

COMPREHENSIVE PLAN DODGE COUNTY, MN

Adopted: 9-10-2019



AN IN-DEPTH ANALYSIS OF COUNTY-WIDE GOALS AND ASPIRATIONS
COMMISSIONED BY THE DODGE COUNTY BOARD OF COMMISSIONERS

REPORT PROUDLY COMPLETED AND SUBMITTED BY:



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DODGE COUNTY
 Historic. Vibrant. Rural.

Introduction

Forward

It was in 1853 that government surveyors set lines for the townships. A year later, the Mantor brothers, along with Eli P. Waterman, established their claims, which would later become the town known as "Mantorville." In 1855, Dodge County was organized for local government. Dodge County was officially placed in the Fifth Judicial District by the State Constitution on May 11, 1858. Its name was given in honor of Wisconsin governor Henry Dodge. The Dodge County Courthouse, designed by E. Townsend Mix and built of locally quarried limestone in 1865, is the oldest working courthouse in Minnesota.

Authority

In Accordance with Minnesota Statute 394.23, Dodge County has the authority to create a comprehensive plan. This plan includes goals, recommendations, and objectives to help guide the future of the county.



What a Comprehensive Plan Is

The comprehensive plan, sometimes called the master plan or general plan, is an official public document adopted by the Dodge County Board of Commissioners, that serves as a vision statement of the county's goals and policies. The plan establishes policies and procedures relating to the county's future growth, including new development of land. The plan represents the collective input of public and private sector attitudes, needs, and desires. Its recommendations are based on a detailed analysis of economic, social, demographic, and other forces evident in the community. In that the plan attempts to provide an adopted "vision" of the community for some distant point in time, the comprehensive plan provides valuable guidance for those making important economic decisions, including local officials, land developers, existing and prospective residents, employees, and business operators.

Although the contents of comprehensive plans vary, the Dodge County Comprehensive Plan includes the four most common technical elements. First is a demographic inventory. That shows the characteristics of the county's residents at the time the plan is drafted. Second and third are policies and implementation steps. The policies provide official positions reflecting the desires of county residents and officials regarding the various sections of the plan and they lay the groundwork for decision making process. The implementation steps provide actionable items relating to the identified policies. Finally, nearly every plan includes land use mapping.

Comprehensive Plans look beyond pressing current issues to gain a perspective on issues and opportunities in the future. This Comprehensive Plan looks well into the future in depicting future land-use patterns.

What a Comprehensive Plan Is Not

The Comprehensive Plan is often confused with several other documents, including zoning ordinance, zoning map, subdivision regulations, the capital improvements plan, building and fire codes. These are specific and detailed documents that are intended to implement the goals and policies of a comprehensive plan. Particularly confusing is the misperception of the roles of zoning regulations and the land use or growth and development section of a comprehensive plan. Both deal with ways to use privately owned land. The plan, however, indicates only broad categories for future land use in a county, whereas, a zoning map delineates the exact boundaries of zoning districts, and zoning ordinance specifies the detailed regulations that apply to those districts.

Why a Comprehensive Plan Is Needed

The county government has a great deal of influence on land use within its jurisdiction. The services, facilities and improvements provided or regulated by county government affect the daily lives of the citizens. They give form to the county and stimulate and direct the use of privately owned land.

In the unincorporated areas of Minnesota, the county government is typically the body with the most opportunity to coordinate the overall pattern of physical development. This is as it should be because a board of county commissioners makes county government decisions that represent the county at large.

Therefore, county government often needs technical guidance in making these land use decisions. The planning commission can provide this guidance with assistance from professional staff planners. The Comprehensive Plan is the tool that establishes long-range general policies based on community input.

The plan is a way to present them in a coordinated, unified manner, which can be continually referred to in decision making.

Why Comprehensive Planning is important to Dodge County

Dodge County must take full advantage of its dynamic growth opportunities while preserving its distinctive quality of as a rural county. This document is designed to communicate the vision of the community regarding its future. It is a future that is based on taking actions that will position the County to take full advantage of its growth prospects.

The goal of all this effort is to compile recommendations for the development of the physical form of Dodge County and provide recommendations for the social and economic development of the county.

A county-wide survey was completed and open input meetings were held in each city and each township. Through the input meetings and survey the following philosophies were identified.

- Encourage input and participation from the residents
- Maintain county's rural values and character
- Protect prime agricultural land
- Grow and sustain a diversity and housing options
- Provide increased opportunity for business growth and increased jobs
- Support improved access to quality broadband in the rural areas of the County
- Increase recreational opportunities
- Allow for growth without jeopardizing clean air and water
- Improve and maintain transportation infrastructure

The county's planning process does not end with the adoption of this document. Planning is an ongoing process used to promote orderly growth and development through objectives established in this plan. The Plan will continue to evolve after it is officially adopted. Fine-tuning the Plan through later amendments will ensure that this document remains a reflection of the values of the county's residents.

The county should review this Plan as an advisory document, not only for planning and zoning, but also to all other boards, commissions, County Board of Commissioners and citizens. The purpose of the plan is to become an over-arching guide for decision-making related to the physical, social, and economic development for the county over the next decade. The value of this plan can only be realized to the diligent efforts of county officials and residents.

Dodge County
Comprehensive Plan
Executive Summary

Overview

Dodge County adopted its first comprehensive plan in 1970. The plan was updated in 1993 and again in 2001. The 2018 Comprehensive Plan is the third update and revision.

The goal of all this effort is to define policy and action to guide future development of the physical form of Dodge County and the social and economic development of the county.

A county-wide survey was completed and open input meetings were held in each community and each township. Through the input meetings and survey the following philosophies were identified.

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- Improve and maintain transportation infrastructure

The Comprehensive Plan describes projected trends that will affect land use and drive social and economic development in the county. The primary trends and events identified are:

- Increasing population
- Aging and increasingly diverse population
- Highway 14 expansion
- Continued consolidation of farming
- Growth and job opportunities associated with Rochester metropolitan area and Mayo Clinic
- Increasing demand for solar and wind energy
- Increasing demand for "homes on acreages" outside city limits
- Increasing demand for home-based occupations
- Climate change projected to increase severity of flash flooding and heat waves
- Increasing demand for recreational opportunities
- Increasing demand for commuter options to Rochester including mass transit
- Planned reclamation and development of Stussy Quarry

The following summarizes policy and action steps Dodge County will follow to manage growth in a manner that accounts for the core philosophies and anticipated trends.

Housing

Policy:

Continue with “Smart Growth Principles” adopted in the 2001 Comprehensive Plan and;

Promote quality responsible housing options by:

1. Maintaining buffers between residential land uses and agricultural or industrial land uses.
2. Education of the public about traditional agricultural practices and the effects of living next to farming operations to minimize conflicts.
3. Preserving prime agricultural lands by limiting residential development in the agricultural district and promoting development to occur where infrastructure exists to support the development.

Ten Year Implementation Plan

1. Reassess comprehensive plan housing section upon completion of Dodge County Housing Study
2. Amend Zoning Ordinance to satisfy Policy as needed.
3. Reconsider the recommendations of the Land Use Task Force (2005-2008) regarding alternatives for allowing higher residential densities in some parts of the Agricultural District, a “2nd Agricultural District”, and similar methods to protect Prime Farmland but accommodate for residential development.
4. Update County-wide housing study every 10 years at maximum to stay informed on current demand and gaps in the County’s housing market.
5. Continue to encourage additional independent and/or assisted living housing development, in areas served by city water and sewer, to accommodate growth in aging population.

Economic Development

Policy:

1. Support agriculture business
2. Support the growth of manufacturing
3. Support efforts for business retention

Ten Year Implementation Plan

1. Conduct regular business retention and expansion visits.
2. Catalog, update and promote available commercial and industrial sites throughout the County
3. Form Council of Governments and meet regularly to discuss land-use and growth issues and Opportunities.
4. Update County-wide housing study to identify gaps in workforce housing market.
5. Explore and identify programs to assist with additional recreational opportunities for County residents and visitors such as parks and bike trails.
6. Identify and promote resources to support ag business growth and retention

Transportation

Policy:

Maintain a quality and effective transportation system through:

1. Implement/maintain access management practices throughout Dodge County. Access management aids in reducing the number of conflict points and, thereby, reduces the overall number of crashes. There is a direct relationship between the number of access points and the crash rate. Access management can have a reduction in annual crashes of 40 percent; the level of service during peak hour traffic is improved; and roadways with access management perform better in terms of retail sales than surrounding communities with no access control.
2. Develop a set of classification criteria that is tailored to the characteristics of the County roadway system. Then develop a functional classification system for all County roads and County state aid highways.
3. Preserve adequate right of way to accommodate future reconstruction and improvements as Development/redevelopment occurs adjacent to County roads.
4. Preserve and/or consider officially mapping right of way to accommodate future interchanges Along Trunk Highway 14. Future land use conflicts and costly acquisitions can be minimized and even avoided by preserving right of way for transportation improvements.
5. Consider jurisdictional classification changes to low volume County roads. Several County roads have extremely low Average Daily Traffic volumes and should be considered candidates for future jurisdictional classification changes. For current ADT volumes see <http://www.dot.state.mn.us/traffic/data/maps-county-alpha.html>
6. The County should support and encourage private companies and local units of government in carrying out travel demand management strategies. This might include cooperating with local units of government in establishing additional park and ride lots, working with local transit providers in providing additional public transit routes and with private employers in their individual efforts.
7. The County should provide support to the Dodge County Trail Association and local units governments in establishing additional bicycle and pedestrian ways such as the proposed Stagecoach Regional Trail and the Iron Horse Trail, and to coordinate the orderly continuation of existing facilities in developed urban areas.
8. Maintain open lines of communication with the townships of Ashland, Canisteo, Claremont, Concord, Ellington, Hayfield, Mantorville, Milton, Ripley, Vernon, Wasioja, and Westfield in planning for future transportation issues.
9. Consider implementing programs aimed at preserving and enhancing the natural roadway/road ditch and built environmental features. Also, consider programs/practices to enhance the health and diversity of wildlife populations, encourage developers of private and public lands to retain natural areas or restore them with native species after construction, and encourage practices recommended by DNR: DNR's Best Practices for protection of species and Roadways and Turtles Flyer for self-mitigating measures to incorporate into design and construction plans. Other related programs may include Scenic Wildflower Routes and/or Roadsides for Wildlife. Furthermore, environmental impacts for specific projects should be thoroughly evaluated on a per project basis as part of the environmental documentation process.

Ten Year Implementation Plan

1. Update County Transportation Capital Improvement plan as needed. The current plan can be found on the County's website.
2. Continue to work with the State for the expansion of Minnesota Highway 14, including space for (and or development of) a trail corridor on the back slope between Dodge Center and Owatonna.
3. Regularly examine County commute patterns and determine if additional mass transit options are needed based on population growth in Dodge County and job growth in Rochester.
4. Continue to support the Dodge Center Airport.
5. Expand non-motorized trail system options in the County. Work with Department of Natural Resources to access possible funding and/or technical assistance for these projects.
6. Continue to support "Safe Routes to School" planning and implementation.

County Property

Policy:

Evaluate County facility needs by:

1. Quantity of improvements needed
2. Demand for improvements considered
3. Inventory of existing facilities

Ten-year Implementation Plan:

1. Update capital improvement plan each year
2. Conduct energy assessments on all County facilities
3. Continue sustainable regional partnerships (e.g. Olmsted County) in waste management.
4. Prepare a long-range plan for the County Fairgrounds that addresses future use, facilities, and location.

Broadband and Communication Technology

Policy:

Promote access to quality broadband for all of the County's residents by:

1. Communicating with existing private broadband providers to discuss challenges to provide broadband service to the rural areas of the County
2. Identify opportunities to access State and Federal funding programs to assist in broadband projects.

Ten Year Implementation Plan

1. Identify key stakeholders and convene a meeting with broadband providers.
2. Consider formation of Dodge County Broadband Taskforce
3. Facilitate public input meetings to help define demand for improved broadband access.
4. Support communication infrastructure needs for emergency services throughout the County.

Natural Resources and Environment

Policy:

Protect natural resources through:

1. Enforcement of regulation
2. Implementation of Water Management Plan
3. Public education and technical assistance, and
4. Zoning standards that:
 - a) Promote “*smart growth principles*” defined in 2001 County Wide Comprehensive Plan,
 - b) Protect prime agricultural soils, significant natural areas, important aggregate resources, drinking water aquifers, wetlands, floodplains, public waters, and other vital resources.

Ten-year Implementation Plan:

1. Amend Zoning Ordinance to satisfy Policy as needed.
2. Participate with other local governments in the development and implementation of watershed-based Water Management Plans (One Watershed-One Plan).
3. Consider including in the Zoning Ordinance, a Groundwater Protection Overlay District to protect drinking water in areas that are most susceptible to contamination as outlined in attached Concept Paper - **Exhibit 6.a**.
4. Consider including in the Zoning Ordinance protection standards, or an Overlay District, designed to protect Highly Desirable Sand and Aggregate Deposits as identified in DNR’s Aggregate Resources Maps.
5. Consider limiting air quality impacts by prohibiting burning of trash
6. Work with MN Department of Agriculture on implementation of their Nitrogen Management Plan.
7. Consider establishing Wetland Preservation Areas to promote preservation and restoration of high-valued wetlands that maintain and improve water quality as allowed by the Wetland Conservation Act.
8. Make use of new Geologic Atlas to educate public and to help set policy to achieve goals of adopted plans.
9. Provide assistance to landowners wishing to voluntarily reduce pollution impacts.
10. Review DNR’s Rare Features Map, Native Plant Community Map, and Wildlife Action Network Map when reviewing zoning permit applications.

Recreation Opportunities and Tourism

Policy

Continue policies and goals adopted in the 1993 Comprehensive Plan.

The 1993 Comprehensive Plan adopted a goal to provide recreational opportunities for county residents and for stimulating tourism. Approved policy called for developing agreements with public agencies for joint development of recreational facilities. The policy also called for coordinating planning activities to provide a hiking and biking trail system within the County.

Ten-year Implementation Plan:

1. Dodge County EDA will facilitate discussion and action needed to implement the Master Plan for the Stagecoach State Trail.
2. Dodge County EDA will facilitate discussion with owners of Stussy Quarry, City of Kasson, City of Mantorville and Township of Mantorville regarding the restoration of the quarry and associated public recreation opportunity.
3. Dodge County will request the DNR to complete a Biological Survey to identify important natural communities that may serve as possible public Scientific and Natural Areas or Wildlife Management Areas.
4. Dodge County will seek to increase public access to Public Waters for recreational purposes in connection with the State Water Trail system.
5. Dodge County EDA will coordinate public education to inform citizens of available recreation areas and promote tourism.
6. Dodge County will promote and encourage the acquisition and management of public lands.
7. Dodge County will consider amending the zoning ordinance to encourage connectivity of open space in subdivision and public open space.
8. Consider organizing a formal “Parks and Recreation” function within the county with a dedicated budget, long range goals, and annual work plan.

History and Culture

Policy

The 1970 Comprehensive plan included a policy stating “historic preservation and restoration shall be continued in Wasioja and Mantorville and development in restoration areas shall conform to established historic styles and architecture”.

A high priority goal identified in the 2001 Comprehensive Plan was the “preservation of significant historic sites (close to 30 platted ghost towns and 81 school districts)”.

An approved policy of the 2001 Comprehensive Plan is: “Dodge County will consider policies or amendments to the County Zoning Ordinance to include language that addresses the preservation and protection of historical assets that reflect standards suggested by the Minnesota State Historic Preservation Organization, while considering other local area factors”

Ten-year Implementation Plan:

1. Consider amendments to the County Zoning Ordinance to include language that addresses the preservation and protection of historical assets that reflect standards suggested by the Minnesota State Historic Preservation Organization, while considering other local area factors.
2. Dodge County will encourage the Dodge County EDA, Dodge County Historical Society, and partners to:
 - Increase awareness of the social and economic value of historic preservation.
 - Encourage the arts in community development plans throughout the county.
 - Promote the cultural heritage and highlight the importance of century old farm homesteads.
 - Preserve older and historic structures, landscapes, and features in order to provide a sense of identity.
 - Encourage the revitalization and maintenance of historic structures.

