

CHAPTER 2

INVENTORY AND TRENDS: DEMOGRAPHICS, AGRICULTURE AND LAND USE

DEVELOPMENT AND DEMOGRAPHIC TRENDS AND PROJECTIONS

Waukesha County is the third most populous county in the state and the most populous suburban county in the Metropolitan Milwaukee area and Southeastern Wisconsin. According to U.S. Census Bureau estimates, Waukesha County's estimated population in 2009 was 383,154. Milwaukee County, Waukesha County's neighbor to the east and the state's most urban county, is the only county that is more populous in the region. The economic and agricultural climate of Waukesha County is greatly influenced by the county's close proximity to the City of Milwaukee, the largest city in the state. According to the U.S. Census Bureau, in 2000, the Milwaukee Metropolitan Area was the 35th largest metropolitan area in the United States.

Chapters 2 and 6 of the Waukesha County Comprehensive Development Plan (WCCDP) detail demographic, development and employment trends in the county in great detail. The following discussion highlights certain statistics that characterize the county's rapid growth and development trends, while also providing newly available population estimates. Population and job growth have been significant factors in fueling the conversion of lands out of agricultural use in the county. Inclusion of such development and population trend information is critical to understanding the challenge of planning for farmland preservation in a suburbanizing county within a major metropolitan area.

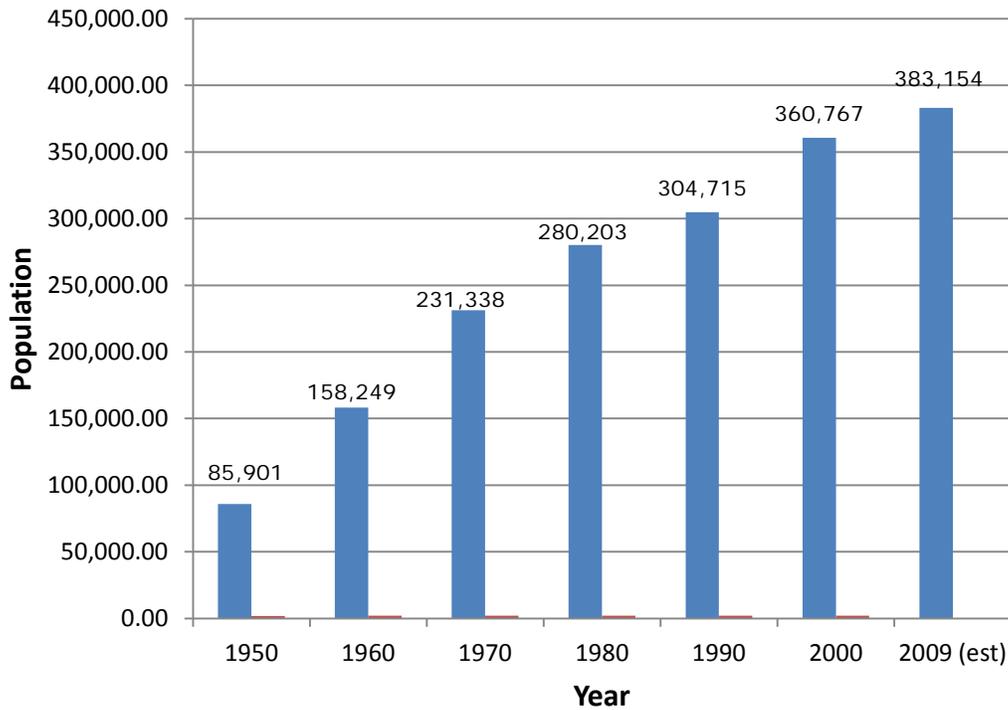
Detailed discussion of other land use topics and trends such as utilities, transportation facilities and environmental corridors is found within the chapter text of the WCCDP and can be located by viewing the table of contents for the WCCDP. There are no known major transportation, utility or community facility projects proposed within areas dominated by agricultural use that are anticipated to affect agriculture significantly. In addition, analysis of these other planning topics was conducted very recently as part of the formulation of the 2009 WCCDP. Consequently, further discussion of these topics is not being repeated in this plan document.

Population Growth 1950-2009

Waukesha County has added at least 20,000 persons in every decade since 1950, with growth exceeding 70,000 persons per decade in the 1950s and 1960s (See Figure D2-1). The county's population growth rate from 1950 to 2009 was an estimated 346%. Population growth in the most recent full decade of Census Bureau record (1990-2000) was also strong, with the county adding more than 56,000 people during this time period. As identified in Chapter 2 of the WCCDP, the vast majority of the county's population growth has been the result of in-migration. According to SEWRPC's *A Regional Land Use Plan for Southeastern Wisconsin: 2035*, 188,384 people migrated to the county between 1950 and 2000, accounting for 68% of the county's growth during that timeframe.

According to U.S. Census Bureau estimates, Waukesha County's population represented 18.9% of the seven county southeastern Wisconsin region in 2009, whereas the County's population represented just 6.9% of the region's population in 1950. This shift in the distribution of the region's population has put great pressure upon the agricultural industry in Waukesha County and has made the county more of an economic engine within the region. It should be noted that the recent severe national recession that began in 2007 has slowed the pace of growth and development in the county greatly in the past few years.

