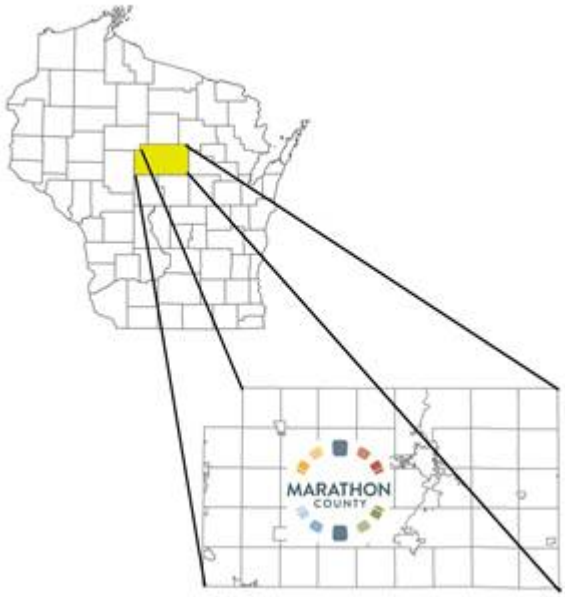
CHAPTER 7: POPULATION, INFRASTRUCTURE AND LAND USE TRENDS



Marathon County is located near the geographic center of Wisconsin. Marathon County has a population of approximately 134,063 residents (2010 Census). The Wausau metropolitan area which includes the cities of Mosinee, Wausau, Schofield; villages of Rothschild, Weston, Kronenwetter; and the towns of Rib Mountain, Stettin, Texas and Weston has a population of nearly 85,000 residents. Marathon County is considered a rural county with over one million acres of land.

Population and Housing Trends

Marathon County's population has increased by approximately 7% between 2000 and 2010. During the same period, household units increased by 15%. This trend shows an increase in housing that exceeds the growth in population. This is due to a smaller household size and a prevalence of home construction rather than purchasing of existing homes. As the population ages, more households are becoming "empty nesters." This, in combination with smaller families, contributes to the decreased household size. This trend poses several challenges:

- Land converted for housing accommodates a smaller portion of the population growth. Therefore, land conversion to residential use increases at a faster rate than population growth.
- The cost of the provision of public utilities and services per capita increases due to population distribution.

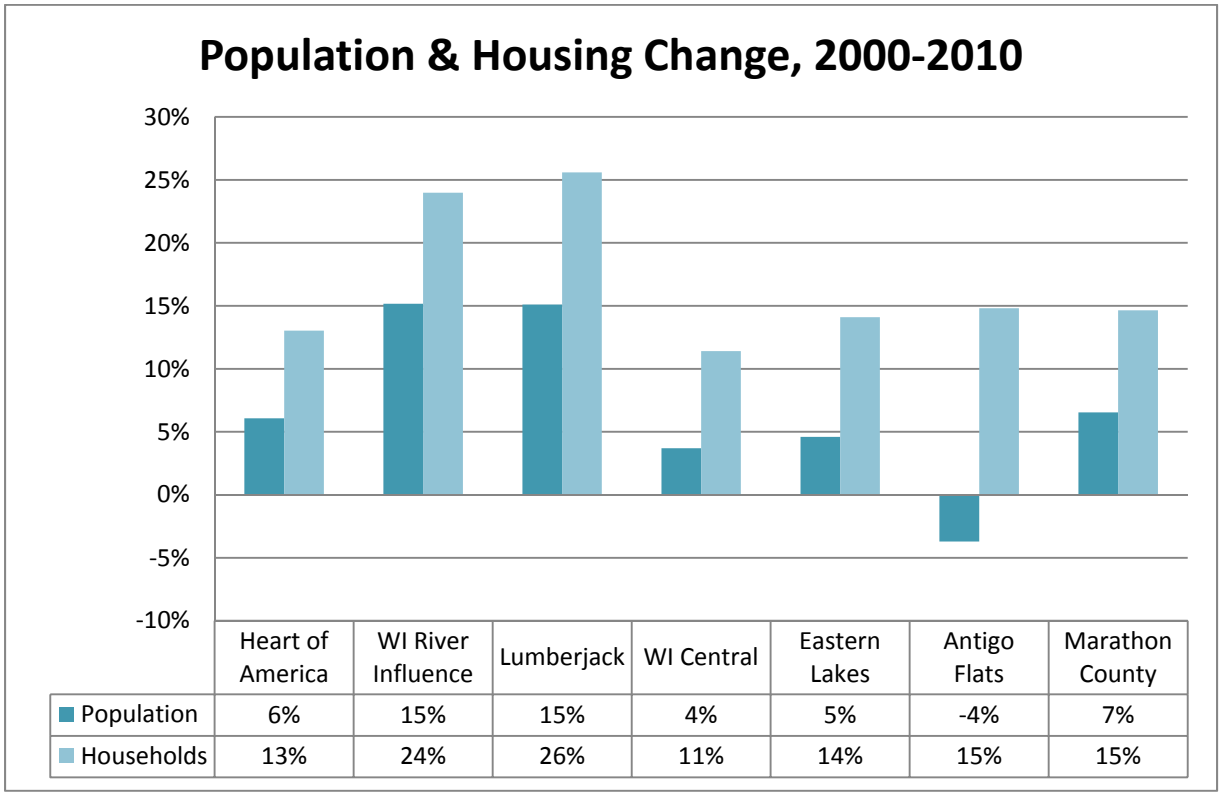
The gap between population growth and housing growth is broader in the unincorporated areas of the county than in the cities and villages. It is also more prevalent in communities on the fringes of urban areas and in communities with significant water features. Many communities have seen an increase in household units and a decrease in population. In some areas of the

