

## Figures, Maps, Tables

4.1: Demographic dashboard	P-12
4.2: Net worth	P-14
4.3: Non-retail to retail earnings	P-15
4.4: Retail marketplace summary	P-16
4.5: Road conditions	P-20
4.6: Broadband service inventory in Benzie County	P-21
4.7 Proposed Merit fiber-optic network	P-21
4.8: Regional Recreation Trails	P-22
4.9: Land Dashboard	P-26
4.10 Natural Features map	P-27
4.11: Existing land use chart and map (inventory 2013)	P-28
4.12: Residential characteristic changes, 2000-2010	P-30
4.13: Future Land Use map	P-31
4.14: Land use images	P-32
4.15: Action plan	P-35





# Expectations

The top priorities enumerated by attendees at Joyfield Township's visioning session form a cascading chain of logic on a mission: Implement planning and zoning, which keep the community rural and beautiful, which makes it ideally suited for growth in agriculture, which will yield needed industry and jobs.

On June 13, 2012 interested residents convened at the Blaine Christian Church to participate in a Community Vision Session as a prelude to preparing the community master plan. The session was structured in a manner to solicit community-based priorities that needed to be addressed by the Planning Commission as part of their goal setting.

The following pages present "Cornerstones," or goals formulated by the Joyfield Township Planning Commission to guide future development. Each includes a set of "Building blocks," specific strategies to be implemented to achieve those goals. At the bottom is the "Foundation" that supports each Cornerstone: its linkage to the citizens' stated priorities and to the Benzie County Master Plan. Each cornerstone is important to the community, without ranking, and all require consideration when developing policies and zoning.

### Retain and create jobs.

Joyfield Township has 32 businesses with an estimated employment base of 223 employees. This means that for every resident, there are .28 jobs—or 1/3 of one job. Agriculture and farm-related wholesale businesses make up approximately 46% of the Township employment base.

Similarly, 256 out of 799 residents 16 years or older are employed either in the township or the immediate region. Of those employed, 43% work in administrative and management jobs, 31% work in the service industry, and 26% are employed in the farming, production, and construction professions.

State and regional initiatives focusing on agriculture will provide an opportunity for future job creation in areas such as agricultural tourism and farm-to-table or farm-to-restaurant programs. In addition, the community has an opportunity to work with Benzonia Township on the establishment of a commerce/business district at the intersection of M-115 and US-31. This area already has a number of commercial businesses, but a coordinated approach would make this emerging district more cohesive to provide a greater array of businesses for residents in the immediate area.

### **Building blocks**

- Concentrate industrial, retail, and service business opportunities at the US-31 and M-115 intersection, and work with Benzonia Township to establish a business district with uniform standards and regulations.
- 2. Encourage infrastructure improvements, including wireless, broadband, natural gas, sewer, and water services.
- 3. Ensure that the Zoning Ordinance contains provisions for home occupations and cottage businesses.
- 4. Ensure that zoning provisions encourage agricultural-related business development.
- Encourage local businesses, and those interested in starting a business, to engage in training and education opportunities.
- 6. Coordinate business recruitment with surrounding townships and organizations.



Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Joyfield collective priorities	Retain scenic character	Growth in agriculture	Implement planning and zoning	Increase job opportunities

Connect with regional non-motorized and motorized trails.

Joyfield Township has beautiful and scenic rural landscapes, but it lacks any form of non-motorized pathway. Although county roads such as Joyfield Road, Mick Road (County Road 604) and Smeltzer Road (County Road 602) provide bicyclists and walkers with a pleasurable experience, there are no formal connections to the Betsie Valley Trail / Pathway or other areawide attractions.

In addition to non-motorized trails, plans should include snowmobiles and other motorized all-terrain vehicles trails and facilities. Snowmobile trails allow Joyfield Township residents to take advantage of its average annual snowfall of 108 inches, which is comparable with other northwest lower peninsula communities but higher than the state average of 51 inches.

### **Building blocks**

- 1. Incorporate the findings of Benzie County and the Northwest Michigan Regional Non-Motorized Strategy and proposed route locations in the master plan and local (MDNR-approved) fiveyear recreation and park master plans.
- 2. Reserve adequate right-of-way for trails and bike lanes along proposed routes and County roads, giving consideration to landowners.
- 3. Consider a connection with the Betsie River Pathway over the Betsie River, and consider a connection to Swamp Road trailhead within the C.S. Mott Nature Preserve.
- 4. Coordinate efforts with the Benzie County Road Commission to provide paved shoulders when township roads are resurfaced and/or reconstructed.
- 5. Coordinate with neighboring townships to develop trails within the township and to provide linkages from them to the regional trail system.
- 6. Encourage respect and consideration of property owners along the trails.
- 7. Encourage year-round trail and access for nonmotorized and motorized recreation.



Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns	
Joyfield collective priorities	Retain scenic character	Growth in agriculture	Implement planning and zoning	Increase job opportunities	

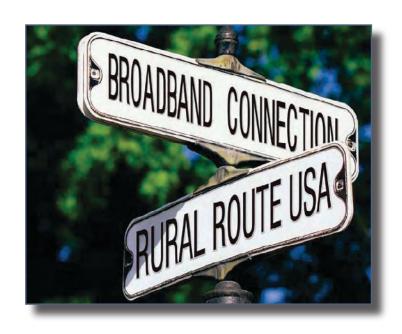
Improve and develop township infrastructure.

Joyfield Township is a rural community. As a result, the typical array of infrastructure—public water and sewer—is not available or practical. Based on the 2010 US Census, the township had a population density of 40 people per square mile and a housing unit density of 20 housing units per square mile. The only area in the township that could conceivably have public water and sanitary sewer in the future would be at the intersection of US-31 and M-115, adjacent to Benzonia Township.

Besides water and sewer, rural communities are in need of other infrastructure such as electricity, natural gas, and broadband (Internet) services. Joyfield Township's electrical needs are served by Cherryland Electric Cooperative and Consumers Power. Joyfield Township is within the MichCon natural gas service area according to the Michigan Public Service Commission, but product is unavailable. For an agricultural area, the availability of energy is critical to operations and production. Electricity, natural gas (NG), and propane (LP) are used in the operation of irrigation equipment, drying of grain and fruit, heating for frost protection, heating and cooling for barns and greenhouses, and for standby generators. Growing the agricultural, light industry, and cottage business economy means having access to infrastructure.

### **Building blocks**

- Work with adjacent communities and agencies to help obtain access to natural gas for residences and businesses.
- 2. Collaborate on regional initiatives to help obtain access to broadband for home, business, and public safety uses.
- Minimize overhead systems and encourage telephone, Internet, and cable utilities to bury lines or to use existing poles.
- Coordinate the potential provision of water and sanitary services at the US-31 and M-115 intersection with the rate of development and in conjunction with Benzonia Township when feasible.
- 5. Incorporate provisions in the zoning ordinance to allow for home occupations and cottage businesses that can fully utilize the infrastructure network.
- Encourage the maintenance or improvement of township roads.



Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns	
Joyfield collective priorities	Retain scenic character	Growth in agriculture	Utilities	Increase job opportunities	

Avoid the development of industries that have a negative affect on our rural character.

Care should be taken to minimize the negative impacts of industries on the township's rural character. These types of industries would include landfills, natural gas "sweetening" (desulphurization) plants, and others that could negatively affect our rural character.

The master plan should encourage opportunities that supplement agricultural operation and allow for diversity in employment opportunities. The township encourages nodal development of light industry and commercial businesses. Cottage and value-added agricultural industries are supported throughout the township.

### **Building blocks**

- Designate roads with adequate capacity in design, construction, and anticipated function to cater to the increase in traffic flows arising from heavy commercial, warehousing, and light industrial activity.
- 2. Encourage new development to connect to an existing network of infrastructure or have the potential to be connected to and serviced with infrastructure in an efficient, economic, and orderly manner.
- Include adequate separation from incompatible activities such as residential, agriculture, and sensitive environments such as wetlands, riparian corridors, and remnant vegetation.
- Encourage growth in light industry, small businesses, and value-added industries in appropriate areas.
- Discourage the development of industrialscale agriculture or non-agriculture that could negatively affect our rural character.



Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns	
Joyfield collective priorities	Maintain rural character	No large industrial complexes	Implement planning and zoning	Increase job opportunities	

### Discourage blight.

The State of Michigan Brownfield Redevelopment Authority Act defines "blight" as property which 1) has been declared a public nuisance in accordance with state and local building, housing, plumbing, fire, or local ordinance, 2) is an attractive nuisance to children, 3) is a fire hazard, 4) has utilities serving the property or buildings in such disrepair that the property is unfit for its intended use, 5) is tax reverted, 6) is owned by a land bank, or 7) has sufficient demolition debris buried on the site that it is unfit for its intended use. So, blight comes in many forms—and in all of them, it is the responsibility of the local unit of government to monitor and manage its removal.

### **Building blocks**

- 1. Adopt and enforce a blight ordinance.
- 2. If contaminated property is involved on a parcel, consider working with the Benzie County Brownfield Authority on remediation efforts and strategy.
- 3. If property in the township is under the control of the Benzie County Land Bank or a brownfield authority, coordinate efforts with the land bank authority on reuse opportunities for the property and/or work with interested parties on the reuse and repurposing of the property.
- 4. Consider the coordination of clean-up efforts with neighboring townships and counties to minimize blight and waste.



Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns	
Joyfield collective priorities	Retain scenic character	Growth in agriculture	Implement planning and zoning	Increase job opportunities	

Preserve our rural and scenic character.

The preservation of rural and scenic character relates back to sustaining the agricultural and natural landscapes of Joyfield Township. The fields and farms that create that patchwork landscape so highly regarded by resident and visitor need to be profitable operations to be sustainable. The natural landscape—local tributaries, woodlots, wetlands, etc.—is often regulated by local and state authorities, but much of Joyfield Township is farmland. According to the existing land use inventory, 4,180 acres are designated agricultural, comprising 33% of the township land area.

Another element of the rural and scenic experience is the condition and historical development of county road network. As seen in the picture below, many of the county roads that traverse Joyfield Township are lined with large deciduous trees which provide a memorable canopy of shade during the warm summer months. Behind these tree rows are views of local farms and orchards.

## **Building blocks**

- Encourage development designed to preserve usable amounts of open, farmable land.
- Encourage development in areas served by municipal utilities and roads.
- 3. Discourage non-agricultural uses from negatively impacting agriculture as the primary land use.
- 4. Encourage height restrictions and/or building designs that fit our rural area.
- 5. Provide for reasonable protection of the dark night sky.
- Encourage the location of intensive development, such as residential subdivisions, commercial and industrial establishments, to areas that have the infrastructure to service them.



Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns
Joyfield collective priorities	Retain scenic character	Growth in agriculture	Implement planning and zoning	No large industrial complexes

Sustain and enhance the agricultural economy of the township.

Joyfield Township has a land area of 12,763 acres. Agricultural uses account for 4,180 acres (33% of the land area) and 20% of the township's property valuation. When agricultural uses are combined with the 3,737 acres of forest land, nearly two-thirds of Joyfield Township is used for farms, orchards, and woodlots.

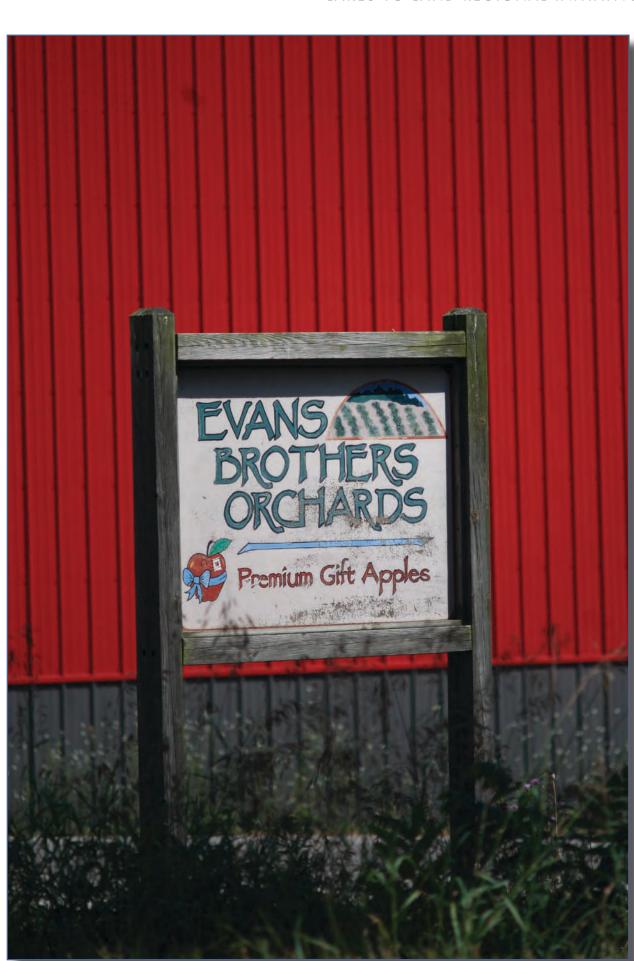
Recognizing the importance that agricultural operations play in the township, a meeting with the farm community was sponsored by the Joyfield Township Planning Commission which identified a number of concerns, some of which are related to planning and zoning. These issues included the division of land, affordable work force and migrant housing, better roads for hauling farm produce, products, and equipment, more affordable energy, and support for the Right to Farm Act provision. In addition, the need for greater flexibility and less restrictions in zoning provision, the use of cluster development, and minimization of redundant regulations which impede the agricultural community from fully utilizing their properties were discussed.

### **Building blocks**

- 1. Formulate agricultural zoning policies that provide flexibility to farm and orchard operators.
- Formulate zoning policies which allow for clustered and compact rural residential development in agricultural areas.
- 3. Formulate zoning policies which allow for valueadded opportunities such as farm markets, agtourism, home occupations, and cottage businesses.
- 4. Evaluate land division strategies that allow for future residential development that encourage continuation of farming and agriculture.
- Formulate zoning policies which recognize the Right to Farm when residential uses are sited adjacent to existing farms and orchards.
- 6. While the township can in no way be obligated to purchase or financially support the sale or transfer of development rights it will support adopting a Development Rights Ordinance with the expressed purpose of becoming eligible to participate in the land conservancy, the Agriculture Preservation Fund Program or programs like these which would help fund the purchase of Development Rights Agreements for interested members of the agricultural community.