**Figure D2-1
Population Growth in Waukesha County
1950 -2009**



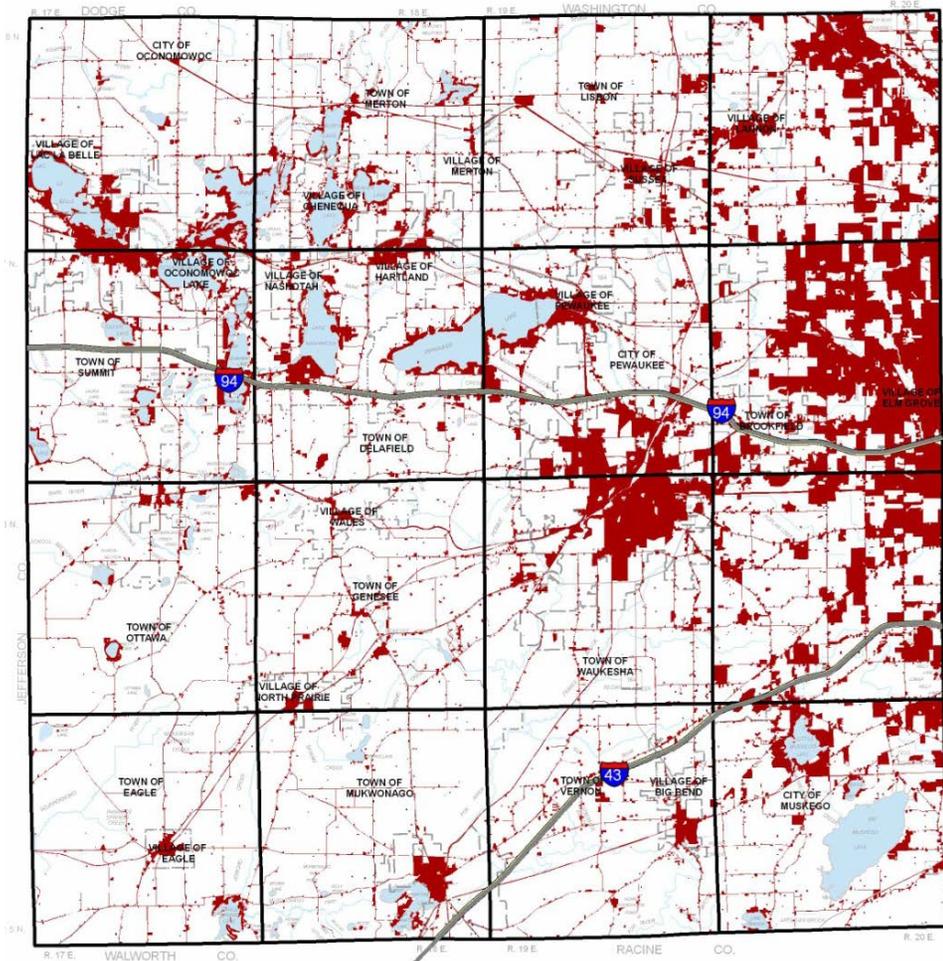
Source: US Census Bureau

Distribution of Population

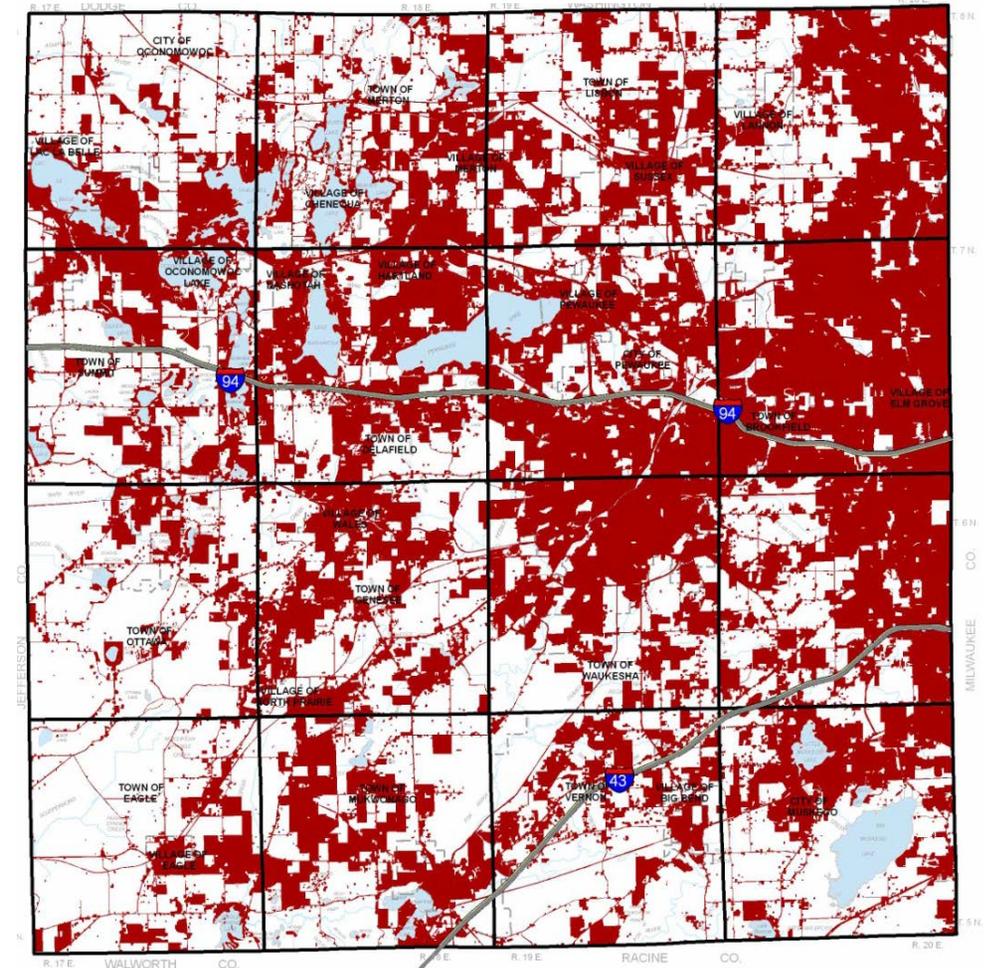
The rapid growth in Waukesha County has resulted in the conversion of tens of thousands of acres of agricultural land to both urban uses and rural residential use. Lands within the county devoted to residential use increased by 47,073 acres between 1963 and 2000 (See Table II-17, Chapter 2 WCCDP). Suburbanization of the county’s eastern tier communities was fueled by the construction of improved highway systems, most notably Interstate Highways 94 and 43. These highways provided fast, easy access to employment centers in the Milwaukee area and made the concept of accessing “country” settings in Waukesha County more attainable. Numerous major employment and shopping centers have developed near various major interstate highway interchanges, with development of such areas generally occurring from east to west in the county over time to coincide with population growth.

In recent decades, population growth has increasingly expanded to the central and western tier communities of the county, as land became more scarce and expensive in the eastern part of the county. The growth of western Waukesha County communities has also been driven by employment and commercial growth within the county. With more job opportunities, shopping and services available in close proximity, the previously more remote parts of the county became more popular residential destinations. The county’s distribution of developed areas had increasingly strayed from its concentration in compact urban areas and in shoreland areas around lakes in the early 1960s to a much more widespread distribution by 2005. Maps D2-2 and D2-3 show the changing pattern of development in the county over time. Improved highway systems have made areas near the numerous lakes and unique kettle moraine topography in the western part of the county more accessible causing additional growth in those areas, often upon former agricultural lands. As described in Chapter 2 of the WCCDP, an estimated 20%, or 75,626 county residents, lived in unincorporated areas of Waukesha County in 2005.

Map D2-1
Urban and Residential Lands: Waukesha County - 1963



Map D2-2
Urban and Residential Lands: Waukesha County - 2005



Household Trends

Average household size within the county has steadily declined in recent years. According to *A Regional Land Use Plan for Southeastern Wisconsin 2035*, from 1950 to 2000, average household size fell from 3.51 persons per household to 2.63 persons per household in 2000. This means that as the county's population has grown, even more housing units have been needed to accommodate this shift in household structure, which created further development pressure on agricultural lands. Waukesha County has added 111,630 households over this 50 year time period for a total of 135,229 households in 2000.

Employment Trends

As noted in Chapter 6 of the WCCDP, Waukesha County's share of the region's employment increased from 3% in 1950 to 22% in 2000. In 2000, there were 270,800 jobs in Waukesha County. Between 1990 and 2000 alone, the county added 81,100 jobs, an increase of 43% (See Table II-8, Chapter 2 WCCDP). During this same time period, agricultural employment within the county declined by 180 jobs to 1,011 (See Table II-9, Chapter 2 WCDP). Lands devoted to commercial and industrial use in the county have increased from 2121 acres in 1963 to 10,876 acres in 2000. While the conversion of lands from agricultural use to commercial and industrial use is notable, the jobs that coincide with the land use change have generated significant associated residential growth over the past several decades.

Growth and Land Use Projections

SEWRPC projects that between 2000 and 2035, the county will add 86,000 residents (23.8% increase), 38,900 households (28.8% increase) and 62,900 jobs (23.2% increase) (See Table II-15, Chapter 2 WCDP). It is expected that this growth will generally be accommodated in greenfield type developments, as the county still contains a large inventory of undeveloped lands and most undeveloped and agricultural land in the county is in planned land use categories that allow for some type of development. The ongoing severe economic recession may cause some of these projections to appear to be high, however, extreme high and low periods tend to be moderated over time. The 2009 County Development Plan projects that urban uses will continue to consume more land into the future, with another 64,217 acres projected to be converted from rural use to residential, commercial or industrial uses by 2035 (See Table VII-7, Chapter 7 WCDP).