county, increase in housing exceeded population growth by 11%. The Lumberjack and Wisconsin River Influence regions experienced the highest population and housing growth in the county. The growth in the Lumberjack region is likely due to the relocation of the new Wausau East High School in northeast City of Wausau and Riverside Elementary School in Ringle. The Wisconsin River Influence's proximity to urban areas (Stevens Point, Marshfield, and Wausau) aind desirable waterfront properties likely contributed to the high population and housing growth. See Map 8 for a household density breakdown by region.

The urban fringes, defined as the area outside of cities and villages but within 1.5 miles from the corporate limits, experienced varied growth rates during the period of 2000 – 2010. Fenwood, Spencer, and Stratford urban fringes experienced housing growth rates higher than that of the county. (29%, 20%, and 21% respectively vs. 15% for the county). All urban fringe areas except Abbotsford-Colby, Athens, and Hatley had population growth rates higher than the overall county growth rate.

Figure 9 shows population and housing change for the regions of Marathon County. Figure 10 summarizes the population and housing density trends from 2000-2010 for the urban fringes in Marathon County.

Figure 9



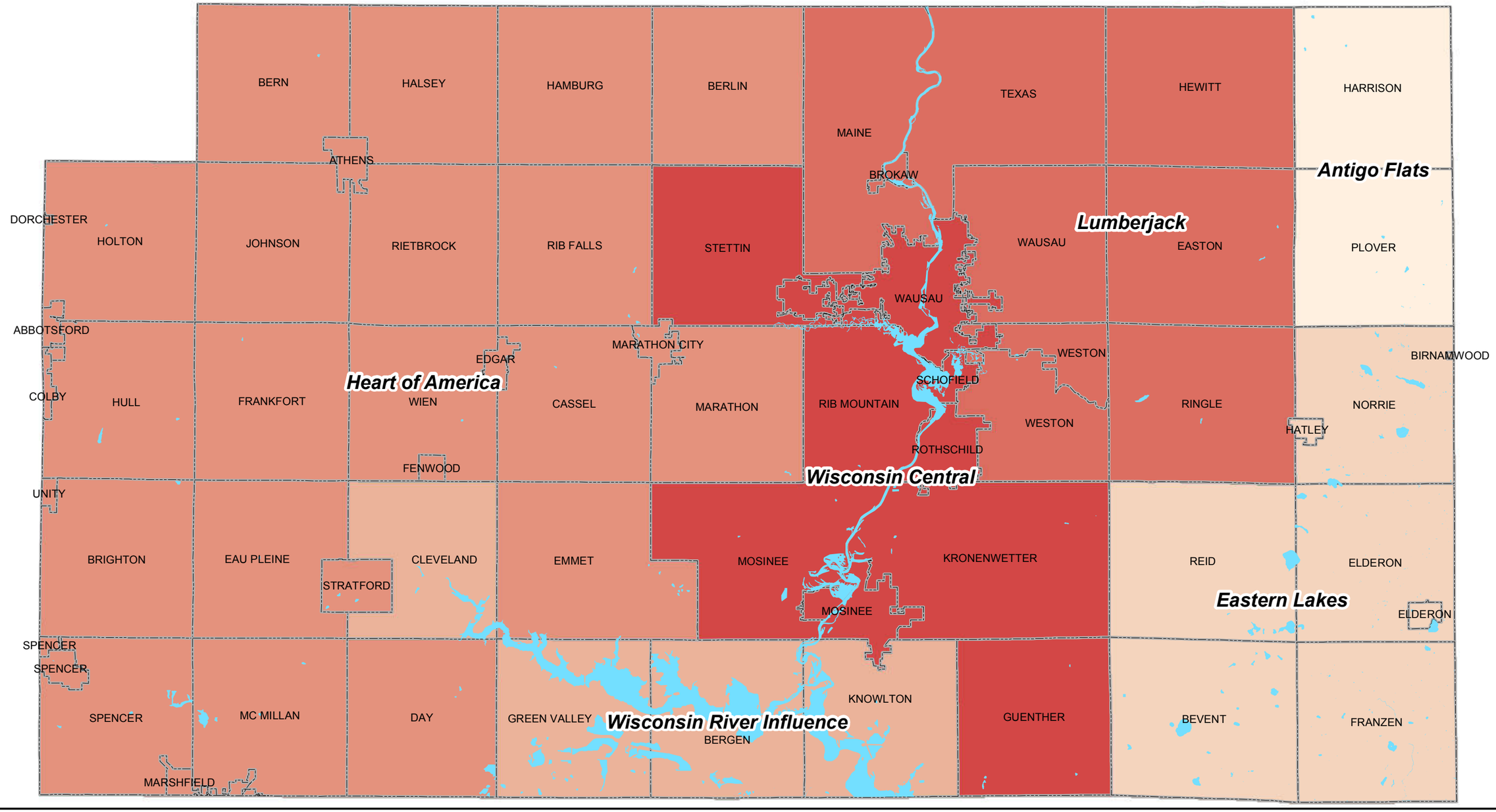
	Heart of America	WI River Influence	Lumberjack	WI Central	Eastern Lakes	Antigo Flats	Marathon County
Population	6%	15%	15%	4%	5%	-4%	7%
Households	13%	24%	26%	11%	14%	15%	15%

Source: 2010 Census

Figure 10 Marathon County Urban Fringe Population and Housing Density Trends: 2000-2010.

Municipality Name	Fringe Area Square Miles	2000 Population	2010 Population	Population Percent Change	2000 Housing Units	2010 Housing Units	Housing Percent Change	2010 Population Density	2010 Housing Unit Density