Benzie County master plan principles	Balanced growth	Environmental protection	Visual character of the landscape	Visual character of small towns	
Joyfield collective priorities	Retain scenic character	Growth in agriculture	Implement planning and zoning	Increase job opportunities	





# People and Places

### Demographic Dashboard

In order to consolidate the reams of information provided by the U.S. Census Bureau and ESRI Business Analyst (a private data provider), a demographic dashboard was prepared for the community to highlight a variety of demographic, household, income, and employment information. The dashboard, featured on the next page, graphically compares Joyfield Township (yellow) to Benzie County, Manistee County, the State of Michigan, and the United States. This data shows where Joyfield Township is compared to county, state, and national statistics..

#### **Population**

Michigan's population decline experience between 2000 and 2010 passed Joyfield by, as the township held on to all 212 residents gained during the 1990s and even added a few more to bring the 2010 census one citizen shy of the 800 mark. That citizen is projected to arrive, along with

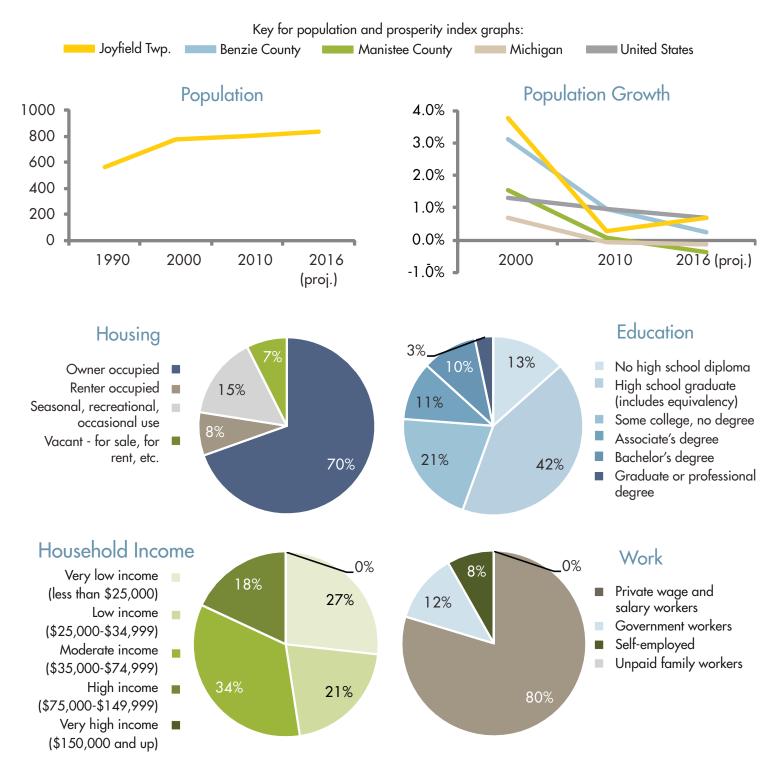
32 more, as the population continues a slow climb upward through 2016. Because of forecasted flatline population growth it is anticipated that land development will be limited to the sporadic construction of rural residential homesteads.

### Housing

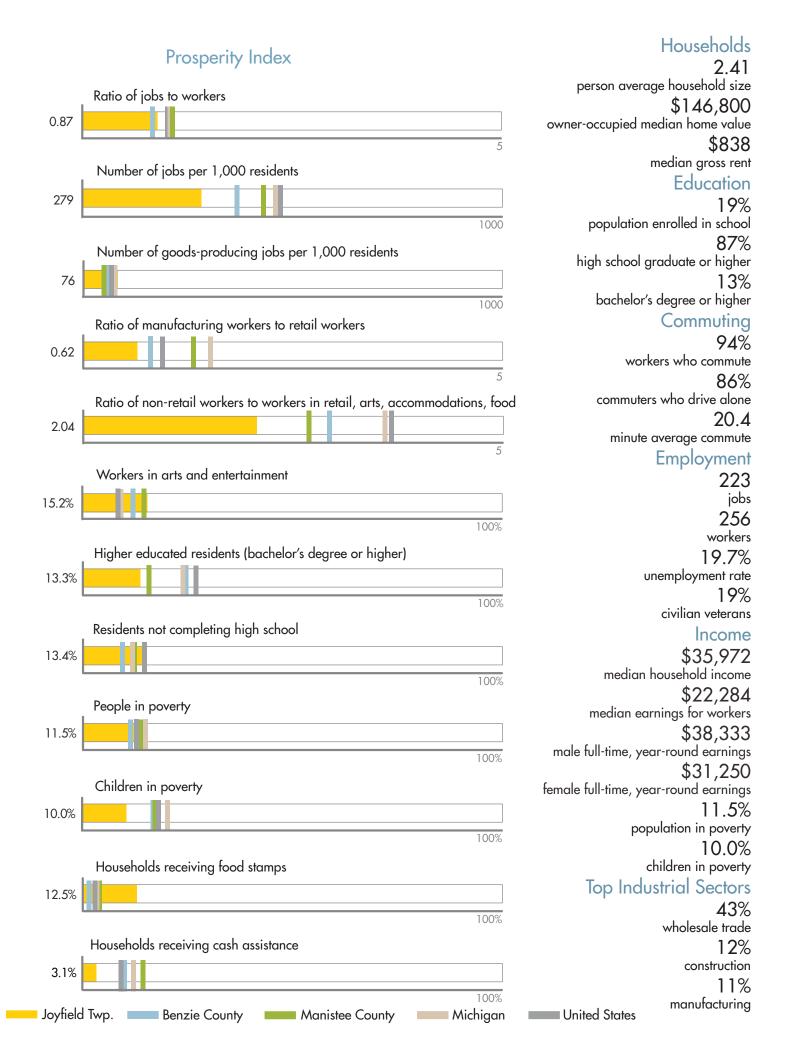
Joyfield's 404 housing units provide the shelter for its 288 households. Seven in 10 of those households own their homes, and 57% of the owner-occupied homes are mortgaged. The median home value is \$146,800, and the median gross rent is \$838.

By the time the Census began counting them in 1940, just 12% of Joyfield's houses had been built. Residential development continued slowly, averaging less than 20 homes per decade and taking until 1970 to double in size. The pace picked up to about 55 homes per decade over the following years, and the two decades on either side of the new millennium have seen about 90 new homes apiece.

# Demographic Dashboard



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



The majority of the homes (57%) are heated by bottled, tank, or liquid petroleum (propane) gas. Another one in five are heated by wood, and about 12% keep warm with fuel oil or kerosene. A few households use electricity (6%), utility gas (4%), or other fuel (1%) to fend off the northern Michigan winter.

#### Education

The largest share of Joyfield residents (42%) has a high school education or equivalent. The proportion who have not attained that level (13.4%) is higher than the rates in Benzie County, Manistee County, and Michigan as a whole. An almost identical percentage (13.3%) has completed a bachelor's degree or higher; this is lower than the rates in all four aggregated populations.

#### Income

Joyfield's median household income is \$35,972 ranks in the bottom half of surrounding communities, with median earnings for all workers at \$22,284. This means that a household can be more easily supported with fewer earners: it would take just 1.61 workers' median earnings to equal the median household income.

Of the 13 industrial classifications tracked by the U. S. Census, just 7 had enough full-time, yearround workers to present data. The highest-paying classification is public administration, and the second highest-paying occupation is construction. Among all earnings (including seasonal and part-time), the contrast continues and expands: the highest-paid professions are public administration, information , construction, and professional, scientific, management, waste, and administrative services. Joyfield's overall population is slightly skewed, with a 57-43 male-to-female ratio, and its full-time, year-round working population is skewed even more heavily at 60-40.

The poverty rate of 11.5% in Joyfield is commensurate with regional, county, state, and national benchmarks. Among citizens younger than 18, the poverty rate is slightly lower (10%), whereas it is 4 to 6 percentage points higher in each of the aggregated populations. There are more food stamp receipts in the township than in the larger populations (12.5% vs. 2%-4%) but less cash assistance (3.1% vs. 9%-14%).

A quick estimate of a community's "net worth" can be obtained by dividing its major assets (checking and savings accounts, stocks, bonds, mutual funds) by its major liabilities (home and car loans). The higher the ratio of assets to liabilities, the better insulated the community will be from quick changes in the economy. In Joyfield, the ratio is 2.93. This figure is higher than that of Benzie County, (2.58) Michigan (2.65), and the United States (2.41). A factor contributing to the higher "community" net worth is

the presence of older households and retired households who tend to have less debt and other long-term obligations. According to the U.S. Census it is estimated that 88 residents have access to retirement income and 124 residents are utilizing social security benefits.

### **Occupations**

This section talks about the occupations and professions in which the residents of Joyfield Township work, whether or not their places of employment are within the township limits. Industrial classifications are similar but also different than occupational classifications.

Sixty-two of the 256 workers in Joyfield's civilian employed population (24%) listed "Educational services, health care, and social assistance" as their occupation. The second greatest number of workers were in retail trade (16%), followed by arts, entertainment, recreation, accommodation, and food services (15%).

Nationally, the median earnings of workers in non-retail occupations are double the median earnings of

4.2: Net worth

Assets	
Checking Accounts	\$1,224,155
Savings Accounts	\$2,859,938
U.S. Savings Bonds	\$104,165
Stocks, Bonds & Mutual Funds	\$7,248,124
Total	\$11,436,382
Liabilities	
Original Mortgage Amount	\$3,131,781
Vehicle Loan Amount	\$769,755
Total	\$3,901,536
Net Worth	
Assets / Liabilities	2.93
S	ource: Esri Business Analyst

4.3: Non-retail to retail earnings

Industry	Workers	Median earnings	Weighted median earnings
Non-retail			
Educational services, and health care and social assistance	62	\$33,571	\$2,081,402
Manufacturing	26	\$26,667	\$693,342
Construction	24	\$41,875	\$1,005,000
Transportation and warehousing, and utilities	12	\$21,667	\$260,004
Information	12	\$46,000	\$552,000
Other services, except public administration	10	\$35,833	\$358,330
Agriculture, forestry, fishing and hunting, and mining	9	\$16,250	\$146,250
Professional, scientific, management, administrative, waste management services	9	\$36,250	\$326,250
Public administration	6	\$51,250	\$307,500
Wholesale trade	5	\$30,417	\$152,085
Total	175		\$5,882,163
Average of weighted median earnings		\$33,612	
Retail, art, accommodation, food service			
Retail trade	42	\$16,250	\$682,500
Arts, entertainment, and recreation, and accommodation and food services	39	\$22,083	\$861,237
Total	81		\$1,543,737
Average of weighted median earnings		\$19,058	
"Finance and insurance, and real estate and rental and leasing" had too f	ew sample ob	servations to ca	culate an estimate.

"Finance and insurance, and real estate and rental and leasing" had too few sample observations to calculate an estimate.

Source: American Community Survey 2006-2010

workers in retail occupations Although it is not a direct comparison, we can get a sense of this disparity in wages between non-retail jobs and those in retail, arts, accommodations, and food service by multiplying the median earnings in each industry by the number of workers in that industry, then dividing the resulting aggregate income for each category (non-retail and retail, arts, etc.) by the number of workers in it. This average of weighted median earnings, shown in Figure 4.3, estimates that non-retail workers in Joyfield earn about 1.76 times as much as workers in retail, arts, accommodation and food service. Therefore, the higher the ratio of non-retail jobs to those in retail, arts, accommodation, and food service, the higher Joyfield's aggregate personal income should be.

## Retail and Business Summary

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

The business summary generated by Esri notes that 32 businesses employ 223 people within the township's borders. When compared with the residential population of Joyfield, this equates to 279 jobs per 1,000 residents. In some cases, this may be a sign of a "bedroom community" heavily populated by commuters. Further, the U.S. Census notes that 82% of workers (16 years and older) commute to work with an average commute time of 22.5 minutes.

One quarter of the businesses are devoted to construction, with a total of 27 employees. There are no other significant concentrations of industry. Four fields split the next 38% of Joyfield's economy evenly at 3 businesses apiece: agriculture, forestry, fishing, hunting, mining; wholesale trade; retail trade; and services other than public administration.

The greatest number of employees in Joyfield are working in wholesale trade, with 43% of the overall labor force (95 employees). Construction and manufacturing employ 12% and 11% of the remaining workers respectively.