An analysis of local assessment data and recorded subdivision plats reveals that there appears to be an overabundance of vacant lots in the county marketplace at the present time. The strong economic times leading up to the current economic recession led to vast speculation in the marketplace. A Waukesha County analysis of local assessment records through August 2010 revealed that there were approximately 4,415 vacant buildable lots in the county, with 1,218 of those being located in unincorporated areas. There were 372 subdivision plats recorded in the county since 2000, accounting for 18,059 new lots. The current vacant lots occupy 4,339 acres, with 2,374 acres comprising vacant lots in unincorporated areas. Another 87 preliminary plats were submitted for review between 2000 and 2010, holding the potential for another 2,949 residential lots to be created. With a very weak residential real estate market and significant lot inventory, it is not expected that land conversion will occur at the same high rates of the past in the foreseeable future.

AGRICULTURAL DATA AND TRENDS

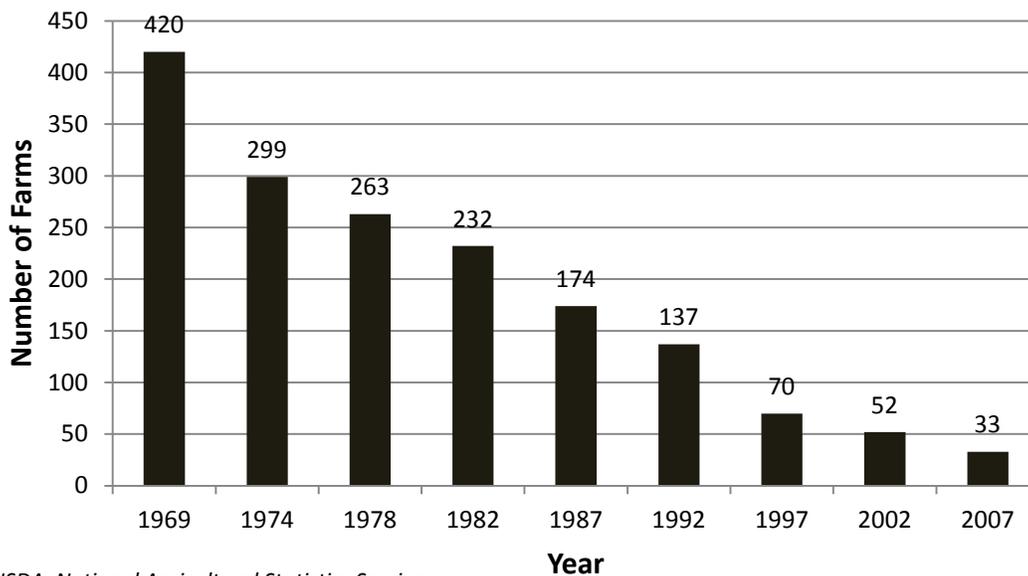
Dairy and Livestock

Between 1918 and 1959 Waukesha County assumed the title of "Cow County USA" due partly to the large number of dairy farms and cows in the county. In 1930, there were an estimated 42,000 dairy cows on Waukesha County farms. More significant, however, was the large number of sophisticated dairy

breeders, well known pedigreed and production-tested dairy herds. These breeders transformed Waukesha County into a national dairy trade center known for some of the best dairy cattle in the world.¹

The agricultural sector in the county has changed greatly since then. As noted earlier, improved transportation systems and urban pressures have played a large role in the loss of agricultural lands since the 1960's. Figure D2-2 illustrates the decline in the number of dairy farms in the county since 1969, when it was home to an estimated 15,263 milk cows. Thirty-eight years later in 2007, the number of dairy farms had dropped 92% to 33 farms while milk cows dropped to 2,756, an 82% reduction.

Figure D2-2
Dairy Farms in Waukesha County
1969 - 2007



Source: USDA, National Agricultural Statistics Service

During this same time period, USDA statistics show most other types of livestock farming also experienced significant declines around the county. This includes beef cows, swine, sheep, mink and chickens. However, it should be noted that local inventories show the number of horse stables increased from 33 sites in 1975² to 85 sites in 2009³. This increase is related to low density residential development that has occurred in much of the rural areas of the county, and the availability of nearby trails for horse riding.

Agricultural Products Sold

Figure D2-3 shows the top seven agricultural products sold in the county in 2007. Together, these seven items make up 95% of the total value of agricultural products sold in the county. Dairy leads at 26%, but nurseries/horticulture and corn each are very close behind at 24%. The next four highest products sales - soybeans, cattle, vegetables and hay - added together do not match any of the top three individually. Corn and soybeans obviously dominate the cropland in the county. While soybeans make up less than half the 2007 market sales of corn, the acres planted to each are not that far apart. From 2005 to 2009, corn was

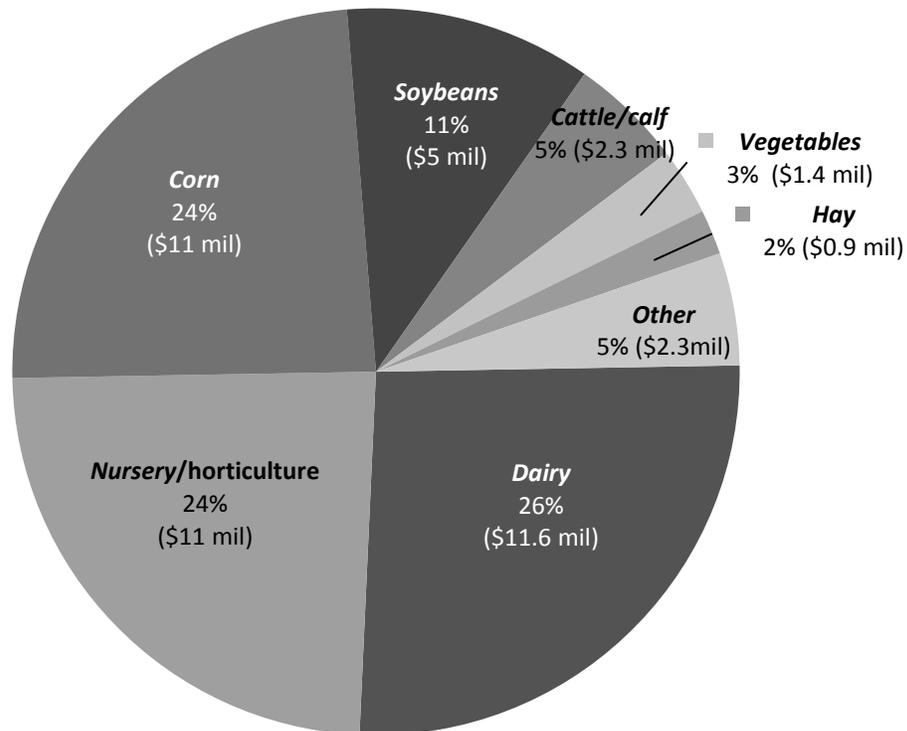
¹ *Waukesha County Agricultural Land Preservation Plan (1998 draft)*

² *Technical Report #21 – “Sources of Water Pollution in Southeastern Wisconsin: 1975”, Southeastern Wisconsin Regional Planning Commission, September 1978.*

³ *Waukesha County Department of Parks and Land Use-Land Resources Division, internal 2009 inventory.*

planted on an average of 29,000 acres while soybeans were planted on an average of 21,000 acres of cropland in the county.⁴

Figure D2-3
Percentage and Market Value of Agricultural Products Sold
Waukesha County: 2007



Source: USDA, National Agricultural Statistics Service

USDA statistics show the number of cropland acres in Waukesha County declined about 45% over the past four decades, from 125,696 acres in 1969 to 69,445 acres in 2007. The market value of agricultural products sold during this time period did not follow the same pattern, but did end up with a similar decline overall. Figure D2-4 shows that when market values are presented in 2007 dollars, sales of agricultural products climbed quickly from \$87 million in 1969 to \$122 million in 1978. However, this was followed by a fairly steep decline in market value in the 1980's and 1990's. The net market value loss in agricultural products sold is 48% from 1969 to 2007, but 63% from 1978 to 2007.

