Dane County Farmland Preservation Plan

As recommended for county board introduction by the Farmland Preservation Plan Subcommittee July 23, 2012
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CHAPTER 1: BACKGROUND AND INTRODUCTION

Dane County Farmland Preservation Plan

Dane County has participated in the Wisconsin Farmland Preservation Program under Chapter 91, Wisconsin Statutes, since the program’s inception in 1978. Twenty-nine towns have adopted Dane County’s exclusive agricultural zoning ordinance, which was last certified by the state Land and Water Conservation Board in 2002. Twenty nine towns have adopted the county’s exclusive agricultural zoning, generating approximately $1.2 million in state income tax relief annually for participating farmers. The Dane County Farmland Preservation Plan is intended to meet the following purposes:

- Meet all requirements for a Farmland Preservation Plan under s.91.38, Wisconsin Statutes;
- Maintain eligibility for benefits available to farmers under the Wisconsin Working Lands program, such as farmland preservation tax credits;
- Serve as the basis for farmland preservation zoning, conservation easement, grant and special designation application support and other policy decisions related to farmland preservation in Dane County.

Dane County Comprehensive Plan

The Dane County Board of Supervisors adopted the Dane County Comprehensive Plan in 2007 under s.66.1001 of Wisconsin statutes to guide land use and other decisions over the next 20 years. The plan includes the county’s overarching policies related to land use, economic development, agricultural, natural and cultural resources, housing, community facilities, transportation and intergovernmental relations. Chapter 82, Dane County Code, adopts the Dane County Comprehensive Plan, and also incorporates the following plans as integral components:

- town comprehensive plans;
- city and village comprehensive plans;
- the Dane County Parks and Open Space Plan;
- the Dane County Water Quality Plan;
- regional transportation plans;
- the Dane County Farmland Preservation Plan, and;
- the City of Fitchburg Farmland Preservation Plan.

Other Relevant Plans

The following plans, each adopted by different entities, also relate to farmland and open space preservation and agricultural activities:

- Dane County Land Use and Transportation Plan (Capital Area Regional Planning Commission);
- Dane County Water Quality Plan (Capital Area Regional Planning Commission);
- Dane County Regional Transportation Plan (Madison Transportation Organization);
- Dane County Parks and Open Space Plan (Dane County Parks Commission);
- Dane County Solid Waste and Recycling Plan (Dane County Board of Supervisors) and;
- Dane County Farmland Preservation Plan (Dane County Board of Supervisors).
CHAPTER 2: AGRICULTURAL INVENTORY & TRENDS

Agricultural Inventory

Overview of Dane County Agriculture

As of 2010, Dane County had 571,779 acres of land in agricultural use, representing 72% of the total land area of the county. That year, 2,568 identified agricultural operations produced over 15 different crops. Corn (194,839 acres), hay (74,570 acres) soybean (70,393 acres), and wheat (7,743 acres) were among the predominate crops in land area.¹

In 2010, Dane County had the 2nd largest cattle herd (146,000 head) in the state, including 51,000 dairy cows, which produced a total of 1.7 billion pounds of milk that year.² Dane County also maintains significant livestock numbers of chickens, hogs and pheasants.

According to the US Census of Agriculture, Dane County continues to lead the state in total market value of agricultural products. In 2007, Dane County products sold for over $470 million, the highest for any county in Wisconsin, and in the top 2% for agricultural counties nationwide. 2007 was a particularly good year for dairy, grain and cattle products, due to historically high commodity prices. Those three sectors accounted for 77% of the total value of products sold that year. In contrast, in 2002, dairy and corn prices were lower, and as a result, Dane County farmers earned much less, ($288 million), with dairy, grain and cattle accounting for approximately 69% of that smaller total.³

Perhaps in response to the volatility of traditional commodity prices, Dane County farmers have learned to diversify. In 2007, Dane County was in the top 25% of U.S. counties in market value of twelve different commodity groups, including specialty crops such as Christmas trees, sheep, goats, horses and horticulture. Meanwhile, the traditional Dane County cash crop staple, tobacco, continued to decline due to decreased demand.

¹ Capital Area Regional Planning Commission, Dane County Land Use Inventory 2010
² Dane County University of Wisconsin Extension, Dane County Agriculture Statistics 2010.
Table 1: Market Value of Agricultural Products Sold, 2007

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>State Rank</th>
<th>US Rank</th>
<th>US Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD ($1,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total value of agricultural products sold</td>
<td>470,593</td>
<td>1</td>
<td>63</td>
<td>98.0%</td>
</tr>
<tr>
<td>Value of crops including nursery and greenhouse</td>
<td>134,406</td>
<td>1</td>
<td>212</td>
<td>93.1%</td>
</tr>
<tr>
<td>Value of livestock, poultry, and their products</td>
<td>336,187</td>
<td>1</td>
<td>62</td>
<td>98.0%</td>
</tr>
</tbody>
</table>

While economically robust, Dane County’s agriculture faces significant challenges. Competition with urban, suburban and other uses threatens the agricultural land base. Between 2010 and 2030, the Wisconsin Department of Administration estimates that the Madison Metropolitan Area will add 105,000 more people, more than anywhere else in Wisconsin. Conservative estimates suggest that Dane County has lost 37,000 acres of farmland to urban, suburban or rural development between 1980 and 2000. Recent development trends have slowed, but could rebound as the real estate market recovers.

In addition, drastic commodity price fluctuations, competition on a global marketplace, capital investment needed for modernization and challenges in transferring farms to a new generation create an uncertain future for farming in Dane County.

Agricultural Land Uses

Dane County Land Use Inventory

In 2010, the Capital Area Regional Planning Commission conducted its 5-year update to the Dane County Land Use Inventory. For the first time, the 2010 inventory includes detailed information on agricultural and other rural land uses. Land uses were identified through a combination of field surveys and aerial photography. Map FPP-1 shows the 2010 rural and urban land uses in Dane County.

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Types of Agricultural Land Uses

In 2010, agricultural uses accounted for 571,779 acres, or 72 percent of the total land area of the county. Corn, soybean and hay were the most extensive cultivated crops, together accounting for 59 percent of all land in agricultural use. Woodlands (including both managed and unmanaged forest) and other open space (including grasslands, set-asides and other non-cultivated, ungrazed lands) together comprised an additional 36 percent. Tobacco, vegetable and fruit crops together accounted for the remaining five percent of agricultural land uses.

Table 2: Types of agricultural land uses (2010)

<table>
<thead>
<tr>
<th>Code</th>
<th>Crop</th>
<th>Acres</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>8120</td>
<td>Corn</td>
<td>194,839</td>
<td>34.1%</td>
</tr>
<tr>
<td>9300</td>
<td>Other open land</td>
<td>104,213</td>
<td>18.2%</td>
</tr>
<tr>
<td>9200</td>
<td>Woodlands</td>
<td>100,573</td>
<td>17.6%</td>
</tr>
<tr>
<td>8125</td>
<td>Hay</td>
<td>74,570</td>
<td>13.0%</td>
</tr>
<tr>
<td>8121</td>
<td>Soybean</td>
<td>70,393</td>
<td>12.3%</td>
</tr>
<tr>
<td>8148</td>
<td>Pasture</td>
<td>15,664</td>
<td>2.7%</td>
</tr>
<tr>
<td>8122</td>
<td>Wheat</td>
<td>7,743</td>
<td>1.4%</td>
</tr>
<tr>
<td>8128</td>
<td>Other grain farming (barley, rye, milo, oat, wild rice etc.)</td>
<td>1,748</td>
<td>0.3%</td>
</tr>
<tr>
<td>8139</td>
<td>All other crop farming</td>
<td>511</td>
<td>0.1%</td>
</tr>
<tr>
<td>8124</td>
<td>Dry pea</td>
<td>416</td>
<td>0.1%</td>
</tr>
<tr>
<td>8129</td>
<td>Tobacco</td>
<td>416</td>
<td>0.1%</td>
</tr>
<tr>
<td>8165</td>
<td>Noncitrus fruit and tree nut farming</td>
<td>312</td>
<td>0.1%</td>
</tr>
<tr>
<td>8130</td>
<td>Polyculture/CSA</td>
<td>140</td>
<td>0.0%</td>
</tr>
<tr>
<td>8160</td>
<td>Apple orchards</td>
<td>109</td>
<td>0.0%</td>
</tr>
<tr>
<td>8166</td>
<td>Other vegetable and melon</td>
<td>48</td>
<td>0.0%</td>
</tr>
<tr>
<td>8163</td>
<td>Fruit and tree nut</td>
<td>42</td>
<td>0.0%</td>
</tr>
<tr>
<td>8168</td>
<td>Grape vineyard</td>
<td>30</td>
<td>0.0%</td>
</tr>
<tr>
<td>8161</td>
<td>Strawberry</td>
<td>9</td>
<td>0.0%</td>
</tr>
<tr>
<td>8162</td>
<td>Berry, other than strawberry</td>
<td>5</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Total land in agricultural use</td>
<td>571,779</td>
<td></td>
</tr>
</tbody>
</table>

5 Capital Area Regional Planning Commission, Dane County Land Use Inventory 2010
Types of Farms

In 2010, 2,339 landowners had some kind of active agricultural use on their land. The Land Use Inventory identified 2,568 separate farm operations (some landowners have multiple sites). Identification of farm type is limited to data visible from public roads or discernible from aerial photography. As a result, analysts could not definitively classify almost 48% (1,237) of the farms inventoried. Of the remaining farms, dairy, beef and horse farms predominated, together accounting for 80% of the identifiable farm types. Farms with multiple crops accounted for 331 of all farm operations.

Table 3: Types of farm operations (2010)\(^6\)

<table>
<thead>
<tr>
<th>Code</th>
<th>Crop</th>
<th>Operations</th>
<th>Percent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8119</td>
<td>All other farm related (not elsewhere coded or undescernable)</td>
<td>1,237</td>
<td>48.2%</td>
</tr>
<tr>
<td>8141</td>
<td>Dairy cattle and milk production</td>
<td>378</td>
<td>14.7%</td>
</tr>
<tr>
<td>8142</td>
<td>Beef cattle ranching and farming, including feedlots</td>
<td>359</td>
<td>14.0%</td>
</tr>
<tr>
<td>8147</td>
<td>Horses (does not include single family residential with horses)</td>
<td>338</td>
<td>13.2%</td>
</tr>
<tr>
<td>8191</td>
<td>Nursery and tree production</td>
<td>134</td>
<td>5.2%</td>
</tr>
<tr>
<td>8190</td>
<td>Greenhouse, nursery and floriculture production</td>
<td>36</td>
<td>1.4%</td>
</tr>
<tr>
<td>8145</td>
<td>Sheep farming</td>
<td>19</td>
<td>0.7%</td>
</tr>
<tr>
<td>8144</td>
<td>Hog and pig farming</td>
<td>13</td>
<td>0.5%</td>
</tr>
<tr>
<td>8149</td>
<td>All other animal production</td>
<td>13</td>
<td>0.5%</td>
</tr>
<tr>
<td>8143</td>
<td>Goat farming</td>
<td>9</td>
<td>0.4%</td>
</tr>
<tr>
<td>8153</td>
<td>Apiiculture</td>
<td>7</td>
<td>0.3%</td>
</tr>
<tr>
<td>8140</td>
<td>Cattle ranching and farming</td>
<td>6</td>
<td>0.2%</td>
</tr>
<tr>
<td>8146</td>
<td>Fur-bearing animal and rabbit production</td>
<td>5</td>
<td>0.2%</td>
</tr>
<tr>
<td>8192</td>
<td>Certified tree farm-sustainable forestry</td>
<td>5</td>
<td>0.2%</td>
</tr>
<tr>
<td>8150</td>
<td>Chicken egg production</td>
<td>4</td>
<td>0.2%</td>
</tr>
<tr>
<td>8181</td>
<td>Aquaculture – fish</td>
<td>2</td>
<td>0.1%</td>
</tr>
<tr>
<td>8151</td>
<td>Poultry and egg production</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>8159</td>
<td>Other poultry production</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>8180</td>
<td>Aquaculture – plants</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>TOTAL ALL FARM OPERATIONS</td>
<td>2,568</td>
<td></td>
</tr>
</tbody>
</table>

Key Agricultural Resources

Land and Soil Resources

Land Evaluation & Site Assessment:

Land Evaluation (Map FPP-2) is a component of the Dane County Land Evaluation Site Assessment (LESA) system and rates the soil-based qualities of a site for agricultural use. The factors used to determine agricultural Land Evaluation were developed by the Natural Resources Conservation Service (NRCS) with cooperation from the Dane County Land Conservation Department. The ratings were based on information from Land Evaluation and Site Assessment: A Guidebook for Rating Agricultural Lands, Second Edition, published by the Soil and Water Conservation Society (1996).

\(^6\) Capital Area Regional Planning Commission, *Dane County Land Use Inventory 2010*
Three factors were used to determine a numeric LE rating:
- prime farmland (10%)
- soil productivity for corn (45%)
- land capability class (45%)

The ratings were separated into one of eight agricultural groups (with arbitrary divisions) – with the soils in Group I as the best soils for agriculture, and Group VIII the poorest soils for agriculture.

**Surface Water Resources**

Four major river basins flow through Dane County: Lower Wisconsin; Grant-Platte-Sugar-Pecatonica; Upper Rock; and Lower Rock. Water conditions, challenges and trends differ from basin to basin, depending on the underlying landscape, proportion of urban, agricultural and natural land uses, and ground and surface water hydrology. Map FPP-3 shows Dane County’s major water resources, while Map FPP-4 shows:
- Outstanding Resource Waters (ORW) Exceptional Resource Waters as determined by the Wisconsin Department of Natural Resources under NR 102, Wisconsin Administrative Code, and;
- Impaired Waters under s.303(d) of the federal Clean Water Act.
Insert FPP-1 2010 Land Use Map (front).
Insert FPP-1 2010 Land Use Map (back).
Insert FPP-2 LESA map (front).
Insert FPP-2 LESA map (back).
Insert FPP-3 Water Resources Map (front).
Insert FPP-3 Water Resources Map (back).
Insert FPP-4: ORW, ERW & Impaired Waterways Map (front).
Insert FPP-4: ORW, ERW & Impaired Waterways Map (back).
Significant issues common to most surface waters in Dane County include\textsuperscript{7,8}:

- Agricultural nonpoint runoff, including cropland soil erosion and pollution from barnyard runoff;
- Urban nonpoint runoff related to replacement of permeable soils with impervious surfaces, and;
- Nutrient (especially phosphorus) loading to surface waters.

**Groundwater Resources**

Two distinct groundwater sources supply nearly all of Dane County’s domestic, commercial and industrial water demands. Shallow sandstone aquifers serve private domestic wells in rural areas, while the deep Mt. Simon aquifer serves municipal wells. Most groundwater in Dane County is replenished from precipitation falling within county boundaries. Groundwater also contributes to baseflow of many Dane County streams, and is an important input to wetlands and lakes as well.

Pressures and concerns on Dane County groundwater include: \textsuperscript{9,10}

- Lowering of groundwater tables due to high capacity well withdrawal;
- Municipal discharges, particularly redirection of groundwater to surface water as part of the wastewater treatment process;
- Nitrate/bacteriological contamination of private wells from over-fertilization and over-concentration of private onsite wastewater treatment systems, and;
- Residue pollutants resulting from historic land use practices.


\textsuperscript{8} Capital Area Regional Planning Commission, *Dane County Water Quality Plan*, 2005


\textsuperscript{10} Capital Area Regional Planning Commission, *Dane County Water Quality Plan*, 2005
Infrastructure For Agriculture

Map FPP-5 shows the location of major agriculture-related facilities in Dane County. The 2010 Dane County Land Use Inventory identified 268 locations that provided equipment, supplies, processing, wholesaling, product storage or other services directly to the agricultural sector.

