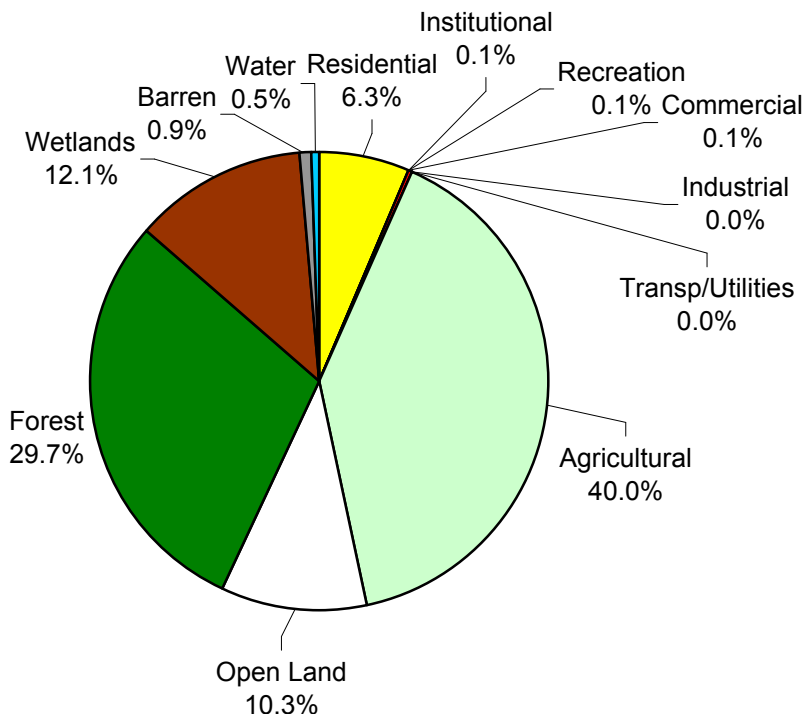
Mayfield Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	1,462	6.3%	Residential	1,462
Institutional	15	0.1%	<i>Single Family/Duplex Residential</i>	<i>1,456</i>
Recreation	25	0.1%	<i>Multiple Family Residential (Low Rise)</i>	<i>6</i>
Commercial	21	0.1%	<i>Multiple Family Residential (Med/Hi Rise)</i>	<i>0</i>
Industrial	0	0.0%	<i>Manufactured Home Park</i>	<i>0</i>
Transp/Utilities	1	0.0%	<i>Group/Transient Quarters</i>	<i>0</i>
Agricultural	9,224	40.0%	Institutional	15
Open Land	2,368	10.3%	Recreation	25
Forest	6,851	29.7%	<i>Indoor Cultural/Assembly/Recreation</i>	<i>0</i>
Wetlands	2,788	12.1%	<i>Open Land Recreation</i>	<i>25</i>
Barren	209	0.9%	Commercial	21
Water	116	0.5%	Industrial	0
TOTAL ACREAGE	23,080	100.0%	Transportation/Communication/Utilities	1
			Agricultural	9,224
			<i>Cropland</i>	<i>9,172</i>
			<i>Orchards/Vineyards</i>	<i>0</i>
			<i>Confined Feeding Operations</i>	<i>4</i>
			<i>Permanent Pasture Lands</i>	<i>45</i>
			<i>Other Agricultural Lands</i>	<i>3</i>
			Grass/Shrublands	2,368
			Forest	6,851
			<i>Broadleaved Forest</i>	<i>4,345</i>
			<i>Coniferous Forest</i>	<i>2,179</i>
			<i>Mixed Conifer/Broadleaved Forest</i>	<i>327</i>
			Wetlands	2,788
			<i>Wooded Wetlands</i>	<i>2,255</i>
			<i>Non-Wooded Wetlands</i>	<i>533</i>
			Barren	209
			<i>Beach/Riverbank</i>	<i>6</i>
			<i>Sand Dune/Exposed Bluff</i>	<i>0</i>
			<i>Extractive</i>	<i>203</i>
			Water	116
			TOTAL ACREAGE	23,080



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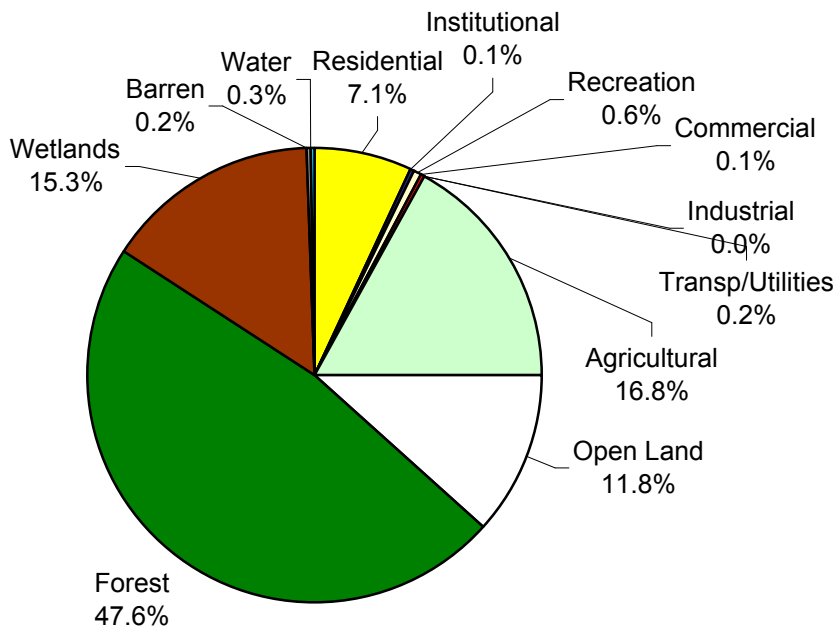
Paradise Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	2,342	7.1%	Residential	2,342
Institutional	37	0.1%	<i>Single Family/Duplex Residential</i>	2,342