Although almost a third of Joyfield's residents work in retail, art, accommodation, or food service, it seems that they are leaving the

4.4: Retail marketplace summary

. T. Nordin marketprace communy		- 1				
	NAICS	Demand	Supply		Leakage	
Industry Group	Class.	(Retail Potential)	(Retail Sales)	Retail Gap	/ Surplus Factor	
Motor Vehicle & Parts Dealers	441	\$1,009,217	\$289,431	\$719,786		1
Automobile Dealers	4411	\$837,286	\$207,431	\$837,286		0
Other Motor Vehicle Dealers	4411	\$131,106	\$278,463	-\$147,357		1
		-	-			
Auto Parts, Accessories & Tire Stores	4413	\$40,825	\$10,968	\$29,857		0
Furniture & Home Furnishings Stores	442	\$86,276	\$0	\$86,276	100.0	
Furniture Stores	4421	\$46,593	\$0	\$46,593	100.0	0
Home Furnishings Stores	4422	\$39,683	\$0	\$39,683	100.0	0
Electronics & Appliance Stores	4431	\$113,878	\$7,666	\$106,212	87.4	0
Bldg Materials, Garden Equip. & Supply Stores		\$168,855	\$0	\$168,855	100.0	0
Bldg Material & Supplies Dealers	4441	\$147,263	\$0	\$147,263		0
Lawn & Garden Equip & Supply Stores	4442	\$21,592	\$0	\$21,592		0
Food & Beverage Stores	445	\$642,975		-\$25,639		1
Grocery Stores	4451	\$578,160	\$668,614	-\$90,454	-7.3	1
Specialty Food Stores	4452	\$49,288	\$0	\$49,288	100.0	0
Beer, Wine & Liquor Stores	4453	\$15,527	\$0	\$15,527	100.0	0
Health & Personal Care Stores	4,464,461	\$136,787	\$0	\$136,787	100.0	0
Gasoline Stations	4,474,471	\$787,648	\$3,185,248	-\$2,397,600	-60.3	0
Clothing & Clothing Accessories Stores	448	\$120,525	\$0	\$120,525	100.0	0
Clothing Stores	4481	\$101,685	\$0	\$101,685	100.0	0
Shoe Stores	4482	\$9,621	\$0	\$9,621	100.0	0
Jewelry, Luggage & Leather Goods Stores	4483	\$9,219	\$0	\$9,219	100.0	0
Sporting Goods, Hobby, Book & Music Stores	451	\$32,049	\$0	\$32,049	100.0	0
Sporting Goods/Hobby/Musical Instr Stores	4511	\$23,059	\$0	\$23,059	100.0	0
Book, Periodical & Music Stores	4512	\$8,990	\$0	\$8,990	100.0	0
General Merchandise Stores	452	\$1,037,459	\$651,825	\$385,634	22.8	0
Department Stores Excluding Leased Depts.	4521	\$198,147	\$0	\$198,147		0
Other General Merchandise Stores	4529	\$839,312	\$651,825	\$187,487	12.6	0
Miscellaneous Store Retailers	453	\$60,428	\$27,292	\$33,137	37.8	1
Florists	4531	\$3,644	\$0	\$3,644	100.0	0
Office Supplies, Stationery & Gift Stores	4532	\$34,421	\$0	\$34,421	100.0	0
Used Merchandise Stores	4533	\$7,501	\$12,317	-\$4,815	-24.3	1
Other Miscellaneous Store Retailers	4539	\$14,862	\$14,975	-\$113	-0.4	0
Nonstore Retailers	454	\$20,388	\$0	\$20,388	100.0	0
Electronic Shopping & Mail-Order Houses	4541	\$252	\$0	\$252	100.0	0
Vending Machine Operators	4542	\$7,758	\$0	\$7,758	100.0	0
Direct Selling Establishments	4543	\$12,378	\$0	\$12,378	100.0	0
Food Services & Drinking Places	722	\$576,584	\$177,216	\$399,368	53.0	0
Full-Service Restaurants	7221	\$360,986	\$63,887	\$297,099	69.9	0
Limited-Service Eating Places	7221	\$95,048	\$61,149	\$33,899	21.7	0
Special Food Services				· · · · · · · · · · · · · · · · · · ·		
	7223	\$98,917	\$48,046	\$50,871	34.6	0
Drinking Places - Alcoholic Beverages	7224	\$21,632	\$4,133	\$17,499	67.9	0

township to do so: there are just 18 retail employees (9.4% of all employees) within the municipality, 5 in accommodation and food service (3.1%), and none in art, entertainment, and recreation.

It should be noted that these 32 businesses do not constitute 32 "storefronts" because a portion of these businesses are operated out of the home.

Table 4.4 is designed by Esri to provide a snapshot of retail opportunity by presenting the fullest picture possible of both supply and demand. Supply is calculated by combining the Census of Retail Trade, a portfolio of demographic and business databases, and the Census Bureau's Nonemployer Statistics data to estimate total sales to households by businesses within the study area. To estimate demand, Esri combines annual consumer expenditure surveys from the Bureau of Labor and Statistics with its own proprietary Tapestry Segmentation system (Tab 2), yielding a fairly tailored picture of the purchases likely to be made by the inhabitants of the study area

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

This trend is not unusual in rural areas where there is higher degree of dependency on regional businesses to meet personal and business needs.

### Agricultural Influence

Of the 12,763 acres of land that comprise Joyfield Township, 4,179 (33%) have an existing land use designation of "Agriculture."

This land represents 64 of the 669 parcels (10%) in the Township. Another 240 acres (2%) spread across five parcels (0.7%) are "Natural Resource Related." Overall, then, about 35% of the land and 11% of the parcels in the township are devoted to "value added" land practices.

About 9% of Joyfield's businesses and 4% of its workers can be directly coded as "agricultural" according to the North American Industrial Classification System (NAICS) used by the US Census.

This is a significant portion of any economy, but an accurate picture of agricultural influence in Joyfield must also include the 43% of workers in the category of "wholesale trade" related to farming. We can see, then, that agriculture comprises almost half of Joyfield's overall economic engine.

#### Seasonal Fluctuations

In Joyfield Township, 15.1% of the houses are seasonal or recreational use. This is significantly lower than Benzie and Manistee counties aggregated percentages of 33.1% and 24.9%, but it represents a significant departure from the state and national benchmarks of 5.8% and 3.5%.





# Infrastructure

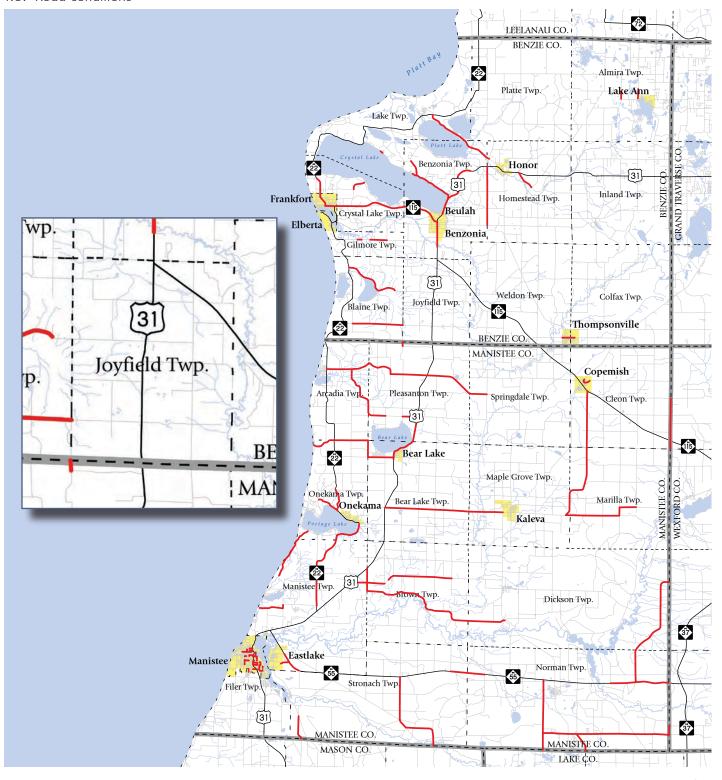
For planning purposes, infrastructure is comprised of "the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions." These components, which come together to form the underlying framework that supports our buildings, movements, and activities, usually include our power supply, water supply, sewerage, transportation avenues, and telecommunications.

#### Roads

The State of Michigan's Public Act 51, which governs distribution of fuel taxes, requires each local road agency and the Michigan Department of Transportation to report on the condition, mileage, and disbursements for the road and bridge system under its jurisdiction. The Pavement Surface Evaluation and Rating (PASER) system used to report on the condition is a visual survey conducted by transportation professionals that rates the road surface from 1 to 10; roads rated 5 and above are considered to be at least "Fair."

Figure 4.5 depicts all of the roads with PASER ratings of "poor" (1-4) in Benzie and Manistee Counties. The close-up in the inset reveals acceptable conditions throughout the entirety of Joyfield Township.

#### 4.5: Road conditions



LAKES TO LAND

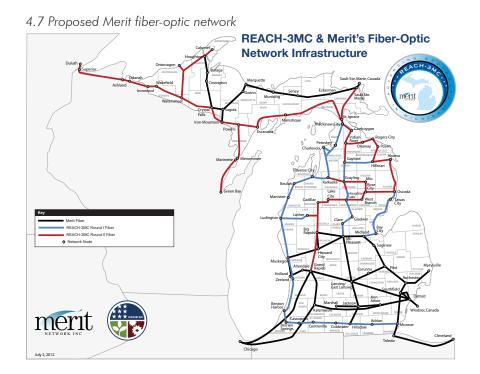
## **Pavement Surface Evaluation and Ratings**

City or Village —— Poor PASER Rating (1 - 4)
—— County Boundary —— Major Road
—— Township Boundary —— Minor Road

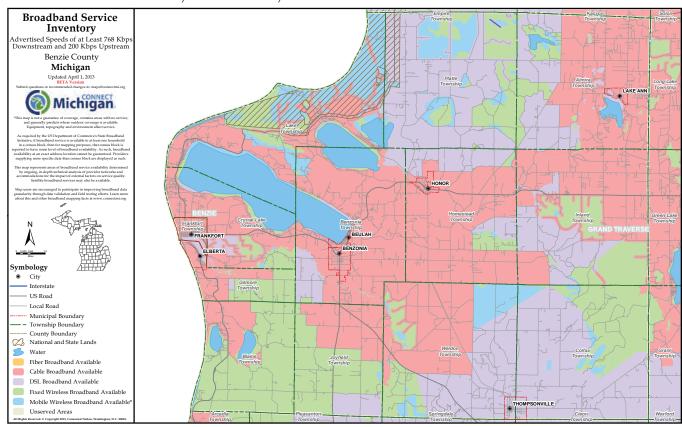
#### **Telecommunications**

Connect Michigan, our state's arm of the national agency dedicated to bringing broadband access to every citizen, calculates that such success has already been achieved in 97% of households in Benzie and Manistee Counties. Figure 4.6 further shows the remaining unserved areas.

There is certainly room for improvement, particularly in terms of increased speed, provider choice, and types of platforms available. In January 2010, Merit Network was awarded American Recovery and Reinvestment Act funds to launch REACH-3MC (Rural, Education, Anchor, Community, and Healthcare—Michigan Middle Mile Collaborative), a statewide fiber-optic network for "community anchor institutions" such as schools and libraries. The completion of the line between Manistee and Beulah was announced on December 28, 2012.



#### 4.6: Broadband service inventory in Benzie County



#### 4.8: Regional Recreation Trails



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

### Power supply

Electricity for Joyfield Township homes and businesses is available from Consumers Energy Company (Jackson) and Cherryland Electric Cooperative (Grawn). The Michigan Public Service Commission lists the township's natural gas provicer as Michigan Consolidated Gas Company (Detroit), but service is currently unavailable.

#### Water and sewer

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

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

# Trails and regional connections

As can be seen in Figure 4.8, there are not any local or regional trails in Joyfield Township. It's an absence noted by the citizens who requested a multimodal bridge over the Betsie River, and by planning commissioners who formulated a Cornerstone directing increased connection with regional trails.

Preferred strategies for increasing trail access for Joyfield Township residents include connecting with the Betsie River Pathway and the Swamp Road trailhead, paving road shoulders of sufficient width to accommodate nonmotorized transportation, and including snowmobiles and other motorized all-terrain vehicles in trail planning.



Concept Photo: Bridge over the Betsie River by King Road



# Land

Today, nearly all of Joyfield Township—90%—is devoted to plants (existing land use category of "agriculture" or "forest") or housing ("rural residential"). The biggest human-made alteration to the Joyfield landscape is US-31, which bisects the township on its way from Bear Lake to Benzonia and provides the setting for what commercial activities do take place in the township. M-115 also wanders in from the east, connecting with US-31 to form the most urbanized node in the township at the center of its northern limit.

#### 4.9: Land Dashboard

# Land Dashboard

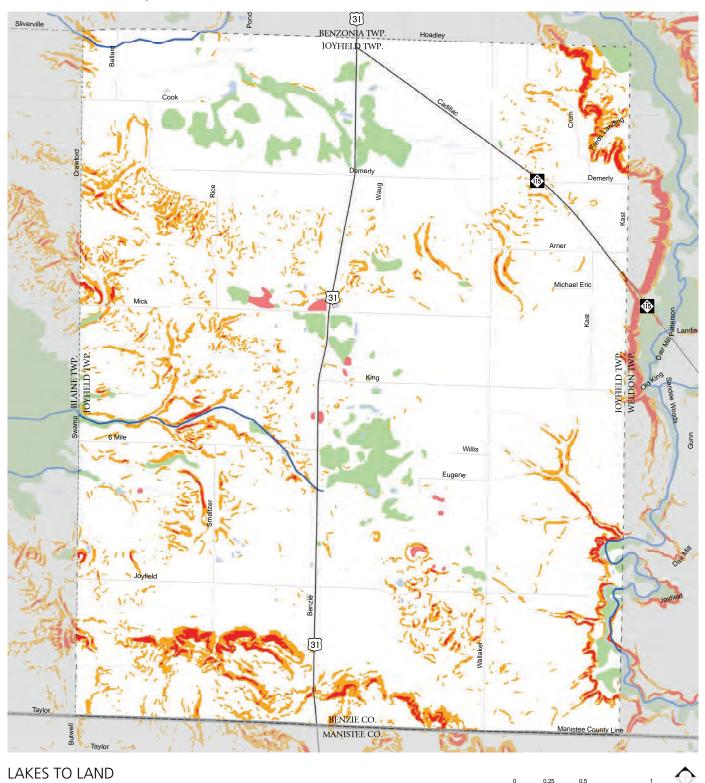
Percentages indicate proportion of total land area except where noted

TOPOGRAPHY						
Elevation		Slopes	Critical dunes			
	0-1 degrees:	3,360 acres	26%			
Low: 620 feet above sea level	1.1-5 degrees:	6,001 acres	47%			
High: 1,085 feet above sea level	5.1-9 degrees:	1,974 acres	15%	0 acres		
Range: 465 feet	9.1-16 degrees:	883 acres	7%			
C	16.1-80 degrees:	156 acres	1%			

WATER					
Surface Water	Rivers	Wetlands			
35.3 acres 0.3%	23.3 miles 0.2% Trout Streams: 4 miles 17% of river length	Emergent (characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens): 29 acres 0.2%  Lowlands, Shrub, Wooded (characterized by low elevation and woody vegetation): 594 acres 5%			

PUBLIC LAND USE					
Roads	Regional Trails	Conserved Land	State Land	Federal Land	
45.4 miles 0.4%	0 miles	GTRLC: 104 acres 1%	Commercial Forest Act: 216 acres 2%	0 acres	