**Table 4: Agriculture-related uses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2111</td>
<td>Meat packing – manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>2870</td>
<td>Agricultural chemicals – manufacturing</td>
<td>11</td>
</tr>
<tr>
<td>5146</td>
<td>Meat and Meat products – wholesale</td>
<td>5</td>
</tr>
<tr>
<td>5147</td>
<td>Fruits and vegetables (fresh) – wholesale</td>
<td>2</td>
</tr>
<tr>
<td>5152</td>
<td>Grain – wholesale</td>
<td>2</td>
</tr>
<tr>
<td>5182</td>
<td>Farm machinery and equipment – wholesale</td>
<td>3</td>
</tr>
<tr>
<td>5252</td>
<td>Farm equipment – retail</td>
<td>19</td>
</tr>
<tr>
<td>5969</td>
<td>Other farm and garden supplies retail not elsewhere coded</td>
<td>65</td>
</tr>
<tr>
<td>6122</td>
<td>Agricultural business and personal credit services</td>
<td>23</td>
</tr>
<tr>
<td>6371</td>
<td>Farm products warehousing and storage (excluding stockyards)</td>
<td>9</td>
</tr>
<tr>
<td>8113</td>
<td>Grain elevators</td>
<td>69</td>
</tr>
<tr>
<td>8221</td>
<td>Veterinarian Services</td>
<td>35</td>
</tr>
<tr>
<td>8222</td>
<td>Animal hospital services</td>
<td>5</td>
</tr>
<tr>
<td>8229</td>
<td>Other animal husbandry services not elsewhere coded</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>TOTAL AGRICULTURE-RELATED LOCATIONS</td>
<td>268</td>
</tr>
</tbody>
</table>

Community Manure Digester (“Cow Power”) Project

In 2010, the Town of Vienna community manure digester began operation. Developed with funding from Dane County, the State of Wisconsin and private investors, this facility processes manure from three participating dairy farms. The digester reduces nutrient management costs for participating farmers who would otherwise have to landspread their manure. Each year, the digester keeps 68,000 pounds of phosphorus out of surface and ground water resources, while producing 2 megawatts of electricity, which is sold to Alliant Energy. By reducing land spreading of untreated manure, the project also significantly reduces nuisance odors and greenhouse gas emissions. In November of 2010, Dane County announced plans for a second public/private community digester in the Town of Springfield.

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11 Capital Area Regional Planning Commission, *Dane County Land Use Inventory 2010*
Transportation

Map FPP-6 shows the location of roads, railroads and airports in Dane County.

Capital, Institutional and Educational Support for Agriculture

Dane County University of Wisconsin Extension

Under Chapter 59.87 of the Wisconsin Statutes, Dane County University of Wisconsin Extension serves as the official community outreach arm of the University of Wisconsin. Dane County Agriculture Agents provide agriculture research information to farmers and others to:

- Improve crops and soils management;
- Build management skills in dairy and livestock producers;
- Supply commercial and home horticulture information;
- Provide water quality and natural resources education, and;
- Improve farm financial management skills.

12 University of Wisconsin Extension of Dane County (2011) [http://dane.uwex.edu/]
Page intentionally left blank.
Insert FPP-5 Agricultural Facilities Map (front).
Insert FPP-5 Agricultural Facilities Map (back).
Insert FPP-6 Transportation Infrastructure Map (back)
Dane County Land and Water Resource Management Plan

Under the auspices of the Land and Water Resource Management Plan, the Dane County Land and Water Resource Department (LWRD) utilizes multiple programs to help implement soil and water conservation initiatives in Dane County. Many LWRD programs provide cost-share, grant or technical assistance directly to Dane County farmers. Significant funding sources for agricultural programs include:

Dane County Resources
- Dane County Land and Water Legacy Fund
- Community Manure Feasibility Study
- Yahara Clean (Capital Lakes Environmental Assessment and Needs)
- Dane County Conservation Fund

State of Wisconsin Resources
- Lake Mendota Priority Watershed Project
- Land and Water Resource Management Cost-Share Program
- Targeted Runoff Management (TRM) Projects

Federal Resources
- Conservation Security Program (CSP)
- Conservation Reserve (CRP) and Conservation Reserve Enhancement (CREP) programs
- Wetlands Reserve Program (WRP)
- Farm and Ranch Protection Program (FRPP)
- Environmental Quality Incentive Program (EQIP)
- Wildlife Habitat Incentives Program (WHIP)
- Technical Service Provider (TSP)

Dane County Economic Development Revolving Loan Fund

The Dane County Economic Development Revolving Loan Fund (ED-RLF) provides financing to businesses that create jobs for low and moderate-income persons. The objectives of the ED-RLF are to:
- Expand or modernize existing or locally owned and managed enterprises.

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- Encourage the creation or retention of employment opportunities for low and moderate-income County residents.
- Leverage new private investment in downtown business districts and traditional business districts.
- Assist businesses with high-value added products or services, especially in the agricultural sector.
- Assist dairy farmers with capital improvements resulting in an increase in milk production.\(^\text{14}\)

**Institutional Food Market Coalition**

Dane County's Institutional Food Market Coalition (IFM) was established in 2006 in an effort to:

- Expand market opportunities for Dane County and regional growers;
- Increase the sales of local Wisconsin food into institutional markets;
- Connect large volume institutional buyers, such as hospitals, universities, nursing homes, prisons, office parks and large businesses with local Wisconsin product, and;
- Identify and resolve obstacles to local sourcing.\(^\text{15}\)

**Farmland Preservation Programs**

*Agricultural Enterprise Areas*

An Agricultural Enterprise Area, or AEA, is an area of contiguous land primarily in agricultural use that has been designated by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) in response to a locally developed petition. Within Agricultural Enterprise Areas, farmers may sign an agreement with the state to keep their property in agricultural use for 15 years. In exchange, farmers are eligible for an additional Farmland Preservation Tax Credit of $2.50 per acre per year. DATCP designates AEAs through a competitive process. To be eligible for AEA designation, properties must be consistent with the *Dane County Farmland Preservation Plan*, and the county board must pass a resolution in support of the application.

*Farmland Conservation Easement Programs*

Property owners actually own several distinct rights:

- the right to use their property;
- to sell, lease or leave their property to their heirs;
- to borrow money against their property, and
- (subject to reasonable land use regulations) to construct buildings on their property or to mine it.\(^\text{16}\)


Conservation easements are a legal instrument landowners use to select one or more of these rights and sell or transfer them to another party. Under Wisconsin law (s.700.40, Wis. Stats.), conservation easements may be used to retain or protect “natural, scenic or open space values of real property, assuring the availability of real property for agricultural, forest, recreational or open space use, protecting natural resources, maintaining or enhancing air or water quality, preserving a burial site, or preserving the historical, architectural, archaeological or cultural aspects of real property.” Conservation easements are recorded with the Register of Deeds, and are a durable property right, like a warranty deed or an access easement. Like other interests in real estate, conservation easements have market value, with prices determined by appraisal and negotiation between buyer and seller.

Agricultural conservation easements are intended to strengthen areas planned and designated as farmland protection areas in a certified county farmland preservation plan. They also support the protection of farmland in Agricultural Enterprise Areas. Land encumbered by an agricultural conservation easement has permanent restrictions placed on its use; these restrictions are designed to ensure that workland is always available for farming. Land with an agricultural conservation easement remains on the property tax rolls and the landowner continues to be responsible for payment of property taxes.

Under an agricultural conservation easement, the landowner continues to:

- Privately own and manage the land
- Farm the land according to a farm conservation plan
- Keep title to the property
- Be eligible for farmland preservation income tax credit (if standards are met for tax credit eligibility)
- Control public access to the land.

Purchase of Agricultural Conservation Easements (PACE)

Purchase of Agricultural Conservation Easements, or PACE (also known as Purchase of Development Rights, or PDR) programs use public dollars to compensate landowners who voluntarily limit the development potential of some or all of their property.

The Wisconsin Department of Agriculture, Trade and Consumer Protection’s (DATCP) PACE program and the U.S Department of Agriculture’s (USDA) Farm and Ranch Lands Protection Program provide state and federal funding for the purchase of agricultural conservation easements. Cooperating local entities (local governments or non-profit conservation organizations) can apply for grants to cover as much as 50% of the cost of the purchase of the easements. State and local entities (but not the federal government) are co-holders of easements purchased with state and federal funds.

Transfer of Development Rights (TDR)

Transfer of Development Rights, or TDR, programs are a method to shift residential development from one portion of a community to another, or from one community to another. Local units of government identify sending areas (where development is discouraged) and receiving areas (where development is encouraged). Landowners in sending areas are allocated development rights based on density policies and criteria in town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan. Plan policies specify the number of potential building sites or nonfarm
development available on a particular property. Landowners seeking to develop in a receiving area must first buy a certain amount of development rights from landowners in a sending area. Once a development right is purchased and transferred, the landowner in the sending area records a conservation easement that prohibits development on all or a portion of his or her property. Landowners who have transferred development rights retain other rights, including the right to farm, manage and keep their land private.

The Dane County Department of Planning and Development maintains model local government resolutions and model comprehensive plan language to accommodate several different TDR program options. These documents are available online at: http://www.countyofdane.com/plandev/planning/transfer_rights.aspx, or by contacting the Department of Planning and Development.

Other Resources

The Dane County Office of Jobs and Prosperity maintains an online reference of public and private resources available to farmers and entrepreneurs in biological- and agricultural-related industries. Resources include organizations, financial assistance and technical help related to business attraction and retention, business associations, business development and training, market development and financing and capital. The online database is available at: http://www.dane-econdev.org/agricultural_and_bioag_enterprise.aspx.

Key Agricultural Specialties

Economically Significant Commodities

Table 2 shows the market value of various Dane County crops compared to other counties in Wisconsin and to agricultural counties across the United States.

Table 5: Economically Significant Crops, 2007

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>State Rank</th>
<th>US Rank</th>
<th>US Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALUE OF SALES BY COMMODITY GROUP ($1,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other animals and other animal products</td>
<td>Undisclosed</td>
<td>1</td>
<td>2</td>
<td>99.9%</td>
</tr>
<tr>
<td>Milk and other dairy products from cows</td>
<td>206,247</td>
<td>3</td>
<td>23</td>
<td>99.1%</td>
</tr>
<tr>
<td>Sheep, goats, and their products</td>
<td>711</td>
<td>6</td>
<td>174</td>
<td>94.2%</td>
</tr>
<tr>
<td>Grains, oilseeds, dry beans, and dry peas</td>
<td>109,384</td>
<td>1</td>
<td>172</td>
<td>94.1%</td>
</tr>
<tr>
<td>Cut Christmas trees and short rotation woody crops</td>
<td>417</td>
<td>12</td>
<td>121</td>
<td>92.9%</td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>46,362</td>
<td>3</td>
<td>251</td>
<td>91.8%</td>
</tr>
<tr>
<td>Nursery, greenhouse, floriculture, and sod</td>
<td>13,521</td>
<td>6</td>
<td>230</td>
<td>91.5%</td>
</tr>
<tr>
<td>Horses, ponies, mules, burros, and donkeys</td>
<td>670</td>
<td>1</td>
<td>340</td>
<td>88.8%</td>
</tr>
<tr>
<td>Vegetables, melons, potatoes, and sweet potatoes</td>
<td>3,929</td>
<td>23</td>
<td>389</td>
<td>86.1%</td>
</tr>
<tr>
<td>Other crops and hay</td>
<td>3,577</td>
<td>3</td>
<td>472</td>
<td>84.5%</td>
</tr>
<tr>
<td>Fruits, tree nuts, and berries</td>
<td>1,111</td>
<td>20</td>
<td>440</td>
<td>83.5%</td>
</tr>
<tr>
<td>Hogs and pigs</td>
<td>5,031</td>
<td>6</td>
<td>519</td>
<td>82.2%</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>364</td>
<td>12</td>
<td>401</td>
<td>73.2%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>2,467</td>
<td>1</td>
<td>123</td>
<td>71.9%</td>
</tr>
</tbody>
</table>
### Livestock

Table 3 shows the top livestock categories in Dane County in 2007, and how Dane County compares to other counties in Wisconsin and to agricultural counties across the United States.

**Table 6: Top Livestock Inventory Items, 2007**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>State Rank</th>
<th>US Rank</th>
<th>US Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle and calves</td>
<td>145,460</td>
<td>2</td>
<td>63</td>
<td>97.9%</td>
</tr>
<tr>
<td>Layers</td>
<td>75,052</td>
<td>9</td>
<td>434</td>
<td>85.6%</td>
</tr>
<tr>
<td>Pheasants</td>
<td>26,247</td>
<td>4</td>
<td>27</td>
<td>98.3%</td>
</tr>
<tr>
<td>Hogs and pigs</td>
<td>21,977</td>
<td>4</td>
<td>496</td>
<td>83.2%</td>
</tr>
<tr>
<td>Broilers and other meat-type chickens</td>
<td>9,962</td>
<td>9</td>
<td>658</td>
<td>73.4%</td>
</tr>
</tbody>
</table>

Source: USDA Census of Agriculture, 2007
Specialty Crops

The U.S. Department of Agriculture defines “specialty crops” as “fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture.”\(^\text{17}\) Growers of specialty crops may be eligible for federal and state grant assistance, preferred ranking for Purchase of Agricultural Conservation Easement grants, and other benefits. Map FPP-7 shows the 2010 location of specialty crops in Dane County.

Insert FPP-7 Specialty Crop map (front).
Insert FPP-7 Specialty Crop map (back).
Trends and Challenges

Farmland Preservation And Agricultural Development Trends, Plans and Needs

Land Use

Conversion Of Agricultural Lands To Other Uses

Based on Dane County Land Use Inventory data, two major trends have contributed to the conversion of agricultural land to other uses.

Conversion From Crop Or Pasture To "Other Open Lands"

From 1980 to 2000, between 61,000 and 79,000 acres of Dane County land were converted from crop or pasture to other undeveloped lands categories, such as environmental corridors, wetland restoration, vacant/unused, or other open lands. Federal set-aside programs (such as CRP or CREP), platted, but unbuilt subdivisions, and idling of unproductive or environmentally sensitive lands have all contributed to this trend. Except perhaps for vacant platted subdivisions, lands converted to “other open lands” categories retain the potential for agricultural use in the future, and so should not be considered a permanent loss of farmland. Like actively farmed lands, idle or other open lands allow for groundwater infiltration, provide critical wildlife habitat and are generally compatible with neighboring agricultural use. If poorly managed, however, idled or abandoned lands can become sources for invasive species, which can cause infestation problems in nearby crop fields and natural resource areas. In some cases, idled lands can also provide habitat for organisms that help retard weed growth.

Conversion due to rural, suburban or urban development.

Between 1980 and 2000, approximately 37,000 acres of Dane County land were converted from agriculture and other undeveloped uses to various types of nonfarm development. This includes 18,000 acres converted to residential land uses, 8,200 to transportation, 7,000 acres to industrial and commercial development, and 3,400 acres to outdoor recreation land uses.

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18 Capital Area Regional Planning Commission, *Dane County Land Use Inventory 1980-2000*.


Other Urban And Rural Land Use Trends

Agricultural Production

Overall Trends

Across Wisconsin, the nature of farming has changed significantly over the past two decades, as farmers react to changing commodity prices, environmental considerations, new technologies and uses for agricultural products and shifts in market demand.

Changes To Nature, Scope, Location, And Focus

Farm Size

Dane County has seen a trend towards the consolidation of agricultural production to larger operations. At the same time, smaller part time farm operations (farms 15-35 acres) continue to grow as well. In 2007, the average farm size in Dane County was 161 acres. 22

Yields

Producers in general continue to be extremely efficient in their production practices with average yields of corn, soybean, winter wheat, and alfalfa continuing to trend upwards with corn possibly the biggest gainer with average yields increasing an average of 3 bu/a/year over the last 10 years. Dairy cattle and milk production numbers have stabilized, with small increases in the last several years. Dairy farm numbers continues to decline slightly, resulting in larger more productive dairy farms on average.23

Geographic Distribution

Agricultural production continues to be heavily located in the outer townships of Dane County, with those farms located closest to the greater Madison area facing the greatest pressure from urban growth.

Business Structure

Over 98% of all farms in Dane County are owned by individuals, families, family partnerships or family-based corporations. Much of the farmland that is rented is owned by individuals that still reside in Dane County at least part of if not all of the year, versus absentee landowners seen in other parts of the United States.


23 Dane County University of Wisconsin Extension, 2011.
Products and Markets

Dairy production continues to dominate Dane County farming. Raw milk sales generated $217 million in total economic activity 2008, while sales for processed dairy products generated another $334 million. Grain operations were a distant second in terms of sales value.