Abbotsford and Colby	1.3	345	335	-2.9	156	155	-0.65	258	119
Athens	17.9	1059	1134	7.1	309	333	7.8	63	19
Dorchester	4.6	179	155	-13.4	76	85	11.8	34	18
Edgar	5	624	652	4.5	206	236	14.6	130	47
Elderon	10.8	271	293	8.1	83	129	55.4	27	12
Fenwood	12.8	376	484	28.7	111	139	25.2	38	11
Hatley	13.1	774	704	-9.0	291	306	5.2	54	23
Marathon City	18.3	800	915	14.4	293	358	22.2	50	20
Marshfield	14.8	1428	1486	4.1	501	554	10.6	100	37
Wausau Metro Area:									
Brokaw to Mosinee	116.5	12,581	13,098	4.1	5427	5995	10.5	112	51
Spencer	11.7	721	862	19.6	254	315	24.0	74	27
Stratford	20.9	840	1016	21.0	325	418	28.6	49	20
Unity	7	181	191	5.5	63	69	9.5	27	10
Total	**254.7**	**20,179**	**21325**	**5.7**	**8095**	**9092**	**12.3**	**84**	**36**

HOUSEHOLDS PER SQUARE MILE BY FPP REGION - MARATHON COUNTY WI



MARATHON COUNTY

Map Developed by Marathon County
Conservation, Planning and Zoning GIS

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FPP Regions by Household Density

- 5 - Antigo Flats
- 11 - Eastern Lakes
- 13 - WI River Influence
- 16 - Heart of America
- 35 - Lumberjack
- 127 - WI Central
- Municipal Boundary

Source: 2009-2011 American
Community Survey 3-Year Estimates

MAP 8

Agriculture Infrastructure

Agricultural infrastructure consists of services and facilities necessary to support a thriving agricultural sector of the local economy. Agricultural infrastructure would include transportation options, product and commodity warehousing, processing, and distribution, implement sales and repair businesses, veterinary services, and supply cooperatives. The following listing includes the infrastructure within Marathon County that supports local production agriculture and markets.