While much of the market value loss can be explained by the loss of farms and cropland, commodity prices also play a big role. For example, the average wholesale liquid milk price in Wisconsin in 1980 was \$12.69 per hundred weight (one-hundred pounds) while in 2009 the unit price was only \$13.08.⁵ If adjusted for inflation, the unit price in 2009 would need to be \$33.04 per hundred weight to have the same buying power that it did in 1980.⁶ In other words, the milk price essentially dropped 60% in this example. To deal with the often stagnant and unpredictable market prices, the national trend in dairy farming is increased milk production per cow and increased herd size.

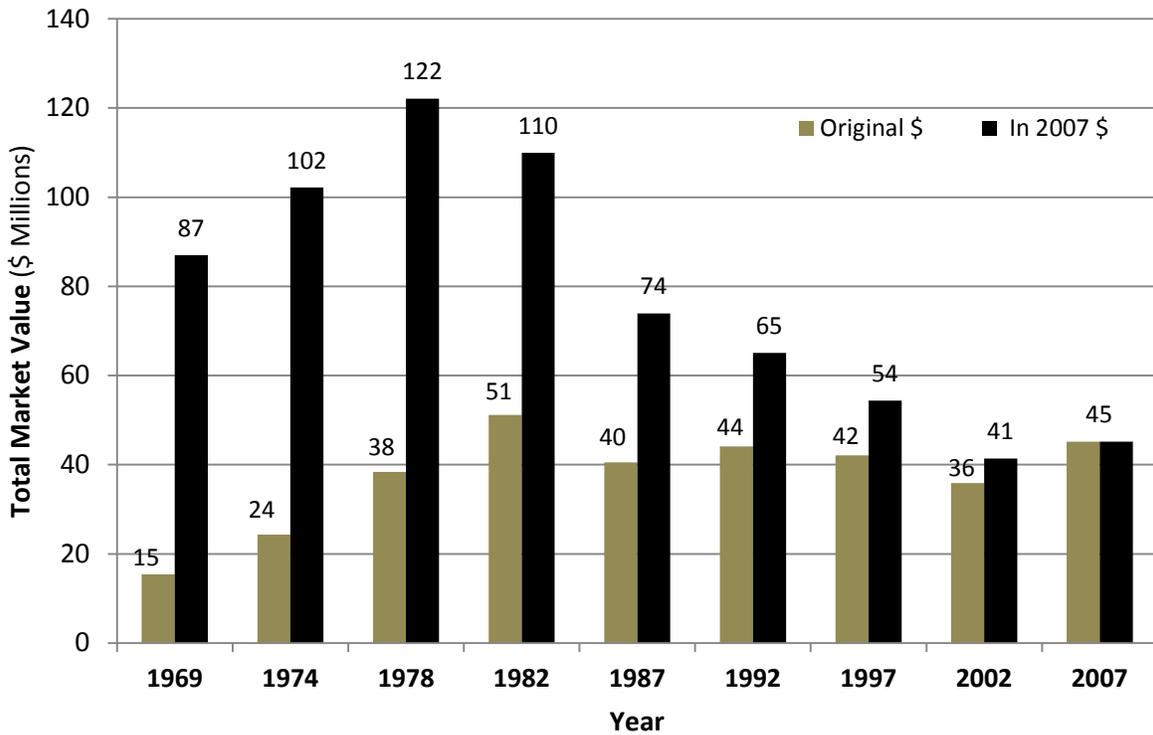
⁴ USDA – National Agricultural Statistics Service.

⁵ Brian Gould, Agricultural and Applied Economics, UW Madison (<http://future.aae.wisc.edu/data>).

⁶ US Bureau of Labor Statistics.