- Encourage the collection of artifacts at archaeological sites during excavation for new construction and consider alternative development patterns if necessary.
- Seek funding and cooperation from the private and nonprofit sectors to assist with historic preservation and cultural outreach projects.
- Promote initiatives furthering the arts and culture as part of community development.
- Publicize the success of preservation efforts and encourage similar actions.
- Promotional and educational activities can increase the public's awareness. These activities can make a critical difference in the effectiveness of any historic preservation efforts.
- Support existing historical districts

Land Use and Growth Management

Policy

Continue the goals and policy defined in the 2001 Comprehensive as follows:

- Dodge County intends to amend the County Zoning Ordinance to include districts that protect agriculture, forest areas, significant natural areas, and vital natural resources.
- Dodge County intends to practice “smart growth principles” including:
 - ✓ Make efficient and effective use of land resources and existing infrastructure by encouraging development to areas with existing infrastructure or capacity to avoid costly duplication of services and costly use of land.
 - ✓ Provide a mix of land uses to create a variety of housing choices and opportunities.
 - ✓ Make development decisions predictable, fair, and cost-effective.
 - ✓ Provide a variety of transportation choices including pedestrian friendly neighborhoods.
 - ✓ Maintain a unique sense of place by respecting local, cultural, and natural environmental features.
 - ✓ Conserve open space and farmland and preserve critical environmental areas.
 - ✓ Encourage stakeholder collaboration and community participation rather than conflict.
 - ✓ Provide staged and managed growth in urban transition areas with compact development patterns.
 - ✓ Enhance access to equitable public and private resources for everyone.

- ✓ Promote the safety, livability, and revitalization of existing urban and rural communities.

Ten-year Implementation Plan:

1. Meet regularly with cities and townships to discuss land use plans in joint effort carry out growth policies and realize opportunities.
2. Amend Zoning Ordinance to reflect current and future urban growth areas identified in approved city plans and/or annexation agreements with townships.
3. Set specific ordinance criteria and limitations on/for rezoning requests.
4. Implement protections through agricultural preservation districts, transfer of development rights, or other options to protect prime farmland.
5. Review and modify allowable uses in specific zoning districts for compatibility with district purpose.
6. Review criteria and performance standards for home occupations, solar energy systems dwelling density, and other uses to address potential issues of incompatibility with the purpose of Agricultural Zoning District.
7. Reconsider the recommendations of the Land Use Task Force (2005-2008) regarding alternatives for allowing higher residential densities in some parts of the Agricultural District, a “2nd Agricultural District”, and similar methods to protect Prime Farmland but accommodate for residential development.
8. Amend County zoning ordinance to be consistent with Dodge County Airport plans and operation.
9. Continue to work with Townships that currently have Township Zoning Ordinances; with goals of consistency, efficiency, and compatibility with County Zoning ordinance and procedures.
10. Consider a zoning overlay district, or similar action, that will protect planned transportation infrastructure from encroachment of non-compatible uses.

Demographics

Population

Figure 1. Dodge County Population Estimates

| | Dodge County, MN |
|----------------------|------------------|
| Population (2016*) | 20,506 |
| Population (2010*) | 20,087 |
| Change in Population | 461 |
| Percentage Change | 2.1% |

*Minnesota State Demographic Center

As figure one illustrates, the population has shown growth in Dodge County from 2010 to 2015. However, its rate of growth at 2.3% is lower than the national growth rate of 4.1% for the same time.

Figure 2. Dodge County Preliminary 2017 Population and Household Estimates

| Dodge County, Minnesota | Total Population | Household Population | Group Quarters | Number of Households | Persons Per Household |
|-------------------------|------------------|----------------------|----------------|----------------------|-----------------------|
| Ashland Twp | 303 | 303 | | 119 | 2.55 |
| Canisteo Twp | 647 | 647 | | 238 | 2.72 |
| Claremont Cty | 540 | 540 | | 220 | 2.45 |
| Claremont Twp | 452 | 452 | | 166 | 2.72 |
| Concord Twp | 578 | 578 | | 224 | 2.58 |
| Dodge Center Cty | 2,758 | 2,702 | 56 | 1,037 | 2.61 |
| Ellington Twp | 260 | 260 | | 101 | 2.57 |
| Hayfield Cty | 1,344 | 1,300 | 44 | 555 | 2.34 |
| Hayfield Twp | 474 | 470 | 4 | 163 | 2.88 |
| Kasson Cty | 6,414 | 6,387 | 27 | 2,414 | 2.65 |
| Mantorville Cty | 1,232 | 1,229 | 3 | 445 | 2.76 |
| Mantorville Twp | 1,976 | 1,976 | | 662 | 2.98 |
| Milton Twp | 746 | 746 | | 272 | 2.74 |
| Ripley Twp | 199 | 199 | | 76 | 2.62 |
| Vernon Twp | 686 | 684 | 2 | 246 | 2.78 |
| Wasioja Twp | 912 | 906 | 6 | 342 | 2.65 |
| West Concord Cty | 780 | 773 | 7 | 322 | 2.40 |
| Westfield Twp | 461 | 461 | | 168 | 2.74 |
| Totals | 20,762 | 20,613 | 149 | 7,770 | 2.65 |

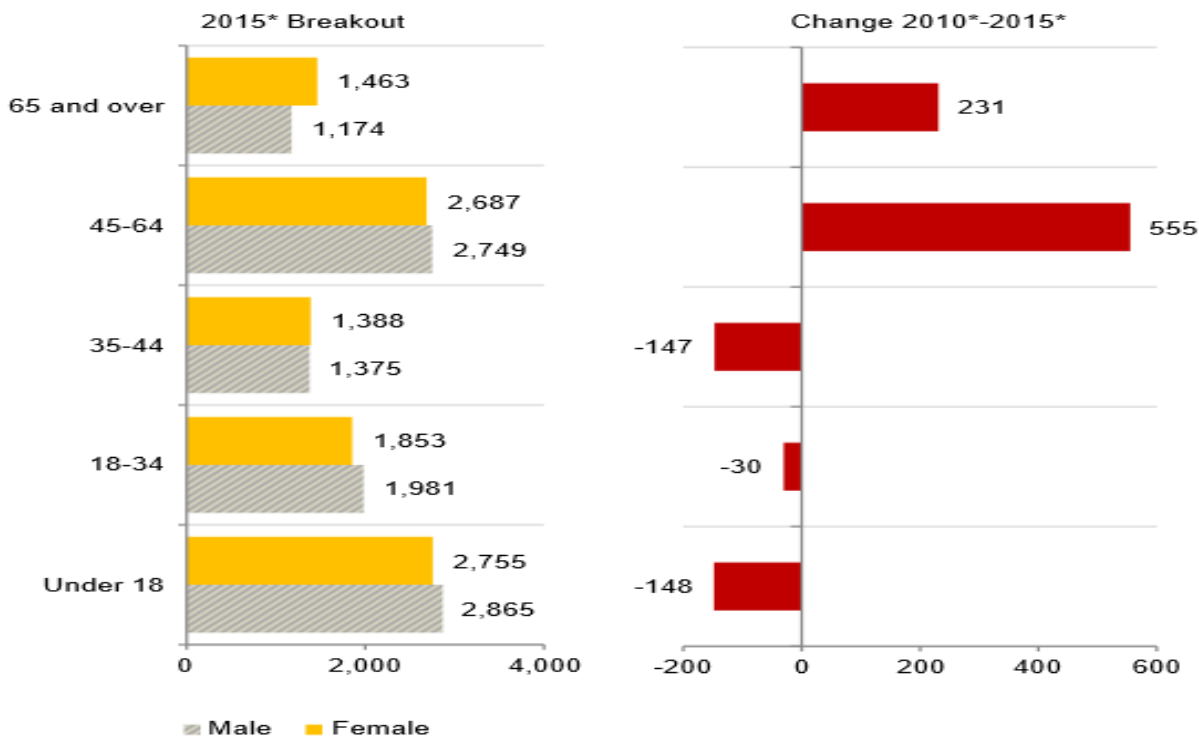
Source: Minnesota State Demographic Center

Figure 3. Dodge County Population Age Breakdown Comparison

| | 2010 | 2015 |
|-------------------------|--------|--------|
| Total Population | 19,829 | 20,290 |
| Under 18 | 5,768 | 5,620 |
| 18-34 | 3,864 | 3,834 |
| 35-44 | 2,910 | 2,763 |
| 45-64 | 4,881 | 5,436 |
| 65 and over | 2,406 | 2,637 |
| Percent of Total | | |
| Under 18 | 29.1% | 27.7% |
| 18-34 | 19.5% | 18.9% |
| 35-44 | 14.7% | 13.6% |
| 45-64 | 24.6% | 26.8% |
| 65 and over | 12.1% | 13.0% |

U.S. Census Bureau: American Community Survey 5-year estimates

Figure 4. Dodge County Population by Age Category



U.S. Census Bureau: American Community Survey 5-year estimates

The figures above illustrate that Dodge County has lost population in the age categories under 44 years old and gained population in the age categories above 45 years old, with the largest growth segment in the group aged 45-64 years old. This mirrors the national age demographic trend. This also indicates that, like most other areas in the United States Dodge County is experiencing an aging population. Because of the size and scope of this national trend, it is expected to remain the trend for the foreseeable future. With that being the case, preparing to meet the needs of an aging population is the recommended plan of action to address this trend.

Figure 5. Population by Race 2016

| | Dodge County |
|---|--------------|
| Total Population | 20,361 |
| White alone | 19,633 |
| Black or African American alone | 67 |
| American Indian alone | 54 |
| Asian alone | 181 |
| Native Hawaiian & Other Pacific Is. alone | 0 |
| Some other race alone | 158 |
| Two or more races | 268 |
| Percent of Total | |
| White alone | 96.4% |
| Black or African American alone | 0.3% |
| American Indian alone | 0.3% |
| Asian alone | 0.9% |
| Native Hawaiian & Other Pacific Is. alone | 0.0% |
| Some other race alone | 0.8% |
| Two or more races | 1.3% |

U.S. Census Bureau: American Community Survey 5-year estimates

Figure 6. Hispanic or Latino Population 2016 Estimate

| | Dodge County |
|----------------------------------|--------------|
| Total Population | 20,361 |
| Hispanic or Latino (of any race) | 988 |
| Percentage | 4.9% |

U.S. Census Bureau: American Community Survey 5-year estimates

The figures above illustrate the lack of racial diversity overall in the county. This is seen in many similar sized counties throughout Minnesota. Because of Dodge County’s proximity to the regional economic center of Rochester, an increased opportunity for growth exists. With this opportunity for growth, the opportunity will exist for additional diversity. As diversity expands, new cultural and quality of life additions may be needed to match this growth and diversification.

Figure 7. Population Projections by Age

| Population Projections Dodge County 2025-2035 | 2025-2035 Change | | Numeric | Percent |
|---|------------------|-----------------|---------|---------|
| | 2025 projection | 2035 projection | | |
| Under 5 years | 1,051 | 1,351 | 300 | 28.5% |
| 5-14 years | 2,151 | 2,188 | 37 | 1.7% |
| 15-24 years | 3,569 | 2,461 | (1,108) | (31)% |
| 25-34 years | 2,418 | 3,095 | 677 | 28% |
| 35-44 years | 2,143 | 2,257 | 114 | 5.3% |
| 45-54 years | 2,515 | 1,899 | (616) | (24.4)% |
| 55-64 years | 2,671 | 2,270 | (401) | (15)% |
| 65-74 years | 2,470 | 2,460 | (10) | (0.4)% |
| 75-84 years | 1,280 | 1,998 | 718 | 56% |
| 85 years & older | 475 | 665 | 190 | 40% |
| Totals | 20,743 | 20,644 | (99) | (0.4)% |

Source: Minnesota State Demographic Center

Figure 8. Population Projections

| | 2015 | 2020 | % | 2025 | % | 2030 | % | 2035 | % | 2040 | % | 2045 | % |
|--------------|-----------|-----------|-----|-----------|-----|-----------|------|-----------|------|-----------|------|-----------|------|
| Dodge County | 20,426 | 20,646 | 1.1 | 20,743 | .5 | 20,725 | (.1) | 20,644 | (.4) | 20,497 | (.7) | 20,306 | (1) |
| Region 10 | 502,797 | 508,663 | 1.2 | 511,547 | .6 | 511,341 | 0 | 509,621 | (.3) | 506,228 | (.7) | 501,747 | (.9) |
| State | 5,482,435 | 5,687,161 | 3.7 | 5,844,466 | 2.8 | 5,974,304 | 2.2 | 6,089,935 | 1.9 | 6,189,207 | 1.6 | 6,278,094 | 1.4 |

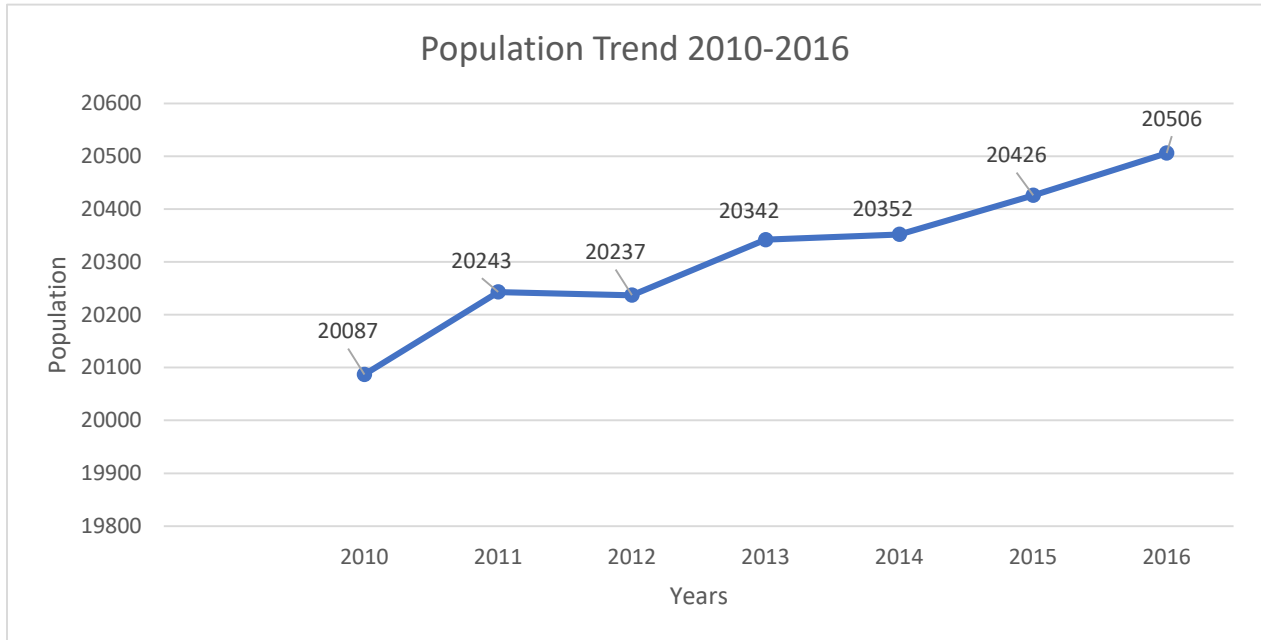
Source: Minnesota State Demographic Center
March 2017 MN County Population Projections

The above population estimates from the State Demographic Center does not reflect regional growth factors such as the DMC Project in the City of Rochester that is projected to have a positive impact on regional population growth. Based on job growth projected in the regional economic center of Rochester, a growth rate similar to the figures experienced historically in Dodge County of 1-2% per 5-year period is probably more accurate.