#### 4.10 Natural Features map



## **Joyfield Township Natural Features**

County Boundary

Wetland Type:
Slope Degree:

------ Township Boundary

Major Roads

Minor Roads

Trout Stream

#### Land Use

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

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

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

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

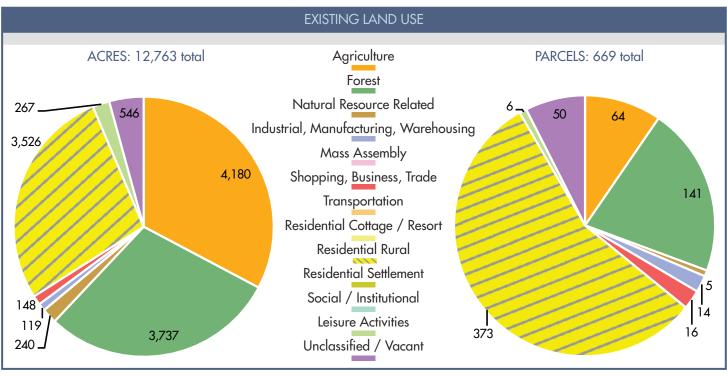
A part of the development of the future land use map is a discussion of the major land use related issues facing the community, how they interrelate with the Cornerstones and Building Blocks, and strategies that may be

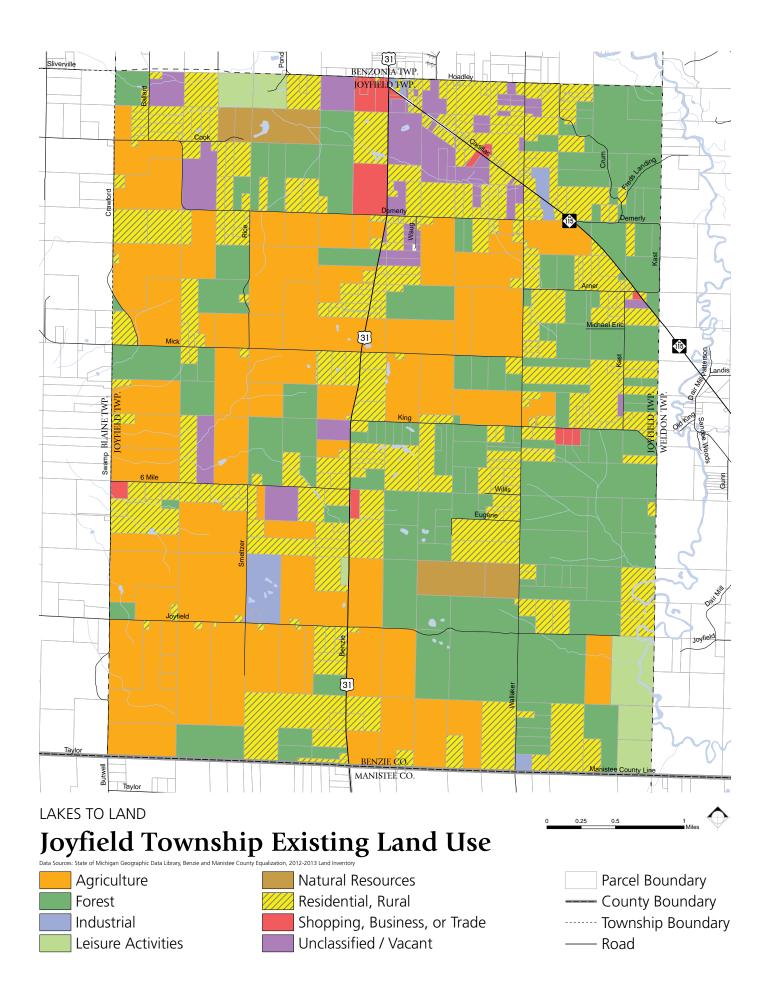
undertaken to achieve the desired future land use. But at the heart of planning for future land use is a picture of how the physical development of the community will take shape. Simply put, this section describes how, physically, the community will look in 15 to 20 years.

Factors considered when preparing the future land use map include:

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







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

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

Three major land uses in Joyfield Township are residential, commercial, and agricultural. This mix of uses creates and enhances the rural and scenic character of the community, and its continuation is supported by the Cornerstones.

#### Agricultural

Farming has been a mainstay of the Township since its settlement in 1863. According to William Joy, one of the township's founders, it is "well watered by numerous spring brooks, the soil mostly a rich, sandy loam, is high and rolling and well adapted to farming and fruit raising; it contains some of the largest and finest farms and orchards in the county."

As a component of the community engagement process, a special meeting was held with the farming community. Ideas were wide-ranging, but several focused on establishing small lot sizes to avoid consumptive land practices, giving local farm owners power to create residential lots on the least productive farmland, and encouraging compact and clustered development. The concern is that dividing the land into parcels larger than five acres to accommodate a single family dwelling can pull value crop land and orchards out of production and begin to erode the inherent efficiencies associated with farming large, contiguous tracts of land.

The continuation and expansion of agriculture is referenced in four of the seven community Cornerstones. However, agriculture as an economic

component of the Township is clearly articulated in the Cornerstone discussing the enhancement of agriculture and farming and the need to provide value-added opportunities to the agricultural community through zoning and land development policies.

Recent Michigan State University
- Extension research notes that the retirement age of Michigan farmers is approaching and many have no succession plans or opportunities to transfer farming operations to other family members. This situation may lead to large to parcels of once productive farmland going fallow awaiting other uses. As a result, the farming economy will decline and with it associated jobs.

#### Commercial

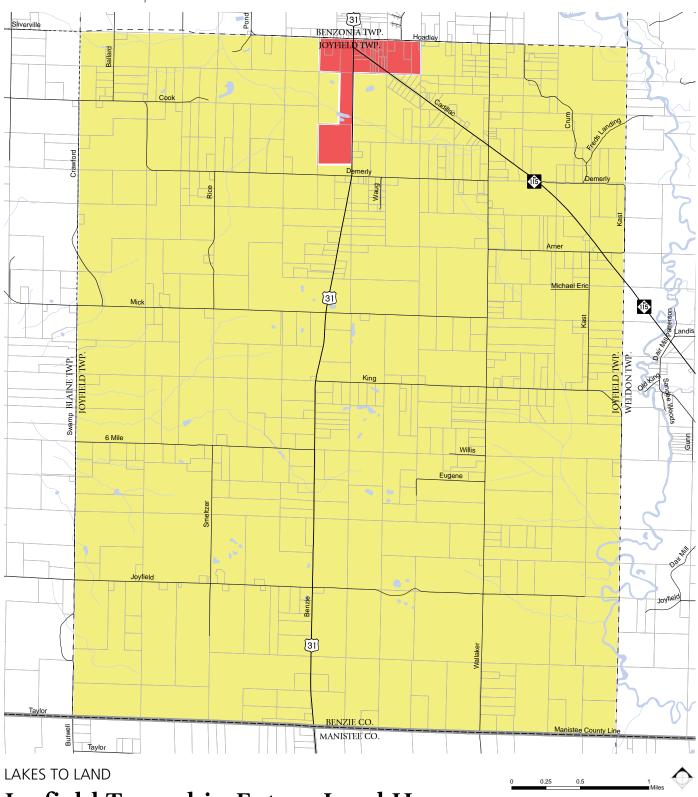
Commercial areas are those that have been, and are intended to be, developed with retail, personal service, office, and light industrial facilities. The Commercial category captures the portion of the township that is adjacent to neighboring Benzonia Township and continues its commercial corridor at the crossroads of US-31 and M-115.

There are a few non-conforming commercial land uses positioned within the interior of the township.

4.12 Residential characteristic changes, 2000-2010

	2000	2010	% Change
Population	777	799	2.8%
Median age	39.0	45.0	13.3%
% Population aged 65+	13.8	18.4	25.0%
Housing units	338	404	16.3%
% Housing for seasonal use	8.0	15.1	47.0%

#### 4.13: Future Land Use map



# Joyfield Township Future Land Use Data Sources: State of Michigan Geographic Data Library, Benzie and Manistee County Equalization

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

Parcel Boundary

Commercial\*

Rural

Township Boundary

Road

Some of those commercial uses may be considered non-conforming land uses, as they do not coincide with the surrounding and dominant land use activity. Other commercial uses may be considered home occupations that may need to consider locating in a commercial district once the business expands and begins to infringe on adjacent non-commercial properties.

The commercial area noted on the Future Land Use Map in 4.13 is based on the former Benzie County Zoning map which designated these properties as commercial. Because the Township's population is not expected to increase significantly enough to warrant additional commercial property the same area is considered reasonable.

#### Residential

Residential land use is an asset to the Joyfield community. It forms a substantial portion of the tax base and adds to the visual character of the community. The residents on the land, of course, are also among Joyfield's greatest assets, offering stewardship, volunteerism, and activity.

As can be seen in table 4.12, Joyfield Township's population has remained relatively stable in number between 2000 and 2010 while its characteristics have shifted. Its median age increased by 6 years, or 13.3%, and its proportion of citizens aged 65 and above has increased by 25%.

These numbers indicate the importance of the growing retiree community within the township. Concurrently, a modest increase of 16.3% in housing units has seen an accompanying 47% increase in the proportion of those housing units that are for seasonal or recreational use.

#### 4.14: Land use images



Rural - Agricultural land use



Rural - Residential land use



Commercial corridor land use Images: Google Earth

### Future Land Use Categories

#### Rural

The Rural designation includes residential uses, agricultural uses, ag-related industry, and cottage industries. The coexistence of these uses creates the rural and scenic character of Joyfield Townnship, and all are encouraged and supported with in the Rural district.

Like many rural communities, Joyfield Township has several scattered commercial/business enterprises that have developed outside of planned commercial districts. Although the Future Land Use map envisions the concentration of business enterprises at the US-31 and M-115 intersection, it recognizes that these isolated but thriving businesses need to have the same protections afforded to businesses within the commercial district. To this end, the zoning regulations when drafted will include a special designation for these properties in order to ensure their conformity and continuance.

#### Commerical

The Commercial category encompasses land near the US-31/M-115 intersection and is intended for retail, service, office, and light industrial facilities. The area is condensed primarily to a small section of the US-31 corridor to discourage commercial corridor sprawl, a continuation of the pattern prescribed by the Benzie County Zoning Ordinance before its dissolution.

### **Zoning Plan**

The future land use map for Joyfield Township classifies the entire township into two land use categories: commercial and rural. As noted on the future land use map (figure 4.13), all of the land in the township, with the exception of the intersection of US-31 and M-115, is classified as rural. The rural land use category includes farms, rural residential properties, institutional uses, orchards and agriculture-related processing.

When a zoning ordinance is enacted, it is envisioned to have two zoning districts: commercial and rural. It is suggested that the rural zoning district set minimum lot sizes at 2.5 acres. In addition, as noted above, the existence of business enterprises outside of the commercial district contributes to the "rural" character of the township. As a result, the Rural zoning district should include as special uses those properties which currently have operable businesses. These may be retail, storage, processing, construction-related or distribution businesses.

# Action Plan

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

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

Implementation of the Joyfield Township Master Plan is predicated on the completion of the tasks outlined in the Action Plan. A critical component of the Action Plan is the preparation of the zoning ordinance.

#### 4.15 Action plan

RECOMM	ended implementation strategy 2	013 – 2018
Action Item	Description	Responsible Party
Planning Commission training	This is an opportune time to have Planning Commission members go through the MSU Extension Citizen Planner program.	Joyfield Township Planning Commission (note: The township should check with its municipal insurance carrier for PC member scholarships)
Zoning ordinance	Prepare a Township Zoning Ordinance.	Planning Commission and Board of Trustees
Non-motorized trail plan	Work through the L2L Regional Initiative to prepare a non-motorized trail plan.	Planning Commission
Agricultural strategy	Participate the the L2L Regional Agricultural Committee to define and prepare regional strategies which promote the continuation and economic viability of farming.	Planning Commission

# Appendix A

Sources and Data

# Farmers' Meeting

The general public, with an emphasis on the agricultural community, was invited to two public meetings with the express purpose of understanding farmers' needs in relation to planning and zoning. One was held in at Joyfield Township Hall on March 7, 2013, and was attended by members of the Joyfield Township agricultural community. Two Joyfield Township farmers also attended the other meeting at Blaine Township Hall on November 26, 2012.

All the information generated was recorded in the minutes of the meeting. At the Joyfield meeting, the facilitator reviewed this collaboration and Joyfield's priorities before asking, "What to the farms need from planning and zoning to ensure that they are viable over the next 20 years without compromising other priorities of the township?" Each table brainstormed the initial question for about 15 minutes, then reported their results to the whole group. Participants were then asked, "What is needed to make this opportunity successful? What are the roadblocks that could prevent success?" The results presented here were used to inform the writing of this master plan.

Local "What do the farms need to ensure they are viable over the next 20 years while also ensuring we maintain the scenic rural character of Joyfield Township?"

- Keep land divisions to 80 acres
- Leave us alone—no zoning
- Agriculture should be number 1 change your priorities
- We don't always make decisions for business based on scenic beauty
- We need the ability to build industrial facilities to support our agricultural industry and maintain it
- Support for migrant work force and housing
- Good roads for hauling produce and farm products
- Support for more affordable electrical energy
- Further land preservation must support the Township tax structure—pay their taxes
- Added support for the Right to Farm Act
- Industry that supports farming/agriculture, such as slaughterhouses and processing
- Local marketing/buy local initiatives (food hub)
- Cluster development instead of large parcels being divided up and sold
- Include Agricultural Tourism in the zoning ordinance (examples: Equestrian Trail System, winery, brewery, cider mill, riding stables)
- Include equestrian campgrounds to accommodate trail rides in the zoning ordinance
- Increase flexibility and ability to diversify without "having to ask permission."

"What is needed to make this opportunity successful? What are the roadblocks that could prevent success?"