Figure D2-4

**Market Value of Agricultural Products Sold
Waukesha County 1969 - 2007**



Source: USDA, National Agricultural Statistics Service

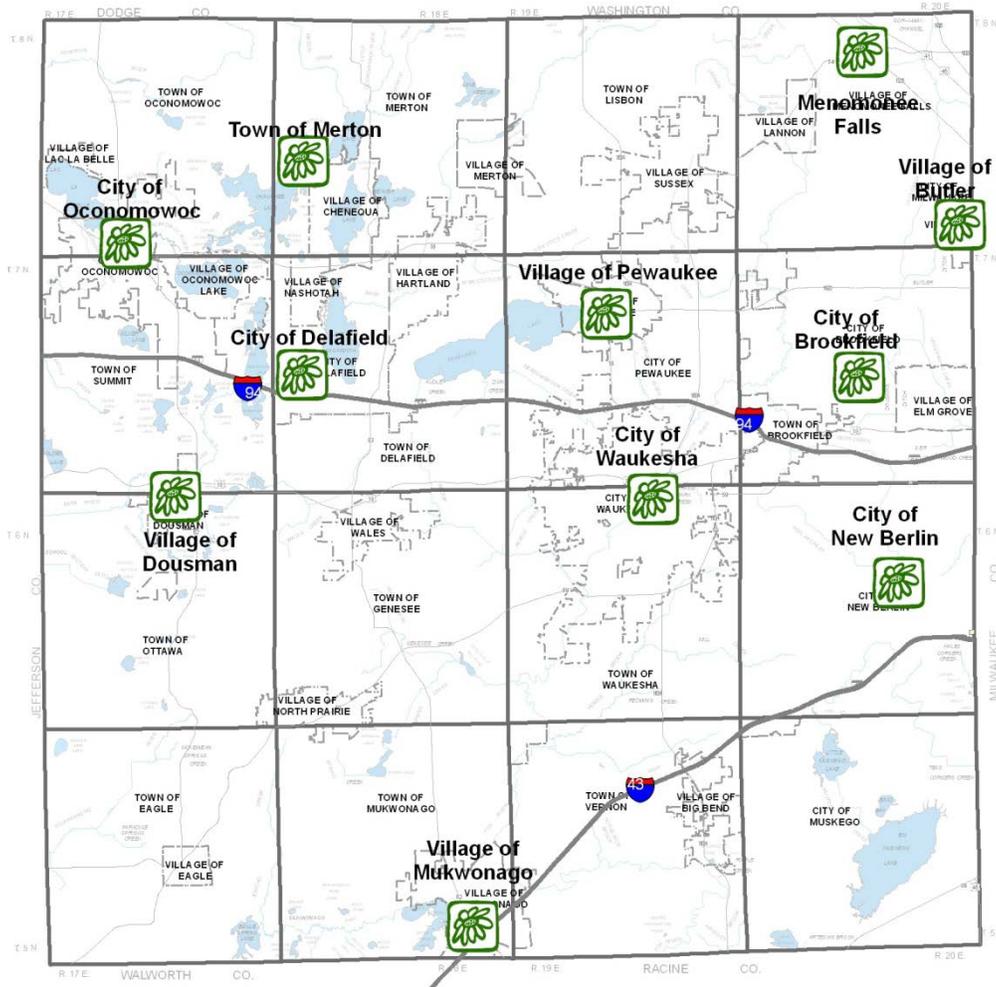
Urban Agriculture

In addition to horses, a few other agricultural related industries that have a connection to urbanization have been on the increase. As of 2010, 91 farms in southeast Wisconsin offered direct producer-to-consumer marketing of commodities such as fresh produce, meat, pumpkins, Christmas trees, greenhouse and nursery stock, hay, straw, sod, specialty crops, and farm tourism.⁷ Eighteen of those farms are currently located in Waukesha County. According to the Waukesha County UWEX Commercial Horticulture Agent, the number of farmers markets in the county has more than doubled since 2000. Eleven communities now sponsor farmers markets, as shown in Map D2-3. The production of landscape trees and plants, as well as landscape and grounds maintenance, are also growing segments of the local economy. In fact, USDA data shows that in 2002 nursery/horticulture sales were the number one agricultural products sold in the county at \$9.5 million, surpassing the dairy industry at \$8.6 million.⁸ Figures D2-3 and D2-4 show that market value of sales in both of these industries improved dramatically by 2007, with dairy increasing 35% to \$11.6 million, and nursery/horticulture increasing 16% to \$11 million. The sharp increase in the dairy sales reflects a peak in the milk market prices enjoyed by farmers during 2007, when it averaged \$19.28 per hundred weight.

⁷ *Farm Fresh Atlas for Southeast Wisconsin, UWEX/Town & Country RC&D* (<http://www.farmfreshatlas.org>).

⁸ "2002 Census of Agriculture", USDA, National Agricultural Statistics Service.

Map D2-3 Community Sponsored Farmers Markets in Waukesha County: 2010



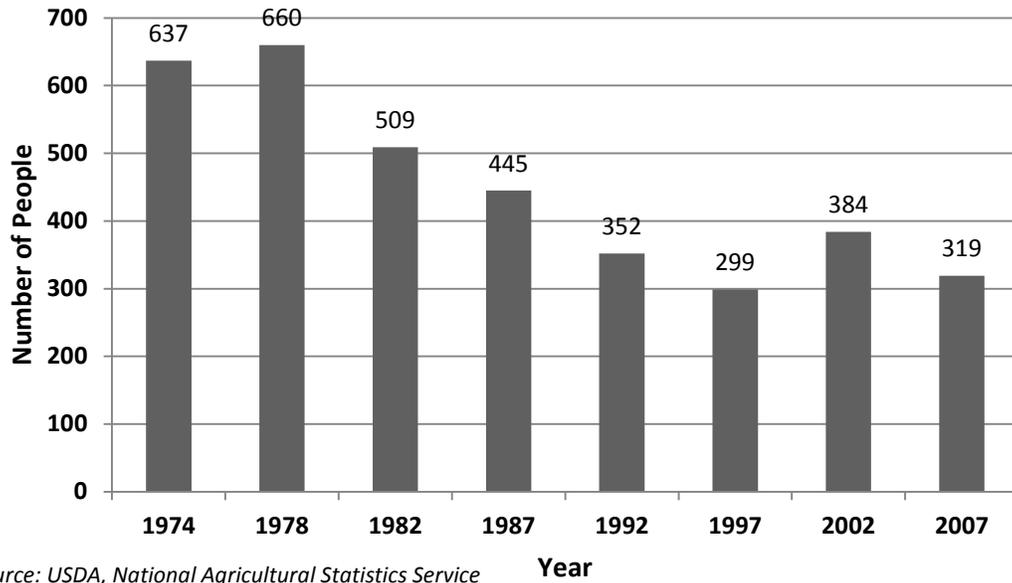
Source: Waukesha County and UWEX

Agricultural Employment

There are a number of different ways to measure the agriculture employment market. The 2007 Census of Agriculture takes a very direct approach, showing that 319 people listed farming as their principal occupation in Waukesha County. As shown in Figure D2-5, this is a 52% decline in the past 29 years. According to the U.S. Bureau of Economic Analysis, agriculture provided 1,011 jobs in Waukesha County in 2000, representing about 0.4% of the total job market in the county. However, a 2011 publication by UW- Extension⁹ says agriculture provided 3,231 jobs in the county. This last example recognizes agriculture as a foundational industry, which many other jobs rely on or support. For example, it includes suppliers of related farm services, equipment, and supplies, as well as industries that rely on the raw farm product for processing, sales, marketing and delivery of food and fiber. There is no doubt that agriculture can have a large economic impact on a community. However, the proportional impact it is having on Waukesha County is clearly diminishing as other types of job markets have developed over the past several decades. Even if the larger number was used, it would only reflect about 1% of the job market in Waukesha County as of 2011.⁹

⁹ "The Economics of Agriculture in Wisconsin Counties", S. Deller and D. Williams, University of Wisconsin-Extension, March 2011.

Figure D2-5
People Who List Farming as Their Principal Occupation
Waukesha County 1974 - 2007

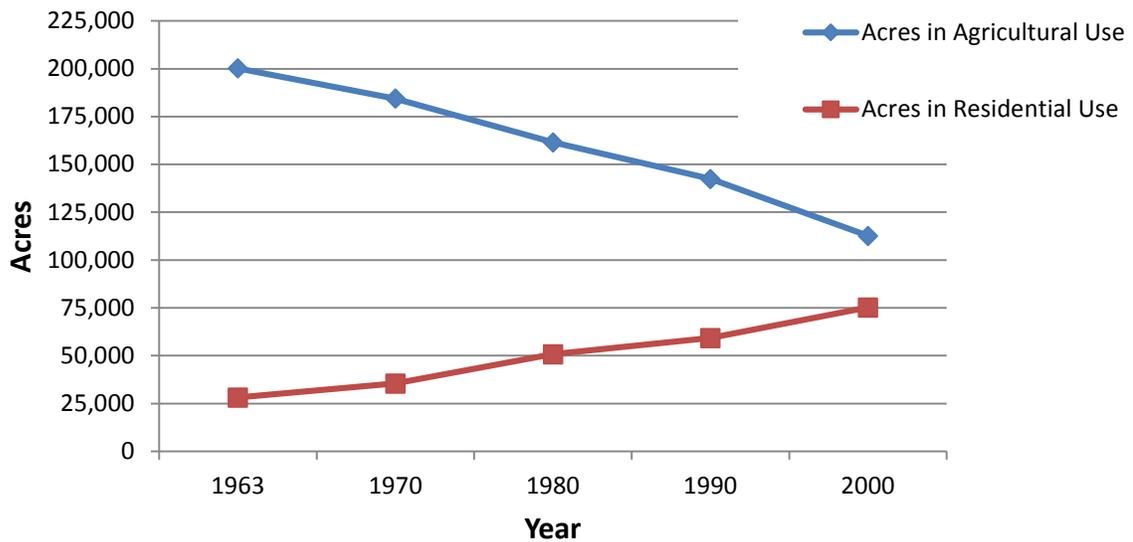


Source: USDA, National Agricultural Statistics Service

Agricultural Land Use

The most significant change in land use in Waukesha County in recent decades has been the loss of agricultural land. Between 1963 and 2000, SEWRPC estimated that the county lost 87,630 acres of agricultural land. This averages to approximately 2,370 acres or about 3.7 square miles each year. As previously noted, the loss of agricultural land has coincided with a steep increase in residential land use, as illustrated in Figure D2-6.