Recently. A Southeast MN Regional Economic Study was done by HR&A Advisors Inc. The portion of that report specific to Dodge County is attached to this plan as Appendix D. The modeling program used for that report projects a .37% population increase per year from 2015 – 2040.

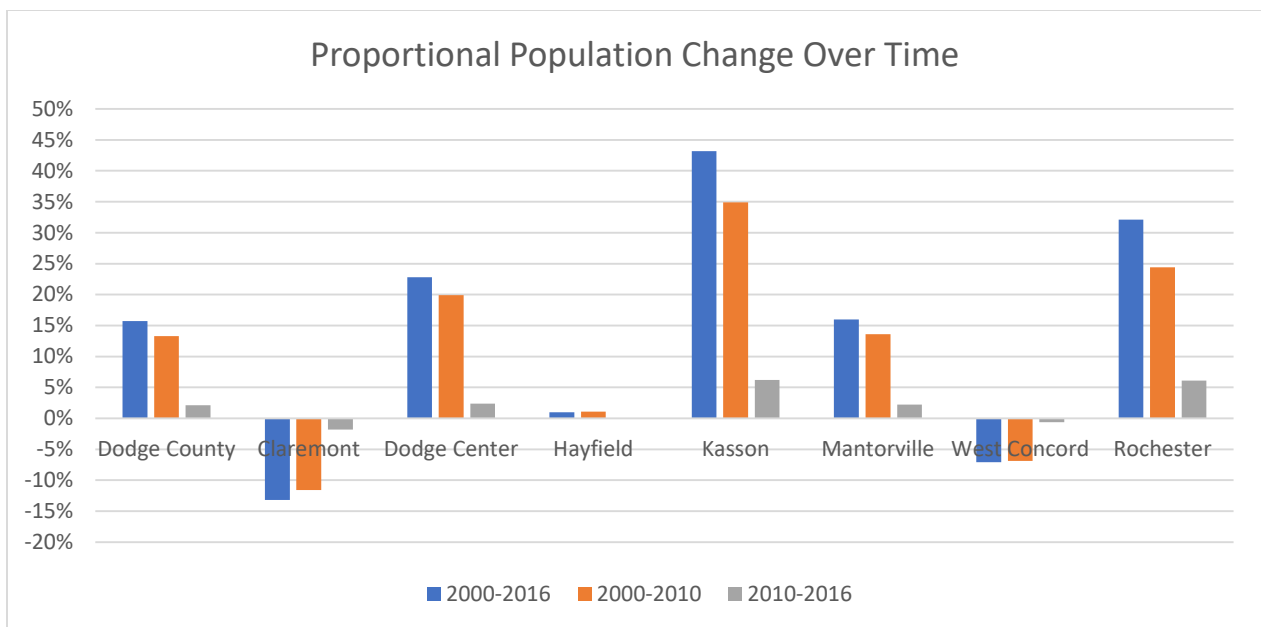
Also in 2018 (as part of the Housing Study), Maxfield Research and Consulting projected a 0.67 percent annualized increase in countywide population from 2020 to 2030 with the eastern 2/3 of the county growing at about 1.0% per year and the western 1/3 of the county declining at 0.08% per year.

Figure 9. Population Trend



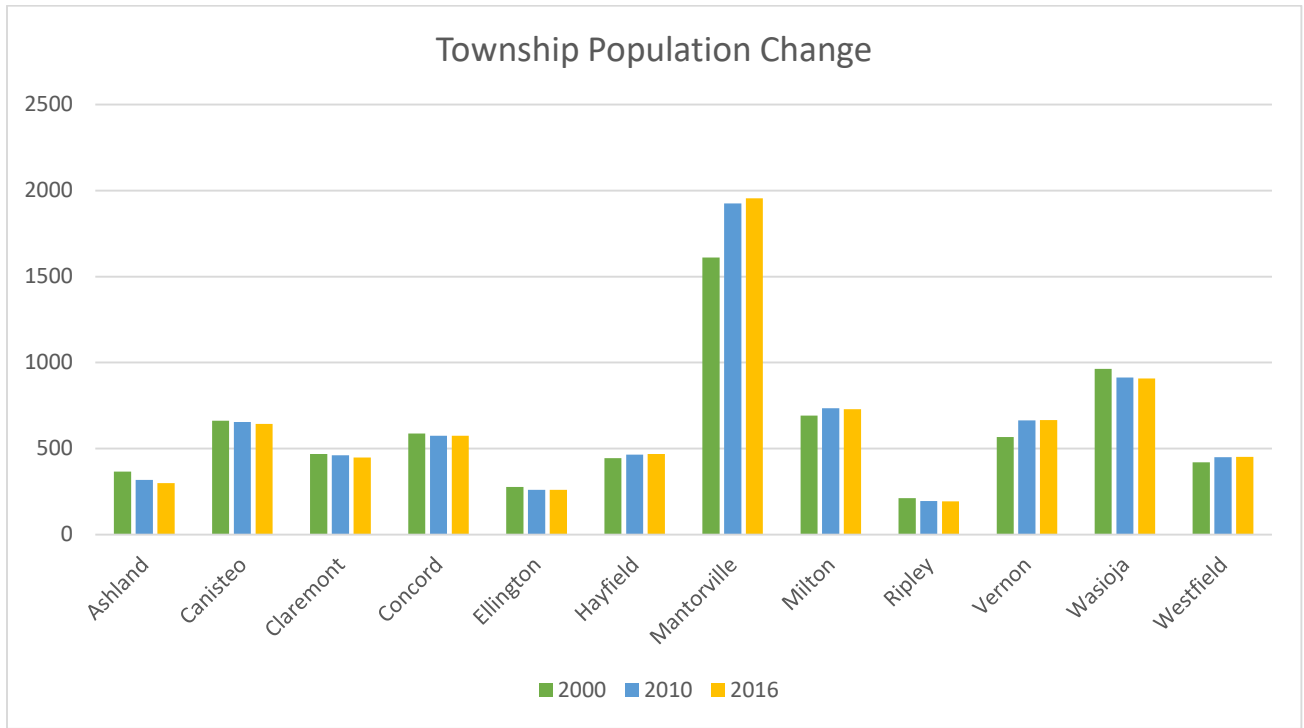
Minnesota State Demographic Center

Figure 10. Population Change Over Time



Minnesota State Demographic Center

Figure 11. Population Change Per Township



Minnesota State Demographic Center

Figure 12. Population Age Change Breakdown

| Dodge County | | | | | | | | | | | | |
|-------------------|--------|-------|--------|-------|-------|--------|----------------|------|--------|----------------|-------|--------|
| | 2010 | | | 2015 | | | Numeric Change | | | Percent Change | | |
| | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Under 5 years | 1,485 | 745 | 740 | 1,231 | 699 | 590 | -196 | -46 | -150 | -13.2% | -6.2% | -20.3% |
| 5 to 19 years | 3,022 | 1,490 | 1,532 | 4,768 | 1,453 | 1,413 | -156 | -37 | -119 | -5.2% | -2.5% | -7.8% |
| 20 to 34 years | 1,321 | 688 | 633 | 3,431 | 663 | 679 | 21 | -25 | 46 | 1.6% | -3.6% | 7.3% |
| 35 to 49 years | 11,845 | 6,012 | 5,833 | 4,130 | 6,162 | 5,979 | 296 | 150 | 146 | 2.5% | 2.5% | 2.5% |
| 50 to 64 years | 2,483 | 1,124 | 1,359 | 4,050 | 1,238 | 1,488 | 243 | 114 | 129 | 9.8% | 10.1% | 9.5% |
| 65 years and over | 408 | 150 | 258 | 2,816 | 146 | 265 | 3 | -4 | 7 | 0.7% | -2.7% | 2.7% |

Minnesota State Demographic Center

Figure 13. Dodge County Employment Breakdown

| Total Primary Jobs | | |
|--|-------|--------|
| | 2015 | |
| | Count | Share |
| Total Primary Jobs | 5,850 | 100.0% |
| <i>Note: "Primary" job is defined as the dominant job for an individual.</i> | | |
| Jobs by Worker Age | | |
| | 2015 | |
| | Count | Share |
| Age 29 or younger | 1,378 | 23.6% |
| Age 30 to 54 | 3,240 | 55.4% |
| Age 55 or older | 1,232 | 21.1% |
| Jobs by Earnings | | |
| | 2015 | |
| | Count | Share |
| \$1,250 per month or less | 989 | 16.9% |
| \$1,251 to \$3,333 per month | 1,774 | 30.3% |
| More than \$3,333 per month | 3,087 | 52.8% |

Jobs by NAICS Industry Sector

| | 2015 | |
|--|-------|-------|
| | Count | Share |
| Agriculture, Forestry, Fishing and Hunting | 255 | 4.4% |
| Mining, Quarrying, and Oil and Gas Extraction | 14 | 0.2% |
| Utilities | 3 | 0.1% |
| Construction | 481 | 8.2% |
| Manufacturing | 1,708 | 29.2% |
| Wholesale Trade | 658 | 11.2% |
| Retail Trade | 381 | 6.5% |
| Transportation and Warehousing | 160 | 2.7% |
| Information | 65 | 1.1% |
| Finance and Insurance | 135 | 2.3% |
| Real Estate and Rental and Leasing | 9 | 0.2% |
| Professional, Scientific, and Technical Services | 173 | 3.0% |
| Management of Companies and Enterprises | 8 | 0.1% |
| Administration & Support, Waste Management and Remediation | 72 | 1.2% |
| Educational Services | 613 | 10.5% |
| Health Care and Social Assistance | 299 | 5.1% |
| Arts, Entertainment, and Recreation | 32 | 0.5% |
| Accommodation and Food Services | 348 | 5.9% |
| Other Services (excluding Public Administration) | 188 | 3.2% |
| Public Administration | 248 | 4.2% |

U.S Census Bureau American Community Survey

| Jobs by Worker Race | | |
|---|-------|-------|
| | 2015 | |
| | Count | Share |
| White Alone | 5,546 | 94.8% |
| Black or African American Alone | 102 | 1.7% |
| American Indian or Alaska Native Alone | 16 | 0.3% |
| Asian Alone | 140 | 2.4% |
| Native Hawaiian or Other Pacific Islander Alone | 0 | 0.0% |
| Two or More Race Groups | 46 | 0.8% |

| Jobs by Worker Ethnicity | | |
|--------------------------|-------|-------|
| | 2015 | |
| | Count | Share |
| Not Hispanic or Latino | 5,572 | 95.2% |
| Hispanic or Latino | 278 | 4.8% |

| Jobs by Worker Educational Attainment | | |
|---|-------|-------|
| | 2015 | |
| | Count | Share |
| Less than high school | 420 | 7.2% |
| High school or equivalent, no college | 1,432 | 24.5% |
| Some college or Associate degree | 1,580 | 27.0% |
| Bachelor's degree or advanced degree | 1,040 | 17.8% |
| Educational attainment not available (workers aged 29 or younger) | 1,378 | 23.6% |

| Jobs by Worker Sex | | |
|--------------------|-------|-------|
| | 2015 | |
| | Count | Share |
| Male | 3,775 | 64.5% |
| Female | 2,075 | 35.5% |

U.S. Census Bureau American Community Survey

Figure 14. Income Distribution

| | Dodge County | Percent of Total |
|--------------------------------|--------------|------------------|
| Per Capita Income (2016) | \$30,495 | |
| Median Household Income (2015) | \$68,116 | |
| Total Households | 7,556 | 100% |
| Less than \$10,000 | 233 | 3.1% |
| \$10,000 to \$14,999 | 243 | 3.2% |
| \$15,000 to \$24,999 | 600 | 7.9% |
| \$25,000 to \$34,999 | 579 | 7.7% |
| \$35,000 to \$49,999 | 979 | 13.0% |
| \$50,000 to \$74,999 | 1,549 | 20.5% |
| \$75,000 to \$99,999 | 1,427 | 18.9% |
| \$100,000 to \$149,999 | 1,379 | 18.3% |
| \$150,000 to \$199,999 | 351 | 4.6% |
| \$200,000 or more | 216 | 2.9% |

U.S Census Bureau American Community Survey

Figure 15. Poverty Levels

| | Dodge County | Percent of Total |
|------------------------|--------------|------------------|
| People | 20,173 | |
| Families | 5,583 | |
| People Below Poverty | 1,342 | 6.7% |
| Families Below Poverty | 223 | 4.0% |

U.S Census Bureau American Community Survey

The income tables above show the distribution of income levels for the county’s residents. Dodge County enjoys both a per capita income and median household income that are higher than the national average. Dodge County’s per capita income of \$30,495 beats the national average of \$29,829 in 2016. The median household income of \$68,116 in Dodge County is significantly higher than the national median of \$53,889.

Figure 16. The Agriculture Economy

| | 2007 | 2012 |
|----------------------|--------------|---------------|
| Crops Sold Value | \$91,966,000 | \$177,607,000 |
| Livestock Sold Value | \$80,996,000 | \$110,522,000 |
| | Jobs | Payroll |
| Farm Hired Labor | 858 | \$10,923,000 |

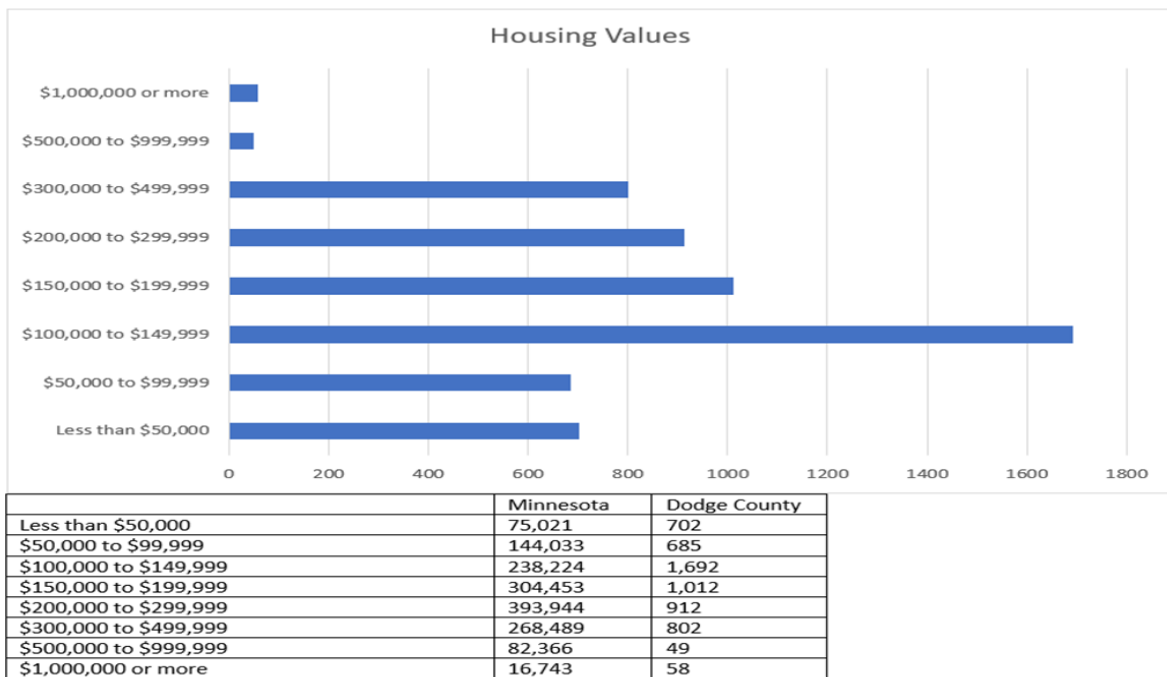
Figure 17. Educational Attainment

| | Dodge County | Percent of Total |
|------------------------------------|--------------|------------------|
| Total Population 25 years or older | 13,115 | |
| No high school degree | 788 | 6.0% |
| High school graduate | 12,327 | 94.0% |
| Associates degree | 1,802 | 13.7% |
| Bachelor's degree or higher | 3,114 | 23.7% |
| Bachelor's degree | 2,379 | 18.1% |
| Graduate or professional | 735 | 5.6% |

U.S Census Bureau American Community Survey

Figure 17 depicts the breakdown of educational attainment for Dodge County. The percentage of county residents with at least a high school diploma is 94% which is higher than the national average of 86.7% and the percentage of employees with an associate's degree is significantly higher than the national average 13.7% to 8.1% in 2015.