- No zoning-minimum zoning if needed
- Let us use our land as we see fit to make a living
- "I believe 90% of the people here, are here to see how bad they are going to get screwed"
- Avoid zoning that dictates what I grow
- Avoid restrictive ordinances and allow farmers more flexibility
- Avoid restrictive zoning that hampers the ability to make a living
- Lands splits at 2.5 acres
- Cluster development
- Lease to legitimate industry—wind/gas/oil
- Do not impede our land rights
- Avoid redundancies in regulations and protect the ability to diversify freely
- Roadblocks include: polarized viewpoints, biased leadership, outside influence, lack of representation

State / • National

Change state law to allow farmland to be passed down to generations without property tax increases (uncapping)

# **Business Meeting**

The general public, with an emphasis on the business community, was invited to a public meeting with the express purpose of address commercial needs in relation to planning and zoning. The meeting was held on January 16, 2014 at Joyfield Township Hall.

Uses Currently Identified by the Businesses Present

- Light Industrial
- Fruit Processing
- Freezer Warehousing (Cold Storage)
- Farming Orchards
- Commercial Fishing (?)
- Federal Firearms License
- Auto Salvage
- Trucking Company
- Light Duty Assembly
- Security Business
- General Contractors
- Auto Parts
- Country Gun Shop
- Country Gallery and Frame
- Heritage Hills Farms

### Ideas Offered by Participants

- 3 Make ordinance very adaptable/flexible to accommodate people's need to make ends meet
- 2 Need to look at mixed use (residential and commercial)
- 2 Current business district in Master Plan is too small
- 2 Allow for reasonable business expansion
- 1 Storage buildings: How many? And, how big?
- 1 Leave along; no zoning
- 1 Have limited restrictions and regulations
- 1 Fireworks: Time to shoot?
- 1 Fire New setbacks
- 1 Fencing regulations and restrictions
- 1 Extend commercial district on US-31 and M-115 to Township limits at least 1/4 mile deep on either side of the road
- 1 Do not write a zoning ordinance that makes existing businesses non-conforming
- 1 Cost for variances
- 1 Collaborate with other communities for infrastructure and utilities (natural gas, Internet, electric)
- 1 Class A road access; improve to Class A
- 1 Agriculture on commercial
  - Retail traffic in rural areas
  - Allow business/commercial transfer after a death or illness

### Sources

### Tab 2 - by Page

- 26. United States Geological Survey. "USGS Water Science school: the effects of urbanization on water quality: phosphorous." Last modified March 2013. http://ga.water.usgs.gov/edu/phosphorus.html
- 31. Michigan Department of Environmental Quality. "Cadillac district watersheds with approved watershed plans." Last modified August 21, 2012. http://www.michigan.gov/deq/0,1607,7-135-3313\_3682\_3714\_31581-96473--,00.html
- 34. Michigan Department of Environmental Quality. "State and Federal Wetland Regulations." Undated. http://www.michigan.gov/deq/0,4561,7-135-3313\_3687-10801--,00.html
- 34. Ducks Unlimited. "Ducks Unlimited Received 11 Great Lakes Restoration Initiative Grants for Conservation in Michigan." 2011 Conservation Report. http://www.ducks.org/media/Conservation/GLARO/\_documents/\_library/\_conservation/\_ states/2011/Michigan\_Report2011.pdf
- 35. National Parks Service. "A Nationalized Lakeshore: The Creation and Administration of Sleeping Bear Dunes National Lakeshore." Theodore J. Karamanski. 2000. http://www.nps.gov/history/history/online\_books/slbe/. Photo: http://www.nps.gov/slbe/images/20060901164502.JPG
- 38. Michigan Department of Environmental Quality. "Sand Dune Protection." Undated. http://www.michigan.gov/deq/0,4561,7-135-3311\_4114\_4236---,00.html
- 40. M-22. "About Us." February 2009. https://m22.com/?category\_name=about-us
- 42. MichiganHighways.org. "Historic Auto Trails." Last modified March 2013. http://www.michiganhighways.org/indepth/auto trails.html
- 42. Schul, Dave. "North American Auto Trails." Last modified October 1999. http://academic.marion.ohio-state.edu/schul/trails/trails.html
- 43. County Road Association of Michigan. "Michigan's County Road Commissions: Driving Our Economy Forward." Undated (circa 2008). http://www.micountyroads.org/PDF/econ\_broch.pdf
- 43. Michigan Traffic Crash Facts. "Reported Traffic Crashes by County in Michigan." 2011. http://publications.michigantrafficcrashfacts.org/2011/quick\_2.pdf
- 43. Michigan Traffic Crash Facts. "Crash Rate Per Licensed Driver by Age of Driver in All Crashes." 2011. https://s3.amazonaws.com/mtcf.pubs/2011/veh\_17.pdf
- 43. Michigan Department of Transportation. "North Region Winter Level of Service for 2011-2012." Approved October 2011. http://www.michigan.gov/documents/mdot/MDOT\_LoS\_map\_North\_08-09\_FINAL\_255162\_7.pdf
- 46. United States Army Corps of Engineers. "Great Lakes Navigation System: Economic Strength to the Nation. Last modified March 2013. http://www.lre.usace.army.mil/Portals/69/docs/Navigation/GLN\_Strength%20to%20the%20Nation%20Booklet 2013v2\_final2w.pdf
- 46. United States Army Corps of Engineers. "Great Lakes Harbors." Arcadia, Frankfort, Manistee, Portage Lake entries all last modified April 2013. http://www.lre.usace.army.mil/Missions/GreatLakesNavigation/GreatLakesHarborFactSheets.aspx
- 47. RRHX: Michigan's Internet Railroad History Museum. "The Evolution of Michigan's Railroads." Undated. http://www.michiganrailroads.com/RRHX/Evolution/EvolutionProjectDescription.htm

- 50. Airnav.com. "Airports." Updated May 2013. http://www.airnav.com/airport/KMBL; http://www.airnav.com/airport/ KFKS; http://www.airnav.com/airport/7Y2
- 50. The Rotarian. "Soaring on a Shoestring," Karl Detzer. December 1939, Volume LV No. 6, p. 16-18. Accessed via books. google.com.
- 53. Annals of the American Academy of Political and Social Science. "Educational Value of Public Recreation Facilities," Charles Mulford Robinson. March 1910, Vol. 35, No. 2, pp. 134-140. http://www.jstor.org/stable/1011260
- 53. Southwick Associates, for the National Fish and Wildlife Foundation. "The Economics Associated with Outdoor Recreation, Natural Resources Conservation and Historic Preservation in the United States." October 2011. http://www.trcp.org/assets/ pdf/The\_Economic\_Value\_of\_Outdoor\_Recreation.pdf
- 57. Michigan Department of Natural Resources, Parks and Recreation Division. "Michigan Public Boat Launch Directory." Undated during the Engler administration (1991-2003). http://www.michigan.gov/documents/btaccess 23113 7.pdf
- 57. Great Lakes Commission, for the United States Army Corps of Engineers. "Great Lakes Recreational Boating's Economic Punch." December 2008. http://www.glc.org/recboat/pdf/rec-boating-final-small.pdf
- http://www.lre.usace.army.mil/\_kd/Items/actions.cfm?action=Show&item\_id=6197&destination=ShowItem

Great Lakes Recreational Boating report in response to PL 106-53, Water resources development act of 1999, US Army Corps of engineers, Dec. 2008

- 60. Michigan Department of Natural Resources. "Value of Wildlife to Michigan." Undated. http://www.michigan.gov/ dnr/0,4570,7-153-10370\_30909\_43606-153356--,00.html
- 60. Michigan Department of Natural Resources. "75th anniversary of Pittman-Robertson Act is a perfect time to celebrate hunters' role in conservation funding." August 2012. http://www.michigan.gov/dnr/0,4570,7-153-10366\_46403-284662--,00.html
- 67. Interlochen Public Radio. "Art Around the Corner Frankfort's Post Office Mural." February 2012. http://ipr.interlochen. org/art-around-corner/episode/18226
- 68. National Parks Service National Register of Historic Places. "Telling the Stories: Planning Effective Interpretive Programs for Properties Listed in the National Register of Historic Places bulletin," Ron Thomson and Marilyn Harper. 2000. http://www.nps. gov/nr/publications/bulletins/pdfs/interp.pdf
- 68. National Parks Service National Register of Historic Places. Database. Varying dates. http://nrhp.focus.nps.gov/ natreahome.do?searchtype=natreahome
- 69. Michigan Lighthouse Conservancy. "The United States Lighthouse Service." Last modified June 2011. http://www. michiganlights.com/lighthouseservice.htm
- 69. terrypepper.com. "The Lighthouses of Lake Michigan." Last modification date varies; July 2004-January 2007. http://www. terrypepper.com/lights/lake michigan.htm
- 78. United States Bureau of Labor Statistics. "Education Pays." March 2012. http://www.bls.gov/emp/ep\_chart\_001.htm
- 79. Esri. "Tapestry Segmentation Reference Guide." 2012. http://www.esri.com/library/brochures/pdfs/tapestrysegmentation.pdf
- 84. Metlesits, Dave. "Season 1-2 dash in Photoshop" (illustration of KITT car dashboard from "Knight Rider"). April 2007. http://davemetlesits.deviantart.com/gallery/10189144?offset=24#/dvkxfu

### Tab 4 - by Subject

#### Cornerstones

Benzie County Equalization Department. 2011.

State of Michigan. "Brownfield Redevelopment Financing Act," PA 381 of 1996. Accessed March 2013.

AboutCountry.org. Joyfield Township. Accessed 2013

State of Michigan. "The Land Division Act (LDA)," PA 591 of 1996 and PA 87 of 1997. Accessed June 2013.

Michigan State University. "Michigan Pioneer and Historical Collections." Vol 1, pages 146-149.

#### **Economics**

United Stated Department of Labor Bureau of Labor Statistics. "Industries at a Glance. Manufacturing: NAICS 31-33." Data extracted February 2013. http://www.bls.gov/iag/tgs/iag31-33.htm

United Stated Department of Labor Bureau of Labor Statistics. "Industries at a Glance. Retail Trade: NAICS 44-45." Data extracted February 2013. http://www.bls.gov/iag/tgs/iag44-45.htm

ReferenceForBusiness.com. "Service Industry." Accessed March 2013. http://www.referenceforbusiness.com/management/Sc-Str/Service-Industry.html

Esri. "2011 Methodology Statement: Esri Data—Business Locations and Business Summary." March 2012. http://www.esri.com/~/media/Files/Pdfs/library/whitepapers/pdfs/esri-data-business-locations.pdf

University of Washington West Coast Poverty Center. "Poverty and the American Family." 2009. http://depts.washington.edu/wcpc/Family

United States Department of Labor Bureau of Labor Statistics. "Highlights of Women's Earnings in 2009." June 2010. http://www.bls.gov/cps/cpswom2009.pdf

#### Infrastructure

PEI Infrastructure Investor. "What in the world is infrastructure?" Jeffrey Fulmer. July / August 2009, p 30–32.

American Society of Civil Engineers. "Report Card for America's Infrastructure." 2013. http://www.infrastructurereportcard.org/

The Economist. "D (for dilapidated) plus: Slightly better roads and railways, but don't live near a dam." April 6, 2013. http:// www.economist.com/news/united-states/21575781-slightly-better-roads-and-railways-dont-live-near-dam-d-dilapidated-plus

Michigan.gov. Mi Dashboard. Data extracted March 2013. http://www.michigan.gov/midashboard/0,4624,7-256-59631---,00.html

Michigan Transportation Asset Management Council. "PASER Collection." Accessed March 2013. http://www.mcgi.state.mi.us/ MITRP/Educ\_Training/PASERCollection.aspx

Michigan Department of Licensing and Regulatory Affairs, Public Service Commission. "Michigan Service Areas of Electric and Gas Utilities." Data extracted March 2013. http://www.dleg.state.mi.us/cgi-bin/mpsc/electric-gas-townships. cgi?townsearch=p\*

Michigan Department of Licensing and Regulatory Affairs, Public Service Commission. "MPSC Issues Annual Report on Renewable Energy." February 2013. http://www.michigan.gov/mpsc/0,4639,7-159-16400 17280-295134--,00.html

United States Environmental Protection Agency. "Michigan Renewable Energy Maps." Data extracted March 2013. http://www. epa.gov/renewableenergyland/maps\_data\_mi.htm

Connect Michigan. "My ConnectView" interactive map. Data extracted March 2013. http://www.connectmi.org/interactivemap

Merit Network. "Merit's ARRA Projects: REACH-3MC Fiber-Optic Network Update." February 2013. http://www.merit.edu/ documents/pdf/reach3mc/REACH-3MC\_Project\_Overview.pdf

#### Land

United States Geological Survey. "The National Map." Accessed March 2013. http://nationalmap.gov/

United States Department of Agriculture Forest Service, Northern Research Station. "Michigan Surficial Geology." Accessed March 2013. http://www.ncrs.fs.fed.us/gla/geology/images/mi-surfgeo.gif

United States Geological Survey. "Classification of Wetlands and Deepwater Habitats of the United States: Emergent Wetland." Last modified February 2013. http://www.npwrc.usgs.gov/resource/wetlands/classwet/emergent.htm

Michigan Department of Environmental Quality. "The Sand Dunes Program." Accessed March 2013. http://www.michigan. gov/deg/0,4561,7-135-3311 4114 4236-9832--,00.html