Agriculture Infrastructure:	
Agricultural Co-operatives	10
Agricultural Equipment Dealers	12
Equipment Service & Repair	20
Processing Businesses	40
Registered Ginseng Growers & Dealers	121
Christmas Tree Growers	9
Nurseries and Nursery Dealers	32
Custom Manure Applicators	11

Like many of the agricultural production models the support business and facilities have experienced a high degree of consolidation, especially in the processing and transport areas. Marathon County anticipates that the agricultural infrastructure will to evolve support the future production models.

Agriculture census data indicate that the fastest growth relative to numbers of producers is with small scale, local community, direct-market enterprises. These producers are much younger than the traditional commercial commodity types. Marathon County will need to work with the local food organizations to ensure that facilities are adequate to distribute product.

Other challenges to meet agricultural needs include improved local roads and bridges to handle increased weight and size of equipment, improved communication systems, and energy production.

Transportation System (Roads and Bridges)

With the major state highways of 51 and 29, the county is fully served by major transportation arteries. The County is home to 63 municipalities including cities, villages and towns. Most urban centers plan to grow their populations and economies in the future. The resulting growth and economic development in Marathon County will have many positive aspects, including growth in tax base, jobs, and amenities. Still, without thoughtful planning, this growth pressure may result in direct conversion of farmland, and increased difficulty in conducting normal farming activities if nearby lands develop. This poses a threat to the agricultural resources, rural character, and small town lifestyle that most residents of the county value.

For the first time since the advent of the automobile, travel is on the decline. This is thought to be a function of the decline in the economy causing people to make fewer discretionary trips and live closer to service centers. However, vehicle travel is declining more than any other means. It is expected that this decline will continue after the economy recovers. To meet the

changing transportation needs of the population, policy will need to shift from infrastructure construction and repair to planning for multiple transportation modes, transportation-related technology, increased demand for public transit, and changing landuse patterns.

Railroads

Rail is efficient and cost-effective for long distant freight shipping, particularly for bulk commodities, such as coal and grain. Active rail in Marathon County include:

- Urban:
  - Along the Wisconsin River and I-39/USH 51 corridor
  - Parallel to STH 29 west of USH 51
  - East to the Village of Weston running parallel to CTH JJ
- Rural:
  - Southwestern Marathon County connecting Marshfield and Spencer to Superior in northwest Wisconsin and Milwaukee in southeast Wisconsin.
  - Spencer north through Unity, Colby, Abbotsford, and terminating in Medford.

Across northern Wisconsin, freight rail service has been in steady decline over the past decade. Marathon County has joined forces with many neighboring counties to join the Northwoods Rail Transit Commission in 2012. The intent of the commission is to improve local rail services in northern Wisconsin and Upper Michigan to spur economic activities.

Agricultural Equipment

With the trend of production and processing consolidation in agriculture, the equipment utilized to transport manure, milk, commodities, and feed materials has increased in both size and weight. The increase in weight and size is a trend that challenges the adequacy of Marathon County's transportation infrastructure relative to safety, maintenance activities and schedules, and structural upgrades.

The most acute time period for agricultural impacts to roads and bridges occurs in the spring and fall seasons when manure spreading activities occur. The spring season is most problematic with heavy loads because the road bed is saturated with random ice lenses. Because of county-led conservation and nutrient management efforts over nearly 4 decades, livestock producers commonly store livestock manures and wastewater in large impoundments during the winter and summer months and land spread these wastes to cropland in large volumes immediately prior to planting or immediately after harvest. In order to move large volumes of manure efficiently (time) and economically, larger/heavier equipment is utilized.

Marathon County will develop a policy that recognizes the importance of safely moving agricultural materials efficiently and profitably in a manner while protecting the road and bridge investments.