Dane County has a growing market for small acreage production and direct sales of farm products, including road-side stands, farmers’ markets, “pick your own” and Community Supported Agriculture. In 2008, 246 Dane County farms generated over $2.5 million in direct-marketing sales. Traditionally based on sales to individual households, the market for locally grown produce has in recent years expanded to include restaurant, grocery and institutional buyers. Between 2007 and 2010, Dane County’s Institutional Food Marketing program connected 55 local growers with 18 institutional buyers (including University of Wisconsin, local and state government facilities), generating over $1.5 million in wholesale sales.24

Finally, landscaping, nursery, greenhouse, floriculture and other horticulture products have performed very well in the past 5 to 10 years in Dane County. In 2008, horticultural and related products generated over $19 million in Dane County.25

Manure Management

Environmental concerns, increasing land rents and conflicts with suburban and rural residential development have significantly affected manure management in Dane County. A recent study found that between 1999 and 2004, farmers close to urbanizing areas increased the distance they hauled manure, and paid higher rents for lands used for manure spreading.26 Well-publicized fish kills resulting from agricultural runoff resulted in changes to the county’s manure storage ordinance, to prohibit winter landspreading and strengthen storage design standards. Dane County has also made substantial investments in manure digester technology (see agricultural infrastructure below).

24 Dane County Department of Planning & Development, Economic Development Division: Dane County Institutional Food Marketing Coalition 2010 Program Report, 2011.

25 University of Wisconsin Cooperative Extension: Dane County Agriculture: Value and Economic Impact, 2011.

Soil and Water Conservation

Over the past 25 years, Dane County farmers have reduced average annual soil erosion from their lands from 10.5 tons per acre per year in 1985 to 3.2 tons per acre per year in 2007, a decline of almost 70%. Farm conservation plans, including installation of cost-shared conservation practices and trends toward no-till farming have contributed to soil erosion reductions.  

*Enterprises Related To Agriculture*

**Overall Trends**

Farming, on-farm “value-added” processing and off-farm food processing industries contributed over:
- $3 billion in sales;
- 16,000 jobs;
- $1.2 billion in net income, and;
- $117 million in local, county and state tax revenue to the Dane County economy in 2008. 

*Changes To Nature, Scope, Location, And Focus*

A 2011 University of Wisconsin Extension study looked at relative employment for a wide variety of farm- and food-related industries in Wisconsin and compared them with employment statistics for similar industries around the country. Researchers then analyzed how these values changed between 2001 and 2009. Based on this data, the study identified a number of food-processing industries (including processed dairy, frozen specialties, spices and meat food products)
where Wisconsin industries appear to have a strong and growing competitive advantage. The study also identified: historically strong Wisconsin industries that have declined in economic activity in recent years (such as cheese manufacturing); new, emerging industries that have shown significant employment growth, and; industries that have been traditionally relatively weak in Wisconsin and have declined in employment.

Table 7: Agricultural economic clusters

<table>
<thead>
<tr>
<th>Potential Cluster</th>
<th>LQ 2009</th>
<th>Change in LQ 2001 to 2009</th>
<th>Percent of Jobs 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry, condensed, and evaporated dairy products</td>
<td>5.50</td>
<td>1.93</td>
<td>0.07%</td>
</tr>
<tr>
<td>Frozen specialty food manufacturing</td>
<td>3.45</td>
<td>1.29</td>
<td>0.18%</td>
</tr>
<tr>
<td>Fruit and vegetable canning</td>
<td>3.17</td>
<td>0.06</td>
<td>0.19%</td>
</tr>
<tr>
<td>Spice and extract manufacturing</td>
<td>3.01</td>
<td>0.72</td>
<td>0.06%</td>
</tr>
<tr>
<td>All other miscellaneous food manufacturing</td>
<td>2.58</td>
<td>0.23</td>
<td>0.06%</td>
</tr>
<tr>
<td>Other animal food manufacturing</td>
<td>2.25</td>
<td>0.40</td>
<td>0.07%</td>
</tr>
<tr>
<td>Confectionery mfg. from purchased chocolate</td>
<td>1.71</td>
<td>0.52</td>
<td>0.05%</td>
</tr>
<tr>
<td>Mixes and dough made from purchased flour</td>
<td>1.69</td>
<td>0.05</td>
<td>0.02%</td>
</tr>
<tr>
<td>Animal, except poultry, slaughtering</td>
<td>1.38</td>
<td>0.18</td>
<td>0.19%</td>
</tr>
<tr>
<td>Rendering and meat byproduct processing</td>
<td>1.38</td>
<td>0.00</td>
<td>0.01%</td>
</tr>
</tbody>
</table>

Strength Declining

| Cheese manufacturing                                  | 14.88   | -1.49                     | 0.55%               |
| Creamery butter manufacturing                        | 14.77   | -2.80                     | 0.03%               |
| Meat processed from carcasses                        | 4.30    | -0.39                     | 0.44%               |
| Mayonnaise, dressing, and sauce manufacturing         | 2.45    | -0.09                     | 0.03%               |
| Frozen fruit and vegetable manufacturing              | 1.80    | -1.90                     | 0.00%               |
| Dog and cat food manufacturing                       | 1.15    | -0.07                     | 0.02%               |

Weakness Growing

| Bottled water manufacturing                           | 0.70    | 0.06                      | 0.01%               |
| Ice manufacturing                                     | 0.67    | 0.43                      | 0.00%               |

Weakness Declining

| Commercial bakeries                                   | 0.91    | -0.13                     | 0.11%               |
| Perishable prepared food manufacturing                | 0.82    | -0.56                     | 0.03%               |
| Fluid milk manufacturing                              | 0.82    | -0.26                     | 0.04%               |
| Ice cream and frozen dessert manufacturing            | 0.75    | -0.34                     | 0.01%               |
| Poultry processing                                    | 0.60    | -0.05                     | 0.13%               |
| Soft drink manufacturing                              | 0.37    | -0.17                     | 0.03%               |

Other Trends, Plans and Needs

Figure 1: Dane County Population Growth, 1970-2035

**Population Growth**

From 1970 to 2000, Dane County’s growth rate increased each decade. Dane County’s population grew by 12% during the 1970’s, 14% through the 1980’s, and more than 16% during the 1990’s. Between the 2000 census and 2010, Dane County’s population is estimated to have grown to 489,712, a ten-year growth rate of 14.8%. Based on Wisconsin Department of
Administration projections, Dane County’s rate of growth is projected to gradually level off between 2010 and 2035, with a projected 2035 population of 653,876.  

**Housing**

Residential development competes for much of the same land base required by agriculture. The same soil, slope and drainage conditions that make for productive farmland also make for ideal building sites. Between 1980 and 2000, residential development accounted for more permanent conversion of Dane County agricultural land (18,000 acres) than any other land use.

Housing construction in Dane County, following national real estate market trends, has shown considerable volatility in recent years. From 1982 to 2003, new housing construction in Dane County followed a generally upward trend. After peaking in 2003 with 5,466 new housing units, permits for new housing construction in Dane County declined, in some cases precipitously, each year until 2009. The number of permits for new homes issued in 2009 (1,260) was the second lowest total since 1970. Meanwhile, permits for additions or reconstruction of existing homes remained relatively steady (at least in some jurisdictions) over the same period.

**Figure 2: Dane County New Housing Construction, 1971-2009**

![Graph showing new housing construction in Dane County from 1971 to 2009.](http://danedocs.countyofdane.com/webdocs/PDF/capd/2010_postings/2009_Trends_web.pdf)

**Economic Growth and Business Development**

As of January, 2011, Dane County had an estimated civilian labor force of 294,052. Dane County unemployment rates had risen from 2.1% at the time of the 2000 census to 5.3% (15,556 unemployed) at the start of 2011. Nevertheless, Dane County appeared to weather the recession better than the state as a whole, which saw its unemployment rate jump from 3.3% to 8.2% over the same period.

In 2011, the Madison Metropolitan Statistical Area, which includes Dane, Columbia and Iowa Counties, employed 337,000 people in nonfarm jobs. State government, education, health, retail

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30 Wisconsin Department of Administration, Demographic Services Center


32 Permit records, Dane County Department of Planning and Development (January, 2010).

trade and professional and business services led all employment sectors, together accounting for 48% of the total nonfarm employment in the three-county area. Projected reductions in public sector spending over the next several years could significantly alter the Madison Metropolitan Area and Dane County job market, both through direct reduction of government and education employees and reductions in consultant professional and construction services provided through publicly-funded contracts.

Table 8: Madison metropolitan area employment by industry (2011)\textsuperscript{34}

<table>
<thead>
<tr>
<th>Total Nonfarm Wage &amp; Salary Employment</th>
<th>337,000</th>
<th>100.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Government</td>
<td>49,400</td>
<td>14.7%</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>42,600</td>
<td>12.6%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>35,400</td>
<td>10.5%</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>34,800</td>
<td>10.3%</td>
</tr>
<tr>
<td>Local Government</td>
<td>29,600</td>
<td>8.8%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>27,700</td>
<td>8.2%</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>27,700</td>
<td>8.2%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>25,900</td>
<td>7.7%</td>
</tr>
<tr>
<td>Other Services, excl. Public</td>
<td>18,900</td>
<td>5.6%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>11,800</td>
<td>3.5%</td>
</tr>
<tr>
<td>Information</td>
<td>10,800</td>
<td>3.2%</td>
</tr>
<tr>
<td>Construction, Mining &amp; Natural Resources</td>
<td>9,500</td>
<td>2.8%</td>
</tr>
<tr>
<td>Transportation, Warehousing &amp; Utilities</td>
<td>7,700</td>
<td>2.3%</td>
</tr>
<tr>
<td>Federal Government</td>
<td>5,200</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Dane County’s relatively strong economy and favorable labor market presents both opportunities and challenges to Dane County farmers. Proximity to a metropolitan area with a relatively high per capita income has allowed farmers in the region to take advantage of direct-to-market sales of fresh produce and on-farm processed food products. Short commute times and jobs with good pay allow farming households to supplement their income. In 2007, 56% of farmers reported their principal occupation as something other than farming.\textsuperscript{35}

On the other hand, higher incomes available from nonfarm work make farming less attractive to young people entering the workforce. A 2004 report found that although Wisconsin dairy farmers have left the dairying business at a relatively constant rate over the past twenty years, the numbers of new farmers entering into dairying has declined “dramatically.” This decline in new farmers is the single largest contributor to statewide declines in dairy farm numbers.\textsuperscript{36}

Municipal Expansion

Map FPP-8 shows the growth of Dane County incorporated municipalities between 1980 and 2011. Cities and villages in Dane County annexed a total of 24,000 acres between 1980 and 2000. Cities annexed about twice as much land, roughly 16,000 acres, as villages, which annexed about 8,000 acres. While some annexed land remains under cultivation, typically, annexed land is intended for eventual development, except for relatively small percentages preserved as urban agriculture.

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\textsuperscript{35} US Department of Agriculture, National Agriculture Statistics Service, \textit{Census of Agriculture}, 2007

\textsuperscript{36} Jackson-Smith, Douglas and Barham, Bradford, “\textit{Dynamics of Entry and Exit on Wisconsin Dairy Farms in the 1990s},” Program on Agriculture Technology Studies, University of Wisconsin-Madison, 2004 [http://www.pats.wisc.edu/pubs/13]
If current development trends continue, urban areas (Central and outlying service areas, including limited service areas) will accommodate about 63% of the land demand (26,750 acres) while rural areas will accommodate the remaining 37% (15,700 acres) of the roughly 42,450 acres of needed land for development between 2000 and 2030. This indicates 6.5% of the undeveloped land in 2000 will be developed and that 21% of the County’s total land area will be developed by 2030, significantly compromising agricultural land and productivity and numerous ecological functions.

Much of this land will come from converting agricultural lands to urban uses. Moreover, half of Dane County townships with prime soils are located where growth pressure is the greatest, including the towns of Bristol, Burke, Middleton, Westport, and Windsor. Outlying service areas, such as the Northern USA, and the Sun Prairie, Verona and Cottage Grove urban service areas will likely see the greatest increase in land converted to developed uses. The Central Urban Service Area (CUSA), the region’s most populous, will not be contributing to the majority of developed acreage in the future due to boundary agreements, and more compact development practices. 37

Transportation38

Agriculture-Related Freight Shipments

Agricultural, agriculture-related, forestry and food products accounted for 6.6 million tons (35% of the total) of freight traffic into, out of and within Dane County in 2007. Of that total, 3.2 million tons (48%) was shipped into Dane County from other locations, 2.8 million tons (41%) was shipped from Dane County to other locations, and 0.6 million tons (9%) was shipped entirely within Dane County.

38 Dane County Department of Planning and Development, Dane County Comprehensive Plan, Volume II, Chapter 3 [http://danedocs.countyofdane.com/webdocs/PDF/PlanDev/ComprehensivePlan/plan/VOL2_withmaps.pdf]
Table 9: Agriculture-related freight shipments (2007)\textsuperscript{39}

<table>
<thead>
<tr>
<th>STCC3</th>
<th>STCC3 Description</th>
<th>Inbound</th>
<th>Outbound</th>
<th>Internal</th>
<th>Totals</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 1</td>
<td>Grains</td>
<td>996,712</td>
<td>735,633</td>
<td>451,195</td>
<td>2,183,540</td>
<td>30.0%</td>
</tr>
<tr>
<td>0 1 4</td>
<td>Livestock Or Livestock Prod</td>
<td>428,489</td>
<td>243,926</td>
<td>100,552</td>
<td>772,967</td>
<td>10.6%</td>
</tr>
<tr>
<td>2 4 0</td>
<td>Raw Forest Products</td>
<td>365,707</td>
<td>310,370</td>
<td>10,531</td>
<td>686,608</td>
<td>9.4%</td>
</tr>
<tr>
<td>2 0 4</td>
<td>Grain Mill Products</td>
<td>235,235</td>
<td>368,726</td>
<td>6,070</td>
<td>610,031</td>
<td>8.4%</td>
</tr>
<tr>
<td>2 0 2</td>
<td>Dairy Products</td>
<td>243,912</td>
<td>296,995</td>
<td>19,575</td>
<td>560,482</td>
<td>7.7%</td>
</tr>
<tr>
<td>2 1 0</td>
<td>Misc Food Preparations</td>
<td>138,784</td>
<td>202,909</td>
<td>15,613</td>
<td>357,306</td>
<td>4.9%</td>
</tr>
<tr>
<td>2 0 3</td>
<td>Canned Or Preserved Food</td>
<td>77,645</td>
<td>232,389</td>
<td>3,586</td>
<td>313,620</td>
<td>4.3%</td>
</tr>
<tr>
<td>2 0 8</td>
<td>Beverages Or Flavor Extracts</td>
<td>142,523</td>
<td>138,491</td>
<td>2,852</td>
<td>283,867</td>
<td>3.9%</td>
</tr>
<tr>
<td>2 4 3</td>
<td>Millwork Or Prefab Wood Products</td>
<td>84,574</td>
<td>165,042</td>
<td>4,054</td>
<td>253,671</td>
<td>3.5%</td>
</tr>
<tr>
<td>2 6 5</td>
<td>Containers Or Boxes, paper</td>
<td>109,731</td>
<td>32,882</td>
<td>761</td>
<td>143,375</td>
<td>2.0%</td>
</tr>
<tr>
<td>2 4 9</td>
<td>Miscellaneous Wood Products</td>
<td>48,536</td>
<td>59,526</td>
<td>856</td>
<td>108,919</td>
<td>1.5%</td>
</tr>
<tr>
<td>2 0 5</td>
<td>Bakery Products</td>
<td>29,922</td>
<td>2,466</td>
<td>84</td>
<td>32,472</td>
<td>0.4%</td>
</tr>
<tr>
<td>2 0 7</td>
<td>Sugar, Beet Or Cane</td>
<td>16,401</td>
<td>11,780</td>
<td>232</td>
<td>28,412</td>
<td>0.4%</td>
</tr>
<tr>
<td>2 0 6</td>
<td>Paper Or Building Board</td>
<td>9,567</td>
<td>11,787</td>
<td>50</td>
<td>21,404</td>
<td>0.3%</td>
</tr>
<tr>
<td>0 1 3</td>
<td>Fresh Vegetables</td>
<td>3,343</td>
<td>8,576</td>
<td>8</td>
<td>11,928</td>
<td>0.2%</td>
</tr>
<tr>
<td>0 1 9</td>
<td>Misc Farm Products</td>
<td>1,549</td>
<td>2,444</td>
<td>-</td>
<td>3,993</td>
<td>0.1%</td>
</tr>
<tr>
<td>0 1 2</td>
<td>Fresh Fruits Or Tree Nuts</td>
<td>6,486</td>
<td>88</td>
<td>-</td>
<td>6,574</td>
<td>0.1%</td>
</tr>
<tr>
<td>0 1 0</td>
<td>Meat and Animal Byproducts</td>
<td>144,474</td>
<td>84,485</td>
<td>2,077</td>
<td>231,037</td>
<td>3.2%</td>
</tr>
<tr>
<td>2 8 7</td>
<td>Agricultural Chemicals</td>
<td>96,435</td>
<td>133,950</td>
<td>3,244</td>
<td>233,628</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

All others 3,474 1,000 6 4,480 0.1%

Totals 3,558,687 3,099,977 621,566 7,280,230 100%

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Conflicts with Other Transportation Uses

Personal motor vehicles account for over 90% of the daily trips in Dane County outside of the Central Urban Service Area.\textsuperscript{40} Slow moving farm machinery and fast-moving automobiles must frequently share local and county roads, resulting in increased risk of traffic accidents. As travel patterns disperse, pressure on farmland increases as well. Adding lanes to existing roads not only directly consumes farmland through expanded rights-of-way, but can also create barriers to movement of farm machinery. New roads can effectively bisect existing farms, reducing their economic viability. In addition, residential or highway-oriented commercial development spurred by transportation improvements not only consumes additional farmland, but can create secondary conflicts with existing agricultural use.