# Data

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

POPULATION	Subject	llovfield	
1990	000 001	Joyfield Estimate	Percent
2000	POPULATION		change
2000	1000	5.45	per year
2010			
2016 (proj.)   832   0.41%			
HOUSING OCCUPANCY   Total Housing Units   404			
Total Housing Units	2016 (proj.)	832	0.41%
Owner-occupied         281         69.6%           Renter-occupied         32         7.9%           Seasonal/Recreational/Occasional use         61         15.1%           Vacant - For Sale, For Rent, etc.         30         7.4%           Total X 100%           EDUCATIONAL ATTAINMENT           Population 25 years and over         513         513           Less than high school         69         13.40%           High school graduate and equivalency         216         42.10%           Some college, no degree         106         20.70%           Associate's degree         54         10.50%           Bachelor's degree         51         9.90%           Graduate or professional degree         17         3.30%           Total X 100%           Percent high school graduate or higher         (X)         86.50%           Percent bachelor's degree or higher         (X)         86.50%           Percent bachelor's degree or higher         (X)         13.30%           SCHOOL ENROLLMENT         256         256           Population employed population 16 years         256         256           and over         27.70%         3.20%           Pr			
Renter-occupied   32   7.9%			
Seasonal/Recreational/Occasional use			
Vacant - For Sale, For Rent, etc.         30         7.4%           Total         X         100%           EDUCATIONAL ATTAINMENT         100%           Population 25 years and over         513         513           Less than high school         69         13.40%           High school graduate and equivalency         216         42.10%           Some college, no degree         106         20.70%           Associate's degree         54         10.50%           Bachelor's degree         51         9.90%           Graduate or professional degree         17         3.30%           Fercent high school graduate or higher         (X)         86.50%           Percent bachelor's degree or higher         (X)         13.30%           SCHOOL ENROLLMENT         (X)         13.30%           Population enrolled in school         153         19.15%           CLASS OF WORKER         256         256           Civilian employed population 16 years         204         79.70%           Government workers         31         12.10%           Self-employed in own not incorporated         21         8.20%           business workers         0         0.00%           Unpaid family workers <t< td=""><td>Renter-occupied</td><td></td><td></td></t<>	Renter-occupied		
Total   X   100%			
EDUCATIONAL ATTAINMENT			
Population 25 years and over   513   513     Less than high school   69   13.40%     High school graduate and equivalency   216   42.10%     Some college, no degree   106   20.70%     Associate's degree   54   10.50%     Bachelor's degree   51   9.90%     Graduate or professional degree   17   3.30%     Fercent high school graduate or higher   (X)   86.50%     Percent bachelor's degree or higher   (X)   86.50%     Percent bachelor's degree or higher   (X)   13.30%     SCHOOL ENROLLMENT   Population enrolled in school   153   19.15%     CLASS OF WORKER   Civilian employed population 16 years   256   256     and over   Private wage and salary workers   204   79.70%     Government workers   31   12.10%     Self-employed in own not incorporated   21   8.20%     business, workers   0   0.00%     Total X   100%     Private sector jobs   87.9%     INCOME AND BENEFITS (IN 2010     INFLATION-ADJUSTED DOLLARS)   Total households   288   288     Less than \$10,000   20   6.90%     \$10,000 to \$14,999   25   8.70%     \$15,000 to \$24,999   32   11.10%     \$25,000 to \$34,999   43   14.90%     \$50,000 to \$74,999   43   14.90%     \$75,000 to \$99,999   37   12.80%     \$150,000 to \$149,999   56   19.40%     \$75,000 to \$199,999   15   5.20%     \$150,000 to \$199,999   0 0.00%		Х	100%
Less than high school         69         13.40%           High school graduate and equivalency         216         42.10%           Some college, no degree         106         20.70%           Associate's degree         54         10.50%           Bachelor's degree         51         9.90%           Graduate or professional degree         17         3.30%           Fercent bigh school graduate or higher         (X)         86.50%           Percent bachelor's degree or higher         (X)         13.30%           SCHOOL ENROLLMENT         (X)         153         19.15%           CLASS OF WORKER         (X)         153         19.15%           CLASS OF WORKER         (X)         256         256           and over         Private wage and salary workers         204         79.70%           Government workers         31         12.10%           Self-employed in own not incorporated         21         8.20%           business, workers         0         0.00%           Unpaid family workers         0         0.00%           Private sector jobs         87.9%           INCOME AND BENEFITS (IN 2010         NELTATION-ADJUSTED DOLLARS)           Total households         288         288 <td></td> <td></td> <td></td>			
High school graduate and equivalency   216   42.10%   Some college, no degree   106   20.70%   Associate's degree   54   10.50%   Bachelor's degree   51   9.90%   Graduate or professional degree   17   3.30%   Total   X   100%   Percent high school graduate or higher   (X)   86.50%   Percent bachelor's degree or higher   (X)   13.30%   SCHOOL ENROLLMENT   Population enrolled in school   153   19.15%   CLASS OF WORKER   Civilian employed population 16 years   256   256   and over   Private wage and salary workers   204   79.70%   Government workers   31   12.10%   Self-employed in own not incorporated   21   8.20%   business workers   Unpaid family workers   0   0.00%   Total   X   100%   Private sector jobs   NCOME AND BENEFITS (IN 2010   INFLATION-ADJUSTED DOLLARS)   Total households   288   288   Less than \$10,000   20   6.90%   \$15,000 to \$14,999   32   11.10%   \$25,000 to \$24,999   32   11.10%   \$25,000 to \$49,999   43   14.90%   \$50,000 to \$74,999   43   14.90%   \$75,000 to \$99,999   37   12.80%   \$150,000 to \$149,999   15   5.20%   \$150,000 to \$199,999   0   0.00%   \$200,000 or more   0   0.00%	Population 25 years and over		
Some college, no degree         106         20.70%           Associate's degree         54         10.50%           Bachelor's degree         51         9.90%           Graduate or professional degree         17         3.30%           Total X 100%           Percent high school graduate or higher (X) 86.50%           Percent bachelor's degree or higher (X) 13.30%           SCHOOL ENROLLMENT           Population enrolled in school 153 19.15%           CLASS OF WORKER           Civilian employed population 16 years and over           Private wage and salary workers         204 79.70%           Government workers         31 12.10%           Self-employed in own not incorporated business workers           Unpaid family workers         0 0.00%           INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS)         87.9%           INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS)         288 288           Less than \$10,000         20 6.90%           \$15,000 to \$14,999         32 11.10%           \$25,000 to \$34,999         32 11.10%           \$50,000 to \$49,999         43 14.90%           \$50,000 to \$74,999         56 19.40%           \$75,000 to \$99,999         3			
Associate's degree 54 10.50% Bachelor's degree 51 9.90% Graduate or professional degree 17 3.30%  Percent high school graduate or higher (X) 86.50% Percent bachelor's degree or higher (X) 13.30%  SCHOOL ENROLLMENT 1			
Associate's degree Bachelor's degree Graduate or professional degree Total Total Fercent high school graduate or higher Percent bachelor's degree or higher ROULENROLLMENT Population enrolled in school CLASS OF WORKER Civilian employed population 16 years Government workers Self-employed in own not incorporated business workers Unpaid family workers  INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS) Total National Substantial Su	Some college, no degree		
Total x   100%	Associate's degree		10.50%
Graduate or professional degree         17         3.30%           Total         X         100%           Percent high school graduate or higher         (X)         86.50%           Percent bachelor's degree or higher         (X)         13.30%           SCHOOL ENROLLMENT         153         19.15%           Population enrolled in school         153         19.15%           CLASS OF WORKER         256         256           Civilian employed population 16 years         256         256           and over         204         79.70%           Government workers         31         12.10%           Self-employed in own not incorporated         21         8.20%           business workers         0         0.00%           Unpaid family workers         0         0.00%           INCOME AND BENEFITS (IN 2010         100%           INFLATION-ADJUSTED DOLLARS)         288         288           Less than \$10,000         20         6.90%           \$15,000 to \$24,999         32         11.10%           \$25,000 to \$34,999         32         11.10%           \$50,000 to \$49,999         43         14.90%           \$50,000 to \$74,999         37         12.80% <t< td=""><td>Bachelor's degree</td><td></td><td></td></t<>	Bachelor's degree		
Percent high school graduate or higher (X) 86.50% Percent bachelor's degree or higher (X) 13.30% SCHOOL ENROLLMENT Population enrolled in school 153 19.15% CLASS OF WORKER Civilian employed population 16 years 256 256 and over Private wage and salary workers 204 79.70% Government workers 31 12.10% Self-employed in own not incorporated 21 8.20% business workers Unpaid family workers 0 0.00% Private sector jobs 87.9% INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS) Total households 288 288 Less than \$10,000 20 6.90% \$10,000 to \$14,999 32 11.10% \$25,000 to \$24,999 32 11.10% \$25,000 to \$34,999 60 20.80% \$35,000 to \$49,999 43 14.90% \$50,000 to \$74,999 56 19.40% \$75,000 to \$99,999 37 12.80% \$150,000 to \$199,999 15 5.20% \$150,000 to \$199,999 15 5.20% \$150,000 to \$199,999 0 0.00%	Graduate or professional degree	17	3.30%
Percent bachelor's degree or higher   X	Total	Х	
Percent bachelor's degree or higher         (X)         13.30%           SCHOOL ENROLLMENT         153         19.15%           CLASS OF WORKER           Civilian employed population 16 years         256         256           and over         204         79.70%         79.70%           Government workers         204         79.70%         8.20%           Government workers         31         12.10%         8.20%           business workers         0         0.00%         8.20%           Unpaid family workers         0         0.00%         8.20%           Intraction of private sector jobs         87.9%         87.9%         87.9%           INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS)         8.288         288         288           Less than \$10,000         20         6.90%         \$10,000 to \$14,999         32         11.10%           \$25,000 to \$34,999         32         11.10%         \$25,000 to \$49,999         43         14.90%           \$50,000 to \$74,999         43         14.90%         \$75,000 to \$99,999         37         12.80%           \$150,000 to \$149,999         15         5.20% <td< td=""><td>Percent high school graduate or higher</td><td>(X)</td><td></td></td<>	Percent high school graduate or higher	(X)	
SCHOOL ENROLLMENT	Percent bachelor's degree or higher		13.30%
Population enrolled in school         153         19.15%           CLASS OF WORKER         256         256           Civilian employed population 16 years         256         256           and over         204         79.70%           Private wage and salary workers         204         79.70%           Government workers         31         12.10%           Self-employed in own not incorporated         21         8.20%           business workers         0         0.00%           Unpaid family workers         0         0.00%           Private sector jobs         87.9%           INCOME AND BENEFITS (IN 2010         INFLATION-ADJUSTED DOLLARS)           Total households         288         288           Less than \$10,000         20         6.90%           \$10,000 to \$14,999         32         11.10%           \$25,000 to \$24,999         32         11.10%           \$25,000 to \$34,999         60         20.80%           \$35,000 to \$74,999         37         12.80%           \$75,000 to \$99,999         37         12.80%           \$100,000 to \$149,999         15         5.20%           \$150,000 to \$199,999         0         0.00%           \$200,000 or m	SCHOOL ENROLLMENT		
CLASS OF WORKER         256           Civilian employed population 16 years and over         256           Private wage and salary workers         204         79.70%           Government workers         31         12.10%           Self-employed in own not incorporated business workers         21         8.20%           Unpaid family workers         0         0.00%           Total X         100%           Private sector jobs         87.9%           INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS)         288           Total households         288           Less than \$10,000         20         6.90%           \$10,000 to \$14,999         25         8.70%           \$15,000 to \$24,999         32         11.10%           \$25,000 to \$34,999         43         14.90%           \$50,000 to \$49,999         43         14.90%           \$75,000 to \$99,999         37         12.80%           \$150,000 to \$149,999         15         5.20%           \$150,000 to \$199,999         0         0.00%           \$200,000 or \$199,999         0         0.00%		153	19.15%
Civilian employed population 16 years and over Private wage and salary workers  Government workers  Self-employed in own not incorporated  business workers Unpaid family workers  Total X 100%  Private sector jobs  INCOME AND BENEFITS (IN 2010  INFLATION-ADJUSTED DOLLARS)  Total households  Less than \$10,000  \$10,000 to \$14,999 \$15,000 to \$24,999 \$35,000 to \$34,999 \$35,000 to \$49,999 \$10,000 to \$74,999 \$100,000 to \$149,999 \$100,000 to \$149,999 \$150,000 to \$149,999 \$150,000 to \$74,999 \$150,000 to \$149,999 \$150,000 to \$149,999 \$150,000 to \$149,999 \$150,000 to \$149,999 \$150,000 to \$199,999 \$150,000 to \$199,999 \$150,000 to \$199,999 \$200,000 or more	CLASS OF WORKER		
and over Private wage and salary workers Government workers 31 12.10%  Self-employed in own not incorporated business workers Unpaid family workers 0 0.00%  Total X 100%  Private sector jobs INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS) Total households Less than \$10,000 \$10,000 to \$14,999 \$15,000 to \$24,999 \$35,000 to \$34,999 \$35,000 to \$49,999 \$35,000 to \$74,999 \$50,000 to \$74,999 \$100,000 to \$149,999 \$100,000 to \$149,999 \$150,000 to \$199,999 \$150,000 to \$199,999 \$150,000 to \$199,999 \$200,000 or more	Civilian employed population 16 years	256	256
Private wage and salary workers         204         79.70%           Government workers         31         12.10%           Self-employed in own not incorporated business workers         21         8.20%           Unpaid family workers         0         0.00%           Total         X         100%           Private sector jobs         87.9%           INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS)         288           Total households         288         288           Less than \$10,000         20         6.90%           \$10,000 to \$14,999         32         11.10%           \$25,000 to \$24,999         32         11.10%           \$25,000 to \$49,999         43         14.90%           \$50,000 to \$49,999         43         14.90%           \$75,000 to \$99,999         37         12.80%           \$150,000 to \$149,999         15         5.20%           \$150,000 to \$199,999         0         0.00%           \$200,000 or more         0         0.00%	and over		
Self-employed in own not incorporated business workers         21         8.20%           Unpaid family workers         0         0.00%           Total         X         100%           Private sector jobs         87.9%           INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS)         288           Total households         288         288           Less than \$10,000         20         6.90%           \$10,000 to \$14,999         32         11.10%           \$25,000 to \$24,999         32         11.10%           \$25,000 to \$49,999         43         14.90%           \$50,000 to \$74,999         43         14.90%           \$75,000 to \$99,999         37         12.80%           \$150,000 to \$149,999         15         5.20%           \$150,000 to \$199,999         0         0.00%           \$200,000 or more         0         0.00%	Private wage and salary workers		79.70%
business workers         0         0.00%           Unpaid family workers         0         0.00%           Total         X         100%           Private sector jobs         87.9%           INCOME AND BENEFITS (IN 2010         INFLATION-ADJUSTED DOLLARS)           Total households         288         288           Less than \$10,000         20         6.90%           \$10,000 to \$14,999         25         8.70%           \$15,000 to \$24,999         32         11.10%           \$25,000 to \$34,999         60         20.80%           \$35,000 to \$47,999         43         14.90%           \$50,000 to \$74,999         37         12.80%           \$75,000 to \$99,999         37         12.80%           \$150,000 to \$149,999         0         0.00%           \$150,000 to \$199,999         0         0.00%           \$200,000 or more         0         0.00%			
Total X 100% Private sector jobs 87.9%  INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS) Total households 288 288  Less than \$10,000 20 6.90% \$10,000 to \$14,999 25 8.70% \$15,000 to \$24,999 32 11.10% \$25,000 to \$34,999 60 20.80% \$35,000 to \$49,999 43 14.90% \$50,000 to \$74,999 56 19.40% \$75,000 to \$99,999 37 12.80% \$1100,000 to \$149,999 15 5.20% \$150,000 to \$199,999 0 0.00% \$200,000 or more 0 0.00%	Self-employed in own not incorporated	21	8.20%
Total X 100% Private sector jobs 87.9%  INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS) Total households 288 288  Less than \$10,000 20 6.90% \$10,000 to \$14,999 25 8.70% \$15,000 to \$24,999 32 11.10% \$25,000 to \$34,999 60 20.80% \$35,000 to \$49,999 43 14.90% \$50,000 to \$74,999 56 19.40% \$75,000 to \$99,999 37 12.80% \$1100,000 to \$149,999 15 5.20% \$150,000 to \$199,999 0 0.00% \$200,000 or more 0 0.00%	business workers		0.000/
Private sector jobs INCOME AND BENEFITS (IN 2010 INFLATION-ADJUSTED DOLLARS) Total households Less than \$10,000 \$10,000 to \$14,999 \$15,000 to \$24,999 \$15,000 to \$34,999 \$25,000 to \$34,999 \$35,000 to \$49,999 \$35,000 to \$74,999 \$50,000 to \$74,999 \$75,000 to \$99,999 \$100,000 to \$149,999 \$15 5.20% \$150,000 to \$199,999 \$200,000 or more \$0 0.00%	Unpaid family workers	-	
INCOME AND BENEFITS (IN 2010   INFLATION-ADJUSTED DOLLARS)   Z88   288   Less than \$10,000   20   6.90%   \$10,000 to \$14,999   25   8.70%   \$15,000 to \$24,999   32   11.10%   \$25,000 to \$34,999   60   20.80%   \$35,000 to \$49,999   43   14.90%   \$50,000 to \$74,999   56   19.40%   \$75,000 to \$99,999   37   12.80%   \$100,000 to \$149,999   15   5.20%   \$150,000 to \$199,999   0   0.00%   \$200,000 or more   0   0.00%			100%
INFLATION-ADJUSTED DOLLARS   288   280   208   208   208   208   208   208   208   208   208   208   208   208   208   208   208	Private sector jobs	87.9%	
Less than \$10,000       20       6.90%         \$10,000 to \$14,999       25       8.70%         \$15,000 to \$24,999       32       11.10%         \$25,000 to \$34,999       60       20.80%         \$35,000 to \$49,999       43       14.90%         \$50,000 to \$74,999       56       19.40%         \$75,000 to \$99,999       37       12.80%         \$100,000 to \$149,999       15       5.20%         \$150,000 to \$199,999       0       0.00%         \$200,000 or more       0       0.00%			
Less than \$10,000       20       6.90%         \$10,000 to \$14,999       25       8.70%         \$15,000 to \$24,999       32       11.10%         \$25,000 to \$34,999       60       20.80%         \$35,000 to \$49,999       43       14.90%         \$50,000 to \$74,999       56       19.40%         \$75,000 to \$99,999       37       12.80%         \$100,000 to \$149,999       15       5.20%         \$150,000 to \$199,999       0       0.00%         \$200,000 or more       0       0.00%	INFLATION-ADJUSTED DOLLARS)	200	200
\$10,000 to \$14,999			
\$15,000 to \$24,999 \$25,000 to \$34,999 \$00 20.80% \$35,000 to \$49,999 \$143 14.90% \$50,000 to \$74,999 \$50,000 to \$99,999 \$100,000 to \$149,999 \$15 5.20% \$150,000 to \$199,999 \$200,000 or more \$0 0.00%			
\$25,000 to \$34,999 60 20.80% \$35,000 to \$49,999 43 14.90% \$50,000 to \$74,999 56 19.40% \$75,000 to \$99,999 37 12.80% \$100,000 to \$149,999 15 5.20% \$150,000 to \$199,999 0 0.00% \$200,000 or more 0 0.00%			
\$35,000 to \$49,999			
\$50,000 to \$74,999			
\$75,000 to \$99,999       37       12.80%         \$100,000 to \$149,999       15       5.20%         \$150,000 to \$199,999       0       0.00%         \$200,000 or more       0       0.00%			11 4 0000
\$100,000 to \$149,999	\$35,000 to \$49,999	43	
\$150,000 to \$199,999 0 0.00% \$200,000 or more 0 0.00%	\$35,000 to \$49,999 \$50,000 to \$74,999	43 56	19.40%
\$200,000 or more 0 0.00%	\$35,000 to \$49,999 \$50,000 to \$74,999 \$75,000 to \$99,999	43 56 37	19.40% 12.80%
. ,	\$35,000 to \$49,999 \$50,000 to \$74,999 \$75,000 to \$99,999 \$100,000 to \$149,999	43 56 37 15	19.40% 12.80% 5.20%
Total X 1100%	\$35,000 to \$49,999 \$50,000 to \$74,999 \$75,000 to \$99,999 \$100,000 to \$149,999 \$150,000 to \$199,999	43 56 37 15 0	19.40% 12.80% 5.20% 0.00%
15.5.1	\$35,000 to \$49,999 \$50,000 to \$74,999 \$75,000 to \$99,999 \$100,000 to \$149,999 \$150,000 to \$199,999 \$200,000 or more	43 56 37 15 0	19.40% 12.80% 5.20% 0.00% 0.00%