Recreation	213	0.6%	<i>Multiple Family Residential (Low Rise)</i>	0
Commercial	46	0.1%	<i>Multiple Family Residential (Med/Hi Rise)</i>	0
Industrial	0	0.0%	<i>Manufactured Home Park</i>	0
Transp/Utilities	52	0.2%	<i>Group/Transient Quarters</i>	0
Agricultural	5,584	16.8%	Institutional	37
Open Land	3,907	11.8%	Recreation	213
Forest	15,781	47.6%	<i>Indoor Cultural/Assembly/Recreation</i>	0
Wetlands	5,071	15.3%	<i>Open Land Recreation</i>	213
Barren	61	0.2%	Commercial	46
Water	94	0.3%	Industrial	0
TOTAL ACREAGE	33,188	100.0%	Transportation/Communication/Utilities	52
			Agricultural	5,584
			<i>Cropland</i>	5,369
			<i>Orchards/Vineyards</i>	0
			<i>Confined Feeding Operations</i>	7
			<i>Permanent Pasture Lands</i>	208
			<i>Other Agricultural Lands</i>	0
			Grass/Shrublands	3,907
			Forest	15,781
			<i>Broadleaved Forest</i>	5,958
			<i>Coniferous Forest</i>	7,548
			<i>Mixed Conifer/Broadleaved Forest</i>	2,275
			Wetlands	5,071
			<i>Wooded Wetlands</i>	4,154
			<i>Non-Wooded Wetlands</i>	917
			Barren	61
			<i>Beach/Riverbank</i>	0
			<i>Sand Dune/Exposed Bluff</i>	18
			<i>Extractive</i>	43
			Water	94
			TOTAL ACREAGE	33,188



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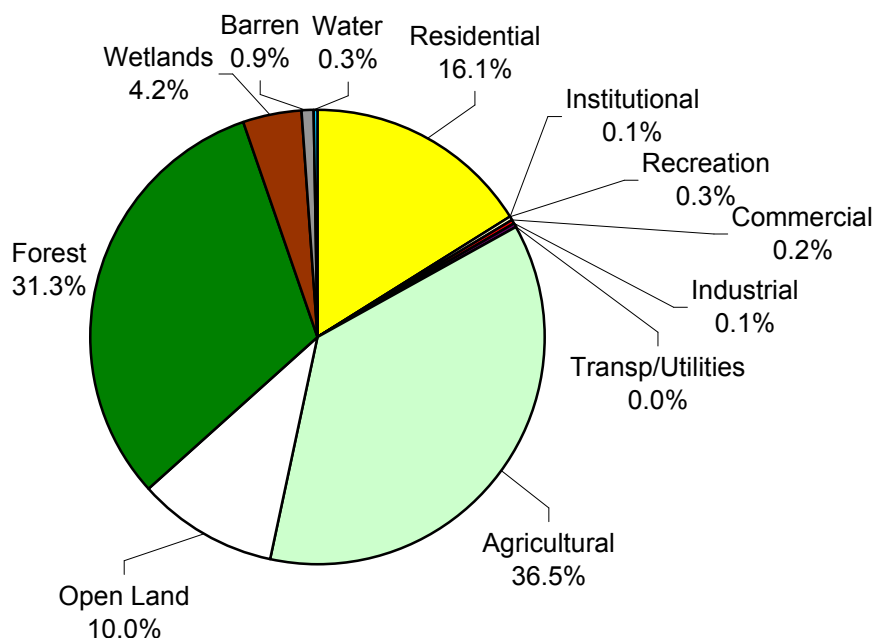
Peninsula Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	2,876	16.1%	Residential	2,876
Institutional	23	0.1%	<i>Single Family/Duplex Residential</i>	2,870
Recreation	55	0.3%	<i>Multiple Family Residential (Low Rise)</i>	6
Commercial	43	0.2%	<i>Multiple Family Residential (Med/Hi Rise)</i>	0
Industrial	17	0.1%	<i>Manufactured Home Park</i>	0
Transp/Utilities	4	0.0%	<i>Group/Transient Quarters</i>	0
Agricultural	6,529	36.5%	Institutional	23
Open Land	1,796	10.0%	Recreation	55