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\textsuperscript{39} Wisconsin Department of Transportation

\textsuperscript{40} Madison Area Metropolitan Planning Organization
Insert FPP-8 Municipal Expansion (front).
Insert FPP-8 Municipal Expansion (back).
Utilities

Approximately 18,558 developable acres have been added to Dane County urban service areas from 1986 through 2009. Over 60 million gallons per day (mgd) of groundwater is withdrawn and used for public and private water supply—about 140 gallons per person per day. Public water supplies account for about 75 percent of total groundwater use. Urban areas account for 80 percent of groundwater use. 41

Communications

A rapid rise in demand for and availability of cellular telephone technology has led to a commensurate increase in the number of towers and other antenna facilities for transmission and reception. To limit visual and other impacts of towers, Dane County has chosen to pursue a strategy of encouraging collocation of antenna arrays wherever possible. 42

Community Facilities And Services

Dane County has undertaken a capital planning program for county-operated community facilities, to meet the following goals:

- To meet obligations to maintain all existing facilities and equipment in good repair, address potential liability problems, and conform to Federal and State regulations;
- To respond to opportunities to achieve economies in operation through automation, energy efficiency, or other capital investments;
- To consider long-range financing strategies for major capital projects which balance capital needs, operational needs, and fiscal responsibility in a framework which supports priority-setting by policy-makers;
- To provide a basis for justifying and approving capital projects and then accountability for implementation. 43

The Capital Improvement Plan is updated and issued on an annual basis, and contains detailed recommendations for improvements, expansions, rehabilitation and maintenance of all county-owned facilities. 44

Energy

Energy consumption continues to increase in Dane County. A growing population and number of businesses account for a portion of this increase, and the rest is due to increased usage. By 2010,

41 Dane County Department of Planning and Development, Dane County Comprehensive Plan, Volume II, Chapter 4

42 Dane County Department of Planning and Development, Dane County Comprehensive Plan, Volume II, Chapter 4

43 Dane County Department of Planning and Development, Dane County Comprehensive Plan, Volume II, Chapter 4

44 Dane County Department of Administration, Office of Management and Budget, Dane County Capital Improvement Plan (annual), [http://www.countyofdane.com/budget]
it is estimated that approximately 130,000 residential customers and 20,000 businesses will be served. 45

**Waste Management**

The Solid Waste Division of the Department of Public Works, Highways and Transportation administers the siting, construction, operation, maintenance, closure, and post-closure care of Dane County’s landfills, compost sites, and landfill gas-to-energy systems. This Division also coordinates and manages the County’s recycling and Clean Sweep programs and activities. The Dane County landfill, located at 7102 US Highway 12, accepts household refuse from all Dane County residents. Household refuse does not include recyclables, vehicle batteries, animal waste, and household hazardous waste. The County Landfill is expected to be available until 2015 to 2020. No other landfills are being considered as a successor to the Dane County Landfill at this time. 46

**Environmental Preservation**

The Dane County Parks & Open Space Plan (POSP) seeks to identify significant cultural, historical, and natural resources that should be considered for possible protection, preservation or restoration. The POSP also seeks to identify countywide recreation needs and Dane County's role in providing facilities to meet anticipated demands.

The POSP recognizes the value of farmland and actively seeks ways to incorporate farmland preservation and agricultural enterprise into plan recommendations. Many of these recommendations will help meet the goals of the Farmland Preservation Plan. For example, conservation easements on active farms surrounding county parkland will help preserve the agricultural use of the land while also preserving the park viewshed and rural atmosphere. Another example is the use of county parkland for community gardening and related enterprises, such as incubator space for beginning farmers. To the extent possible and reasonable, implementation of the Dane County Parks & Open Space Plan shall seek to compliment the goals of the Farmland Preservation Plan. Map FPP-9 shows the major land resources in Dane County.


46 Dane County Department of Planning and Development, *Dane County Comprehensive Plan*, Volume II, Chapter 4
Insert FPP-9 Land Resources (front)
CHAPTER 3: GENERAL STRATEGIES

I. General Goals and Policies for Farmland Preservation

   1. Identify areas of Dane County suitable for long term preservation and viability of diverse agricultural enterprises and resources. Protect or encourage protection of those areas for the benefit and use of current and future generations.47

   Supporting Objectives

   a) Maintain a sufficient acreage of land in agricultural production in Dane County to economically sustain crucial agricultural support industries.

   b) Minimize the amount of land converted from agricultural use to accommodate permitted non-farm development.

   c) Reduce scattered rural nonfarm development by encouraging clustering of rural development as part of a town farmland preservation strategy.

   d) Encourage future urban development to be compact, adjacent to existing development and consistent with town planning policies.

   e) Continue to apply those comprehensive plans of towns, cities, villages and extraterritorial cooperative plans which have been incorporated into the Dane County Comprehensive Plan for detailed land use policies in Farmland Preservation, Non-Farm Development and Resource Protection Corridor Overlay Areas. Continue to review all comprehensive plans and amendments to plans for consistency with county policies, in accordance with the Intergovernmental Cooperation policies of the Dane County Comprehensive Plan and Chapter 82, Dane County Code.

   County Actions and Programs

   Consistent with county, town, city, village and extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan, the county will seek to:

   (1) Develop and implement new tools, such as Purchase of Agricultural Conservation Easements (PACE), Transfer of Development Rights (TDR) and conservation subdivisions to meet agricultural resource goals.

   (2) Implement fees and other financial mechanisms to support agricultural preservation efforts and create a disincentive for unnecessary conversion of agricultural land.

   (3) Establish design guidelines that minimize conversion of agricultural land, support farm operations and allow for agriculture-related businesses.

   47 See also Dane County Comprehensive Plan, Chapter 5, pp. 34-37 [http://danedocs.countyofdane.com/webdocs/PDF/PlanDev/ComprehensivePlan/CH5_Agriculture.pdf]
(4) Establish maximum lot sizes, with exceptions where necessary due to local land conditions, for all land rezoned out of exclusive agriculture.

II. General Goals and Policies for Agricultural Enterprise and Development

Consistent with county, town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan, the county will seek to:

1. Maintain Dane County’s status as one of the nation’s most productive and economically viable agricultural areas. Keep farming economically viable in Dane County through the 21st century.

2. Support and promote the development of community, regional, national and international markets for agricultural products to promote and preserve the county’s agricultural industry.

3. Support the creation of conventional, organic and sustainable agricultural enterprises in Dane County.

Supporting Programs and Objectives

a) Economic Development Program

(1) Objectives:

(a) Continue to develop and implement a comprehensive economic development program to support, expand and enhance agriculture as a viable economic activity in Dane County.

(b) Support and encourage the development of regional agricultural enterprise including: agricultural cooperatives; manufacturing to process soy beans, produce and other farm products, and; new agricultural technologies.

(c) Support farm marketing programs that promote Dane County agriculture and help farmers improve their profitability.

(d) Identify and help develop new markets for production agriculture, biotechnology, value-added processing and Community Supported Agriculture (CSA).

b) University of Wisconsin Extension (UWEX) Services

(1) Objectives:

(a) Continue and expand direct services, marketing assistance and on-demand technical assistance provided to farmers through Dane County University of Wisconsin Extension (UWEX) programs.

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48 See also Dane County Comprehensive Plan, Volume I, Chapter 6, pp. 63-64 [http://danedocs.countyofdane.com/webdocs/PDF/PlanDev/ComprehensivePlan/CH6_EconomicDev.pdf]
(b) Design and implement education workshops and distribute materials for farmers, developers, landowners and the general public.

(c) Help entrepreneurs plan, start and grow new enterprises that capture value from agriculture.

(d) Provide information about agricultural production to foster understanding and tolerance between farmers and their residential neighbors.

c) **Infrastructure and Capital Improvements to Support Agriculture**

(1) **Objectives.**

(a) Strengthen transportation infrastructure such as rail transit and roads to support agricultural commerce.\(^49\)

(b) Support and promote, using targeted investments of public funds where necessary, infrastructure and organizational capacity that serves agriculture and related enterprises.\(^50\)

(2) **Transportation Infrastructure**

(a) Include transportation of agricultural goods to market in all long-term planning related to truck, rail and air freight transport.

(b) Highway shoulders and crossings should be designed to accommodate farm equipment, bicycles and other uses and minimize safety conflicts with automobile traffic.

(3) **Agricultural Processing, Supply, Distribution and Waste Management Infrastructure**

(a) Support and encourage the development of regional agricultural enterprise including:

(i) agricultural cooperatives;

(ii) manufacturing to process agricultural commodities;

(iii) produce and other farm products, and;

(iv) new agricultural technologies.

(b) Pursue institutional food purchasing policies to provide new markets for area farmers.

(c) Assist and support the development of organic processing facilities to process organic farm products.

(d) Use targeted public and private funds to stimulate needed physical and intellectual infrastructure serving the agricultural sector. Develop facilities and institutions that support and incubate the development of local food products and businesses and develop new markets for Dane County products. Examples include:

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\(^{49}\) See also *Dane County Comprehensive Plan*, Volume I, Chapter 3 [http://danedocs.countyofdane.com/webdocs/PDF/PlanDev/ComprehensivePlan/CH3_Transportation.pdf]

\(^{50}\) See also *Dane County Comprehensive Plan*, Volume I, Chapters 3 & 4
(i) a self-supporting Central Agriculture and Food Facility (CAFF);
(ii) a Dane County agricultural enterprise development center;
(iii) facilities to process agricultural waste into marketable products or renewable energy, such as the “Cow Power” manure digester program, or;
(iv) a packing and wholesale facility for fresh produce.

d) Zoning and Land Use Regulation Modernization

(1) Objectives.

(a) Examine zoning processes, existing and proposed local codes, administration and procedural requirements to:
   - minimize negative impacts on agriculture, and
   - promote a diversity of agricultural, agriculture accessory and agriculture related uses that are both economically productive and compatible with rural areas.

(b) Ordinances and regulations restricting noise, odors, keeping of animals or other activities that could inhibit typical farm operations, will not apply in Farmland Preservation Areas.

(c) Consider whether any new county regulations would put Dane County farmers at a competitive disadvantage to farmers elsewhere in the state.

(d) Amend farmland preservation zoning districts to make it easier to establish agricultural service and other industries that promote appropriate, sustainable rural and farm economic development. Examples include: biotech industries; value-added enterprises; agricultural tourism; forestry and sustainable timber harvest; agricultural supply and product distributors; ethanol plants; soybean and other processing plants; implement dealers, and; mixed use developments involving both traditional agriculture and retail/processing uses.

(2) Task Force for Prioritized Revision of Chapter 10 (Zoning Ordinance)

Substitute 1 to Dane County Board Resolution 120, 2006-2007 established the Task Force for Prioritized Revision of Chapter 10 and charged it with establishing priorities and proposing amendments to the Dane County Zoning Ordinance.

Future priorities identified by the Task Force include amendments to bring the county’s farmland preservation zoning districts into compliance with recent changes to Chapter 91, Wisconsin Statutes, by the 2012 statutory deadline.
CHAPTER 4: DESIGNATED PLANNING AREAS

I. Farmland Preservation Areas

A. Rationale for Designation

Farmland Preservation Areas, as shown on the Dane County Farmland Preservation Plan Map (Map FPP-10), include lands that meet all of the following criteria:

1. Are predominately in active agricultural, agriculture accessory, agriculture-related or natural resource use;
2. Are planned to support a predominance of agriculture, agricultural accessory, agriculture-related and natural resource uses for twenty years or more;
3. Are clearly shown as “Agricultural Preservation,” “Farmland Preservation” or “Rural Preservation” on Planned Land Use Maps in town, city, village and extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan;
4. Include policies in town, county, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan, to generally limit new nonfarm development to a density of one or fewer units per 35 acres;
5. Are in areas with sufficient regulatory or other policy mechanisms in place to implement farmland preservation plan policies and to effectively limit nonfarm development, and;
6. Are completely outside designated Urban Service Areas, as shown in the most current version of the Dane County Water Quality Plan, as amended and approved by the Capital Area Regional Planning Commission and the Wisconsin Department of Natural Resources.

B. Goals and Objectives for Farmland Preservation Areas

Consistent with county, town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan, the county will seek to:

1. Maintain and support production agriculture, agricultural-related businesses, forestry, open space, and compatible uses.
2. Maintain eligibility for farmland preservation tax credits under Chapter 91, Wisconsin Statutes.
3. Limit new nonfarm development in designated Farmland Preservation Areas to a density of one or fewer units per 35 acres.
4. Direct permitted nonfarm development away from productive agricultural lands.
5. Commercial and industrial uses that are not agriculturally related will be located in areas identified for such use and where the full range of public services (sewer, water, fire protection and police protection) can be economically provided.
C. Policies and Programs for Farmland Preservation Areas

Consistent with county, town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan, the county will apply the following policies and programs in Farmland Preservation Areas.

1. **Farmland Preservation Zoning Districts**

   All Farmland Preservation Areas must be either in a town that has adopted Dane County’s certified Farmland Preservation Zoning ordinance, or in a city, village or extraterritorial area that has adopted its own Farmland Preservation Zoning ordinance certified under s.91.38, Wis. Stats. Within Farmland Preservation Areas, Dane County and its town, city and village partners will seek to maintain at least eighty percent (80%) of the land area (as required by state DATCP review criteria) in a certified Farmland Preservation Zoning district. No areas outside of an Farmland Preservation Area may be in a certified Farmland Preservation Zoning District. In Dane County, Farmland Preservation Zoning Districts include the following:

   a) **County Zoning.** Map FPP-11 shows the current zoning in unincorporated Dane County. Dane County intends to request state Farmland Preservation Zoning certification under s.91.38, Wisconsin Statutes for the following county zoning districts.

      (1) A-1(ex) Exclusive Agriculture District (s.10.123, Dane County Code).
      (2) A-4 Small Lot Agriculture District (s.10.129, Dane County Code).
      (3) A-B Agricultural Business District (s.10.112, Dane County Code).

   b) **City and Village Zoning.** Farmland Preservation Zoning districts also include any city, village or extraterritorial zoning ordinances or districts certified by the state Department of Agriculture, Trade & Consumer Protection under s. 91.38, Wis. Stats.

2. **Other Zoning Districts**

   a) **Findings of Fact for Rezones out of Farmland Preservation Zoning Districts.** As required under s. 91.48, Wisconsin Statutes, prior to approving any petitions to rezone land from a certified farmland preservation zoning district to any other zoning district, the local zoning authority must make the following findings:

      (1) The land is better suited for a use not allowed in the farmland preservation zoning district.

      (2) The rezoning is consistent with applicable town, city, village or extraterritorial cooperative plans and the Dane County Comprehensive Plan.

      (3) The rezoning is substantially consistent with the state-certified Dane County Farmland Preservation Plan.

      (4) The rezoning will not substantially impair or limit current or future agricultural use of surrounding parcels of land that are zoned for or legally restricted to agricultural use.
b) *Conditions on Rezones.* To the extent permitted by applicable zoning ordinances, the local zoning authority may impose additional restrictions on rezone petitions to make sure the findings of fact in 2.a) above are satisfied.

c) *County Zoning.* Within Farmland Preservation Areas, the county board will consider petitions from landowners to rezone to the following zoning districts to accommodate new development:

(1) Any certified Farmland Preservation Zoning District;

(2) Agriculture, including the A-2, A-2(1), A-2(4), and A-2(8) districts;

(3) Residential, including the R-1, R-1a, R-2, R-3, and R-3a districts;

(4) Rural Homes, including the RH-1, RH-2, RH-3, and RH-4 districts;

(5) The Limited Commercial (LC-1) district;

(6) The Conservancy (CO-1) district;

(7) The Recreational (RE-1) district;

(8) The Historic (HD) overlay district;

(9) The Transfer of Development Rights Sending Area (TDR-S) overlay district;

(10) The Transfer of Development Rights Receiving Area (TDR-R) overlay district (see limitations in discussion of TDR below).