Figure 18. Dodge County Housing Values



Source: U.S. Census Bureau, 2015 American Community Survey 1-Year Estimates

Figure 19. Dodge County Housing Characteristics 2017

| | Dodge County | Percent of Total |
|--|--------------|------------------|
| Total Housing Units | 8,255 | |
| Occupied | 7,785 | 94.3% |
| Vacant | 471 | 5.7% |
| For rent | 60 | 0.7% |
| Rented, not occupied | 0 | 0.0% |
| For sale only | 78 | 1.0% |
| Sold, not occupied | 82 | 1.0% |
| Seasonal, recreational, occasional use | 36 | 0.4% |
| For migrant workers | 4 | 0.0% |
| Other vacant | 199 | 2.5% |
| Year Built | | |
| Built 2014 to 2016 | 240 | 2.9% |
| Built 2010 to 2013 | 112 | 1.4% |
| Built 2000 to 2009 | 1,383 | 17.3% |
| Built 1990 to 1999 | 1,239 | 15.5% |
| Built 1980 to 1989 | 668 | 8.3% |
| Built 1970 to 1979 | 1,388 | 17.3% |
| Built 1940 to 1969 | 1,409 | 17.6% |
| Built prior to 1940 | 1,816 | 19.8% |

U.S Census Bureau American Community Survey

When examining Dodge County’s housing characteristics in the figure above, a couple of important statistics stand out. First, the 94.3% occupancy rate in Dodge County is higher than the national average of 87.7% and may indicate a lack of available housing options for prospective new residents. Second, when looking at the age of the county’s housing stock 37.1% of the homes have been built after 1990 which is more than the national average of 33.3%. This would indicate more availability of newer housing stock. One potential concern would be the fact that nearly 20% of the county’s housing stock was built prior to 1940. This is almost two times the national average of 10.1%. With such a large percentage of older housing stock updating and energy efficiency could potentially be cause for concern. However, the County is not aware of any source of data that reflects the level at which older homes are being updated.

Farming Demographics

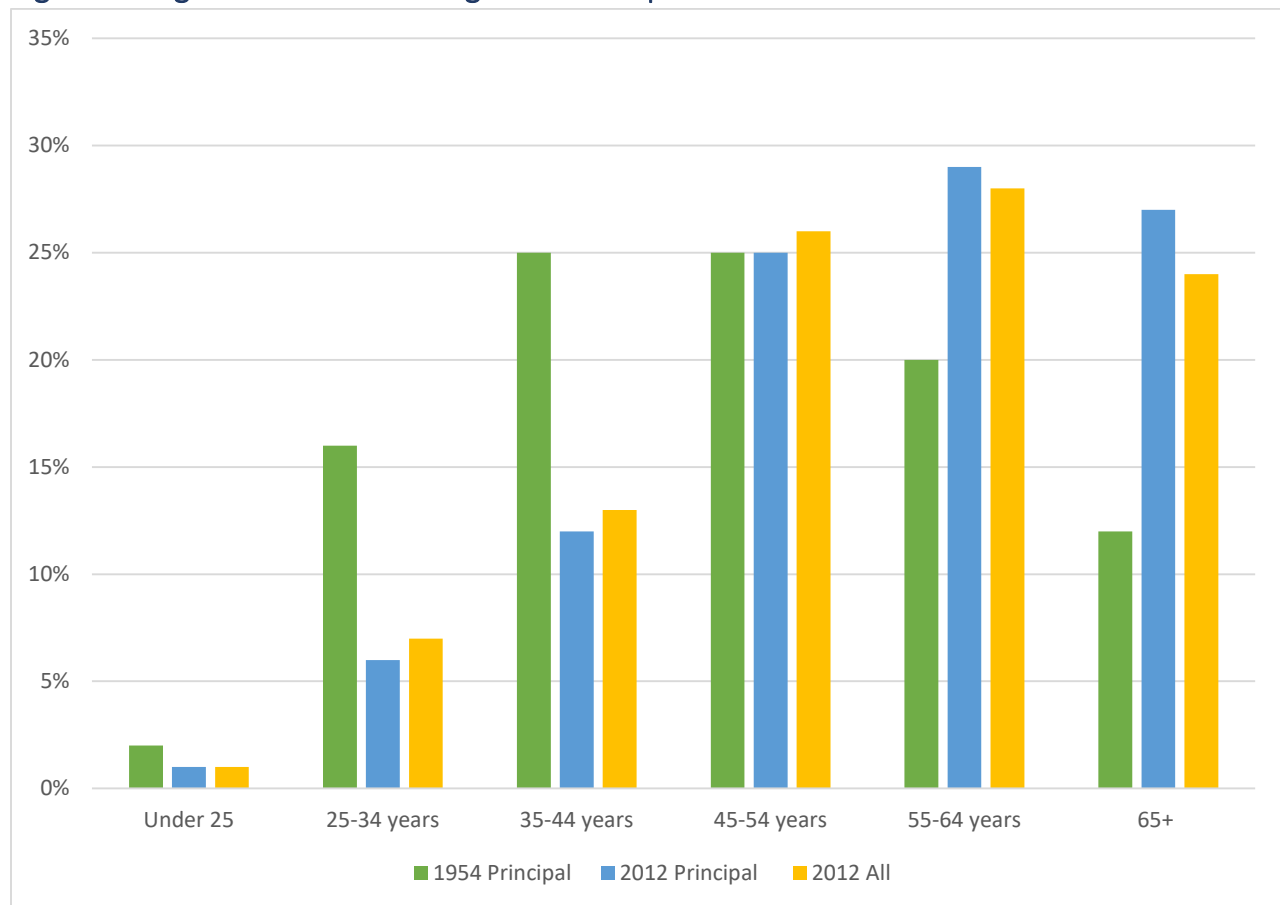
As workers age into retirement, it is crucial that younger cohorts of workers have the skills and education to replace them in the labor force. This is of particular importance today, as the unusually large portion of the workforce comprising the Baby Boomer generation continues its movement into retirement over the next two decades. This aging trend will affect all industries, including agriculture.

The shift to older farmers is especially evident when comparing Minnesota’s operators in 1954 versus 2012. Principal operators over age 65 represented 12% of principal operators in 1954, but more than doubled to 27% in 2012. Many of these farmers were born even before the large “Baby Boom” generation. More than 8,880 principal farm operators in Minnesota in 2012 were age 75 or older.

In 2012, the average age of Minnesota’s principal operators was 56.6, somewhat younger than the U.S. average of 58.3 years. Minnesota’s principal farm operators rank in the middle of 10 Midwestern states on this measure, but the age distribution of farmers is very similar across the Midwest. None of the Midwestern states has an average age below 54 years among its principal operators. Furthermore, in all of the Midwest states including Minnesota, less than a quarter of farmers are under age 45.

(From the MN State Demographic Center Population Notes, March 2015)

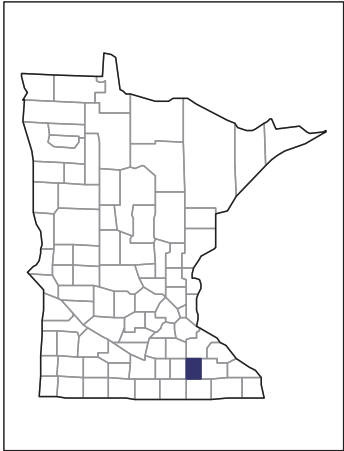
Figure 20. Age Distribution Among MN Farm Operators 1954 and 2012



Source: Census of Agriculture, USDA

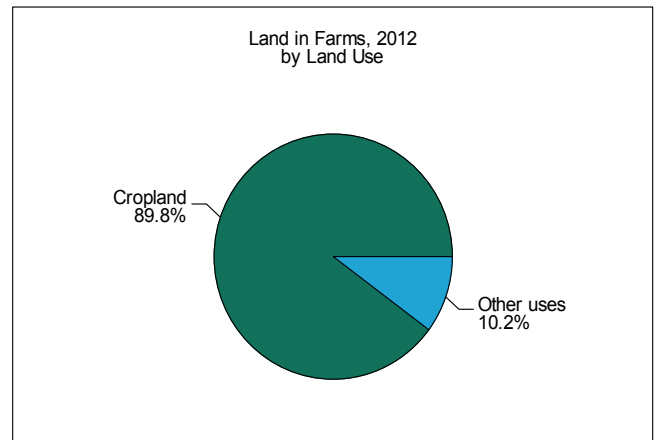
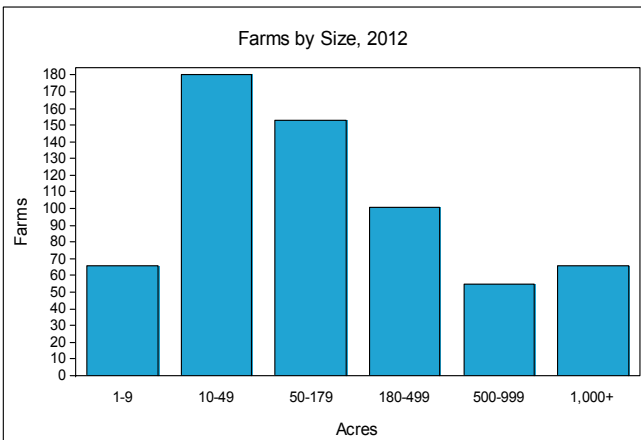
2012 CENSUS OF AGRICULTURE

COUNTY PROFILE



Dodge County Minnesota

| | 2012 | 2007 | % change |
|--|---------------|---------------|----------|
| Number of Farms | 621 | 723 | - 14 |
| Land in Farms | 225,418 acres | 248,125 acres | - 9 |
| Average Size of Farm | 363 acres | 343 acres | + 6 |
| Market Value of Products Sold | \$288,129,000 | \$172,962,000 | + 67 |
| Crop Sales \$177,607,000 (62 percent) | | | |
| Livestock Sales \$110,522,000 (38 percent) | | | |
| Average Per Farm | \$463,975 | \$239,228 | + 94 |
| Government Payments | \$4,124,000 | \$4,465,000 | - 8 |
| Average Per Farm Receiving Payments | \$9,636 | \$8,737 | + 10 |





Dodge County – Minnesota

Ranked items among the 87 state counties and 3,079 U.S. counties, 2012

| Item | Quantity | State Rank | Universe ¹ | U.S. Rank | Universe ¹ |
|---|----------|------------|-----------------------|-----------|-----------------------|
| MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD (\$1,000) | | | | | |
| Total value of agricultural products sold | 288,129 | 36 | 87 | 298 | 3,077 |
| Value of crops including nursery and greenhouse | 177,607 | 39 | 87 | 288 | 3,072 |
| Value of livestock, poultry, and their products | 110,522 | 29 | 87 | 403 | 3,076 |
| VALUE OF SALES BY COMMODITY GROUP (\$1,000) | | | | | |
| Grains, oilseeds, dry beans, and dry peas | 170,817 | 37 | 85 | 204 | 2,926 |
| Tobacco | - | - | - | - | 436 |
| Cotton and cottonseed | - | - | - | - | 635 |
| Vegetables, melons, potatoes, and sweet potatoes | 5,643 | 22 | 87 | 334 | 2,802 |
| Fruits, tree nuts, and berries | 5 | 76 | 81 | 2,496 | 2,724 |
| Nursery, greenhouse, floriculture, and sod | (D) | (D) | 79 | (D) | 2,678 |
| Cut Christmas trees and short rotation woody crops | - | - | 50 | - | 1,530 |
| Other crops and hay | (D) | 76 | 87 | (D) | 3,049 |
| Poultry and eggs | 12,881 | 21 | 87 | 545 | 3,013 |
| Cattle and calves | 9,191 | 51 | 86 | 1,378 | 3,056 |
| Milk from cows | 24,521 | 21 | 83 | 291 | 2,038 |
| Hogs and pigs | 63,772 | 18 | 86 | 91 | 2,827 |
| Sheep, goats, wool, mohair, and milk | 73 | 64 | 87 | 1,633 | 2,988 |
| Horses, ponies, mules, burros, and donkeys | 80 | 51 | 85 | 2,005 | 3,011 |
| Aquaculture | - | - | 43 | - | 1,366 |
| Other animals and other animal products | 4 | 82 | 86 | 2,509 | 2,924 |
| TOP CROP ITEMS (acres) | | | | | |
| Corn for grain | 120,051 | 32 | 85 | 212 | 2,638 |
| Soybeans for beans | 63,083 | 52 | 85 | 496 | 2,162 |
| Forage-land used for all hay and haylage, grass silage, and greenchop | 6,278 | 63 | 87 | 2,047 | 3,057 |
| Vegetables harvested, all | 3,575 | 20 | 87 | 214 | 2,801 |
| Corn for silage | 2,271 | 46 | 84 | 718 | 2,237 |
| TOP LIVESTOCK INVENTORY ITEMS (number) | | | | | |
| Turkeys | 262,050 | 17 | 76 | 97 | 2,416 |
| Hogs and pigs | 163,874 | 19 | 85 | 108 | 2,889 |
| Cattle and calves | 19,790 | 42 | 87 | 1,358 | 3,063 |
| Broilers and other meat-type chickens | 2,782 | 18 | 85 | 716 | 2,723 |
| Layers | 1,482 | 41 | 86 | 1,546 | 3,040 |

Other County Highlights, 2012

| Economic Characteristics | Quantity | Operator Characteristics | Quantity |
|---|----------|---|----------|
| Farms by value of sales: | | Principal operators by primary occupation: | |
| Less than \$1,000 | 126 | Farming | 363 |
| \$1,000 to \$2,499 | 34 | Other | 258 |
| \$2,500 to \$4,999 | 31 | | |
| \$5,000 to \$9,999 | 35 | Principal operators by sex: | |
| \$10,000 to \$19,999 | 36 | Male | 584 |
| \$20,000 to \$24,999 | 8 | Female | 37 |
| \$25,000 to \$39,999 | 32 | | |
| \$40,000 to \$49,999 | 12 | Average age of principal operator (years) | 57.0 |
| \$50,000 to \$99,999 | 57 | | |
| \$100,000 to \$249,999 | 59 | All operators by race ² : | |
| \$250,000 to \$499,999 | 63 | American Indian or Alaska Native | - |
| \$500,000 or more | 128 | Asian | 2 |
| Total farm production expenses (\$1,000) | 208,881 | Black or African American | - |
| Average per farm (\$) | 336,362 | Native Hawaiian or Other Pacific Islander | - |
| | | White | 923 |
| Net cash farm income of operation (\$1,000) | 92,562 | More than one race | 2 |
| Average per farm (\$) | 149,053 | All operators of Spanish, Hispanic, or Latino Origin ² | 9 |

See "Census of Agriculture, Volume 1, Geographic Area Series" for complete footnotes, explanations, definitions, and methodology.

- Represents zero. (D) Withheld to avoid disclosing data for individual operations.

¹ Universe is number of counties in state or U.S. with item. ² Data were collected for a maximum of three operators per farm.

Section 1: Housing



Introduction: Housing is a dominant form of development in Dodge County. The housing supply plays an important role in shaping the communities and the county. To a large degree, the size, form and type of housing units determines who lives in Dodge County. The quality and character of Dodge County neighborhoods play an important role in shaping the identity of the community and its stature as a place to live in southeastern Minnesota. Dodge County and its Cities are currently conducting a county-wide housing study expected to be complete in 2019.