Figure D2-6
Acres in Agricultural and Residential Use
Waukesha County 1963 – 2000



Source: SEWRPC

Because a SEWRPC land use inventory has not been published since 2000, Waukesha County conducted an updated inventory of agricultural lands based upon 2010 aerial photography and submitted land division documents. The updated inventory estimates that another 38,805 acres of agricultural and rural lands have been lost since 2000, which averages over 4,600 acres per year. This brings the total acres in agriculture to 92,246 as of 2010. The 92,246 acres of farmland represents slightly less than 25% of the land area of the county remaining in agricultural use as of 2010. Figure D2-6 above was not updated because no inventory of residential lands has been completed since 2000.

A review of subdivision plats recorded between 2000 and 2010 corroborates the aerial photo review technique. In the past decade, over 11,000 acres of farmland were platted in either subdivision plats or condominium plats within the county. In addition, another 87 preliminary plats encompassing nearly 4600 acres of land were submitted for review but remain unrecorded since 2000. This does not account for the many other urban land use conversions or residential lots created outside of the platting process. It should be noted that during this inventory update, a different methodology was used to group rural land uses together and eliminate vacant lots and proposed subdivisions from the inventory, causing the “agricultural land” acres to drop significantly. This was done to avoid including any of these lands in the farmland preservation analysis discussed in the next chapter.

The remaining 92,246 acres of agricultural or rural land uses in 2010, exclusive of natural resource and environmental corridor uses, compares to 173,918 acres of agricultural lands in 1980. This represents a 46% loss of the agricultural lands in Waukesha County during this 30-year span (81,672 acres loss). Map D2-4 shows 2010 agricultural land uses compared to 1980 agricultural land uses. The difference represents the loss of agricultural lands since the first Farmland Preservation Plan was prepared for Waukesha County in the early 1980's. Also shown in Map D2-4 are the areas served by sanitary sewers as of 2000. While the sewer service area needs significant updating, the map in general illustrates an obvious pattern of much of the 81,672 acres of land converted to urban or residential uses being well beyond areas served by sanitary sewer service.

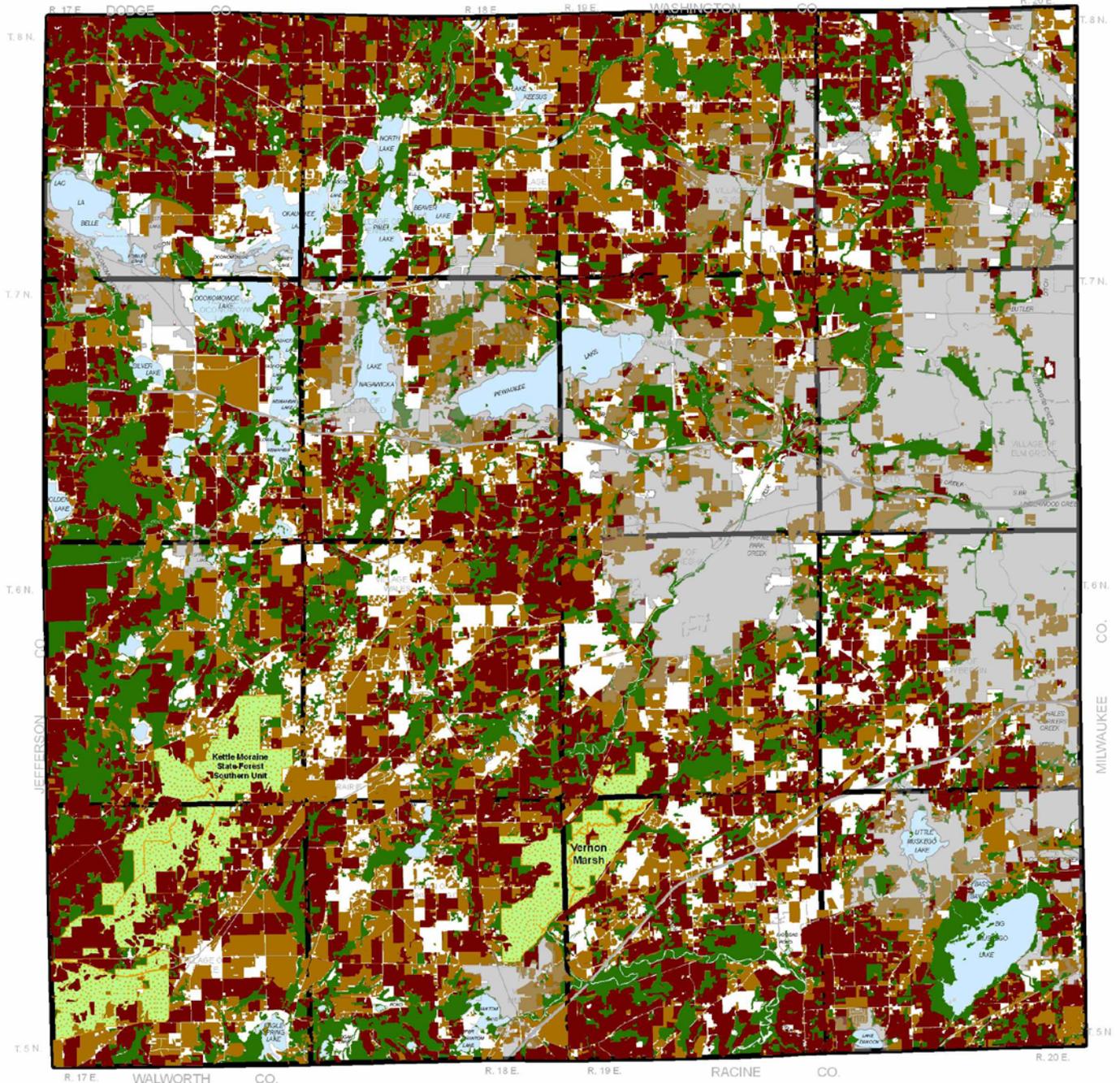
Agricultural Infrastructure and Support Services

As farming has declined in the county, so have the agricultural infrastructure and support services. For example, as of 2010, there are currently no implement dealers or grain elevators in Waukesha County. The vast majority of cropland is rented, which often means longer travel distances for farm machinery during planting and harvesting times, and competition with commuter traffic on the roads. Table D2-1 summarizes the known agricultural related businesses in Waukesha County. No specific sources are listed for the data in Table D2-1 because it came from numerous sources, including, but not limited to many national, state and local web sites, news articles, field verification, media advertisements and personal interviews. In general, the information is not easy to find or verify, and becomes quickly outdated.

During discussions with the advisory committee, it was found that local farmers often rely on support services from surrounding counties, such as in Dodge, Jefferson, Walworth, Racine and Washington Counties. It should also be noted that many local businesses that serve a majority of non-farm customers do provide some support services to farmers. Examples include builders, electricians, plumbers, rental services, and various parts suppliers, repair or other business related services. It was also noted that many informal relationships occur between local farm operations to provide support services, and that many smaller farms may not even be counted in the various agricultural inventories.