(11) Other county zoning districts that, through the use of, as necessary, conditional zoning, deed restrictions or other limitations, meet all of the findings of fact under 2.a) above and s.91.48, Wisconsin Statutes.

Policies in town plans adopted as part of the *Dane County Comprehensive Plan* may further restrict the list of appropriate zoning districts in Farmland Preservation Areas.

d) *City, Village or Extraterritorial Zoning.* Appropriate zoning districts for nonfarm development within Farmland Preservation Areas under city, village or extraterritorial zoning authority are as determined by the city or village comprehensive plan or by the extraterritorial cooperative plan.

e) *Density Caps.* New nonfarm development is generally limited to a density of one unit per 35 acres, or fewer, according to detailed policies established in town, city, village or extraterritorial cooperative plans adopted as part of the *Dane County Comprehensive Plan.* Under Chapter 82, Subchapter II, Dane County Code, the Dane County Board of Supervisors reviews each town plan for consistency with countywide planning policies, and adopts, rejects or amends those plans, as necessary, for incorporation into the *Dane County Comprehensive Plan.*

f) *Existing Nonfarm Development*

(1) Town, city, village or extraterritorial cooperative plans adopted as part of the *Dane County Comprehensive Plan* may provide for limited accommodations or exemptions for pre-existing nonfarm development within Farmland Preservation Areas. For existing uses in an Farmland Preservation Area, the local zoning authority may approve limited rezone petitions to districts not listed in c) or d) above to accommodate the following:
- make minor adjustments in zoning parcel lines or zoning parcel size;
- rezone from a less restrictive zoning district to a more restrictive district, or;
- allow for limited expansion of existing operations.

(2) In some cases, residential subdivisions platted prior to the adoption of the county’s exclusive agricultural zoning ordinance are included in designated Farmland Preservation Areas. Such subdivisions are considered prior, nonconforming uses under the county zoning ordinance and under s.91.42(3), Wis. Stats. The local zoning authority may entertain rezone petitions to bring such parcels into zoning compliance to accommodate existing nonfarm uses. However, such areas are not intended to accommodate and new or additional nonfarm development within a twenty year period.

(3) Rezones to zoning districts not listed in 2.c) or 2.d) above to accommodate existing uses should meet, at a minimum, all of the following conditions. Town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan may include additional, or more restrictive, requirements.

(a) The local zoning authority makes the findings of fact described in 2.a) above.

(b) New construction or expansion must meet the siting criteria under 4. below.

(c) Zoning parcels containing all existing uses and any proposed expansions are deed restricted or zoned to limit uses to those currently on the site, or to less intensive uses.

(d) All existing uses on the site and any proposed expansions are brought into compliance with all current applicable regulations, codes and standards, including, but not limited to: parking 51, screening 52, stormwater 53, erosion control 54 and sanitary disposal 55 standards.

(g) Lands Remaining in Agricultural Use. Where possible, portions of properties intended to remain in exclusive agricultural use should remain in a certified farmland preservation zoning district. If remnant agricultural parcels do not meet minimum lot sizes or other standards of county, municipal or extraterritorial farmland preservation zoning districts, they will be zoned in another district appropriate for long-term agricultural use. All zoning must be consistent with

51 See s. 10.18, Dane County Code, or applicable municipal or extraterritorial zoning ordinance.
52 See s. 10.16(7), Dane County Code, or applicable municipal or extraterritorial zoning ordinance.
53 See Chapter 14, Dane County Code, or applicable municipal stormwater management ordinance.
54 See Chapter 14, Dane County Code, or applicable municipal erosion control ordinance.
55 Chapter 46, Dane County Code.
town, city, village or extraterritorial plans adopted as part of the Dane County Comprehensive Plan.

h) Petitions Initiated by County, City or Village Governments. The local zoning authority may, as the need arises and as provided in state statute, initiate rezone petitions to accomplish any of the following:

(1) Make sure parcels in a Non-Farm Planning Area are not in a Farmland Preservation Zoning district, as required by s.91.38, Wis. Stats.

(2) Bring nonconforming zoning parcels into current compliance;

(3) Implement policies in town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan or the Dane County Farmland Preservation Plan, or

(4) Meet certification requirements under s.91.38, Wis. Stats.

3. Siting Criteria for Development

All new development, or expansion of existing development, within a Farmland Preservation Area should comply with, at a minimum, the following criteria. Town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan may include additional, or more restrictive, siting standards.

a) Do not place new development or expansions of existing uses in wetlands, floodplains (see Resource Protection Corridor Overlay District, below).

b) Size nonfarm zoning parcels to the minimum necessary to accommodate the proposed use. Parcels must meet minimum lot sizes, local driveway or county or state highway access standards, and minimum road frontage standards under applicable comprehensive plans, zoning ordinances or land division ordinances.

c) Locate nonfarm building sites to minimize disturbance of productive agricultural soils, promote clustering and minimize conflicts with existing agricultural use. Productive agricultural soils are soils classified as Group I or Group II under the Dane County Land Evaluation and Site Assessment system, or as specified in a town, city, village or extraterritorial cooperative plan adopted as part of the Dane County Comprehensive Plan.

d) As required under Chapter 14, Dane County Code, driveways longer than 125 feet must comply with county erosion control and stormwater standards. Contractors are required to use erosion control measures and return lands to a near normal setting after completion of construction. The Town, County, City, or Village may require an erosion control and/or stormwater management plan or a preliminary review letter meeting county ordinance standards as a condition of approval.

e) Compliance with a county, city or village-approved site plan may be required as a condition on a conditional use permit or rezone petition for new development in a Farmland Preservation Area.
4. **Agricultural Enterprise Areas**

   a) **Conservation Compliance Certification.** Farmers in an Agricultural Enterprise Area (AEA) entering into a voluntary farmland preservation agreement must meet soil and water conservation standards under ATCP 50, Wis. Adm. Code to claim the additional AEA tax credit. Wisconsin AEA application materials require information about approximate percentage of farmers in the AEA in compliance with conservation standards. Apply directly to the Dane County Land & Water Resources Department for conservation compliance certification, no later than 60 days before the nomination application deadline. Further details are available from the Land Conservation Division.

   b) **County Board Resolutions of Support.** The Dane County Board of Supervisors will consider resolutions supporting AEA petitions, provided target lands are shown in an Agricultural Enterprise Area in the Farmland Preservation Plan Map (Map FPP-10) of the Dane County Farmland Preservation Plan. Send requests for consideration to the Dane County Department of Planning and Development no later than 60 days from the nomination application deadline, to allow time for county review and approval.

   c) **Targeted Agricultural Enterprise Areas.** As resources permit, Dane County Planning and Development staff may work directly with landowners and local governments to solicit petitions and assist in the AEA application process. Assistance may include attending public information sessions, mapping and assistance with application narrative drafting. County-assisted AEA projects should include properties with existing, substantial county, local, state or federal public investment in sustainable agricultural practices. Examples of public investment in sustainable agricultural practices include, but are not limited to, agricultural infrastructure, cost-share assistance, agricultural development grant or revolving loan fund financing projects wholly or partially funded with public money.

   d) **County/Regional Benefits to Farmers in an AEA.**

      (1) **Urban Service Areas.** Dane County will continue to advocate for state legislative changes that would establish objective standards for Urban Service Area approvals that take into account potential agricultural impacts. Dane County will work with the Capital Area Regional Planning Commission and the Wisconsin Department of Natural Resources to explore options that would:

         (a) protect AEAs from urban service area expansions intended to serve new urban development, while;

         (b) allowing for limited public sewer or water service needed to support agriculture-related industries.

      (2) **Targeted economic and technical assistance.** The following programs are available to landowners in designated Agricultural Enterprise Areas.
(a) Revolving Loan Funds for agricultural and related business creation or expansion in certified Agricultural Enterprise Areas (AEAs).

(b) As a Recovery Zone under the federal American Recovery and Reinvestment Act, the county will make Recovery Zone Facility Bonds available for projects that fit the criteria for bond issue within AEAs. Projects would have to be substantial in order to meet cost/benefit requirements.

(c) Dane County will continue to work with the WI Department of Commerce and the Workforce Development Board of South Central WI through their business programs for manufacturing and food processing, as well as job training. These resources will be made available to farmers in Agricultural Enterprise Areas.

5. **Agricultural Conservation Easement Programs**
   
   **a) Goals And Objectives For Agricultural Conservation Easement Programs**
   
   Where consistent with county, town, city, village or extraterritorial cooperative plans adopted as part of the *Dane County Comprehensive Plan*, the county will:

   (1) Support and complement any existing or future PDR, Purchase of Agricultural Conservation Easements (PACE), or transfer of development (TDR) programs developed by the county, local, state or federal governments.

   (2) Encourage inclusion of natural resource lands, farmlands, and woodlands under conservation easement.

   (3) Encourage voluntary participation in easement programs, allowing private landowners to continue to manage their property and with no requirement for public access.

   (4) Focus easement purchases to areas planned for long-term or permanent agricultural or natural resource use.

   (5) Make sure that all land protection is in permanent agreements and conservation easements have secondary easement holders to provide lasting public benefit.

   (6) Allow communities to grow in accordance with town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plans.

   **b) County Registry Of Interested Sellers.** Dane County will maintain a voluntary, online database of landowners interested in selling conservation easements on their property.

   **c) Purchase of Agricultural Conservation Easements (PACE) Programs**

   (1) *PACE Grant Eligibility and Ranking Criteria Maps.* Map FPP-12 shows landholdings ranked by selected Wisconsin Department of Agriculture, Trade and Consumer Protection PACE grant criteria* ([http://www.datcp.state.wi.us/workinglands/pace_application.jsp](http://www.datcp.state.wi.us/workinglands/pace_application.jsp)).
The Dane County Department of Planning and Development maintains this map, and updates it on an annual basis. Current Wisconsin ranking information will be available online through DCiMap, Dane County’s online geographic information system (http://dcimap.co.dane.wi.us/dcimap/).

(2) Mapping and Technical Assistance. For town, city or village governments, or qualified non-profit conservation organizations under state and federal PACE programs seeking to purchase conservation easements on agricultural lands in Dane County, the Dane County Department of Planning and Development will provide, free of charge:

(a) Density Study Reports to determine development potential under the Dane County Comprehensive Plan, and;

(b) A map of the target property showing soils (including percentage of prime and state-significant soils), any specialty crops and any state-qualified unique farmland to meet grant application requirements of the State of Wisconsin or the U.S. Department of Agriculture.

(3) Transaction Assistance Grants. Dane County should consider developing a supplemental grant program to assist successful PACE grant applicants with transaction costs (such as surveys, appraisals or legal work) not covered by state, federal or other PACE grant funds.

(4) Conservation Compliance Certification. Wisconsin PACE grant eligibility standards require that target properties have a qualified farm conservation plan in effect, and that all county, state and federal soil and water conservation standards are met. Conservation certification applications, including appropriate inspection and review fees should be received by the Land Conservation Division of the Dane County Land & Water Resources Department no later than 60 days in advance of the grant application deadline. Further details are available from the Land Conservation Division.

(5) County Board Resolutions of Support. The Dane County Board of Supervisors will consider resolutions in support of PACE grant applications by town, city or village governments or by qualified non-profit conservation organizations under state or federal PACE programs, provided target lands are shown in an Farmland Preservation Area in the Farmland Preservation Plan Map (Map FPP-10) of the Dane County Farmland Preservation Plan. Send requests for consideration to the Dane County Department of Planning and Development no later than 60 days from the grant application deadline, to allow time for county review and approval.

(6) County Acquisition Program. As funding permits, Dane County may work directly with willing sellers to purchase agricultural conservation easements on agricultural lands within Farmland Preservation Areas. In areas not already mapped and identified as project areas in the Dane County Parks and Open Space Plan, or in other county, town, or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan, Dane County will
provide for timely, general notification to local governments regarding easement purchases that would affect nonfarm development potential within that jurisdiction. Dane County will work on its own or with project partners, and will seek to match its own acquisition funds with local, state and federal grant programs as much as possible. County-funded Purchase of Agricultural Conservation Easement projects should include lands that meet at least one of the criteria below.

(a) Target lands fall within the boundaries or buffer areas for projects identified in the Dane County Parks and Open Space Plan.

(b) Projects include lands targeted for wetland restoration or streambank easements identified as critical to the protection and enhancement of water quality as part of the Land and Water Legacy Fund.

(c) Projects include lands within designated Agricultural Enterprise Areas.

(d) Projects are in areas where landowners have demonstrated a commitment to long-term or permanent agricultural use.

(e) Maintenance of project lands in permanent agricultural or open space use would:
   (i) minimize boundary conflicts between agriculture and incompatible uses;
   (ii) result in substantial benefits to ground or surface water quality;
   (iii) protect significant natural hydrologic functions
   (iv) prevent productive agricultural lands from irreversible conversion out of agriculture or agriculture-related uses, or;
   (v) protect agricultural infrastructure, soil and water conservation practices or other significant public or private investments in agriculture or agriculture-related uses.

d) **Transfer of Development Rights (TDR)**

(1) **Dane County TDR Zoning Ordinance.** Sections 10.158 and 10.159, Dane County Code provide a legal and administrative framework to support town-initiated Transfer of Development Rights (TDR) programs. The ordinance includes two overlay zoning districts.

(a) **TDR-S (s.10.158, Dane County Code).** The TDR-S district is used to designate TDR sending areas. The TDR-S overlay can be applied to the A-1EX(Exclusive Agriculture) or CO-1 (Conservancy) zoning districts. The TDR-S district does not limit any permitted or conditional uses allowed in the underlying zoning. Instead, the TDR-S district adds a new permitted use allowing landowners to transfer development rights away from their property by recording a conservation easement with the county Register of Deeds.
(i) Transferred development rights must be consistent with town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan. Depending on adopted town and county plan policies, development rights may be transferred to a receiving area in the same town, or to another town, city or village. Development rights may also be sold to a public conservation agency or nonprofit land trust and extinguished. Landowners in the TDR-S district may choose to sell some, all or none of the development rights allocated to them under the town density policy, and may negotiate whatever price they feel is fair.

(ii) A-1EX (TDR-S) zoned parcels remain eligible for state farmland preservation tax credits. As long as they have not already transferred all their development rights, landowners with land zoned A-1EX(TDR-S) may still rezone and divide their land to create new residential lots, consistent with density caps and other policies in the town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan.

(iii) Sending areas should be within a Farmland Preservation Area as shown on the Farmland Preservation Plan Map (Map FPP-10).

(b) TDR-R (s.10.159, Dane County Code). The TDR-R district is used to designate TDR receiving areas. The TDR-R overlay can be applied to the A-1(non-exclusive), and all the A-2 (Agriculture), R (Residential), and RH (Rural Homes) zoning districts. The TDR-R overlay requires that any change of use (such as a zoning permit or conditional use permit) that would increase residential density must be accompanied by a transferred development right from a parcel in the TDR-S district.

(i) Before obtaining zoning permits for property in the TDR-R district, developers must present recorded deed notice documents on both the sending and receiving parcels that:

(a) track the number of rights transferred;

(b) identify the location of the sending parcel, and;

(c) reference a recorded conservation easement on an appropriate TDR-S-zoned parcel.

(ii) Transferred development rights must be consistent with town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan. Development in TDR-R districts must comply with any adopted siting criteria, development standards, environmental protection requirements, zoning setbacks or other land development regulations.

(iii) Within the Extra Territorial Jurisdiction (ETJ) of a city or village, the town and municipality must comply with adopted intergovernmental cooperation (and if necessary, dispute resolution)
procedures in all applicable comprehensive plans before rezoning lands to the TDR-R district.

(iiv) Except for farm-to-farm transfers as described below, designated receiving areas must be within areas shown as Non-Farm Planning Areas in the Farmland Preservation Plan Map (Map FPP-10) of the Dane County Farmland Preservation Plan.

(2) Farm to Farm Transfers. From time to time, farmers may wish to trade development rights to facilitate more compact development, promote clustering, or protect large areas of productive farm soils. In such cases, TDR receiving areas are not formally mapped in town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan or the Dane County Farmland Preservation Plan, but are applied as TDR transactions occur. The local zoning authority may consider limited TDR-R overlay zoning within Farmland Preservation Areas as shown on the Farmland Preservation Plan Map (Map FPP-10), provided all of the following criteria are met. Town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan may impose additional criteria or conditions.