1.1 - Importance:

As Dodge County grows, housing is going to become an increasing issue. The current housing stock in Dodge County is fairly old with a significant number of houses being built prior to 1950. This fact along with the age of our citizens and pursuit of growth in the County makes residential growth on all levels extremely important.

Including housing policies and initiatives in the comprehensive plan is appropriate. The housing needs of a county are not completely met by private market forces, land use planning and land use controls. County plans and ordinance controls create the framework for private land development; land development is almost universally profit driven. Private market forces need to be supplemented by programs and funding sources bridging the financial gaps of providing housing for segments of the community that cannot afford market-rate housing. Accordingly, the plan can assist in identifying housing needs and providing a foundation for local decision making to guide residential development and redevelopment efforts in Dodge County.

1.2 - Housing Inventory:

Figure 21

| Housing Tenure | | Percent |
|-----------------------|--|---------|
| Owner Occupied Units | | 82.80% |
| Renter Occupied Units | | 17.20% |

Source: US Census Bureau; 2010 and 2015 American Community Survey

Figure 22

| Housing Units | 2015 | 2010 | Percent Change |
|------------------------|------|------|----------------|
| Total Housing Units | 8255 | 7887 | 4.67% |
| Occupied Housing Units | 7785 | 7301 | 6.63% |
| Vacant Housing Units | 471 | 586 | -19.62% |

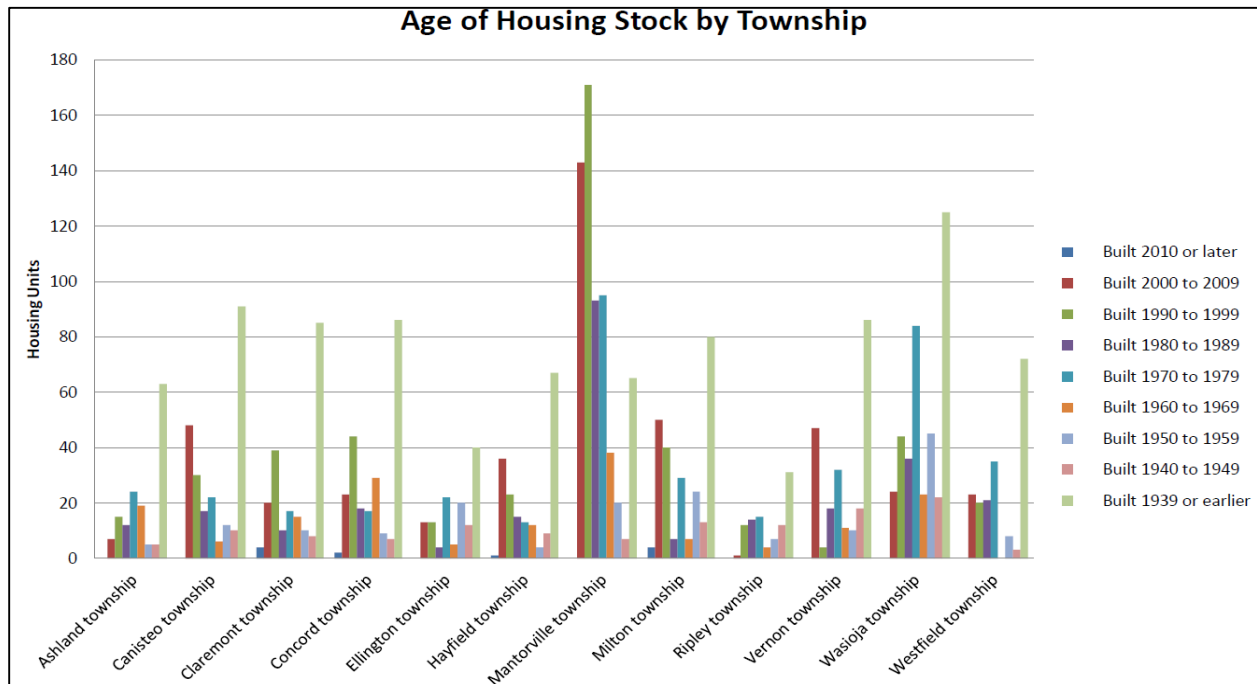
Source: US Census Bureau; 2010 and 2015 American Community Survey

The inventory of housing in Dodge County as indicated by the U.S. Census data reflects that there are approximately 8,255 total housing units in the county. The total housing unit count and the number of occupied housing units have increased, but the number of vacant units significantly decreased from 2010 to 2015.

According to the Census, the total number of housing units increased by 4.67%; the occupied units increased by 6.63% and the number of vacant units decreased by 19.62%.

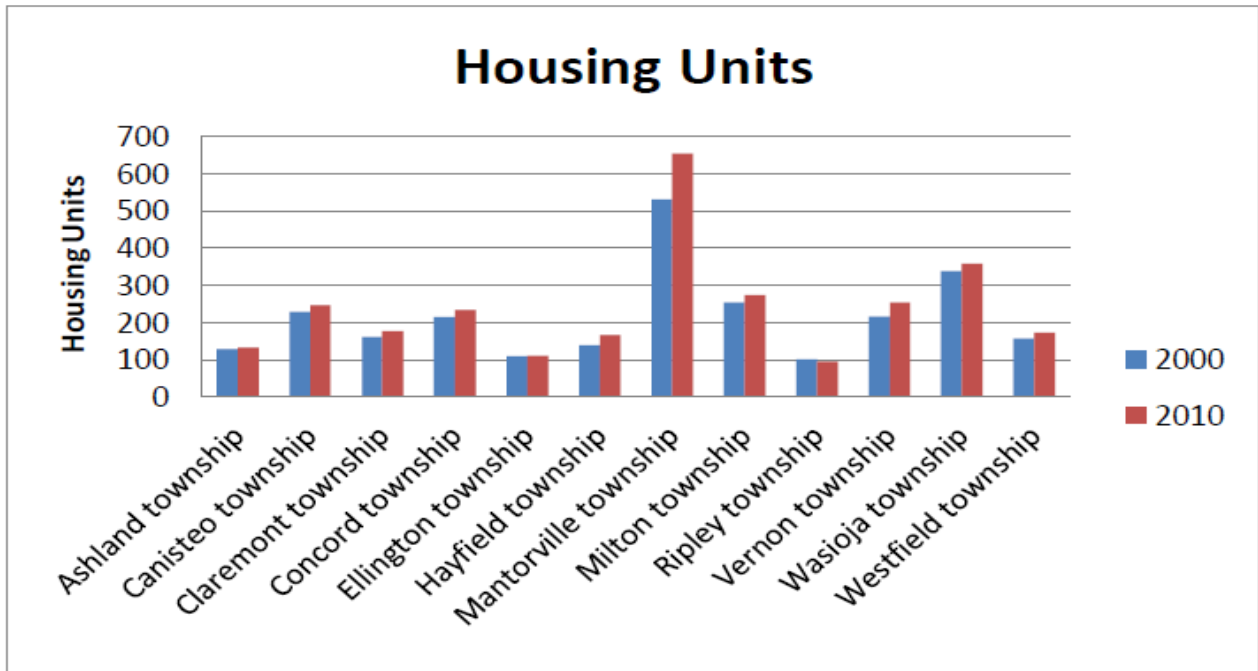
As of 2015, 82.8% of units are owner occupied, while 17.2% of units are renter occupied.

Figure 23



Source: Market Street Economic Study of Rochester Metropolitan Statistical Area for Rochester Area Economic Development Inc.

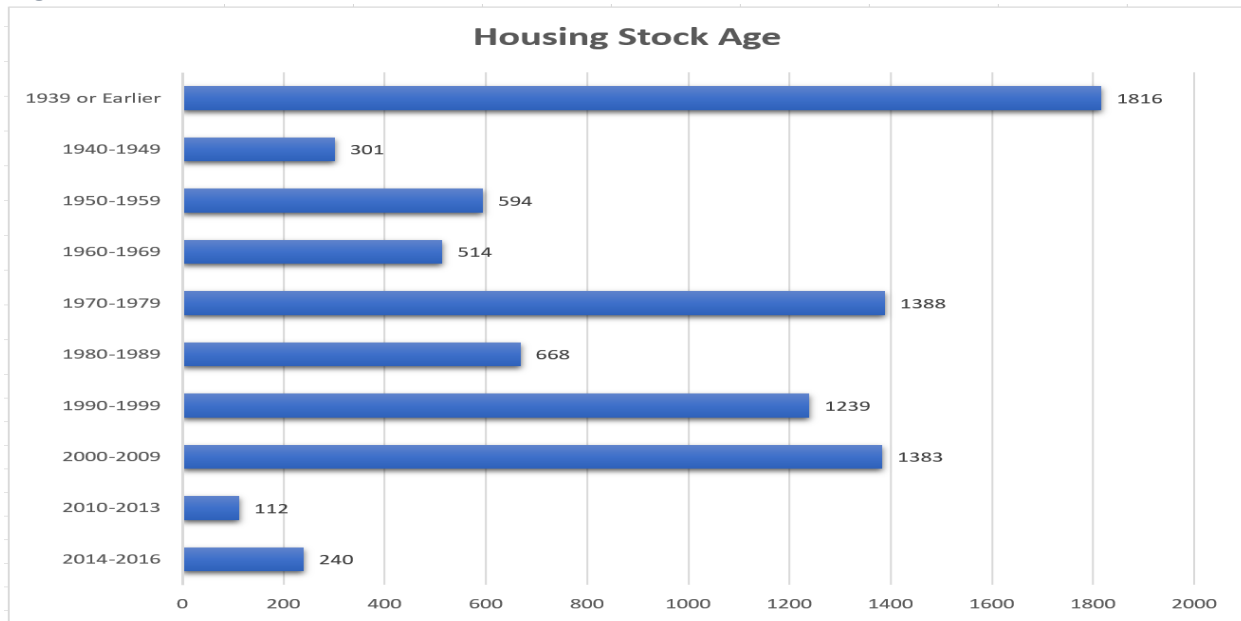
Figure 24



Source: Market Street Economic Study of Rochester Metropolitan Statistical Area for Rochester Area Economic Development Inc.

In Dodge County, 32.8% of all housing was built prior to 1950. Also relevantly, Dodge County does have a significant number of homes built after 1990. According to US Census data, 36% of the housing stock was built in the last 27 years.

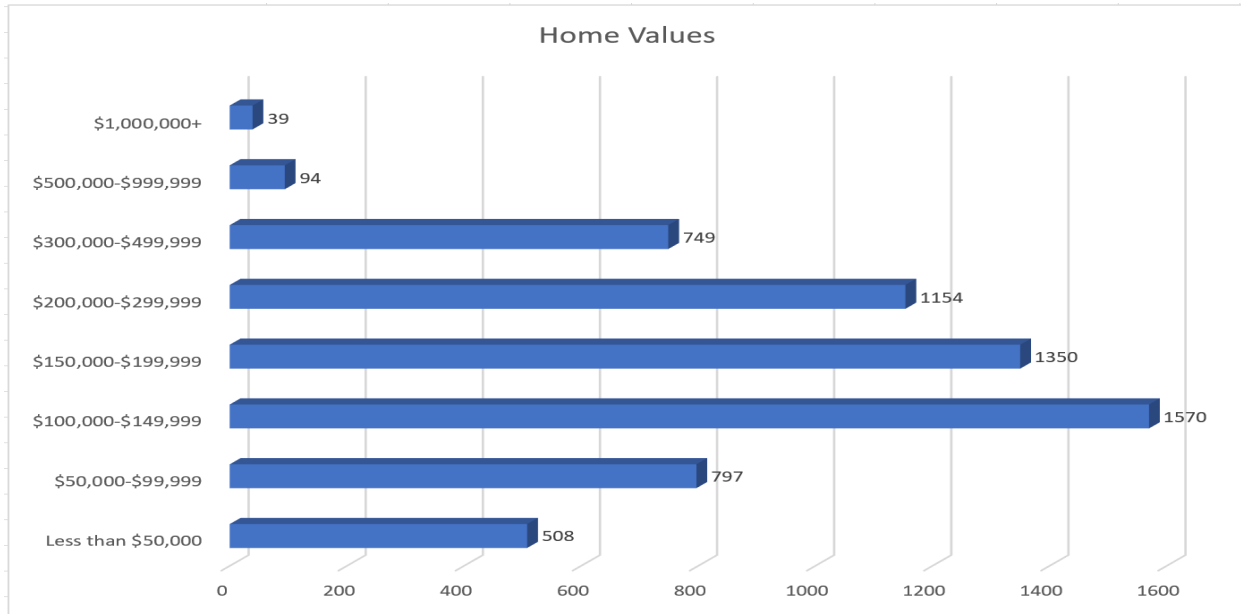
Figure 25



Source: US Census Bureau; 2015 American Community Survey

1.3 - Housing Values:

Figure



Source: US Census Bureau; 2015 American Community Survey

The American Community Survey estimated the median home value for Dodge County owner occupied units in 2015 to be \$158,700.

Nearly half of the abovementioned housing, 46.7%, is valued between \$100,000 and \$199,000.

1.4 - Housing Affordability and Burden:

Figure 27

| Housing Costs as a Percent of Household Income, 2015* | | |
|---|------------------|------------|
| | Dodge County, MN | U.S. |
| Owner-occupied housing w/ a mortgage | 4,264 | 48,414,291 |
| Monthly cost <15% of household income | 1,028 | 10,168,990 |
| Monthly cost >30% of household income | 942 | 15,648,374 |
| Specified renter-occupied units | 1,295 | 42,214,214 |
| Gross rent <15% of household income | 242 | 4,667,482 |
| Gross rent >30% of household income | 456 | 20,210,842 |
| Median monthly mortgage cost[^] | \$1,420 | \$1,492 |
| Median gross rent[^] | \$635 | \$928 |
| Percent of Total | | |
| Monthly cost <15% of household income | 24.1% | 21.0% |
| Monthly cost >30% of household income | 22.1% | 32.3% |
| Gross rent <15% of household income | 18.7% | 11.1% |
| Gross rent >30% of household income | 35.2% | 47.9% |

[^] Median monthly mortgage cost and median gross rent are not available for metro/non-metro or regional aggregations.
 * The data in this table are calculated by ACS using annual surveys conducted during 2011-2015 and are representative of average characteristics during this period.

Source: Headwaters Economics; Economic Profile System- Dodge County, MN Profile

Housing affordability is measured by calculating the percentage of housing cost against the household income.

According to the Census' American Community Survey, the median income in Dodge County is \$68,116 with 57.7% of households accruing \$50,000-\$149,999 annually.

Housing costs (including gross rent) amounting to approximately 15% or less of the household income are typically considered to be highly affordable, while housing costs requiring 30% or greater of the household income are classified as a proxy for unaffordable (Headwaters Economics).

In Dodge County, 31.9% of owner occupied units were calculated to be mortgage free. With median monthly mortgage costs of \$1,420 and median gross rents of \$635, the county's affordability index tends to reflect favorably when compared to the country as a whole. Dodge County has 24.1% of households paying less than 15% of income on housing costs. That said, 22.1% of households are expending more than 30% of their household income on housing costs and 35.2% of renters in the county spend more than 30% of their household income on rent.

A number of county-wide survey respondents also noted affordability as a concern or area of focus that they had for the county.

1.5 - Population Trends:

Housing demand is commonly affiliated with and/or considered to be a function of population growth and the demographic trends in population. Dodge County's population from 2000 to 2010 only increased by about 11.5 percent; however, with the anticipated major, regional growth initiatives impending, the county expects to provide housing for a portion of new residents and workers.