For purposes of this plan, it was not attempted to quantify these types of support services in Table D2-1 because it would be difficult to set standards or verify much of the information, especially if agriculture is not the primary client base for many of the noted businesses. However, these facts do suggest that some forms of agriculture can survive and even flourish in an urbanizing area without much of the conventional infrastructure or services commonly dedicated to the agricultural sector in more rural counties.

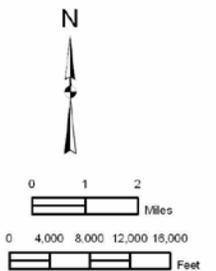
Map D2-4 Agricultural Land Use Changes: Waukesha County 1980-2010



Legend

- Sewer Service Area: Year 2000
- 2010 Agricultural Land Use
- Agricultural Lands Converted Since 1980
- Major State-Owned Lands
- Environmental Corridor

Source: Waukesha County & SEWRPC



**Table D2-1
Agricultural Infrastructure and Support Services in Waukesha County**

Infrastructure or Support Service	Location (Township)	Notes/description
Agtech Products Inc	Waukesha	Silage Inoculants, livestock waste treatment products, animal health and nutrition products
Avoca Enzymatic Extraction	Menomonee Falls	Enzyme modified dairy products, Grade B processing
Cargill Flavor Systems	Waukesha	Dairy flavors, enzyme modified dairy products, goat milk, powdering operation, Grade B processing
Community Supported Agriculture (CSA)	Muskego (1) Ottawa (1)	A CSA is a partnership between farmers and consumers within a community. Members pay a fee at the beginning of the growing season to receive a portion of the farm's produce each week throughout the growing season.
Create A Pack Foods Inc	Oconomowoc	Powder mixing/blending, Grade B processing
Crop Insurance Carriers	Brookfield (1) Genesee (1) Pewaukee (1) Waukesha (1)	Prime Agricultural Consultants, Inc. Premier Insurance Solutions Rural Mutual Insurance M & I Bank
Frontier FS Cooperative	Oconomowoc	Provides seed, feed, fertilizer, fuel, grain processing and farm consulting services
Gamay Foods Inc	New Berlin	Dairy flavors, enzyme modified dairy products, powder mixing/blending, Grade B processing
Golden Guernsey Dairy/Dean Foods	Waukesha	Milk and Ice cream processing plant, Grade A - 146 employees
Lake Country Foods Inc	Oconomowoc	Ice cream, powder mixing/blending, powdering operation, Grade B processing
Nutrient Management Planners	Menomonee Falls (1) Oconomowoc (4) Pewaukee (1) Waukesha (1)	WI DATCP website – Certified Crop Advisors , Certified Professional Crop Consultants
Old Tavern Club	Waukesha	Cold pack cheese, Grade B processing
Waukesha County Agribusiness Council	Waukesha	Local branch of WI Agribusiness Council- a statewide business league dedicated to improving the business environment for agriculture in WI.
Waukesha County Farm Bureau	Pewaukee	Local branch of WI Farm Bureau – organized and run by local farmers to represent and promote agriculture in the county.
White Oak Farm	Oconomowoc	Soil products and composting services

INFLUENCE OF LAND USE PLANS ON DEVELOPMENT PATTERNS AND AGRICULTURAL USE

While regional land use plans and studies recognized a pattern of urban sprawl as early as the 1960s, local development plans and zoning have generally failed to protect most agricultural lands, even in the more rural parts of the county. Consequently, the county has not developed in an incremental fashion over time. Instead, farm fields and residential developments are scattered together across much of the county. Suburban type large lot developments are commonplace throughout most of the county. With no county land use plan in place until the mid-1990s, agricultural lands were consistently rezoned for other uses, most notably residential use, as farmers retired or left the business for other reasons. The steady increase in land values over time caused a domino effect in farms being converted out of agricultural use. Whereas in past times, a farmer might have acquired additional lands when a neighboring farm became available, farmers serving on the advisory committee noted that, in past decades, most farmers could no longer afford to acquire acreage to expand because development potential drove land prices out of reach. With no possibility for expansion, existing farms have generally struggled to remain viable as farm sizes elsewhere have increased to achieve greater economies of scale.

1984 Waukesha County Agricultural Land Preservation Plan

As previously noted, the county adopted its first farmland preservation plan in 1984. The 1984 *Waukesha County Agricultural Land Preservation Plan* proposed the preservation of large expanses of farmland, but many communities in the county lacked local land use plans, agricultural preservation zoning codes or political will to bring it to fruition. The 1984 plan identified 170 square miles (>35 acre parcels) to be planned for agricultural preservation. Map D2-5 shows all 183 square miles recommended for preservation, including parcels <35 acres, but not including those lands designated for “agricultural transition”. The 1984 plan was based on a 1980 SEWRPC land use inventory and mapped areas as small as 100 acre blocks as farmland preservation areas. The plan designated the vast majority of farms in the county in preservation areas, often with little regard for the degree of development pressure in the area. The 1984 plan has also generally been recognized as a “voluntary” plan, in that most all land owners who wished to be eligible for agricultural tax credits simply expressed a willingness to be mapped in the plan even though their intent may not have been to keep their lands in agricultural use over time.

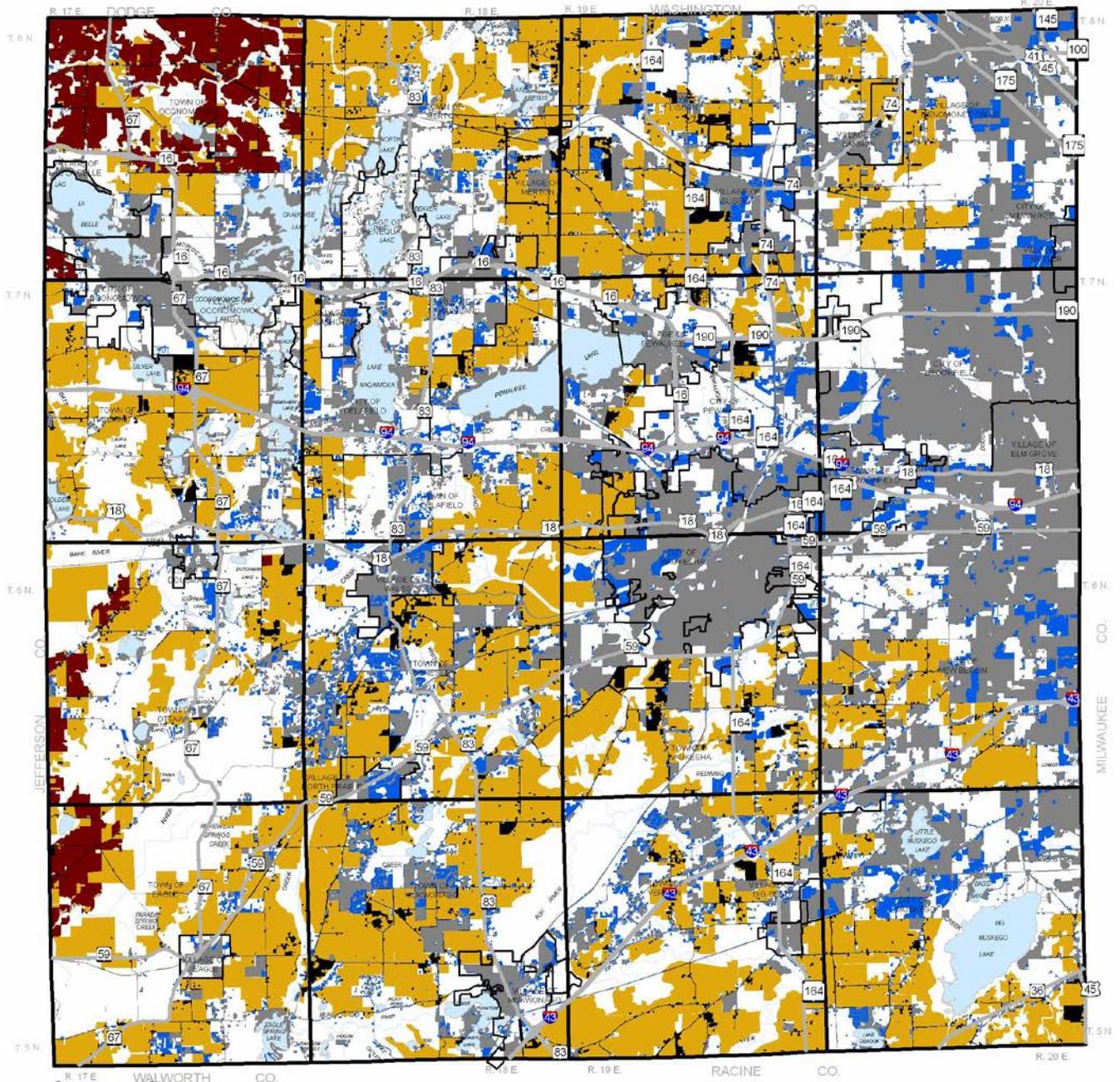
Map D2-5 also shows the urban and residential lands that existed in 1980, which included 93,942 acres, or 25% of the county landscape. Of the 37 municipalities in the county, only six implemented a DATCP certified farmland preservation zoning ordinance, as discussed in Chapter 1 (see Map D1-2). This left 58% of the farmland preservation areas in the 1984 Waukesha County Farmland Preservation Plan generally unprotected with regards to zoning, and the owners of the farmland ineligible for the state income tax credits available at the time. Even by 1980, a development pattern was already established in much of the county that would prove to be difficult to change, as the following sections of this plan will demonstrate.