Forest	5,598	31.3%	<i>Indoor Cultural/Assembly/Recreation</i>	0
Wetlands	746	4.2%	<i>Open Land Recreation</i>	55
Barren	155	0.9%	Commercial	43
Water	50	0.3%	Industrial	17
TOTAL ACREAGE	17,892	100.0%	Transportation/Communication/Utilities	4
			Agricultural	6,529
			<i>Cropland</i>	1,865
			<i>Orchards/Vineyards</i>	4,591
			<i>Confined Feeding Operations</i>	0
			<i>Permanent Pasture Lands</i>	44
			<i>Other Agricultural Lands</i>	29
			Grass/Shrublands	1,796
			Forest	5,598
			<i>Broadleaved Forest</i>	3,590
			<i>Coniferous Forest</i>	976
			<i>Mixed Conifer/Broadleaved Forest</i>	1,032
			Wetlands	746
			<i>Wooded Wetlands</i>	618
			<i>Non-Wooded Wetlands</i>	128
			Barren	155
			<i>Beach/Riverbank</i>	147
			<i>Sand Dune/Exposed Bluff</i>	0
			<i>Extractive</i>	8
			Water	50
			TOTAL ACREAGE	17,892



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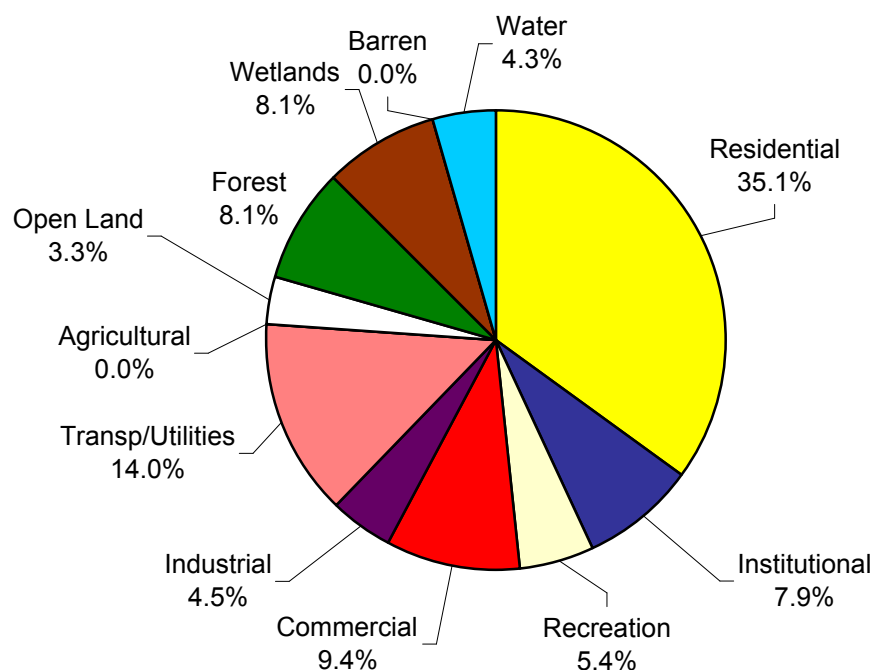
Traverse City Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	1,859	35.1%	Residential	1,859
Institutional	418	7.9%	<i>Single Family/Duplex Residential</i>	<i>1,712</i>
Recreation	284	5.4%	<i>Multiple Family Residential (Low Rise)</i>	<i>130</i>
Commercial	498	9.4%	<i>Multiple Family Residential (Med/Hi Rise)</i>	<i>14</i>
Industrial	240	4.5%	<i>Manufactured Home Park</i>	<i>1</i>
Transp/Utilities	741	14.0%	<i>Group/Transient Quarters</i>	<i>2</i>
Agricultural	0	0.0%	Institutional	418
Open Land	175	3.3%	Recreation	284
Forest	427	8.1%	<i>Indoor Cultural/Assembly/Recreation</i>	<i>22</i>
Wetlands	428	8.1%	<i>Open Land Recreation</i>	<i>262</i>
Barren	2	0.0%	Commercial	498
Water	229	4.3%	Industrial	240
TOTAL ACREAGE	5,301	100.0%	Transportation/Communication/Utilities	741
			Agricultural	0
			<i>Cropland</i>	<i>0</i>