Figure 28

| Population Projections Dodge County 2025-2035 | 2025-2035 Change | | Numeric | Percent |
|--|------------------|-----------------|---------|---------|
| | 2025 projection | 2035 projection | | |
| Under 5 years | 1,051 | 1,351 | 300 | 28.5% |
| 5-14 years | 2,151 | 2,188 | 37 | 1.7% |
| 15-24 years | 3,569 | 2,461 | (1,108) | (31)% |
| 25-34 years | 2,418 | 3,095 | 677 | 28% |
| 35-44 years | 2,143 | 2,257 | 114 | 5.3% |
| 45-54 years | 2,515 | 1,899 | (616) | (24.4)% |
| 55-64 years | 2,671 | 2,270 | (401) | (15)% |
| 65-74 years | 2,470 | 2,460 | (10) | (.4)% |
| 75-84 years | 1,280 | 1,998 | 718 | 56% |

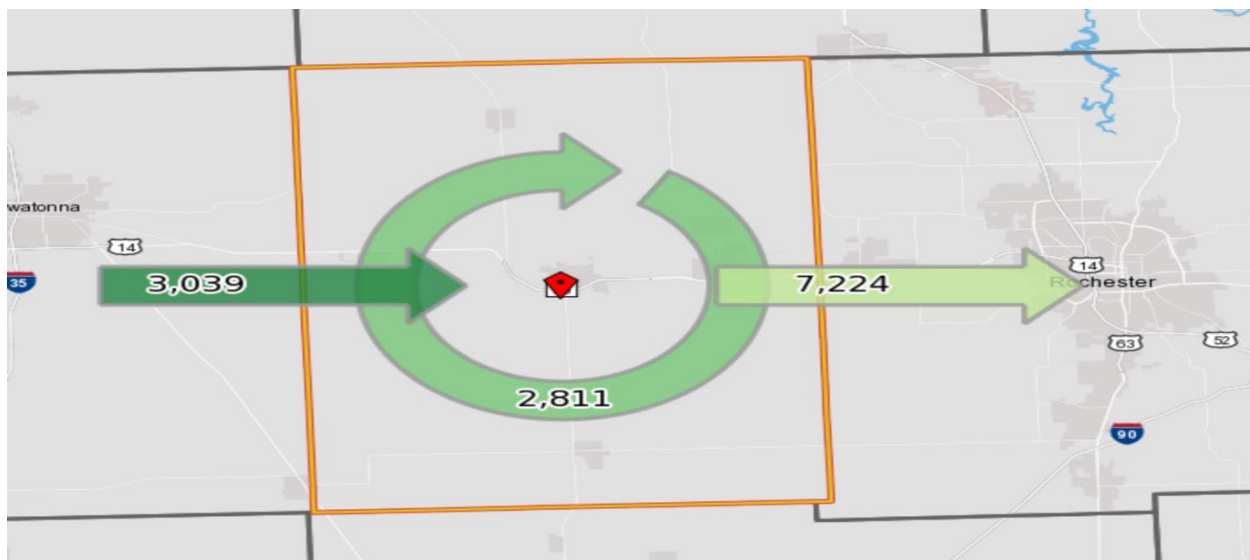
| | | | | |
|------------------|--------|--------|------|-------|
| 85 years & older | 475 | 665 | 190 | 40% |
| Totals | 20,743 | 20,644 | (99) | (.4)% |

Source: Minnesota State Demographer's Office

Furthermore, the State Demographer's office calculates the projected population of the county to be stable through 2035. A noteworthy number of these projected residents will also be in their 20s and 30s, as well as significant growth in children 5 and under, indicating a reasonable expectation for continued, steady growth of young families in the county. The County and Cities will have to work to address the 40% growth rate in population over 85 years old by 2035. There is the potential need for additional independent and/or assisted living to accommodate this aging population.

It is also prudent to consider workforce statistics in the overall determination of housing needs. In the case of Dodge County, it would be relevant to consider that the mean travel time to work is 24 minutes (US Census Bureau; 2015 American Community Survey). In fact, 7,224 residents of Dodge County live in the county but commute elsewhere for work (see above). This data implies that individuals find the county to be a desirable place to live, even if their place of employment requires them to be elsewhere during the weekdays/working hours.

Figure 29



Source: US Census Bureau; "On the Map" Laborshed Analysis Statistics

1.6 - Units Needed to Accommodate Future Population Growth By 2035:

As indicated above through projections from the State Demographer's office, by the year 2035, Dodge County's population is expected to remain stable. With the population numbers expected to remain stable, the current geographic distribution of homes should also remain stable, meaning the majority of new housing construction will happen in city limits. That being said, there is also the demand trend of people wanting to build/live in homes on acreages built in the traditional agriculture district. The County will want to pay very close attention to this trend to both capitalize on growth potential and preserve quality ag land.

1.7 - Residential Housing and Land Usage:

With a land area of 439.28 square miles, Dodge County is occupied by a population base that is geographically covering the county at a density measure of 45.7 persons/square mile.

Comprised of 12 townships and 6 cities, Dodge County has a mixture of urban, or higher density housing, and rural housing units that have been built on or near agricultural land.

The location of dwelling units is important, because distributed survey response data suggested that many county residents would prefer that agricultural land (especially that which is tillable) be preserved for farming and other agricultural activities. Of those who were not opposed to housing in more rural areas of the county, respondents proposed that new residents to those areas be provided education on the characteristics of rural living such as noise, odor, and equipment differences to urban settings.

What's more, county land use ordinances were developed deliberately with one of the purposes being to protect the agricultural capability and productivity of the land in the county.

1.8 – Results of the 2017 Survey

The following graphs summarize responses from county-wide survey conducted in 2017. See **Appendix A** for comprehensive summary:

Figure 30

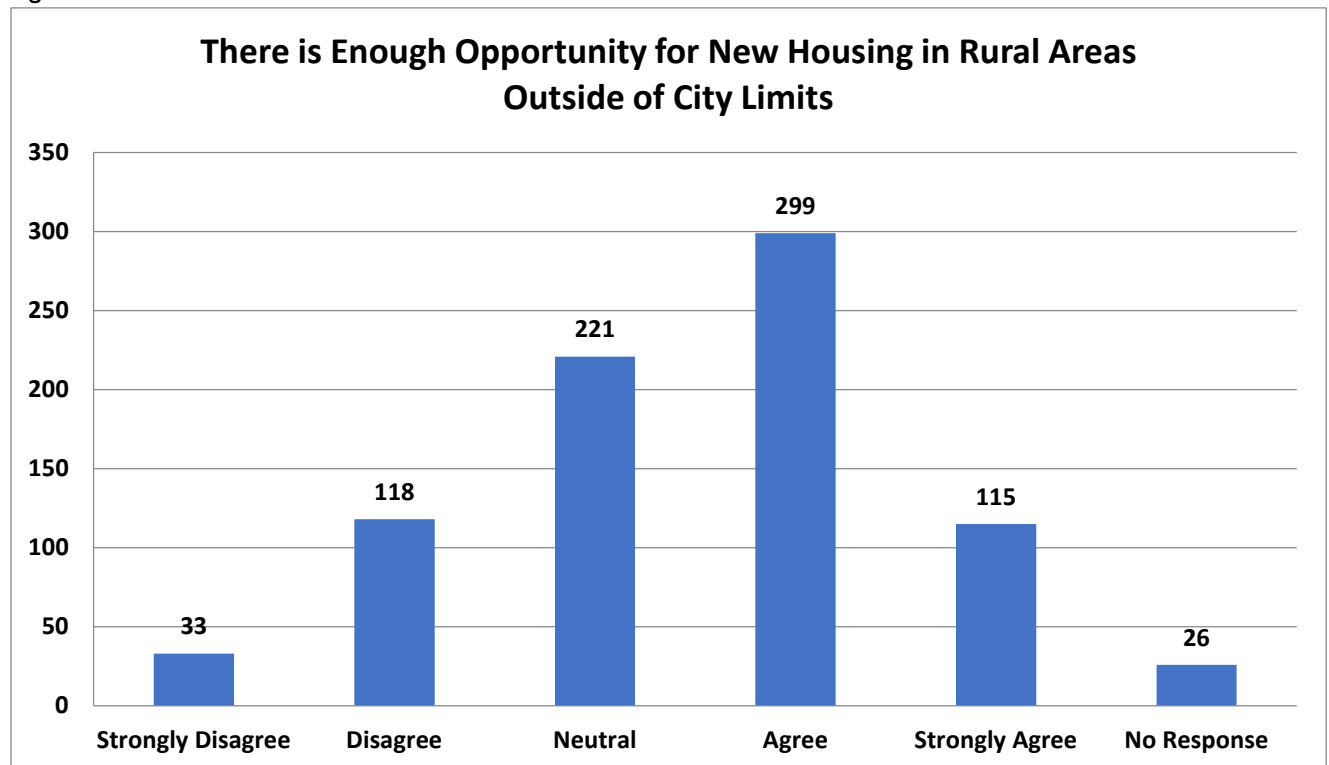
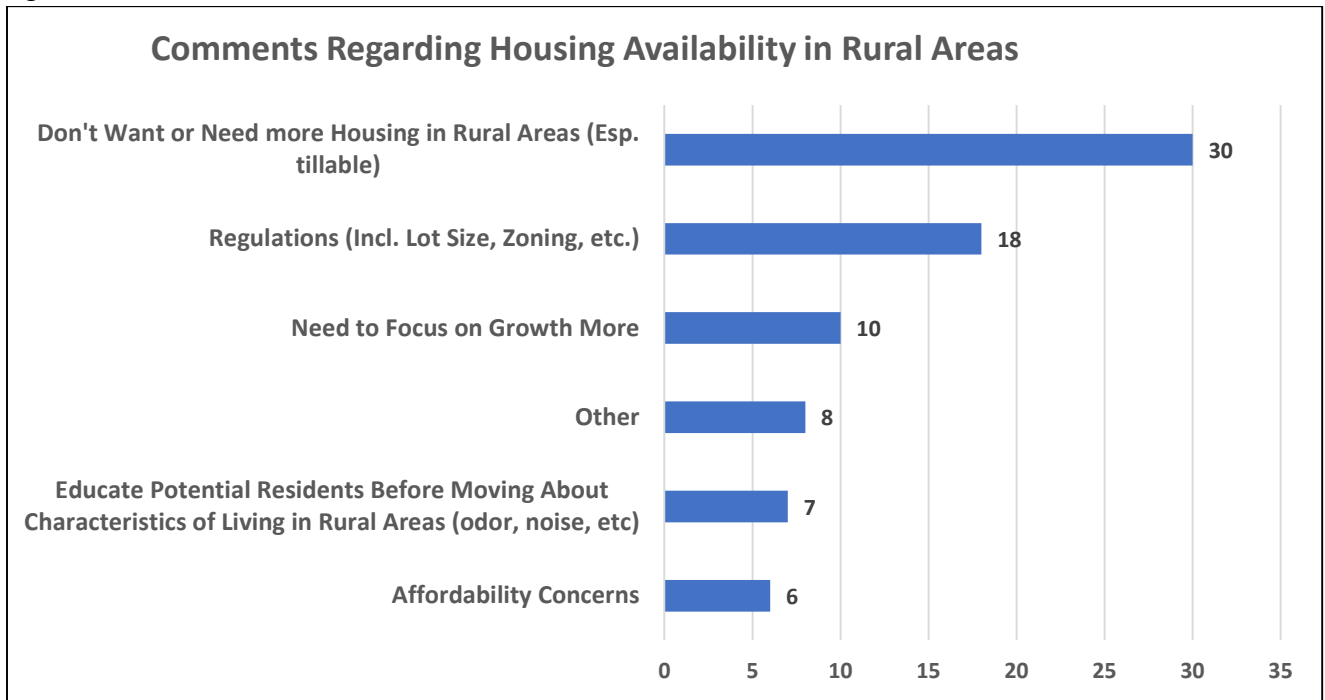


Figure 31



1.9 - Previously Adopted Goals and Policies

Adopted goals and policies from the 2001 Comprehensive Plan:

Dodge County intends to practice “smart growth principles” including:

- ✓ Make efficient and effective use of land resources and existing infrastructure by encouraging development to areas with existing infrastructure or capacity to avoid costly duplication of services and costly use of land.
- ✓ Provide a mix of land uses to create a variety of housing choices and opportunities.
- ✓ Make development decisions predictable, fair, and cost-effective.
- ✓ Provide a variety of transportation choices including pedestrian friendly neighborhoods.
- ✓ Maintain a unique sense of place by respecting local, cultural, and natural environmental features.
- ✓ Conserve open space and farmland and preserve critical environmental areas.
- ✓ Encourage stakeholder collaboration and community participation rather than conflict.
- ✓ Provide staged and managed growth in urban transition areas with compact development patterns.
- ✓ Enhance access to equitable public and private resources for everyone.

- ✓ Promote the safety, livability, and revitalization of existing urban and rural communities.

1.10 - Updated Policy for 2018 County Wide Comprehensive Plan

Policy:

Continue with the policies adopted in the 2001 Comprehensive Plan and;

Promote quality responsible housing options through:

1. Maintaining buffers between residential land uses and agricultural or industrial land uses through ordinance enforcement.
2. Education of the public about traditional agricultural practices and the effects of living next to farming operations to minimize conflicts.
3. Preserving prime agricultural lands by limiting residential development in the agricultural district and promoting development to occur where infrastructure exists to support the development.

1.11 - Ten Year Implementation Plan

1. Reassess Comprehensive Plan Housing Section upon completion and any subsequent updates of Dodge County Comprehensive Housing Study.
2. Amend Zoning Ordinance to satisfy Policy as needed.
3. Reconsider the recommendations of the Land Use Task Force (2005-2008) regarding alternative for allowing higher residential densities in some parts of the Agricultural District, a “2nd Agricultural District”, and similar methods to protect Prime Farmland but accommodate for residential development.
4. Update County-wide housing study every 10 years at maximum to stay informed on current demand and gaps in the County’s housing market.
5. Continue to encourage additional independent and/or assisted living housing development, in areas served by City water and sewer to accommodate growth in the elderly population.

Section 2: Economic Development



Introduction: Economic development plays an essential role in maintaining the quality of life for Dodge County. A strong economy creates jobs and opportunities for the citizens of the county. Resource based industries like energy and agriculture are prominent and should continue to be encouraged. Supporting recreation, industrial, and commercial businesses are also vital to maintaining a strong, stable, and sustainable local economy. The purpose of the economic development section of the Comprehensive Plan is to identify and explain what the county will do to encourage and support economic development.

Dodge County residents recognize that they will experience growth pressure from their proximity to the Rochester metropolitan statistical area. Like many surrounding counties in the region, Dodge County has more residents commuting out of the county to work every day than coming into the county. However, the gap between these two commuting patterns is smaller in comparison to many of the surrounding counties. This means that Dodge County has more job opportunities than some of the other counties in the region which could provide a stronger base on which to expand economic growth for the county.

2.1 - Labor Force Characteristics

The labor force of the county is defined as the portion of the population which is 16 years of age or older and is employed, unemployed, or actively seeking employment. In 2016, the estimated population of Dodge County was 20,506. The labor force participation rate in the county, as defined above, is estimated to be 74.7%. Therefore, the labor force population can be calculated to amount to ~15,218.

Dodge County's labor force participation rate is higher than that of the State of Minnesota (~71%).

The county has 5,850 primary jobs according to the US Census. A primary job is defined as the job that provides the earner with the most earnings or income. If an individual holds only 1 job, that is considered their "primary job."

The Census also identifies the primary industries employing Dodge County residents. The primary industries with the largest share of the workforce using NAICS and Census categories, were Manufacturing and Wholesale Trade. These industries will continue to provide career opportunities in the county. Survey responses from citizens indicated a desire to see growth in recreational opportunities such as expanded bike and walking trails, events, and other prospective methods of increasing tourism and resident engagement through outdoor recreation. Expansions in this area will be likely to create more jobs in that sector. With the aging population, the health care and social service industry will likely have growth needs as well as the county looks into economic development and job creation in the coming years.

The Minnesota State Demographer estimated that the population would remain steady from 2016 to 2035. Utilizing the same labor force participation rate, the labor force population would remain constant thru 2035. With large scale economic development projects like DMC in Rochester having a regional impact, if successful, the labor population would grow regionally as well.