Median household income (dollars)	35,972	(X)
Very low income	77	26.7%
Low income	60	20.8%
Moderate income	99	34.4%
High income	52	18.1%
Very high income	0	0.0%
Per capita income	18,861	(X)
Median earnings for workers (dollars)	22,284	(X)
Median earnings for male full-time, year- round workers (dollars)	38,333	(X)
round workers (dollars) Median earnings for female full-time,	31,250	(X)
vear-round workers (dollars) POVERTY		
All families	(X)	8.00%
All people	(X)	11.50%
Under 18 years	(X)	10.00%
Receiving food stamps	36	12.50%
Receiving cash assistance	9	3.10%
INDUSTRY		
Civilian employed population 16 years	256	256
and over		200
Agriculture, forestry, fishing and hunting,	9	4%
and mining		
Construction	24	9%
Manufacturing	26	10%
Wholesale trade	5	2%
Retail trade	42	16%
Transportation and warehousing, and	12	5%
utilities	12	5/0
Information	12	5%
Finance and insurance, and real estate and rental and leasing	0	0%
	9	4%
and administrative and waste management	/	470
services	/ 0	0.40/
Educational services, and health care and social assistance	62	24%
Arts, entertainment, and recreation, and	39	15%
accommodation and food services		
Other services, except public	10	4%
administration		
Public administration	6	2%
Total		100%
Manufacturing to retail jobs	0.62	
Non-retail	165	+
Retail, arts, accommodations, food	81	+
Non-retail to retail, arts, acc., food	2.04	+
raon-reidii io reidii, dris, dcc., iood	∠.∪4	

EMPLOYMENT STATUS		
Population 16 years and over	571	571
In labor force	319	55.90%
Civilian labor force	319	55.90%
Employed	256	44.80%
Unemployed	63	11.00%
Armed Forces	0	0.00%
Not in labor force	252	44.10%
Civilian labor force	319	319
Percent Unemployed	(X)	19.70%
Total		100%
Jobs per 1,000 residents	320	
Non-service jobs per 1,000 residents	259	
Non-service jobs per 1,000 residents COMMUTING TO WORK		
Workers 16 years and over	251	251
Drove alone	201	80.10%
Carpooled	19	7.60%
Public transit (except taxi)	10	4.00%
Walked	3	1.20%
Other means	2	0.80%
Worked at home	16	6.40%
Total		100%
Workers who commute	235	93.63%
Commuters who drive alone		85.53%
Mean travel time to work (minutes)	20.4	(X)
HOUSEHOLDS BY TYPE		
Total households	288	288
Average household size	2.41	(X)
Average family size	2.89	(X)
VETERAN STATUS		
Civilian population 18 years and over Civilian veterans	539	539
Civilian veterans	104	19.30%
OCCUPATION		
Management, business, science, and arts	71	27.70%
occupations		
Service occupations	49	19.10%
Sales and office occupations	55	21.50%
Natural resources, construction, and	45	17.60%
maintenance occupations		
Production, transportation, and material	36	14.10%
moving occupations		1. 4. 10/0
Total	X	100%
loidi	_ ^	100/0

VALUE		
Owner-occupied units		270
Median home value (dollars)	146,800	(X)
MORTGAGE STATUS		
Owner-occupied units	270	270
Housing units with a mortgage	155	57.40%
Housing units without a mortgage	115	42.60%
Total	Х	100%
GROSS RENT		
Occupied units paying rent	11	11
Median rent (dollars)	838	(X)
HOUSE HEATING FUEL		
Occupied housing units	288	288
Utility gas	11	3.80%
Bottled, tank, or LP gas	165	57.30%
Electricity	16	5.60%
Fuel oil, kerosene, etc.	33	11.50%
Coal or coke	0	0.00%
Wood	59	20.50%
Solar energy	0	0.00%
Other fuel	4	1.40%
No fuel used		0.00%
Total	Χ	100%
YEAR STRUCTURE BUILT		
Total housing units	389	389
Built 2005 or later	31	8.00%
Built 2000 to 2004	59	15.20%
Built 1990 to 1999	87	22.40%
Built 1980 to 1989	43	11.10%
Built 1970 to 1979	66	17.00%
Built 1960 to 1969	24	6.20%
Built 1950 to 1959	11	2.80%
Built 1940 to 1949	21	5.40%
Built 1939 or earlier	47	12.10%
Total	Х	100%

HOUSELIOLDS DV TVDE				
HOUSEHOLDS BY TYPE				
Total households	288	+/-39	288	(X)
Family households (families)	187	+/-31	64.90%	+/-8.4
With own children under 18 years	72	+/-27	25.00%	+/-8.3
Married-couple family	167	+/-30	58.00%	+/-8.4
With own children under 18 years	58	+/-23	20.10%	+/-7.4
Male householder, no wife present, family	10	+/-13	3.50%	+/-4.5
With own children under 18 years	10	+/-13	3.50%	+/-4.5
Female householder, no husband present, fam	10	+/-8	3.50%	+/-2.9
ily				
With own children under 18 years	4	+/-5	1.40%	+/-1.8
Nonfamily households	101	+/-30	35.10%	+/-8.4
Householder living alone	79	+/-27	27.40%	+/-8.0
65 years and over	26	+/-14	9.00%	+/-4.8
Households with one or more people under 18 y	75	+/-27	26.00%	+/-8.2
ears				
Households with one or more people 65 years a	90	+/-23	31.30%	+/-7.8
nd over				
Average household size	2.41	+/-0.30	(X)	(X)
Average family size	2.89	+/-0.31	(X)	(X)

PERCENTAGE OF FAMILIES AND PEOPLE WHO	OSE INCOI	ME IN THE
PAST 12 MONTHS IS BELOW THE POVERTY LE	VEL	
All families	8.00%	+/-5.4
With related children under 18 years	5.30%	+/-7.2
With related children under 5 years only	0.00%	+/-100.0
Married couple families	6.60%	+/-5.3
With related children under 18 years	6.60%	+/-8.9
With related children under 5 years only	0.00%	+/-100.0
Families with female householder, no husband p	40.00%	+/-47.3
resent		
With related children under 18 years	0.00%	+/-100.0
With related children under 5 years only	-	**
All people	11.50%	+/-5.4
Under 18 years	10.00%	+/-13.6
Related children under 18 years	10.00%	+/-13.6
Related children under 5 years	76.90%	+/-36.4
Related children 5 to 17 years	3.10%	+/-4.5
18 years and over	11.90%	+/-4.4
18 to 64 years	11.80%	+/-5.2
65 years and over	12.00%	+/-8.1
People in families	8.30%	+/-6.5
Unrelated individuals 15 years and over	23.90%	+/-10.5