Water Supply

Marathon County utilizes nearly 20 billion gallons per year for residential, industry and agricultural uses. This equates to 55.55 Mgal/day. In the citizen survey, respondents rated the protection of groundwater supplies as the highest priority. Groundwater issues facing Marathon

County include dairy expansion and concentration, climate change, demand in excess of supply especially in western Marathon County, well contamination, and localized groundwater flooding (Kronenwetter).

Energy

Economic growth requires labor, capital, and energy. Agri-business and industry need energy at a competitive cost to operate. However, as we grow, demand increases. As demand increases, additional generation is added to meet demand. Generation requires infrastructure, which results in increased cost per unit of energy. Additionally, unlike labor and capital, traditional energy (fossil fuels) has a limited source supply, so as usage increases, the longevity of the resource decreases. Marathon County governments, businesses, and residents are working towards consistent, affordable, reliable, and sustainable energy by following energy conservation principles that incorporate traditional energy sources, renewable energy, and energy conservation programs.

63% of power in Wisconsin is generated from coal. Renewable energy in Marathon County includes the biomass plant completed in 2013, Wausau hydro-electric dam, Ringle landfill, and private wind and solar power generation.

Many businesses and organizations have developed **Energy Teams** to review and improve building energy efficiency. **K-12 Energy Education Program (KEEP)** teaches faculty and students how to reduce energy consumption in school and at home.

Utilities, Sanitary Sewer and Wastewater Treatment

The communities of Abbotsford, Athens, Brokaw, Colby, Edgar, Hatley, Kronenwetter, Marathon, Marshfield, Mosinee, Rib Mountain, Rothschild, Schofield, Spencer, Stratford, and Wausau supply their residents with drinking water from a municipal water supply. The remainder of the county relies on private wells for their water supply.

Marathon County's water supply is generally adequate to meet needs, and is of high quality with some exceptions:

- In 2008, Brokaw began buying drinking water from Wausau after one of Brokaw's wells became contaminated.
- In 2007, an industrial customer in Abbotsford over tripled water usage. The City's water supply cannot meet growing demands. Abbotsford has been since exploring additional water sources.

The communities above, as well as the Village of Fenwood and parts of the Town of Johnson (Milan) and the Town of Day (Rozellville) provide waste water treatment services. The Wausau Urban Area Sewer Service Plan plans for the expansion of sewer service area and protection of water quality in the Wausau urban area (cities of Mosinee, Schofield, and Wausau; villages of Kronenwetter, Rothschild, and Weston, and the town of Rib Mountain). The remainder of the county relies on Private On-Site Waste Treatment Systems (POWTS) for sewage treatment.

Solid Waste Management

Most solid waste collection in Marathon County is by private service providers. In most communities, the municipality contracts with the provider for waste collection charge residents for the service. In some communities, the resident is responsible for contracting with the service provider.

Marathon County owns and operates a regional landfill in the Town of Ringle. Marathon County offers programs on composting, recycling, hazardous waste collection, and electronics recycling.

Land Use Trends

Like most regions of Wisconsin, Marathon County has seen approximately 22,000 acres of cropland converted to other uses over the years of 2000-2010. This conversion trend has been a constant over the past 4 decades. Protecting the county's best cropland is a major goal of this plan.