The median household income in Dodge County was recorded at \$68,718 according to 2016 Census data. The county should conduct a housing study to ensure housing market is conducive to workforce needs and income—refer to the housing section of this document for information on housing affordability/burden (>30% of income).

Figure 33

| 2015 by NAICS Industry Sector Dodge County | | 2015 | |
|---|--|--------------|--------------|
| | | Count | Share |
| Agriculture, Forestry, Fishing and Hunting | | 255 | 4.4% |
| Mining, Quarrying, and Oil and Gas Extraction | | 14 | 0.2% |
| Utilities | | 3 | 0.1% |
| Construction | | 481 | 8.2% |
| Manufacturing | | 1,708 | 29.2% |
| Wholesale Trade | | 658 | 11.2% |
| Retail Trade | | 381 | 6.5% |
| Transportation and Warehousing | | 160 | 2.7% |
| Information | | 65 | 1.1% |
| Finance and Insurance | | 135 | 2.3% |
| Real Estate and Rental and Leasing | | 9 | 0.2% |
| Professional, Scientific, and Technical Services | | 173 | 3.0% |
| Management of Companies and Enterprises | | 8 | 0.1% |
| Administration & Support, Waste Management and Remediation | | 72 | 1.2% |
| Educational Services | | 613 | 10.5% |
| Health Care and Social Assistance | | 299 | 5.1% |
| Arts, Entertainment, and Recreation | | 32 | 0.5% |
| Accommodation and Food Services | | 348 | 5.9% |
| Other Services (excluding Public Administration) | | 188 | 3.2% |
| Public Administration | | 248 | 4.2% |

Source: DEED Occupations in Demand

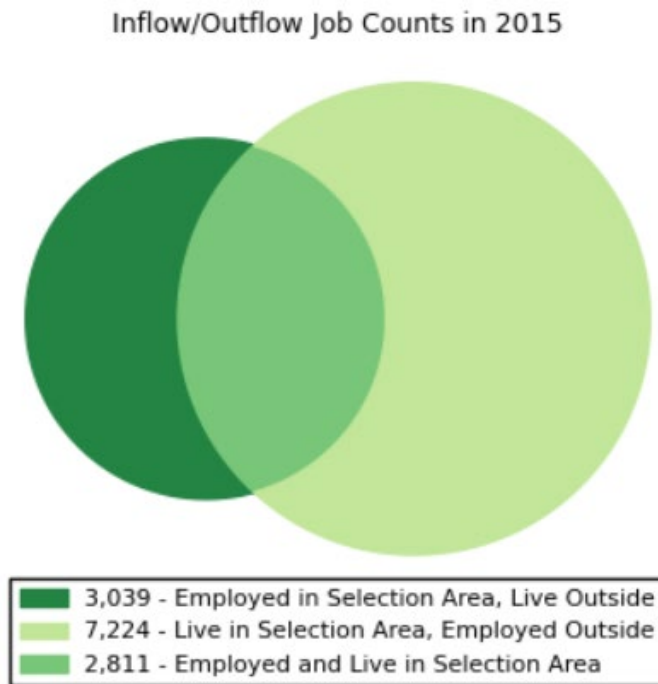
2.2 - Commuting Workforce

According to the US Census and Minnesota DEED, 2015 data suggests that 2,811 individuals live and work in Dodge County. 3,039 people live outside of the county, but commute in to work each day, and finally, 7,224 individuals live in the county but commute out to work each day. Many of the individuals commuting out of the county for work commute to Owatonna or Rochester, MN.

Dodge County is highly integrated into the regional economy, as transportation options allow for longer commutes. According to Census American Community Survey 2016 data, 21.6% of occupied households in the county have 1 vehicle, 40.2% have 2 vehicles; 35.3% have 3 or more vehicles. Only 2.8% of the households noted that they have no vehicle available. Economic growth along the Highway 14 corridor is expected to continue. This and other roads for commuting workforce participants should be adequately maintained and continuously evaluated for necessary improvements. Projected increase in available jobs in Rochester will also increase traffic congestion resulting in higher demand for public transit options such as bussing, carpooling, and shuttle services in Dodge County.

According to data from the U.S. Census, residents reported an average/mean commute of 24 minutes, slightly longer than the State average of 21 minutes (US Census Bureau; 2015 American Community Survey). The fact that almost 55% of Dodge County's labor force works outside of the county indicates the increasing draw of surrounding areas' regional economies. In addition to upkeep of major transportation systems for commuters, Dodge County should also focus on the availability of housing for its growing population and the families and individuals looking to reside in Dodge County but work elsewhere.

Figure 34



Source: US Census; On the Map

2.3 - Unemployment

According to Census and Minnesota DEED data, unemployment patterns in Dodge County have closely mirrored those of the State of Minnesota.

With low unemployment rates being experienced State-wide and 3.3% in the county (US Census Bureau; 2016 American Community Survey), the county should find ways to aid employers in making the county a desirable place to live, work and do business. The perpetuation of housing availability and recreational opportunity may prove to be an effective means to drawing in new populace.

According to Minnesota DEED's economic outlook projections, there will be a great need for the replacement of retiring workers in positions throughout industry sectors. What's more, the county will experience job growth especially in the healthcare and healthcare support sector. Jobs functioning as replacement positions will be created as well as new, expanded positions.

Figure 35

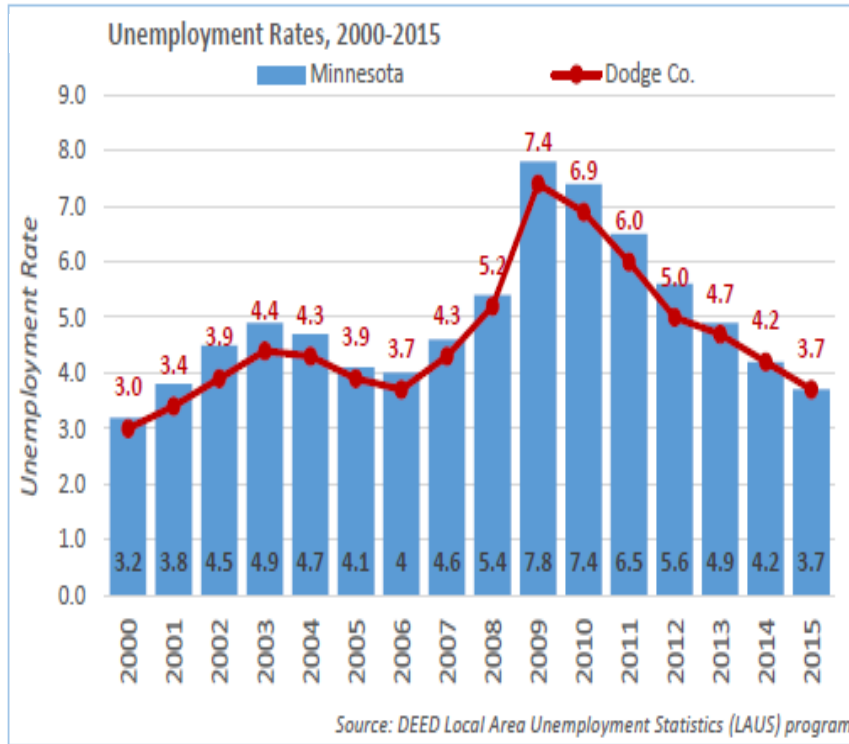


Figure 36

| Annual Unemployment Rates | | |
|---------------------------|-----------|-----------|
| | Dodge Co. | Minnesota |
| 2000 Annual Avg. | 3.0 | 3.2 |
| 2001 Annual Avg. | 3.4 | 3.8 |
| 2002 Annual Avg. | 3.9 | 4.5 |
| 2003 Annual Avg. | 4.4 | 4.9 |
| 2004 Annual Avg. | 4.3 | 4.7 |
| 2005 Annual Avg. | 3.9 | 4.1 |
| 2006 Annual Avg. | 3.7 | 4.0 |
| 2007 Annual Avg. | 4.3 | 4.6 |
| 2008 Annual Avg. | 5.2 | 5.4 |
| 2009 Annual Avg. | 7.4 | 7.8 |
| 2010 Annual Avg. | 6.9 | 7.4 |
| 2011 Annual Avg. | 6.0 | 6.5 |
| 2012 Annual Avg. | 5.0 | 5.6 |
| 2013 Annual Avg. | 4.7 | 4.9 |
| 2014 Annual Avg. | 4.2 | 4.2 |
| 2015 Annual Avg. | 3.7 | 3.7 |

Source: DEED LAUS program

Figure 33 below shows how regional unemployment rates have fallen while job vacancies have risen. With such low unemployment, you can see the number of jobseekers per vacancy meaning employers will struggle to find qualified jobseekers to fill more complex job vacancies.

Figure 37

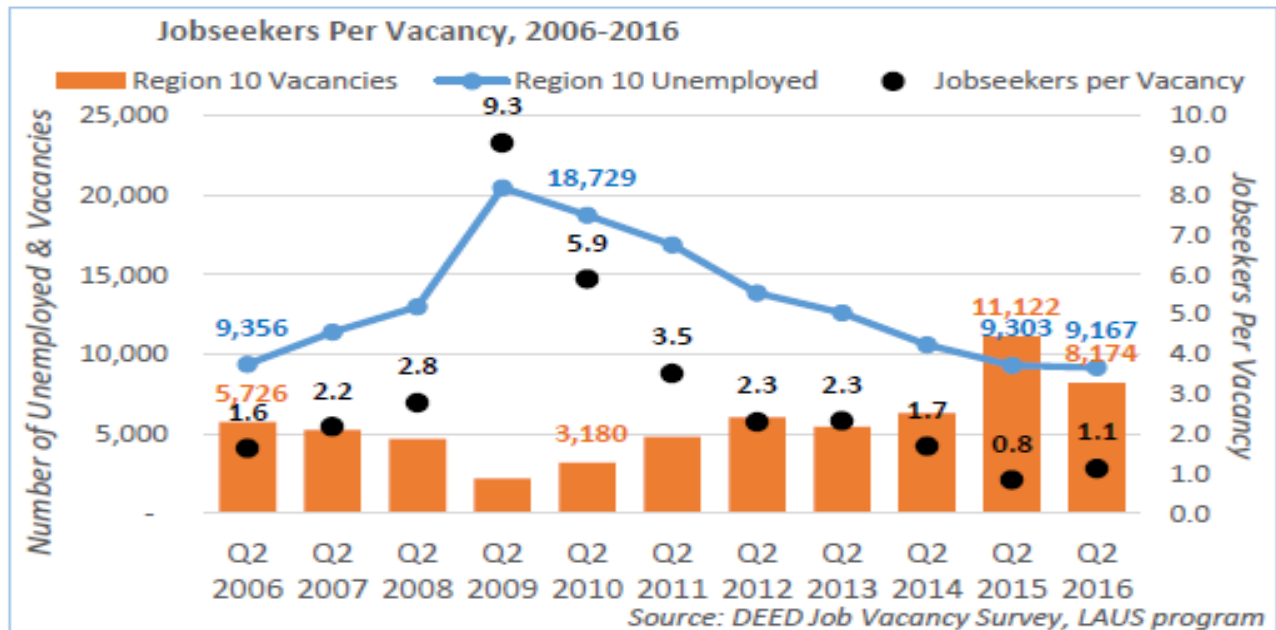


Figure 38

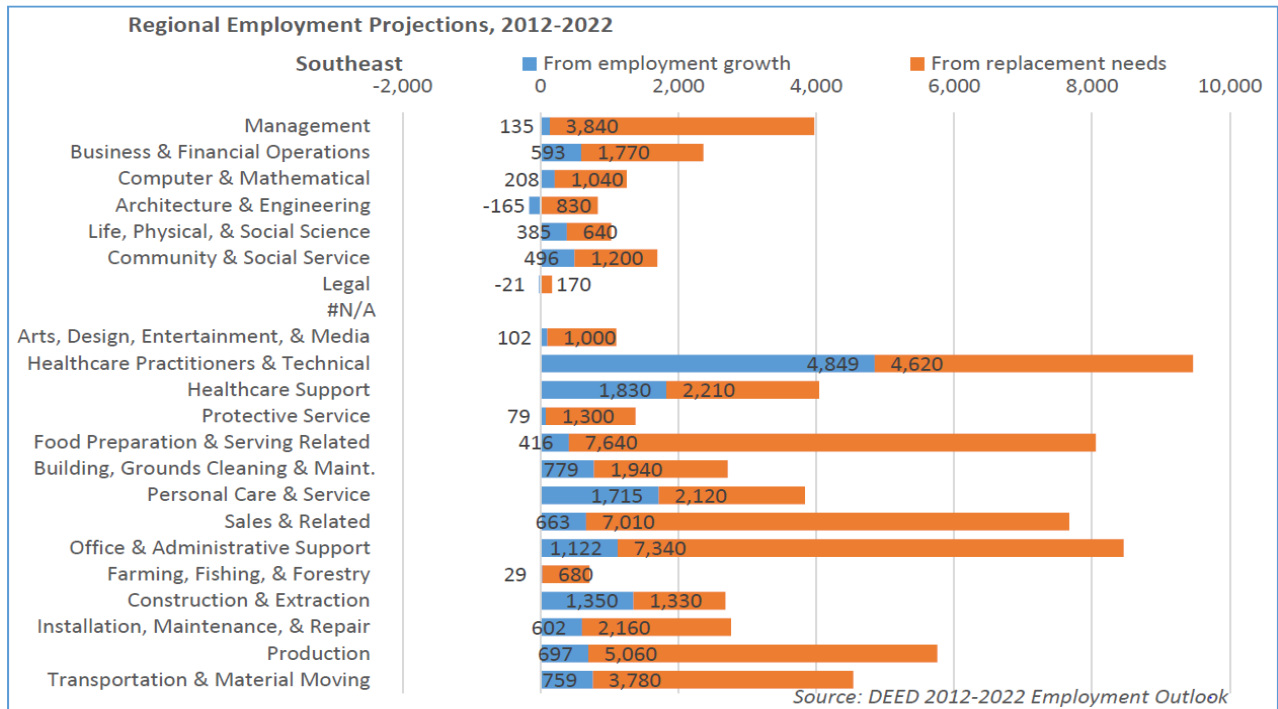


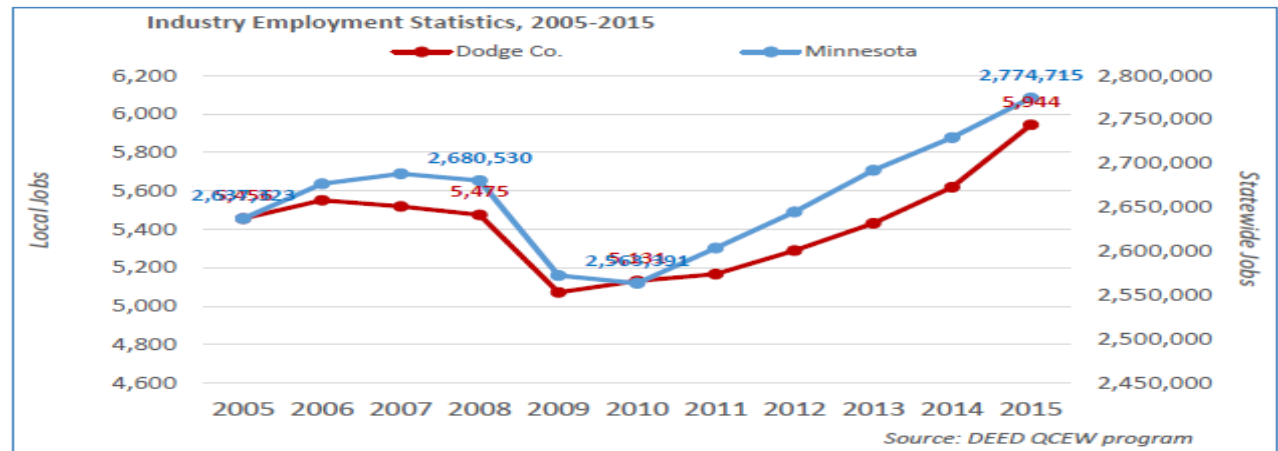
Figure 34 illustrates the projected demand for new employees in the southeast region from 2012-2022. The graph shows significant projected need not only based on new job growth, but also based on replacement employees for people leaving the workforce.