1996 - A Development Plan for Waukesha County Wisconsin; and 1998 - Waukesha County Agricultural Land Preservation Plan

Waukesha County adopted the first county-wide development plan in the State of Wisconsin in 1996. By this time, Map D2-5 shows that 10,638 acres of farmland designated for preservation in 1984 were already converted to other urban uses, including many farms in the six communities with certified farmland preservation zoning ordinances. Clearly, by the mid-1990’s the earlier established development patterns continued in the rural areas of the county. The 1996 development plan documented that Waukesha County had experienced significant urban sprawl for the past several decades. The plan noted that farmland had become significantly fragmented and that a new farmland preservation strategy was needed. A new standard was proposed that called for a **critical mass** of contiguous farmland to exist in order for lands to be designated for agricultural preservation. By including many local officials and landowners in the planning process, the plan also recognized the importance of local support for any effort to preserve farmland. The 1996 development plan focused on protection of natural resources such

Map D2-5

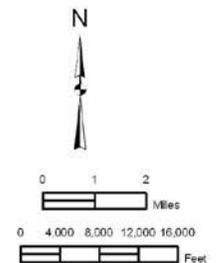
Urban Land Use and Farmland Preservation Planning Waukesha County: 1980-1995



Legend

- 1980 Urban / Residential Lands
- New Urban / Residential Lands 1980-1995 (123,266 ac)
- 1984 Farmland Preservation Areas
- 1996 County Development Plan Farmland Preservation Areas
- New Urban Lands Within 1984 Farmland Preservation Areas (10,638 ac)
- 1995 Civil Division Boundaries

Source: Waukesha County & SEWRPC



as environmental corridors, wetlands and woodlands, and called for preservation of significant areas of land for recreational purposes. The 1996 plan also established a “Rural Density Residential and Other Agricultural Lands” category that encompassed nearly 20% of the land area of the county. This category supported the continuation of farming but also allowed for rural development densities (one dwelling unit per five acres) in such areas. The plan also provided incentives for conservation design to achieve goals for natural resource and rural atmosphere preservation.

Map D2-5 shows that land use and zoning decisions were often made with little regard to the 1984 Farmland Preservation Plan. Of the 29,324 acres of agricultural lands converted to non-agricultural uses between 1980 and 1995, 36% (10,638 acres) were designated for farmland preservation in the 1984 plan. The general ineffectiveness of the 1984 plan in preserving farmland, and the limited local support for the concept, led to the use of a different farmland planning standard in the 1996 Development Plan.

The 1996 plan stipulated that lands planned as “Prime Agricultural Lands” had to be located in a block of at least five square miles. As noted earlier, the five square mile standard was used in the 1990 and 2000 Regional Land Use Plans for Southeastern Wisconsin, adopted by SEWRPC in 1966 and 1978, respectively. “The protection of a critical mass of farmland to enable the continuation of commercial farming and to enable support businesses to survive”¹⁰ is often cited by national leaders as a guiding principle for an effective farmland preservation program. The five square mile planning standard is one example of this principle. When applying this planning standard in Waukesha County, only limited areas in the Towns of Oconomowoc, Eagle and Ottawa met this standard. The plan called for 17 square miles of land, or three percent of the county, to be planned for agricultural preservation, as shown in Map D2-5.

The 1998 *Waukesha County Agricultural Land Preservation Plan (draft)*, which was never certified by DATCP, called for a similar five square mile standard. Consequently, during the strong growth period of the late 1990s and early 2000s, low density residential development continued to occur in the rural unincorporated areas of Waukesha County, further segmenting existing tracts of farmland.

2009- A Comprehensive Development Plan for Waukesha County

The 2009 County Comprehensive Development Plan utilized the same five square mile planning standard for lands to be designated for agricultural preservation. Acreage planned for Prime Agricultural Preservation totaled 10,341 acres (16.2 square miles) county-wide, with the majority of that acreage being located within the Town of Oconomowoc (See Map VII-2, Chapter 7 2009 WCCDP). The advisory committee for the agricultural element of the plan considered a secondary tier of farmland preservation areas that would have encompassed agricultural blocks of at least three square miles, to be accompanied by a 10-acre density residential zoning standard. However, due to concerns over negative effects on local land values and inefficient use of land under this proposal, the advisory committee ultimately endorsed the five square mile block as the accepted standard for the plan. Through the end of 2010, all 16.2 square miles of land designated for agricultural preservation in the 2009 plan remained designated as such.

County estimates showed that 47,705 additional acres of farmland was converted from agricultural to urban or residential uses between 1995 and 2005. This conversion rate reflects some of the highest in the history of the county, averaging about 7.5 square miles per year, and representing an historical development boom in the area. These estimates were generated by comparing county land division data with 1995 and 2000 SEWRPC detailed land use inventories. While the data may not be completely comparable or as accurate as previous data sets, it clearly shows a continuation of the land use trends documented in the previous county planning efforts. The net result of land conversions since the first farmland preservation plan is shown in Map D2-4 and were discussed earlier. However, it should be noted that 99% of the land conversions occurred outside of the 1996 farmland preservation areas. With few exceptions, the 17 square miles designated for farmland preservation in the 1996 plan were generally preserved.

¹⁰ “A Cautionary Reply for Farmland Preservation”, Tom Daniels, Professor of Geography and Planning, University at Albany, State University of New York, 1999; Also served as Director of the Lancaster County, PA farmland preservation program for nine years.