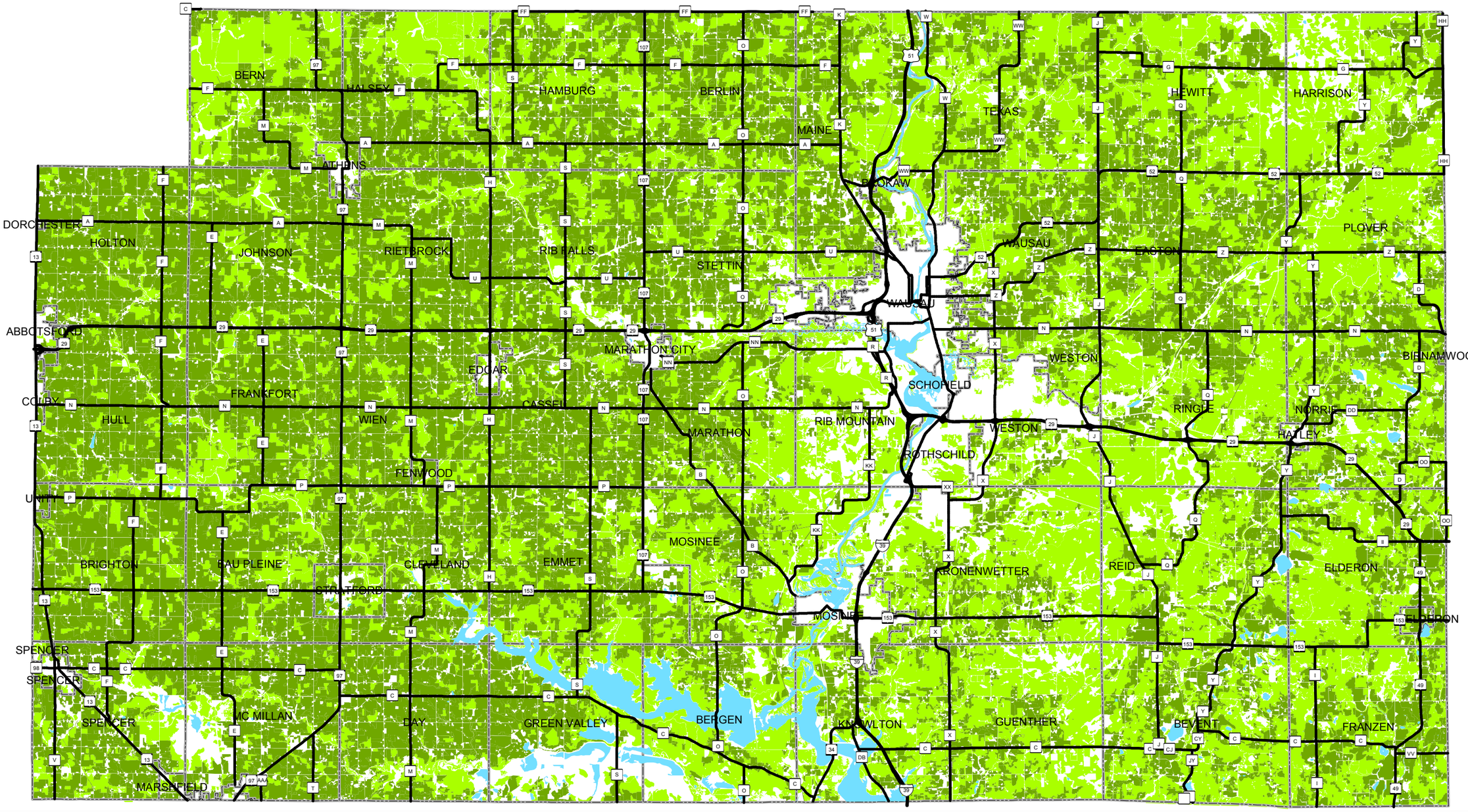
Over time, the distribution of land uses relative to cropland, woodland, pasture and residential needs has changed (Figure 11). From 1992 to 2007, the amount of land in farms decreased from 529,966 to 490,628 acres (a decrease of 7.4 percent). Map 9 shows the 2010 land use cover types for Marathon County.

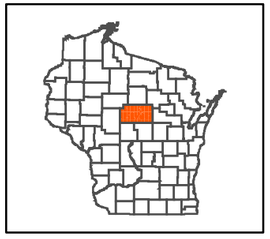
Figure 11 Estimated land use cover of Marathon County in 2008.

Land Use	Acres	Change from 2000
Cropland (32.9%)	331,948	- 20,893
Specialty Crops (0.4%)	3,874	- 1,983
Other Agriculture (10.3%)	104,123	+ 4,621
Commercial (0.5%)	5,245	+ 935
Forest Land (38%)	382,870	- 1,679
Barren (6%)	60,632	+ 11,071
Industrial (0.3%)	2,771	+ 271
Single Family Residential (4.7%)	47,386	+ 6,207
Multi-family Residential (0.1%)	886	+ 260
Open Water (2.8%)	28,322	- 502
Quarries (0.4%)	3,674	+ 692
Recreational (0.3%)	2,495	- 260
Transportation (3.3%)	33,113	+ 945
Public & Quasi-public (0.2%)	2,240	+ 343
Unknown	112	+ 79
Total Acres	1,009,691	

Source: Marathon County Land Use Cover Database.