			<i>Orchards/Vineyards</i>	<i>0</i>
			<i>Confined Feeding Operations</i>	<i>0</i>
			<i>Permanent Pasture Lands</i>	<i>0</i>
			<i>Other Agricultural Lands</i>	<i>0</i>
			Grass/Shrublands	175
			Forest	427
			<i>Broadleaved Forest</i>	<i>293</i>
			<i>Coniferous Forest</i>	<i>69</i>
			<i>Mixed Conifer/Broadleaved Forest</i>	<i>65</i>
			Wetlands	428
			<i>Wooded Wetlands</i>	<i>264</i>
			<i>Non-Wooded Wetlands</i>	<i>164</i>
			Barren	2
			<i>Beach/Riverbank</i>	<i>2</i>
			<i>Sand Dune/Exposed Bluff</i>	<i>0</i>
			<i>Extractive</i>	<i>0</i>
			Water	229
			TOTAL ACREAGE	5,301



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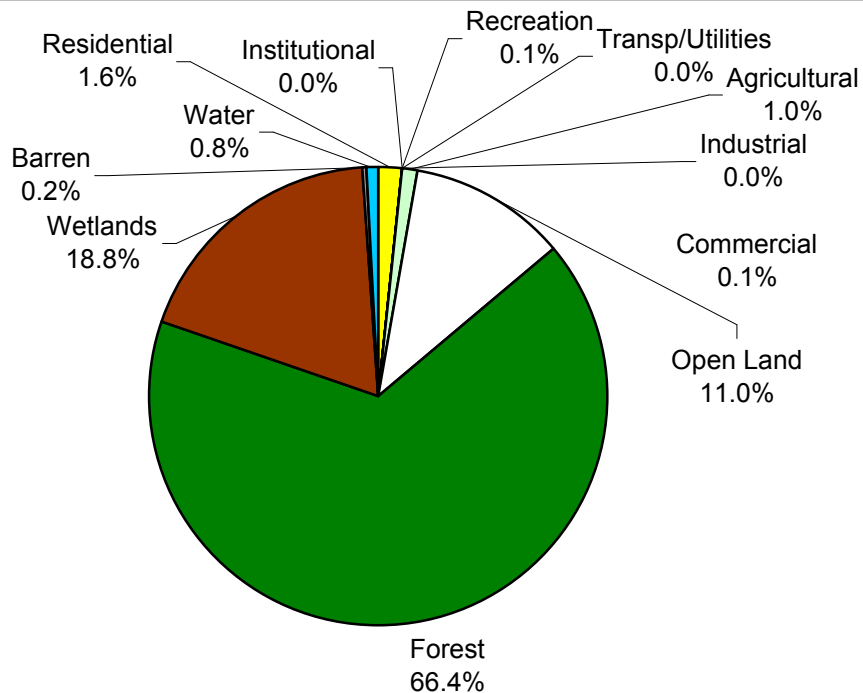
Union Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	368	1.6%	Residential	368
Institutional	2	0.0%	<i>Single Family/Duplex Residential</i>	368
Recreation	13	0.1%	<i>Multiple Family Residential (Low Rise)</i>	0
Commercial	15	0.1%	<i>Multiple Family Residential (Med/Hi Rise)</i>	0
Industrial	0	0.0%	<i>Manufactured Home Park</i>	0
Transp/Utilities	4	0.0%	<i>Group/Transient Quarters</i>	0
Agricultural	230	1.0%	Institutional	2
Open Land	2,547	11.0%	Recreation	13
Forest	15,356	66.4%	<i>Indoor Cultural/Assembly/Recreation</i>	0
Wetlands	4,334	18.8%	<i>Open Land Recreation</i>	13
Barren	53	0.2%	Commercial	15
Water	192	0.8%	Industrial	0
TOTAL ACREAGE	23,114	100.0%	Transportation/Communication/Utilities	4
			Agricultural	230
			<i>Cropland</i>	170
			<i>Orchards/Vineyards</i>	0
			<i>Confined Feeding Operations</i>	0
			<i>Permanent Pasture Lands</i>	60
			<i>Other Agricultural Lands</i>	0
			Grass/Shrublands	2,547
			Forest	15,356
			<i>Broadleaved Forest</i>	2,702
			<i>Coniferous Forest</i>	7,294
			<i>Mixed Conifer/Broadleaved Forest</i>	5,360