(a) Rezones to accommodate new nonfarm development must meet all findings of fact under Chapter 4, Section I.C., Policy 2, Farmland Preservation Areas, Other Zoning Districts.

(b) The transfer facilitates compliance with the Siting Criteria for Development in a Farmland Preservation Area described in Chapter 4, Section I, Policy C.3.

(c) Resulting development does not cause the proportion of land area under a certified Farmland Preservation Zoning district to fall below 80% of the countywide area of the Farmland Preservation Area, as required by DATCP certification requirements.

(3) Town Implementation. To implement TDR-S or TDR-R overlay districts, town boards must:

(a) Adopt a resolution saying they wish to apply the TDR ordinance within the town;

(b) Amend, if necessary, the land use section of their comprehensive plan to establish appropriate TDR policies;

(c) Have the town comprehensive plan amendment adopted by the county board as part of the Dane County Comprehensive Plan, and;

(d) Rezone individual parcels (either on a case-by-case basis as TDR proposals are made, or by a town-initiated “blanket rezone”) to the TDR-S district, TDR-R district, or both.
II. Non-Farm Planning Areas

A. Rationale for Designation

Non-Farm Planning Areas, as shown on the *Dane County Farmland Preservation Plan Map* (Map FPP-10), include areas in town, city, village or extraterritorial cooperative plans adopted as part of the *Dane County Comprehensive Plan* that are not planned for long-term agricultural use. Such areas do not meet the criteria for Farmland Preservation Areas described above, and are not eligible for Farmland Preservation tax credits or other benefits provided under Chapter 91, Wisconsin Statutes. Non-Farm Planning Areas include:

- Rural Development / Transitional or Mixed Agricultural / Residential Areas identified in town plans adopted as part of the *Dane County Comprehensive Plan*;
- Areas with insufficient regulatory or other policy mechanisms in place to effectively limit nonfarm development over the next twenty years, and;
- Urban Service Areas identified in the *Dane County Water Quality Plan*.

B. Goals and Objectives for Non-Farm Planning Areas

Consistent with county, town, city, village or extraterritorial cooperative plans adopted as part of the *Dane County Comprehensive Plan*, the county will:

1. Create or encourage compact, mixed-use development to avoid the conversion of agricultural or open space areas.
2. Maintain Dane County’s rural character and preserve the distinct character and physical separation of Dane County communities.
3. Encourage separation of incompatible uses in rural areas.
4. Reduce scattered rural nonfarm development by encouraging clustering of rural development as part of a town farmland preservation strategy.
5. Promote the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial and industrial structures.
6. Encourage land uses, densities and regulations that promote efficient development patterns and relatively low municipal, state government and utility costs.
7. Encourage future rural development to be compact, adjacent to existing development and consistent with county, town, city, village and extraterritorial cooperative planning policies.

C. Policies and Programs for Non-Farm Planning Areas

Consistent with county, town, city, village or extraterritorial cooperative plans adopted as part of the *Dane County Comprehensive Plan*, the county will:

a) Limited Services Areas delineated in the Dane County Water Quality Plan may also be approved as “Smart Growth Areas” where appropriate to promote higher density infill development as part of a transfer of development rights program.
b) Reduce zoning lot size requirements for rural housing settings, including conservation and cluster subdivision, to reduce housing costs.

c) Establish design guidelines and site plan review procedures for compact development that minimizes the conversion of agricultural land to residential use and the amount of land consumed per unit of new housing in the towns.

d) Amend the County Land Division Ordinance (Chapter 75, Dane County Code) to create a conservation subdivision ordinance to encourage rural density by clustering housing development and reducing lot size, in order to conserve the environment and agricultural land.

e) Seek to maintain or increase housing density, in accordance with town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan.

f) Promote development clusters based upon historical patterns such as existing hamlets, cross roads communities, subdivisions, and conservation subdivisions, as well as environmental factors such as soils, slopes, and viewsheds.

g) Continue to direct urban development requiring a full range of public services to designated Urban Service Areas. Encourage communities to direct new dwelling units to the Outlying Urban Service Areas (OUSAs) and to the Central Urban Service Area (CUSA) as appropriate to ensure that development occurs in locations with a range of urban services, and where those services can be provided most efficiently.

h) Work with the DNR and the Capital Area Regional Planning Commission to establish objective standards for Urban Service Area approvals that take into account potential agricultural impacts.

i) Dedicate resources toward the Dane County Infill Inventory Project to promote the redevelopment of under utilized or unused parcels within urban service areas and promote compact development within these areas to reduce the pace of expansion into undeveloped open space or agricultural areas.
III. Resource Protection Corridor Overlay

A. Rationale for Designation

Resource Protection Corridor Overlays, as shown on the Dane County Farmland Preservation Plan Map (Map FPP-10), include areas that are not suitable for structural development due to environmental sensitivity or because of the presence of fragile, irreplaceable resources. Where Resource Protection Corridors overlap lands in designated Farmland Preservation Areas, properties remain eligible for farmland preservation tax credits and other benefits under Chapter 91, Wis. Stats. and the Dane County Farmland Preservation Plan. Resource Protection Corridors apply to areas outside Urban Service Areas as identified in the Dane County Water Quality Plan and the Dane County Comprehensive Plan. Resource Protection Corridor Overlays include the following categories of lands:

- wetlands, as defined in state statute and including both the shoreland wetland and inland wetland districts under Chapter 11, Dane County Code;
- shoreland setbacks and wetland buffers required under Chapter 11, Dane County Code;
- 1% regional floodplains, including the general floodplain district, floodway district and flood storage district, as described in Chapter 17, Dane County Code, and;
- other areas specifically planned to protect natural or cultural resources, and where structural development is strictly limited, as identified in the Dane County Comprehensive Plan, or its component town, city, village or extraterritorial cooperative plans.

B. Goals and Objectives for Resource Protection Corridors

Consistent with county, town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan, the county will seek to:

1. Develop and promote a countywide system of resource protection corridors based on watersheds as a framework to:
   - protect and where possible, restore, the natural environment and scenic values;
   - provide outdoor recreation opportunities, and;
   - preserve for posterity the nature and diversity of our natural heritage.

2. Permanently protect key sensitive and critical environmental resources, including, but not limited to: infiltration areas; riparian habitat; in-stream habitat; wetland habitat; wetlands; groundwater recharge areas; open space corridors; spawning grounds; shore cover, and; headwater areas.

C. Policies and Programs for Resource Protection Corridors

Consistent with county, town, city, village or extraterritorial cooperative plans adopted as part of the Dane County Comprehensive Plan, the county will:

a) Generally prohibit new structures, buildings or urban development and limit impervious surfaces. Continue to redirect non farm development away from, and limit encroachment into, designated Resource Protection Corridors. This plan
provides general policies while continuing to rely on town plans adopted by the county for more detailed land-use policies. Generally development on slopes of 20% or greater is not allowed, except where it is allowed or allowed with conditions under a town plan adopted by the county into the Dane County Comprehensive Plan.

b) Minimize encroachment and adverse impacts of utilities and transportation facilities on land and water resources in Dane County.

c) Maintain in agricultural, conservation or open space use.

d) Require erosion control and soil and water conservation practices for all land disturbing activities.

e) Provided all applicable county and state erosion control, stormwater, shoreland, wetland, floodplain and stream crossing regulations are met, the following may be permitted in the Resource Protection Corridor:

(1) New structures specifically permitted within setback areas or below regional flood elevations under Chapter 11, Dane County Code, and Chapter 17, Dane County Code, provided all conditions, standards or mitigation requirements are met.

(2) Expansion or improvement of existing accesses or driveways, if necessary to meet current local driveway standards.

(3) Replacement of existing structures, unless prohibited by Dane County ordinance, or by state or federal law.

f) Continue to enforce county or municipal ordinances that meet minimum standards for water quality established by the Dane County Lakes and Watershed Commission and the Dane County Board of Supervisors under Section 33.45, Wis. Stats.

g) Support programs to restore natural vegetation, remove invasive species and improve habitat.

h) Where there are disputes over mapped wetlands, floodplains, soil or slope conditions, the local zoning authority may refer to detailed studies derived from onsite field conditions to determine actual Resource Protection Corridor boundaries. Any such study must be reviewed and approved by the appropriate regulatory authority. Developers bear the burden of proof that mapped Resource Protection Corridors are in error.
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Insert FPP-10 Farmland Preservation Plan Map (front).
Insert FPP-10 Farmland Preservation Plan Map (back).
Insert FPP-11 Current zoning map (front).
Insert FPP-11 Current zoning map (back).
Insert FPP-12 Wisconsin PACE Program Ranking Map (front).
Insert FPP-12 Wisconsin PACE Program Ranking Map (back).
APPENDIX I: CITY OF FITCHBURG FARMLAND PRESERVATION PLAN
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Introduction

This document along with the accompanying maps, data, analysis and policies is the Farmland Preservation Plan for the City of Fitchburg to be adopted as part of the Dane County Farmland Preservation Plan. This plan was prepared in coordination with and is consistent with other pertinent local and regional plans.

The goal of the Farmland Preservation Plan is to identify areas to protect and maintain as agriculture within the City of Fitchburg for the use and benefit of current and future generations. These protected and privately held agricultural lands are a large part of the rural character of the community. The plan is intended to meet the farmland preservation criteria created by the State of Wisconsin as outlined in Chapter 91 of the Wisconsin Statutes, qualifying Fitchburg farmers with certified agricultural zoning to participate in the state farmland preservation tax credit program.

The Planning Framework

The City of Fitchburg is currently participating in the Dane County Farmland Preservation Plan that was adopted in 1981, when the city was a township. This plan was created with the assistance by the Regional Planning Commission staff, with each town preparing their own farmland preservation plans. The county farmland plan is a compilation of all prepared town plans.

In July 2005, a Working Lands Initiative Steering Committee was created by the Department of Agriculture, Trade and Consumer Protection to review the existing programs the State of Wisconsin offers in helping preserve working lands and offer recommendations of new and updated tools to assist in protecting and enhancing the working lands. One of the recommendations by the committee and adopted by the State Legislation and Governor in 2009 was an update to the existing Farmland Preservation Program to improve agricultural planning and zoning, increase tax credits and improve the flexibility of local governments to administer the program.

Counties with the most development pressure as determined by the change in county population growth per square mile between 2000 and 2007 are required to complete updates to their farmland preservation plans first. Dane County, which was identified as one of the faster growing counties, is required to update their plan by December 31, 2011.

The updated plans are to include:

- Goals for farmland preservation and agricultural development.
- Overall development needs and trends with respect to farmland and agriculture.
- Key agricultural resources, existing agricultural land uses, and agricultural infrastructure.
- Identification and map of farmland preservation areas that the county plans to preserve for agriculture and related enterprises.
- Actions that the county will take to preserve farmland and promote agricultural development.
• Consistency with the county’s comprehensive plan.

The City of Fitchburg has elected to prepare its own Farmland Preservation Plan to be incorporated into the Dane County Farmland Preservation Plan as an appendix.
Goals, Objectives and Policies
To further guide the preservation of agriculture land and promote agricultural development within the City of Fitchburg, the following goals, objectives, and polices, which are included in or are consistent with the City of Fitchburg Comprehensive Plan are to be considered and complied.

Goals / Objectives (A broad future condition the City intends to achieve.)–

1) To protect and maintain agriculture as a significant resource and economic viability within Fitchburg.

2) To preserve agricultural land as a resource for the use and benefit of current and future generations.

3) To preserve open space, natural areas, and rural and agricultural land by promoting compact development that contains a logical and sustainable mix of uses and building types.

Policies (A principle to guide decisions to reach the goals and objectives.)–

Agriculture
1) Consider the creation or variations of either a transfer or purchase of development rights program to be used to compensate rural landowners who may be outside the long-term growth area and within the Farmland Preservation Area.

2) Evaluate city incentives to encourage farmers to invest in improvements to their farm operations or to diversify their agricultural operations to address the changing farm economy.

3) Maintain and promote agriculture infrastructure to enhance and sustain agriculture operations.

4) Discourage non-agricultural development in designated agricultural preservation areas through the use of the City’s zoning code.

5) Pursue development or boundary agreements with surrounding communities that would preserve agricultural land across boundaries.

6) Promote the presence of urban agriculture within the City.
7) Encourage the purchase and consumption of local food production.

8) Work with Dane County and other municipalities within the area to promote and establish agricultural enterprises and resources to serve southern Dane County.

**Urban Development**

1) Prohibit creation of rural subdivisions or establishment of new non-agricultural business developments outside the urban service area unless allowed in a planned rural cluster.

2) Retain the rural landscape of Fitchburg by limiting development outside of the urban service area to that which is consistent with the Rural Residential Development Criteria.

3) Direct urban development to the long-term growth boundary identified within the Comprehensive Plan.

4) Promote agricultural-research, development and technology businesses in planned urban areas, adjacent to agricultural land if it is important for the business to be located close to crops and fields.

5) Locate commercial and industrial uses which are not agriculturally related inside the urban service area.

**Natural Resources**

1) Limit agricultural uses within officially delineated wetlands to existing operations and allow expansion only if filling and draining is not required.

2) Protect natural high infiltration areas from development.

3) Maintain exclusive agriculture or conservancy zoning for rural environmental corridors, consisting of woodland areas, wetlands, springs and steep slopes which are part of an operating farm.
Background
As the United States continues to urbanize, the conflict between agricultural and nonagricultural uses of land will continue to intensify. Strong economic growth, in combination with numerous other factors that influence land use, has pushed urban development further from the centers of cities, consuming agricultural land in traditionally rural areas. This can be seen locally in Dane County with the growing Madison Metropolitan area increasing the pressure on Madison and surrounding municipalities to develop subdivisions and the supportive economic/business to support a growing population. Other factors that influence land use may include agricultural product prices, technology, consumer demand, and land prices. With the accelerated shift of agricultural land to urban land, the agricultural industry may be negatively impacted.

Farmer Demographic
Some concerns are present with not enough young farmers entering into the occupation to replace existing farmers. The age of the average farmer in Dane County has been increasing over the past decade. In 2007, the average farmer was 56 years old. Only three percent of farmers fall under the age of 35 and 25 percent of farmers are over the age of 60. According to the Program on Agricultural Technology Studies, in Wisconsin from 1992 to 1997, there were only 344 dairy farm entrants and 1,860 dairy farm exiters, producing a net loss of 1,516 farmers. The Program on Agricultural Technology Studies believe that the increase in net dairy losses is primarily the result of significantly fewer younger people entering dairy, and not a product of more farm closings.

Farm Demographic
With increasing pressures placed on land to urbanize, the acres of available farm land are decreasing. According to the National Agricultural Statistics Service (NASS), between 1987 and 2002, Dane County had a fifteen percent decrease in farm land from 609,000 acres to 515,475 acres. However, between 2002 and 2007, Dane County saw an increase in farm land from 515,475 acres to 535,756 acres. This turn around could be attributed to a number of factors from changes in land use policy, the development market reaching its peak, increased grain prices or the implementation of the Agriculture Use Value Assessment after 2000.

According to a report done by the Program on Agricultural Technology Studies, the South Central (SC) District, consisting of Columbia, Dane, Dodge, Green, Jefferson, and Rock counties, approximately 27,042 acres of farmland changed hands between 2000 and 2002. Of the farmland sold, an average of 25% (6,759 acres) was converted to non-agricultural uses each year, resulting in a loss of 20,277 acres of farmland across the district in this three-year period.

In the South West (SW) Wisconsin District, consisting of Crawford, Grant, Iowa, Lafayette, Richland, Sauk, and Vernon counties, sales of agricultural land are increasing between 2000 and 2002. Agricultural land sales converted to non-farming uses have doubled over the last decade.
for the SW district. Sale of converted land increased from 12 percent to 25 percent, with an annual average sold increased from 6,475 acres to 13,241 acres annually. Agricultural land sales have 75 percent of sales remaining in agricultural uses. The SW District lacks the same growing metropolitan area as Dane County. Therefore, the pressures for farm land to convert to nonagricultural uses in the SW District are not seen as strong as the pressures placed on Dane County through sales of converted farmland.

Despite the trend that acreage of farmland has decreased, according to the Census of Agriculture, Dane County has seen a 28% increase in the number of farms from 1997 to 2007. Over this same time period, the average size of farms has decreased from 198 acres to 161 acres.