AGRICULTURAL & FORESTED AREAS - MARATHON COUNTY WI





MARATHON COUNTY

Map Developed by Marathon County
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Land Use_Cover 2010

- AGRICULTURAL AREAS
- FOREST LAND > 10 ACRES
- Municipal Boundary
- US - State - County Highways

MAP 9

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Economic Growth and Business Development

Marathon County is benefited by a diversity of industrial, commercial and educational enterprises that contribute to the economic and community status.

The Marathon County Development Corporation (MCDEVCO) has partnered with Marathon County government and the Wausau Region Chamber of Commerce to provide site selectors, business leaders, employees and residents with key initiatives and resources that help them establish businesses, identify financing resources, expand opportunities, receive the training and education they need to advance, capitalize on Marathon County's resources and connectivity, and help them establish business partnerships that are mutually beneficial.

Marathon County has also partnered with the North Central Wisconsin Regional Planning Commission (NCWRPC) to provide economic development assistance to communities in the county. NCWRPC is designated as an economic development district (EDD) by the U.S. Department of Commerce Economic Development Administration. Part of this process involves the annual update of the regional economic development strategy. This effort includes reaching out to rural communities to assess potential brownfield sites that could be remediated in order to support both agriculture and non-agriculture uses.

During the period of 2001 – 2011, the education and health industry sector in Marathon County experienced the greatest growth (+5%) as a percent of total employment. The percent of total employment in government, finance, professional and business also increased. Manufacturing; trade, transportation, and utilities; construction and mining; and information industries experienced a decline in the percent of total employment.

The annual growth in non-farm employment in Marathon County is projected at 1.2% in 2014 and 2015, which is 0.4% lower than the projected state annual growth. Annual growth in employment in manufacturing is projected at 2.1% and 1.7% respectively in 2014 and 2015.

Figure 12 identifies the largest industries and in Marathon County. Marathon County has a higher ratio of employment than the State of Wisconsin in Agriculture, manufacturing, wholesale trade, retail trade, finance and insurance.

Figure 12

Industry	Employees
Agriculture/Forestry/Fishing/Hunting/Mining	2,231
Construction	3,891
Manufacturing	16,870
Transportation and Warehousing, and Utilities	3,116
Information	1,026
Wholesale Trade	2,369
Retail Trade	7,697
Finance/Insurance/Real Estate/Rental/Leasing	5,471
Services	25,916
Public Administration	1,393
Total Employment	69,980

Wisconsin Department of Workforce Development

The largest employers in Marathon County (by number of employees) are:
Figure 13

Employer	Industry
Aspirus Wausau Hospital	Medical and surgical hospitals
Greenheck Fan Corporation	Industrial and commercial fan and blower manufacturing
Wausau School District	Elementary and secondary schools
Kolbe & Kolbe Millwork Company	Wood window and door manufacturing
Food Locker Corporate Services, Inc	Mail-order retailers
United Healthcare Services	Direct property and casualty insurers
Marathon Chees Corporation	Dairy product merchant wholesalers
Wausau Paper Mills, LLC	Paper, except newsprint, mills
County of Marathon	Courts
Liberty Mutual Group, Inc	Direct property and casualty insurers

Wisconsin Department of Workforce Development, Office of Economic Advisors

Community Facilities and Services

Marathon County is the home to 17 public school districts, including 58 elementary schools, 17 middle/junior high schools, and 18 high schools. In addition to the public school system, there are several area private K-12 schools. Higher education opportunities in Marathon County include traditional post-secondary schools such as the University of Wisconsin Marathon County and Northcentral Technical College. Other higher education options include Rassmussen College and Globe University.

Marathon County is served by 29 fire districts, 14 police districts, 23 First Responder areas (not all areas of the county are covered by first responders), 16 Emergency Medical Service districts, and 5 Department of Natural Resources Fire Zones. Dispatch for emergency services is centralized through Marathon County dispatch located in Wausau.

The main branch of the Marathon County library system is in Wausau. The library system includes 9 branches.

Marathon County has 2 hospitals, both located in Wausau. Based on location, some residents utilize medical services in surrounding communities such as Stevens Point, Marshfield, and Antigo.