			Wetlands	4,334
			<i>Wooded Wetlands</i>	3,713
			<i>Non-Wooded Wetlands</i>	621
			Barren	53
			<i>Beach/Riverbank</i>	0
			<i>Sand Dune/Exposed Bluff</i>	15
			<i>Extractive</i>	38
			Water	192
			TOTAL ACREAGE	23,114



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Whitewater Township Land Use/Land Cover 2010

Grand Traverse County, Michigan

CLASSIFICATION	ACRES	PERCENT	SUB CLASSIFICATION	ACRES
Residential	1,929	5.5%	Residential	1,929
Institutional	29	0.1%	<i>Single Family/Duplex Residential</i>	1,929
Recreation	38	0.1%	<i>Multiple Family Residential (Low Rise)</i>	0
Commercial	130	0.4%	<i>Multiple Family Residential (Med/Hi Rise)</i>	0
Industrial	41	0.1%	<i>Manufactured Home Park</i>	0
Transp/Utilities	155	0.4%	<i>Group/Transient Quarters</i>	0
Agricultural	3,154	9.0%	Institutional	29
Open Land	3,383	9.7%	Recreation	38
Forest	18,584	53.2%	<i>Indoor Cultural/Assembly/Recreation</i>	0
Wetlands	3,583	10.3%	<i>Open Land Recreation</i>	38
Barren	164	0.5%	Commercial	130
Water	3,752	10.7%	Industrial	41
TOTAL ACREAGE	34,942	100.0%	Transportation/Communication/Utilities	155
			Agricultural	3,154
			<i>Cropland</i>	1,328
			<i>Orchards/Vineyards</i>	1,792
			<i>Confined Feeding Operations</i>	0
			<i>Permanent Pasture Lands</i>	34
			<i>Other Agricultural Lands</i>	0
			Grass/Shrublands	3,383
			Forest	18,584
			<i>Broadleaved Forest</i>	6,870
			<i>Coniferous Forest</i>	8,008
			<i>Mixed Conifer/Broadleaved Forest</i>	3,706
			Wetlands	3,583
			<i>Wooded Wetlands</i>	3,173
			<i>Non-Wooded Wetlands</i>	410
			Barren	164
			<i>Beach/Riverbank</i>	7
			<i>Sand Dune/Exposed Bluff</i>	114
			<i>Extractive</i>	43
			Water	3,752
			TOTAL ACREAGE	34,942



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