**Table 1: Dane County Farms by Size**

<table>
<thead>
<tr>
<th>Size of Farm</th>
<th>1997</th>
<th>2002</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 9 acres</td>
<td>217</td>
<td>306</td>
<td>456</td>
</tr>
<tr>
<td>10 to 49 acres</td>
<td>565</td>
<td>860</td>
<td>1,083</td>
</tr>
<tr>
<td>50 to 179 acres</td>
<td>948</td>
<td>951</td>
<td>1,035</td>
</tr>
<tr>
<td>180 to 499 acres</td>
<td>655</td>
<td>550</td>
<td>528</td>
</tr>
<tr>
<td>500 to 999 acres</td>
<td>161</td>
<td>144</td>
<td>140</td>
</tr>
<tr>
<td>1,000 acres or more</td>
<td>49</td>
<td>76</td>
<td>89</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,595</td>
<td>2,887</td>
<td>3,331</td>
</tr>
</tbody>
</table>

Source: National Agricultural Statistics Service

This trend could be attributed to a large number of hobby farmers and/or small scale farmers entering the field that are not primary livelihoods of the owner/operator. One third of farms in Dane County have 10 to 49 acres with another one third of farms having 50 to 179 acres. Of the 3,331 farms in 2007, 44% of the operator’s principal occupation was farming whereas in 1997, 54% of the operator’s principal occupation was farming. Another reason for the increase in farms, but decrease in size could be retiring farmers splitting the land between family members. Several examples of this can be found in Fitchburg, for example the Gorman and Lacy families.

The definition of a farm used by the NASS includes all operations selling as little as $1,000 of farm products per year, which may include hobby farms. In addition, the Dane County Ordinance limits the division of land zoned agriculturally to 35 acre or less parcels. Therefore, a larger farm could go out of production and the land could be divided into 35+ acre parcels resulting in several hobby farms. The total number of farms would increase, but the acreage of land remains the same.

The increase in the pressure to develop has also impacted farming financially. In 2010, the comparable sales price for an acre of agriculture land in Fitchburg was around $7,500 and for agriculture land with development potential around $50,000 - $60,000 per acre. The average value of all farmland and buildings per farm in 2007 was $696,424, compared to only $580,806 in 2002. With the increasing average cost of land and buildings, fewer farmers will be able to enter into farming. In addition, farmers looking to leave agriculture and with land that has
potential to be developed will produce a greater value by selling the land for a nonagricultural use.

In 2010, Fitchburg had approximately 144 landowners with crop and pasture land. Of the 144 landowners, 97 had greater than 10 acres of land and 47 had less than 10 acres of land. About seventeen of the 144 landowners were active farm resident managers of their land. The City had 4 dairy farms (650 milking cows), four beef farms with several small operations (100 beef cattle), six equestrian farms, and five vegetable/fruit farms.

The City of Fitchburg is home to the Hartung Seed Plant, which handles the drying and bagging of seed corn produced in Wisconsin. The location of the seed plant is located within the proposed boundaries of the McGaw Park Neighborhood, which is projected to be developed as a business park and transit oriented development within the next 15 years. Discussions will need to occur in the future as to the relocation of this operation to meet the needs of both Hartung Seed and the City of Fitchburg.

Main agricultural facilities servicing Fitchburg landowners are located outside of the City within Dane County and the surrounding counties.

**Farm Products**

**Cash Crop**

Crop land makes up a majority of farmland. These crops can either be sold or used to feed livestock. In general, the South Central (SC) District, consisting of Columbia, Dane, Dodge, Green, Jefferson, and Rock counties, produces more corn and soybean based on percentage of major crops grown and the SW District, consisting of Crawford, Grant, Iowa, Lafayette, Richland, Sauk and Vernon counties, produces more forage. Both SC and SW produced relatively the same amount of small grains. The different crop production is a result of glaciation. The SC District falls within the Glacial Till region, an area where glacial debris and wind blown silt were deposited, where better topsoil was left behind. The SW District falls within the Driftless region, no evidence of glaciers, are subject to erosion over greater periods of time resulting in less topsoil and more varied topography. This difference in topsoil from the glaciation and the wind blown silt are the reason why certain crops grow better in one district than the other.

The Wisconsin Natural Resources Conservation Service (WNRCS), part of the US Department of Agriculture (USDA), puts years of experience to work in assisting owners of America’s private land with conserving soil, water, and other natural resources. Many times the WNRCS, Wisconsin Department of Agriculture, Trade, and Consumer Protection (WDATCP), UW - Extension, and Dane County Land Conservation Department (DCLCD) work individually or together to deliver technical assistance for the specific needs of farmers or other private land owners. These groups encouraged the use of crop rotation to help protect soil quality of farmland. Crop rotation can increase yields, increase profitability and reduce risk through
diversification, decrease environmental hazards by reducing chemical inputs, and reduce nutrient depletion in soils from crop production.

Based on discussions with the major farmers in Fitchburg, the 2010 crop rotation was about 51% (5,141 acres) for corn, 30% (3,025 acres) for soybeans, 14% (1,411 acres) for hay, 3% (302 acres) for wheat and 2% (201 acres) for other. Approximately 38% (3,825 acres) of the cropland was rented by nine different large farm operations.

**Dairy**

In addition to cash crops, several dairy farmers are found in Dane County. According to the Program on Agricultural Technology Studies, between 1991 and 1999 the South Central district saw declines in cow numbers of over 22%. However, the total loss in milk production was only 7% due to a district wide productivity gain (milk/cow/year) of 20%. This productivity gain can be accounted for farmers becoming more efficient with their resources, buying supplements to add to feed, increase use of genetics, or harvesting feed more frequently when the crops have the best nutrients. In 2002, the SC District was home to nearly 2,000 dairy farms holding 170,000 cows that produced 2.9 billion pounds of milk.

The average cow in Fitchburg produces approximately 22,000 pounds of milk per year, for an average of 14.3 million pounds of milk from Fitchburg per year based on 650 milking cows.

**Land Use Conflicts**

Urban sprawl is not the only land use concern on the rural-urban fringe. Certain agricultural land uses with contiguous residential land uses can create a variety of spillovers for rural residents on the rural-urban fringe. Depending on the agricultural enterprise, neighboring rural residents can experience various noxious odors, spray drift, noise at night, dust, loose animals, slow-moving farm implement traffic, and other unwanted agricultural spillovers.

On the other hand, locating rural subdivisions and residential property next to operating farms can create a variety of headaches for farmers. These might include trash; liability for trespassing children; damage or theft of crops; complaints and potential nuisance suits for odor, noise, and spray drift; safety hazards from increased traffic and people, and crop or livestock losses due to trespassing neighbors and their pets.

The longer-term impacts of siting incompatible land uses next to one another can be more substantial for agriculture on the rural-urban interface than for agriculture in undeveloped areas.

**Right to Farm**

Wisconsin's right-to-farm law is part of a national trend by states toward changing the common law to prohibit filing nuisance claims against agricultural operations. The common law of nuisance forbids individuals from using their property in a way that causes harm to others. A
private nuisance refers to an activity that interferes with an individual’s reasonable use or enjoyment of his or her property. A public nuisance is an activity that threatens the public health, safety or welfare, or damages community resources, such as public roads, parks and water supplies.

The purpose of right-to-farm laws is to encourage agricultural production and discourage land use conflicts between expanding livestock operations and their neighbors. They all seek to legislatively lift the threat of nuisance lawsuits by neighbors if the agricultural operation produces odor, noise, water pollution, or other nuisance-type conditions (as can be true with large livestock operations such as hog, dairy, and poultry confinements). Right-to-farm laws are designed to accomplish one or both of the following objectives: (1) to strengthen the legal position of farmers when neighbors sue them for a private nuisance; and (2) to protect farmers from anti-nuisance ordinances and unreasonable controls on farming operations. Right-to-farm laws are intended to discourage neighbors from suing farmers. They help establish farmers who use good management practices prevail in private nuisance lawsuits. They document the importance of farming to the state or locality and put non-farm rural residents on notice that generally accepted agricultural practices are reasonable activities to expect in farming areas.

**Land Use Trends**

The City of Fitchburg over the last couple decades has been losing considerable amounts of crop and pasture acres to development, woodlands, open space, or vacant space. Since 1980, over 4,000 acres have been taken out of crop and pasture use. The City has gone from having 71% of its land in crop and pasture use to 50% as of January 2010, though undeveloped land, as a group, has only gone from 84% in 1980 to 72% as of January 2010. Currently, 31% of the undeveloped area accounts for Other (woodlands, open space and vacant space) and 69% of the undeveloped area accounts for crop and pasture.

<table>
<thead>
<tr>
<th>Table 2: City of Fitchburg, Land Use 1980-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
</tr>
<tr>
<td>Acres</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Total Developed Area</td>
</tr>
<tr>
<td>Undeveloped Area</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Crop &amp; Pasture</td>
</tr>
<tr>
<td>Total Area</td>
</tr>
</tbody>
</table>


* Data as of January 1, 2010 Building Department Permit Report
** Includes land annexed and Dane County owned land and parcel deeded to the City of Fitchburg from the City of Madison near Hwy 14 and Syene Rd. Data was cleaned to account for errors and missing land use designations.

**Land Use Demand**

Based on the City of Fitchburg Comprehensive Plan Forecasted Land Use Demand, Chapter 4, and existing land use and building data, City Staff adjusted the forecasted land use demand for the City. It should be understood that the figures are estimates based off of 2000 and 2005 data figures and actual land use demand will most likely vary based on overall market conditions and
policies that the City may utilize to help assure that growth does not outstrip the ability to provide community services.

Table 3: Forecasted Land Use Demand

<table>
<thead>
<tr>
<th></th>
<th>2010-2014</th>
<th>2015-2019</th>
<th>2020-2024</th>
<th>2025-2029</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (du)</td>
<td>1,123</td>
<td>1,138</td>
<td>1,100</td>
<td>1,089</td>
<td>4,450</td>
</tr>
<tr>
<td>Residential (acres)</td>
<td>160</td>
<td>163</td>
<td>158</td>
<td>156</td>
<td>637</td>
</tr>
<tr>
<td>Business (acres)</td>
<td>58</td>
<td>57</td>
<td>58</td>
<td>57</td>
<td>230</td>
</tr>
<tr>
<td>Communication/ Utility/Inst. (acres)</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>47</td>
</tr>
<tr>
<td>Subtotal (acres)</td>
<td>229</td>
<td>232</td>
<td>228</td>
<td>225</td>
<td>914</td>
</tr>
<tr>
<td>Street (acres)</td>
<td>52</td>
<td>51</td>
<td>58</td>
<td>57</td>
<td>218</td>
</tr>
<tr>
<td>Storm Water (acres)</td>
<td>9</td>
<td>11</td>
<td>13</td>
<td>12</td>
<td>45</td>
</tr>
<tr>
<td>Park and Recreation (acres)</td>
<td>49</td>
<td>50</td>
<td>48</td>
<td>47</td>
<td>183</td>
</tr>
<tr>
<td>Total (acres)</td>
<td>339</td>
<td>344</td>
<td>347</td>
<td>341</td>
<td>1,371</td>
</tr>
<tr>
<td>Excess Acreage to 75 acres per year average</td>
<td>36</td>
<td>31</td>
<td>28</td>
<td>34</td>
<td>129</td>
</tr>
<tr>
<td>2010-2030 demand</td>
<td>375</td>
<td>375</td>
<td>375</td>
<td>375</td>
<td>1,500</td>
</tr>
<tr>
<td>5-year flexibility factor</td>
<td></td>
<td></td>
<td></td>
<td>375</td>
<td>375</td>
</tr>
<tr>
<td>Total (2010-2030)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,875</td>
</tr>
</tbody>
</table>

Source: Dane County Regional Planning Commission data and City of Fitchburg Planning

The Comprehensive Plan sets a maximum average development rate of 75-acres per year on a 5-year rolling average. The forecasted land use demand, based on projections, is below the maximum 5-year rolling average of 375 acres. Residential demand is based on the total residential units expected to be constructed at a net density of approximately 7 units per acre. Net density is defined as the number of dwelling units divided by the number of acres zoned residential. An estimated 6,581 dwelling units are projected to be built within the City of Fitchburg from 2000 to 2030 to accommodate an additional 12,402 persons. Currently, 2,131 dwelling units were constructed from 2000 through 2010, leaving 4,450 dwelling units to be forecasted over the next 20 years.

Demand for business uses is often quite variable since the labor force is difficult to project. If it is assumed that the City of Fitchburg will meet the employment demand of the community, which is unlikely with the surrounding major employment centers, we are able to project the business demand. The forecasted acres may vary depending on the floor area ratio of each new business.

Other land use factors generally follow past growth trends, except for park land. Park land was assumed to be dedicated at 65 percent of the required park space base, with the remainder to be covered by a fee in lieu of dedication. In addition, a new policy on park land dedication may reduce the acreage forecasted for park land.

Energy and waste management facilities will be based on regional planning, which may impact the City of Fitchburg, but should be planned to mitigate any disruption to the agricultural preservation.
Future greenfield development within the City will have an impact on the loss of agricultural land. The goals, objectives and policies within the Comprehensive Plan strive for compact, mixed use developments within the urban service area or future urban growth boundary, which will help mitigate the loss of agricultural land. With higher density residential developments and higher floor area ratio for businesses, less agricultural land is needed to accommodate the forecasted acreage.

Mapping
In assisting the Agricultural and Rural Affairs Committee and City staff map out the Farmland Preservation Area, the information was based off of the following maps:

**Future Urban Development Boundary**
The City of Fitchburg realized the importance of managed and orderly growth and established a future growth boundary, within the rural portion of the City, based on the following guidelines:

- It will be assumed that streams will be protected by a 75-foot or wider buffer zone, that wetlands within the current urban services area will be protected by a 75-foot or wider buffer zone, and that wetlands outside the current (2007) urban service area will be protected by a 300-foot or wider buffer zone.
- The proposed future urban development area (FUDA) boundary will favor development of land along the Fitchburg-Oregon rail corridor.
- The proposed FUDA boundary will favor protection of groundwater recharge areas.
- The proposed FUDA boundary will favor protection of high-quality agricultural lands.
- All parts of the current FUDA will be considered for inclusion in the proposed FUDA.
- The proposed FUDA boundary favors areas that can be sewered by gravity.

The boundary focuses the majority of the future development along the eastern rail corridor within the City and contiguous extensions from the existing urban service area (Figure 1). The future development boundary preserves the large contiguous Class I and II soils in the southwestern portion of the City bordering the Townships of Oregon and Verona.

The future urban development neighborhoods accommodate 50+ years of development within the City of Fitchburg based on the policy of limiting development to a maximum of 75 acres per year on a 5-year rolling average. Majority of the future neighborhoods are not planned for development within the next 15 years and are currently planned for agriculture and open space within the City of Fitchburg Comprehensive Plan. The existing urban service area and portions of the Northeast Neighborhood and North Stoner Prairie Neighborhood are potential areas to accommodate the 15 year development projections and are not included in the Farmland Preservation Area.

**Soils**
Farm productivity can be determined by using Prime Soil, Statewide Significant Soil and Soil Class (Figures 2, 3 and 4). Each method was used in determining the farm productivity of soil found in Fitchburg.
Prime Soil is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops (Figure 2). The land must also be available for crop land, pastureland, forest land, or other land, but not water. Prime farmland has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods.

Statewide Significant Soil is land other than prime farmland that is used for production of specific high-value food and fiber crops (Figure 3). It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or yields of specific crops. For example, farmland classified as significant may include soils used for apple orchards that are too steep and erodible to qualify for prime farmland. These categories of farmland are used in administering the Farmland Protection Policy Act and the Farmland Protection Program.

Land capability classification is a widely used system to classify soils for agricultural purposes (Figure 4). The system is based on the most intensive long term use for this land. The criteria used to classify Land Capability are slope, texture of soil, depth of soil material, and drainage. Soils are grouped according to their potentials and limitations, if any, for sustained production of common crops. This classification system places all soils in eight capability classes. With good soil conservation management, soils in Classes I, II, III, and IV are suitable for cultivation. Soils in Classes V, VI and VII with good soil conservation management are suited for pasture, woodland, and wildlife. Soils in Class VIII generally are non-productive for agricultural purposes and are recommended for wildlife habitat.

As a whole, Dane County leads the state in concentration of soils suitable for farming, which the City of Fitchburg mirrors. As the table below indicates, nearly 80 percent of the City of Fitchburg’s soils are in the top four soil classifications, which are suitable for cultivation.