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

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

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

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

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

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

#### **Explanation of Symbols:**

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

82403: INDUSTRY BY SEX AND MEDIAN EARNINGS IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) FOR THE CIVILIAN E

S2403: INDUSTRY BY SEX AND MEDIAN EARNING MPI OVED POPILI ATION 16 VEARS AND OVER	/ BY SEX AND MEDIAN EARN ATION 16 VEARS AND OVER	JIAN EAF	KNINGS I	N THE PA	SI 12 MC	NI HS (II)	V 2010 INF	LAHON-A	DJUSTEL	) DOLLARS)	FOR H	IS IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) FOR THE CIVILIAN E
2006-2010 American Community Survey 5-Year Estimates	unity Surv	ey 5-Yea	r Estimate	Si								
Subject	Joyfield township, Benzie	wnship, E	<b>3enzie Co</b>	County, Michigan	igan							
	Total		Male		Female		Median	Median earnings	Median	Median earnings: Male	Mediar Fe	Median earnings: Female
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Civilian employed populatio 256 n 16 years and over	256	+/-48	26.3%	9.9-/+	43.8%		27,200	+/-2,975	30,000	+/-7,491	26,364	+/-4,831
Agriculture, forestry, fishing 9 and hunting, and mining:	<b>o</b>	<b>2-/</b> +	100.0%	6'06-/+	%0.0	6'06-/+	16,250	+/-26,125	16,250	+/-26,131	ı	* *
Agriculture, forestry, fishin g and hunting	6	<b>L-/</b> +	100.0%	6'06-/+	%0'0	6'06-/+	16,250	+/-26,125	16,250	+/-26,132	1	*
Mining, quarrying, and oil and gas extraction	0	+/-109	1	*	-	*	-	*	-	*	1	*
Construction	24	+/-15	83.3%	+/-22.4	16.7%	+/-22.4	41,875	+/-11,649	40,625	+/-12,222	_	*
Manufacturing	26	+/-16	69.2%	+/-19.4	30.8%	+/-19.4	26,667	+/-22,645	46,250	+/-49,818	8,333	+/-3,089
Wholesale trade	5	9-/+	%0.09	+/-54.8	40.0%	+/-54.8	30,417	+/-63,220	ı	* *	2,500-	**
	42	+/-25	40.5%	+/-24.3	29.5%	+/-24.3	16,250	+/-9,816	15,750	+/-10,672	17,083	+/-15,505
Transportation and wareho 12 using, and utilities:	12	+/-10	100.0%	+/-78.7	%0:0		21,667		21,667	+/-8,356	-	*
Transportation and wareh ousing	12	+/-10	100.0%	+/-78.7	%0:0	+/-78.7	21,667	+/-8,356	21,667	+/-8,356	1	*
Utilities	0	+/-109	-	*	_	*	-	**	ı	* *	-	**
Information	12	+/-13	83.3%	+/-48.4	16.7%	+/-48.4	46,000	+/-29,525	-	*	-	**
Finance and insurance, an d real estate and rental and	0	+/-109		*	-	*	-	*	-	*	1	*
leasing:												
Finance and insurance	0	+/-109		*		*		*		*		*
Real estate and rental an	0	+/-109	1	*	ı	*		*	ı	* *	ı	*
d leasing												

Professional, scientific, and 9 management, and adminis trative and waste managem		6-/+	100.0%	6'06-/+	%0.0	6:06-/+	36,250	+/-33,576	36,250	+/-33,576	1	*
ent services: Professional scientific, an 0		+/-109		* *		*		**		*		* *
d technical services												
Management of companie 0		+/-109		* *		*		* *		*		*
Administrative and suppo		6-/+	100.0%	6.06-/+	%0.0	6.06-/+	36.250	+/-33.576	36.250	+/-33.576		*
nal services, and	62	+/-19	30.6%	+/-12.0	69.4%	+/-12.0	33,571	+/-6,145	45,313	+/-18,061	32,250	+/-5,502
health care and social assi												
stance:												
Educational services 9		6-/+	33.3%	+/-31.0	%2'99	+/-31.0	38,750	+/-31,163	-	*	27,500	+/-29,798
Health care and social as 53		+/-18	30.2%	+/-14.1	%8'69	+/-14.1	33,036	+/-5,667	39,167	+/-24,904	32,250	+/-4,573
sistance												
Arts, entertainment, and rec 39		+/-21	46.2%	+/-26.3	53.8%	+/-26.3	22,083	+/-13,827	17,500	+/-13,173	42,917	+/-22,094
reation, and accommodatio												
n and food services:								- 1	T			
Arts, entertainment, and r 21 ecreation		+/-14	71.4%	+/-25.9	28.6%	+/-25.9	13,750	+/-12,441	13,750	+/-14,502	32,500	+/-62,503
Accommodation and food 18		+/-16	16.7%	+/-28.7	83.3%	+/-28.7	36,250	+/-25,446		*	42,917	+/-20,967
services												
Other services, except publil10 c administration		6-/+	30.0%	+/-38.2	%0:02	+/-38.2	35,833	+/-21,392		*	22,188	+/-22,244
Public administration 6		2-/+	100.0%	+/-100.0	%0.0	+/-100.0 51,250	51,250	+/-5,899	51,250	+/-5,899		*
PERCENT IMPUTED												
Industry	2.0%	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

S2404: INDUSTRY BY SEX AND MEDIAN EARNINGS IN YEAR-BOUND CIVILIAN EMPLOYED POPULATION 16 N 2006-2010 American Community Survey 5-Year Estimates	O MEDIA OYED P / Survey	N EARN OPULAT 5-Year E	IINGS IN 7 IION 16 Y Estimates	S IN THE PAST 12 MON L16 YEARS AND OVER lates	12 MONT O OVER	.HS (IN 20.	10 INFLA	S IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) FOR THE FULL-TIME, 16 YEARS AND OVER lates	STED DO	LLARS) FC	OR THE FI	JLL-TIME,
Subject	Joyfield	township	, Benzie (	Joyfield township, Benzie County, Michigan	chigan							
	Total		Male		Female		Median earnings (dollars)	arnings	Median earnings: male	arnings:	Median earnings: female	arnings:
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Full-time, year-round civilian e mployed population 16 years a	165	+/-40	%9.09	0.6-/+	39.4%	0.6-/+	34,583	+/-11,061	38,333	+/-12,627	29,583	+/-7,960
ure, forestry, fishing and , and mining:	၉	+/-4	100.0%	+/-100.0	%0'0	+/-100.0	1	*	1	*	ı	* *
Agriculture, forestry, fishing an d hunting	က	+/-4	100.0%	+/-100.0	%0'0	+/-100.0	ı	*	ı	*	1	* *
Mining, quarrying, and oil and gas extraction	0	+/-109		*		*		*	-	*	1	*
Construction	18	+/-12	77.8%	+/-30.8	22.2%	+/-30.8	41,875	+/-18,121	40,625	+/-11,337		*
Manufacturing	20	+/-13	%0.06	+/-17.2	10.0%	+/-17.2	31,667	+/-41,441	46,250	+/-49,818	-	* *
Wholesale trade	3	+/-4	100.0%	+/-100.0	%0:0	+/-100.0	-	*	-	*	-	*
	22	+/-15	45.5%	+/-27.4	54.5%	27.4	21,875	+/-9,028	21,250	+/-12,136	21,875	+/-7,962
Transportation and warehousing , and utilities:		<b>-/</b> -2	100.0%	+/-100.0	%0'0	+/-100.0	-	*	-	*	ı	*
rtation and warehous	2	9-/+	100.0%	+/-100.0	%0'0	+/-100.0	-	*	ı	*	-	*
Ütilities	0	+/-109		*		*		*		* *		**
Information	10	+/-13	100.0%	+/-86.3	%0.0	+/-86.3		*	-	*	-	*
а	0	+/-109	_1_	*	_1_	*	-	*	I	**	-	*
estate and rental and leasing:												
Finance and insurance	0	+/-109		*		*		*		*		*
Real estate and rental and le asing	0	+/-109	-	*	-	*	_	*	-	*	-	*

Professional, scientific, and man3 agement, and administrative and waste management services:	ന	4/-5	100.0%	100.0% +/-100.0 0.0%	%0.0	+/-100.0	1	*	1	*		*
Professional, scientific, and teco	0	+/-109		* *		* *		*		* *		*
nnicai services												
Management of companies an 0 d enterprises	0	+/-109	ı	*	ı	*		* *		*		*
Administrative and support and	က	+/-5	100.0%	+/-100.0	%0.0	+/-100.0		*		*		**
waste management services												
Educational services, and healt	41	+/-18	46.3%	+/-16.7	53.7%	+/-16.7	37,639	+/-12,117	45,313	+/-18,061	32,500	+/-9,401
h care and social assistance:												
Educational services	9	8-/+	20.0%	+/-33.6	20.0%	+/-33.6	52,500	+/-28,545		*	_	**
Health care and social assist	35	+/-16	45.7%	+/-19.8	54.3%	+/-19.8	32,917	+/-12,098	39,167	+/-24,904	30,625	+/-8,404
ance												
Arts, entertainment, and recreati 27		+/-18	33.3%	+/-30.3	%2'99	+/-30.3	28,750	+/-24,344	21,875	+/-3,650	43,333	+/-11,139
on, and accommodation and foo												
d services:												
Arts, entertainment, and recre	6	6-/+	%2'99	+/-45.3	33.3%	+/-45.3	26,250	+/-32,897	23,750	+/-5,520		*
ommodation and food ser	18	+/-16	16.7%	+/-28.7	83.3%	+/-28.7	36,250	+/-25,446		*	42,917	+/-20,967
Vices												
Other services, except public ad 10	10	6-/+	30.0%	+/-38.2	%0.07	+/-38.2	35,833	+/-21,392		*	22,188	+/-22,244
ministration												
Public administration	9	<b>1-/</b> +	100.0%	+/-100.0	%0.0	+/-100.0	51,250	+/-5,899	51,250	+/-5,899	_	*
PERCENT IMPUTED												
Industry	%0.0	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

# Esri Business Analyst

Financial Expenditures			
Joyfield Township			
Area: 19.99 Square Miles			
Area. 17.77 Square Miles			
	Spending	Average	
	Potential Index	Amount Spent	Total
Assets			
Market Value			
Checking Accounts	69	\$3,879.43	\$1,224,155
Savings Accounts	71	\$9,063.34	\$2,859,938
U.S. Savings Bonds	83	\$330.11	\$104,165
Stocks, Bonds & Mutual Funds	61	\$22,969.81	\$7,248,124
Annual Changes			
Checking Accounts	35	\$88.64	\$27,970
Savings Accounts	59	\$224.12	\$70,720
U.S. Savings Bonds	308	\$7.11	\$2,244
Earnings			
Dividends, Royalties, Estates, Trusts	73	\$691.48	\$218,195
Interest from Savings Accounts or Bonds	70	\$622.96	\$196,575
Retirement Plan Contributions	63	\$840.89	\$265,342
Liabilities			
Original Mortgage Amount	48	\$9,924.83	\$3,131,781
Vehicle Loan Amount 1	93	\$2,439.41	\$769,755
Amount Paid: Interest			
Home Mortgage	57	\$2,567.47	\$810,164
Lump Sum Home Equity Loan	65	\$81.42	\$25,691
New Car/Truck/Van Loan	81	\$164.04	\$51,764
Used Car/Truck/Van Loan	100	\$156.69	\$49,445
Amount Paid: Principal			
Home Mortgage	66	\$1,265.41	\$399,300
Lump Sum Home Equity Loan	69	\$112.31	\$35,439
New Car/Truck/Van Loan	81	\$873.85	\$275,743
Used Car/Truck/Van Loan	101	\$744.00	\$234,769
Checking Account and Banking Service Charges	70	\$18.93	\$5,973
Finance Charges, excluding Mortgage/Vehicle	71	\$168.55	\$53,186
	1	İ	

Data Note: The Spending Potential Index (SPI) is household-based, and represents the amount spent for a product or service relative to a national average of 100. Detail may not sum to totals due to rounding. Annual change may be negative.

1 Vehicle Loan Amount is the amount of a loan for a car, truck, van, boat, camper, motorcycle, motor scooter, or moped, excluding interest.

Source: Esri forecasts for 2011 and 2016; Consumer Spending data are derived from the 2006 and 2007 Consumer Expenditure Surveys, Bureau of Labor Statistics.

Business Summary				
Joyfield township, MI (2601942000)				
Geography: County Subdivision				
Data for all businesses in area Total Businesses:		Joyfield towns		
Total Employees:		223		
Total Residential Population:		804		
Employee/Residential Population Ratio:		0.28		
Employee, residential regulation radio.		0.20		
	Bus	inesses	Emple	ovees
by NAICS Codes	Number	Percent	Number	•
Agriculture, Forestry, Fishing & Hunting		3 9.4%		4.0%
Mining		0 0.0%		0.0%
Utilities		1 3.1%	9	4.0%
Construction		8 25.0%		12.1%
Manufacturing		1 3.1%	25	11.2%
Wholesale Trade		3 9.4%	95	42.6%
Retail Trade		3 9.4%	18	
Motor Vehicle & Parts Dealers		0 0.0%	0	0.0%
Furniture & Home Furnishings Stores		0 0.0%		0.0%
Electronics & Appliance Stores		1 3.1%		0.4%
Bldg Material & Garden Equipment & Supplies Dealers		0 0.0%		0.4 %
Food & Beverage Stores		1 3.1%		6.7%
Health & Personal Care Stores		0 0.0%		0.0%
Gasoline Stations				
			0	0.0%
Clothing & Clothing Accessories Stores		0.0%	0	0.0%
Sport Goods, Hobby, Book, & Music Stores		0.0%	0	0.0%
General Merchandise Stores		0 0.0%	0	0.0%
Miscellaneous Store Retailers		3.1%	2	0.9%
Nonstore Retailers		0 0.0%	0	0.0%
Transportation & Warehousing		3.1%	2	0.9%
Information		0.0%	0	0.0%
Finance & Insurance		3.1%	2	0.9%
Central Bank/Credit Intermediation & Related Activities		0.0%	0	0.0%
Securities, Commodity Contracts & Other Financial Investments & Other Related Activities		0.0%	0	0.0%
Related Activities Insurance Carriers & Related Activities; Funds, Trusts & Other Financial Achieles		1 3.1%	2	0.9%
Vehicles Real Estate, Rental & Leasing		1 3.1%	1	0.4%
Professional, Scientific & Tech Services		2 6.3%	17	7.6%
Legal Services		0.0%	0	0.0%
Management of Companies & Enterprises		0.0%	0	0.0%
Administrative & Support & Waste Management & Remediation Services		2 6.3%	3	1.3%
Educational Services		0.0%	0	0.0%
Health Care & Social Assistance		1 3.1%	4	1.8%
Arts, Entertainment & Recreation		0.0%	0	0.0%
Accommodation & Food Services		1 3.1%	5	2.2%
Accommodation		1 3.1%	5	2.2%
Food Services & Drinking Places		0.0%	0	0.0%
Other Services (except Public Administration)		3 9.4%	3	1.3%
Automotive Repair & Maintenance		0.0%	0	0.0%
Public Administration		0 0.0%	0	0.0%
Unclassified Establishments		1 3.1%	3	1.3%
Total	3	32100%	223	100%
Source: Business data provided by Infogroup, Omaha NE Copyright 2012, all rights reserved. Esri forec	asts for 2011.		1	

# Appendix B

## **Documentation**

A complete packet has been assembled that includes

"Intent to plan" notices Draft distribution notices Public hearing notices All received comments Meeting minutes related to consideration of comments Public hearing meeting minutes

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

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