<table>
<thead>
<tr>
<th>Soil Class</th>
<th>Acres</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>8,227.1</td>
<td>36.6</td>
</tr>
<tr>
<td>II</td>
<td>3,409.0</td>
<td>15.1</td>
</tr>
<tr>
<td>III</td>
<td>3,206.9</td>
<td>14.3</td>
</tr>
<tr>
<td>IV</td>
<td>2,973.8</td>
<td>13.2</td>
</tr>
<tr>
<td>Subtotal</td>
<td>17,807.8</td>
<td>79.2</td>
</tr>
<tr>
<td>V-VIII</td>
<td>4,686.3</td>
<td>20.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22,503.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Soil Class Shapefile, Dane County Land Information Office
Over the years, the quality agricultural soils within the City of Fitchburg were developed and converted to another land use. As of 2010, the City of Fitchburg still had over 11,000 acres of crop and pasture land, which was 50 percent of the City. The table below indicates that over 92 percent of the crop and pasture land within the City of Fitchburg in 2010 was within the top four soil classifications, which are highly suitable for cultivation.

<table>
<thead>
<tr>
<th>Soil Class</th>
<th>Acres</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>5,201.9</td>
<td>46.3</td>
</tr>
<tr>
<td>II</td>
<td>2,049.6</td>
<td>18.2</td>
</tr>
<tr>
<td>III</td>
<td>1,614.7</td>
<td>14.4</td>
</tr>
<tr>
<td>IV</td>
<td>1,532.4</td>
<td>13.7</td>
</tr>
<tr>
<td>Subtotal</td>
<td>10,398.6</td>
<td>92.6</td>
</tr>
<tr>
<td>V-VIII</td>
<td>827.6</td>
<td>7.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>11,226.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Soil Class Shapefile, Dane County Land Information Office

**Existing Land Use**

The Existing Land Use Map (Figure 5) indicates all residences, commercial and industrial developments, and agricultural and open space land uses. This map was derived from the 2007 aerial photograph, visual surveys and building department permits.

**Existing Zoning**

The Existing Zoning Map (Figure 6) shows all zoning districts currently on record within the City. The existing land use may be different from the existing zoning if a property has yet to be developed. The existing zoning is the regulation tool for controlling the development that may occur on the property.

**Natural Resources**

The Natural Resources Map (Figure 7) depicts the environmental corridors within the City that are restricted or limited from being developed. The environmental corridors consist of wetlands, floodplains, streams, associated buffers, conservation easements and parks. The map also shows the heritage, specimen and potential specimen trees that have been identified within the City, that are to be protected from future development.

**Planning**

The Farmland Preservation Plan Map (Figure 8) is presented as an illustration of the policies of the farmland preservation plan and the comprehensive plan. The Farmland Preservation Plan Map is to be consistent with the Future Land Use Map within the City of Fitchburg’s Comprehensive Plan. Any amendment to policy or the map will have to be consistent among both plans. The amendment process will follow that which is established within the Comprehensive Plan, which consists of, at a minimum, one meeting held by relevant committee(s) in regard to the amendment, one community comment period to receive written comments by the public, one governing body review process of written comments and one public hearing.
The Farmland Preservation Plan Map has 7 different districts identified, which three districts are for farmland preservation lands and four districts are for existing and future development. The main features of these plan districts are as follows:

**Farmland Preservation Districts**

**Agricultural Preservation Area I**
The Agricultural Preservation Area I category includes agricultural uses, including farm buildings and residences of the primary farm owners, some other limited single residences, Wisconsin Department of Natural Resources (WDNR) wetlands, open water and private open space that is outside of the City of Fitchburg’s future urban development boundary and planned for contiguous preservation. This area was determined by the 1980 Farmland Preservation Plan, soil capabilities and the Future Urban Development Boundary process described above.

**Agricultural Preservation Area II**
The Agricultural Preservation Area II category is similar to the Agricultural Preservation Area I, except the City has identified land within defined neighborhood boundaries to be studied for potential development as part of the Future Urban Development Boundary. Land within this category is beyond the 15-year time frame for nonagricultural development and in some locations beyond a 50-year time frame. Every 10 years when the Farmland Preservation Plan is updated, portions of this category are projected to be re-categorized as Future Growth Area to accommodate the 15-year forecasted land use demand.

**Resource Protection Areas Overlay**
The Resource Protection Areas Overlay category includes floodplains, wetlands, and open waters that are protected from all development. Agricultural best practices are encouraged to be used within the resource protection areas to mitigate the negative impacts that may occur from an agricultural operation. The combination of agricultural preservation and resource protection area act as a rural environmental corridor protecting the natural resources outside of the urban service area.

**Existing and Future Development Districts**

**Urban Service Areas**
The Urban Service Area category is served by public water, sanitary and storm sewer to allow for higher densities, high efficiency and less sprawl. Developments within the urban area are a mix of residential development – low density, medium density and high density with mixed use, commercial, business and industrial developments. This area includes both existing urbanized development and potential greenfield development.

**Future Growth Areas**
The Future Growth Area is potentially planned to accommodate development within the next 15 years, however it is currently located outside of the existing Urban Service Area boundary. If the demand for development to expand outside the existing urban service area occurs within the 10-year certification period of the Farmland Preservation Plan, expansion would occur within this designation.
Rural Residential
The Rural Residential category includes existing single-family detached dwelling unit structures located outside the current urban service area in rural subdivisions or clustered along a rural road. These sites are characterized by small parcel sizes and have been zoned for rural residential property which may include small hobby farms.

Rural Development
The Rural Development category includes single-family housing, utility substations, existing quarries, and commercial uses that have developed in the rural areas, but is mainly intended for commercial uses that support agricultural production.

Implementation
The Farmland Preservation Plan is the first step in identifying the areas to preserve farmland and promote agricultural development, but it is the actions and policies that the City will use that helps implement the preservation plan.

Comprehensive Plan
The Comprehensive Plan contains data and background information on the numerous resources and services of the community, including land use, economic development, natural, cultural and agricultural resources, housing, public facilities, utilities and transportation. The Plan also identifies the goals, objectives and policies that will help determine the City’s use of resources and guide decisions for future development and preservation within the City of Fitchburg. All City actions on land division regulation, zoning and official mapping must be consistent with the Comprehensive Plan.

The Land Use section of the Comprehensive Plan focuses development in areas that can be serviced by public water and sewer, away from high quality agricultural land and within the City’s planned growth areas. Development within the urban service area is to be a mix of residential development, with a past density trend of 7.4 dwelling units per acre, commercial, business and industrial areas.

Rural Development Criteria
The City of Fitchburg permits development outside of the urban service area; however it is to follow the Rural Development Criteria. The purpose of the criteria is to site rural development in a manner that is appropriate in regard to community standards, preservation of agricultural land and limiting sprawl and to limit the number of new developments occurring in the rural area. Utilizing 1979 as the base year, a rural landowner has a potential development claim for every contiguous 35 acres under control of common ownership whether or not separated by streets, highways, or railroad rights-of-way. The criteria further restrict the number of claims to be used under the siting criteria, with the remaining claims to be used in a rural cluster. This policy has been effective in the preservation of large contiguous parcels of agricultural land,
while offering rural landowners an option to build a home for a family member or to sell a residential lot for income.

**Rural Clusters**
The City of Fitchburg is currently studying and creating a Rural Cluster program that will provide an alternative to individual residential lots in rural areas that provides for smaller lots and preservation than under the Rural Development Criteria within the Comprehensive Plan.

**Conceptual Park and Open Space Proposal**
The Conceptual Park and Open Space Proposal was developed as a comprehensive study of Fitchburg’s natural, historical, and cultural resources. The proposal identifies large areas and corridors outside of the 2009 urban service area that should be considered for preservation based on the environmental, historical, and cultural significance. Implementation of this proposal is based on funding and the willingness of landowners who wish to sell or donate land or development rights, though some designated areas could be protected while remaining in private ownership. The proposal is adopted as a part of the Comprehensive Park, Open Space and Recreation Plan.

Certain areas of the Agricultural Preservation are also part of the Conceptual Proposal. The implementation of the Conceptual Park and Open Space Proposal will need to be cognizant of existing and long-term agricultural operations when locating active recreation areas versus passive. Areas with prime agricultural soils should be preserved for agricultural uses within the Conceptual Proposal, which may constitute working farms, community gardens, orchards or other passive open space preserved (Fitchburg Comprehensive Park, Open Space and Recreation Plan, 2010).

**Agricultural Zoning**
The Zoning Code is the most efficient implementation tool in controlling the preservation of agricultural land and limiting land use conflicts. The City of Fitchburg currently has two certified zoning districts, Exclusive Agriculture (A-X) and Transitional Agriculture (A-T) that meet the existing standards to participate in the Farmland Preservation Program.

To meet the new provisions within the Working Lands Initiative, that restricts land outside of the farmland preservation boundary from being zoned certified agriculture, the City is proposing to amend the agriculture zoning districts.

The City of Fitchburg is proposing to keep Exclusive Agriculture (A-X) as the only certified agricultural district. Transitional Agriculture (A-T) will not be certified and will be for lands that are outside of the farmland preservation area, but are proposed to be developed within the next 15 years. To maintain large contiguous parcels of agricultural land, the minimum lot size for the A-X and A-T districts is 35 acres.
The City of Fitchburg in October 2010 added a new agriculture zoning district, Small Lot Agriculture (A-S), for parcels under 35 acres. The A-S district is intended to be applied to areas where smaller agricultural parcels are part of a contiguous agricultural block of land and non-agricultural development would be incompatible with agricultural uses, premature or inconsistent with the comprehensive plan. It is also intended to ensure that urban agriculture and community gardens in the urban service area are located to meet the needs for local food production. The district is not intended for residences and will not qualify for Farmland Preservation Credit.

**Wetland and Floodplain Zoning**

The City of Fitchburg Zoning Ordinance contains Wetland and Floodplain overlay zoning districts, which are state-mandated provisions to restrict or limit development within the respective boundaries. Certain areas of the overlay correspond with agriculture zoning for additional protection.

**Land Division**

The City of Fitchburg Land Division Ordinance, in compliance with Chapter 236 of the Wisconsin Statutes, regulates and controls the division and development of land within the City to further the orderly layout and appropriate use of the land consistent with the Comprehensive Plan. All land divisions not creating more than 4 parcels in less than a 5-year period requires the recommendation of the Plan Commission, the approval of the Common Council, and recording of a certified survey map. The certified survey map shall include the entire parcel owned by the subdivider/land divider. If an applicant is creating more than 4 lots in less than a 5-year period, a preliminary and final plat is required. The Comprehensive Plan currently prohibits the creation of rural subdivisions outside the urban service area unless allowed in a planned rural cluster.

The review of all land divisions allows the City to manage the number of lots that are being created in the rural area, not to fragment the parcels and disrupt the existing agricultural uses. All land divisions are required to be consistent with the Comprehensive Plan and to meet the dimensional standards of the associated zoning district.

**Farmland Preservation Tax Credit**

The Wisconsin Working Lands Initiative provides landowners with an opportunity to claim farmland preservation tax credits through participation in the Farmland Preservation Program. These tax credits are income tax credits that are applied against tax liability to landowners who meet eligibility requirements and their land is zoned certified agriculture within a farmland preservation area or they have entered into an agreement and are located in a designated agricultural enterprise area.

**Agricultural Use Value Assessment**

During the past several years the State of Wisconsin has moved to assessment of agricultural land, regardless of its zoning, based on its use as agricultural land, which has resulted in a tax shift to non-agricultural landholders. The City of Fitchburg was one of the only incorporated municipalities to support the agricultural use assessment rule at the state legislature. Fitchburg’s support was provided based on the potential ability to lower taxes on farm land, the value that is
placed on rural agricultural land as a valued open space commodity in the City of Fitchburg. The City believed the tax shift was important to recognize the value of such a land use in the City, and the shift now causes urban users to pay a greater amount of taxes than would have been the case.

**Development Rights**

The City of Fitchburg currently does not have a program developed to assist in the purchase or transfer of development rights and a study done in 2008 failed to move forward. Policy makers within the City feel that such a program would assist the rural landowners. Landowners outside of the Future Urban Growth Boundary may have inaccessible assets in land and the purchase or transfer of development rights may assist landowners to access part of that value. The income they receive from the TDR or PDR program may be used to invest in their farm operation or to compensate them when they sell their land at a rate that is affordable to new or expanding farmers. A policy is set within the Comprehensive Plan to consider the creation or variations of a program to compensate rural landowners who may be outside of the long-term growth boundary. If other agencies are willing to purchase development rights within the City, areas to be targeted for the purchase or transfer of development rights are those lands designated as Agricultural Preservation Area I. These lands provide for contiguous agricultural land and have been designated as the key areas based on location, soil capability, and growth demand.

**Agricultural Enterprise Areas**

An agricultural enterprise area is an area of contiguous land primarily in agricultural use that has been designated by the Department of Agriculture, Trade and Consumer Protection (DATCP) in response to a locally developed petition. Eligible farmers in a designated area have the opportunity to enter into a voluntary farmland preservation agreement with DATCP to keep their land in agricultural use for 15 years and in return receive income tax credits. The agricultural enterprise area serves as a long-term temporary preservation area, in assisting to advance other agricultural preservation and agricultural development goals and policies.

**Agriculture & Rural Affairs Committee**

The Agriculture and Rural Affairs Committee acts as an advisory committee to the Plan Commission. The committee is in charge of helping implement the Farmland Preservation Plan by studying the potential future of agriculture in Fitchburg, recommending areas to be preserved for agriculture, studying and recommending potential compensation programs to landowners in areas designated for agricultural preservation, and reviewing and making recommendations on all rezoning requests on property zoned A-X or A-T. The committee also acts as a voice for the rural community in helping educate and distribute materials on agricultural practices and new programs.

**Financial Tools**

**PACE Program**

The PACE (purchase of agricultural conservation easements) program provides state funding for the purchase of agricultural conservation easements. The Department of Agriculture, Trade and Consumer protection (DATCP) will provide funding to cooperating local entities for the
purchase of easements from willing landowners. Local entities purchase the easements and may be reimbursed for up to 50 percent of the easement cost by the PACE program. The state and local entities will then be co-holders of the easement. PACE funded easements are intended to strengthen areas that have been planned and designated as local farmland preservation areas in a certified county farmland preservation plan. A future implementation of a city purchase of development rights program would supplement the PACE program in possibly securing matching funds.

**Revolving City Loan Fund**

The City of Fitchburg provided $375,000 to the Fitchburg Community & Economic Development Authority to capitalize a revolving loan fund. These funds will be available to existing businesses and prospects planning to locate in Fitchburg. The goals of the program are:

- To encourage a proactive and positive business climate
- To expand and diversify the tax base
- To facilitate existing business expansions
- To assist small businesses and start ups
- To target clean industries, especially high tech manufacturers, research and development companies, and businesses that export
- To attract new businesses to Fitchburg
- To promote a diverse mix of employment opportunities that offer good wages and comprehensive benefit packages.

Agricultural businesses are able to apply for a loan through the revolving loan fund. Loan amounts can range from $10,000 to $50,000 and would have a fixed term interest rate, which may range from zero during a period of deferred but capitalized interest market rate defined as the prime rate of interest as published in the Midwest edition of the Wall Street Journal plus 2 percent.

**Farm Service Agency – Loan Program**

The United States Department of Agriculture (USDA) Farm Service Agency offers numerous loan opportunities from direct farm operating loans, direct operating loans, emergency loans, beginning farmers and rancher loans and socially disadvantaged farmers, ranchers and youth loans.

**NRCS Conservation Programs**

NRCS’s natural resources conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters. Public benefits include enhanced natural resources that help sustain agricultural productivity and environmental quality while supporting continued economic development, recreation and scenic beauty. Programs include conservation technical assistance, environmental improvement, stewardship, water resources, easements, community assistance, and technical processes (NRCS, 2010).
References


Dane County Land Information Office. 2006. <http://www.co.dane.wi.us/lio/>


Appendix: Maps

Figure 1 – Future Urban Development Boundary

Figure 2 – Prime Soil

Figure 3 – Statewide Significant Soil

Figure 4 – Soil Class

Figure 5 – Existing Land Use Map

Figure 6 – Existing Zoning Map

Figure 7 – Natural Resources Map

Figure 8 – Farmland Preservation Plan Map for the City of Fitchburg (Entire City)

Figure 8a – Farmland Preservation Plan Map for the City of Fitchburg (Northwest Quadrant)

Figure 8b – Farmland Preservation Plan Map for the City of Fitchburg (Northeast Quadrant)

Figure 8c – Farmland Preservation Plan Map for the City of Fitchburg (Southwest Quadrant)

Figure 8d – Farmland Preservation Plan Map for the City of Fitchburg (Southeast Quadrant)