Figure 39

| Industry Employment Statistics, 2015 | | | | | | | | |
|--------------------------------------|------------------|----------------|-------------------|-------------------|----------------|----------------|----------------|----------------|
| | 2015 Annual Data | | | | 2010-2015 | | 2014-2015 | |
| | Number of Firms | Number of Jobs | Total Payroll | Avg. Annual Wages | Change in Jobs | Percent Change | Change in Jobs | Percent Change |
| Dodge Co. | 436 | 5,944 | \$245,198,166 | \$41,184 | 813 | 15.8% | 325 | 5.8% |
| State of Minnesota | 160,678 | 2,774,765 | \$148,563,385,038 | \$53,560 | 211,374 | 8.2% | 45,152 | 1.7% |

Source: DEED Quarterly Census of Employment & Wages (QCEW) program

Figure 40



2.4 - Market Information

Dodge County's businesses have very diverse markets. Some of those businesses cater directly to local residents while others are focused on regional, state, and international economies. As discussed above, Dodge County has a significant economic base in the manufacturing industries located in the county, as well as healthcare, agriculture, retail, education and wholesale trade. These industries are primary providers of jobs. Businesses with regional, national, or international relationships bring in dollars from outside of the county that subsequently contribute to the county through wages, household spending, and purchases from local businesses.

In agriculture, it was noted by many county survey participants, that there was a substantial desire to maintain and promote that agricultural industry. Suggestions were made that agri-tourism has become a highly popular means of educating young people about their food and other ag-based products in addition to showcasing the career opportunities available. Suggestions were made for the county to consider the offering of tours of the AICorn Clean Fuel plant and the organization and promotion of "breakfast on the farm" type events that would encourage families to learn about where their food comes from and receive education on farming/food processing techniques affiliated with their daily meal consumption.

As residents of the county heavily suggested that more recreational opportunities should be considered in the future—both for the enjoyment of a more robust tourism industry and for current residents, the county should consider the impact on the lodging industry and to consequential demand that could create. As the recreation and tourism industry grows, the county can consider participation in hotel feasibility studies in conjunction with city or township governmental entities.

While the retail and service sectors do not always provide a high wage rate, it is beneficial to the county to encourage local retail and service spending, both from an economic and an overall planning perspective. The county can encourage communities to look into University of Minnesota Extension office Retail Trade Analysis documents to determine potential needs/niches for different retail concepts that may be supported by its cities and townships.

2.5 - Diversification

While Dodge County does have a fairly diverse economy, it is important to continue to support the growth and development of a variety of industry sectors. This will aid in the availability of different job types in addition to protecting the economy from difficulty associated with one-industry sector collapses.

2.6 - Relationship Building

It is important for the County to continue to build and maintain relationships with its various businesses. A consideration should be made regarding regular business retention and expansion studies to learn about what the needs of the businesses are and to assist promptly with any desires for expansion.

With respect to relationships, the county should also continue to grow its relationships with area organizations such as Rochester Area Builders, residential and commercial builders/developers, and residential and commercial real estate agents/brokers. These relationships can help articulate the need for housing and other development and aid the county in understanding the land values and their affordability. Furthermore, the county should encourage its cities to evaluate policy for permitting and

building in relationship to Rochester, Owatonna, and other metropolitan areas. This comparison regarding fees, process, etc. can become an effective marketing tool.

2.7 - Economic Development Growth

While the county does have economic development listed on its website, it may be prudent to consider an expanded page with further contact information for staff in addition to links to industrial/commercial land available. Creation of a county wide profile with demographic and situational information may be a beneficial tool to include on the county's page. The County EDA has a Revolving Loan Fund for business assistance.

Understanding that many of the cities in the county have their own economic development tools such as revolving loan funds and other relevant programs for utilization by businesses, the county could consider the instatement of a county-wide loan fund to aid township and other county businesses with startup and expansion.

The role of the county in any economic development capacity will be to encourage and support rather than lead or over regulate.

2.8 – Agriculture Trends

Agribusiness is the predominant land use outside of city limits where County land-use policy has the greatest effect. Therefore, it is important to recognize projected trends in agriculture including:

1. **Shifting Farm Structure.** A large transfer of farm assets to younger producers will occur soon. The average farmer is 57 years old, and 30% are over 65. A typical Midwest farm of 2,000 acres could conservatively be worth \$10 million, just including land valued at \$5,000 per acre. The trend toward larger farms will slow until it hits equilibrium.
2. **Acceleration in Technology.** Data analysis in the years ahead will supplement what farmers know intuitively—and in some cases challenge those assumptions. New products rely on aerial satellite imagery, greenness sensors, soil maps and millions of weather data points. The question of data ownership will be a subject of growing debate.
3. **Biotechnology Strategy Evolves.** GMOs are here to stay but face political and public relations hurdles. In states such as Vermont, where labels are required, implementation is expensive. Yet some GMO advocates back a federal labeling solution that would halt state efforts. The industry can benefit by helping turn public opinion.
4. **Specialization to Continue.** Agricultural production is becoming more specialized. In 1982, 35% of all farms produced corn, but in 2007 only 22% did because of economies of scale, technological advances and government policy. Today, farmers have diversified with organics, non-GMO products, high-oleic soybeans and high-starch corn.
5. **Resource Scarcity.** More than 40% of the food production increase since 1961 has been accomplished through irrigation, but groundwater supplies aren't infinite. Climate change also poses challenges. Scientists estimate that for each 1.8°F increase in temperature, key crop yields drop 10%.
6. **Changing Commodity Environment.** From 1980 to 2004, the correlation of corn prices to crude oil prices was 0.35. From 2005-13, that figure more than doubled to 0.87. Other commodities similarly illustrate the strong relationship between energy and crop prices.

7. **Meat Consumption Shift.** U.S. meat consumption declined 7.8% from 2007-13. Meanwhile, China has been the world’s top meat consumer since 1992. By 2012, China’s consumption more than doubled that of the U.S. By 2022, China’s red meat and poultry consumption is projected to rise 15.2%.
8. **Public Scrutiny of Livestock Treatment.** Consumer demand and regulatory insistence on a range of safeguards for raising livestock in ways deemed sustainable and humane are causing rapid changes in the food system. Large food companies and supermarket chains are phasing out the use of sow farrowing crates from their supply chains.
9. **Environmentalism’s Influence Grows.** From fertilizer to pesticides, farmers have to be mindful of a complex, growing web of regulations.
10. **Government Policy in Flux.** Successive administrations in the U.S. and other countries have established approaches to land use, biofuels, GMOs and monetary policy that seem likely to continue. The biggest change is likely to occur in China.

(This list courtesy of the article “Top 10 Megatrends in Agriculture” by Ed Clark

2.9 – Results of the 2017 Survey

The following graphs summarize responses from county-wide survey conducted in 2017. See **Appendix A** for comprehensive summary:

Figure 41

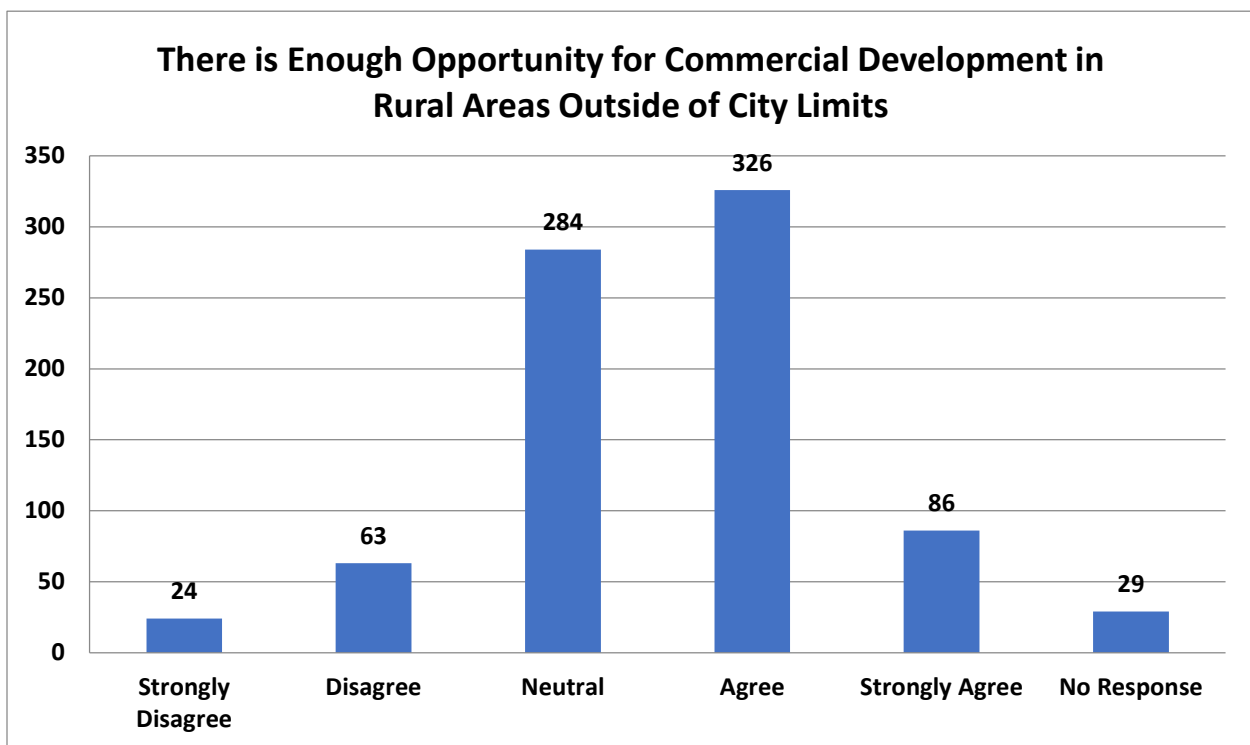
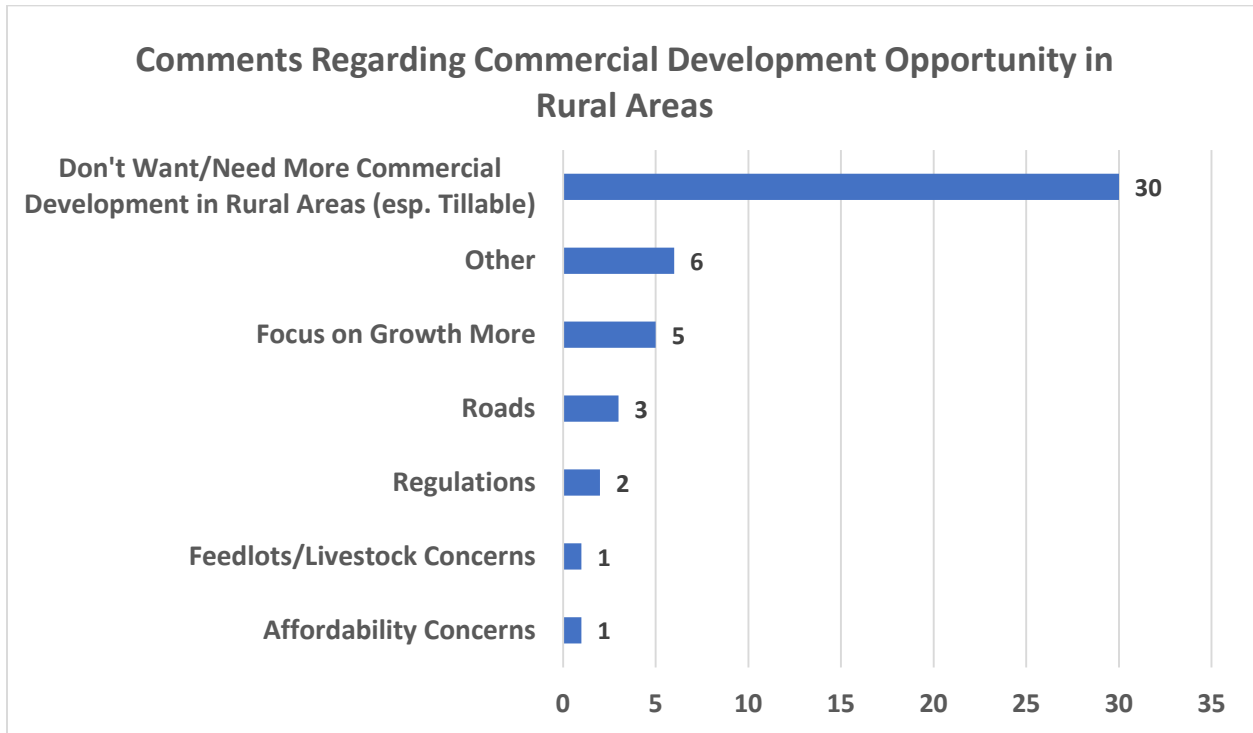


Figure 42



2.9 - Previously Adopted Goals and Policies

1. Support ag business
2. Support the growth of manufacturing
3. Support efforts for business retention

2.10 - Updated Policy for 2018 County Wide Comprehensive Plan

Continue the existing policy to:

1. Support ag business
2. Support the growth of manufacturing
3. Support efforts for business retention

2.11 - Ten Year Implementation Plan

1. Conduct regular business retention and expansion visits.
2. Catalog, update and promote available commercial and industrial sites throughout the County
3. Form Council of Governments and meet regularly to discuss land-use and growth issues and Opportunities.
4. Conduct County-wide housing study to identify gaps in workforce housing market.
5. Explore and identify programs to assist with additional recreational opportunities for County residents and visitors such as parks and bike trails.
6. Identify and promote resources to support ag business growth and retention

Section 3: Transportation



Introduction: The County strives to maintain a safe and effective transportation system for its citizens and businesses. In the citizen survey that was sent out, a high percentage of respondents noted both better road maintenance and expanded Highway 14 as the biggest needs for the transportation system in the County.

Transportation facilities and the land uses associated with them are integral to the function of all levels of government. The degree to which choices of transportation modes are available to residents may have a profound effect on the quality of life locally and regionally.

Street and highway improvements are a critical planning consideration because of the interactive relationship between transportation and land use. Location choices for many land uses are frequently made on the basis of access to major streets and highways. Without consideration for adequate capacity or maintenance, the transportation system cannot adequately accommodate development.

Transportation planning for streets and roads begins with understanding the relationship between land use and road network. Streets and roads balance between the functions of mobility and land access. On one side, such as interstate highways, mobility is the primary function of the network. On the other side, such as local roads, land access to farms and residences is the primary service. In between these two extremes mobility and land access vary depending on the function of the road network.

3.1 - Definitions

This section seeks to improve the understanding of Dodge County's transportation system, the function and basic characteristics of each of the types of roadways found in the county are as follows:

Arterial Roads provide direct, relatively high-speed service for longer trips and large traffic volumes. Mobility is emphasized, and access is limited. There is one, major arterial highway in Dodge County-- Highway 14.

Collector Streets or Roads provide a bridge between arterials and local roads. Collector streets/roads link small towns to arterials as well as collect traffic from local roads.

Local Streets provide direct access to individual homes and farms.

Local County Highways (Lettered Roads): These roads typically carry less traffic. Highway and bridge reconstruction and maintenance is funded through local tax dollars.

County State-Aid Highways (CSAH) (Numbered Roads): were established by the State Government in 1957. Highway and bridge reconstruction and maintenance is funded primarily through State Gas Tax Aid funds allocated to all 87 counties in Minnesota. These funds are based on number of lane miles, ability to pay (equity based on County taxability), vehicle registration, and money needs (what it would cost to bring all mileage up to modern rural and urban standards).

3.2 - Commuter Transportation

Figure 43

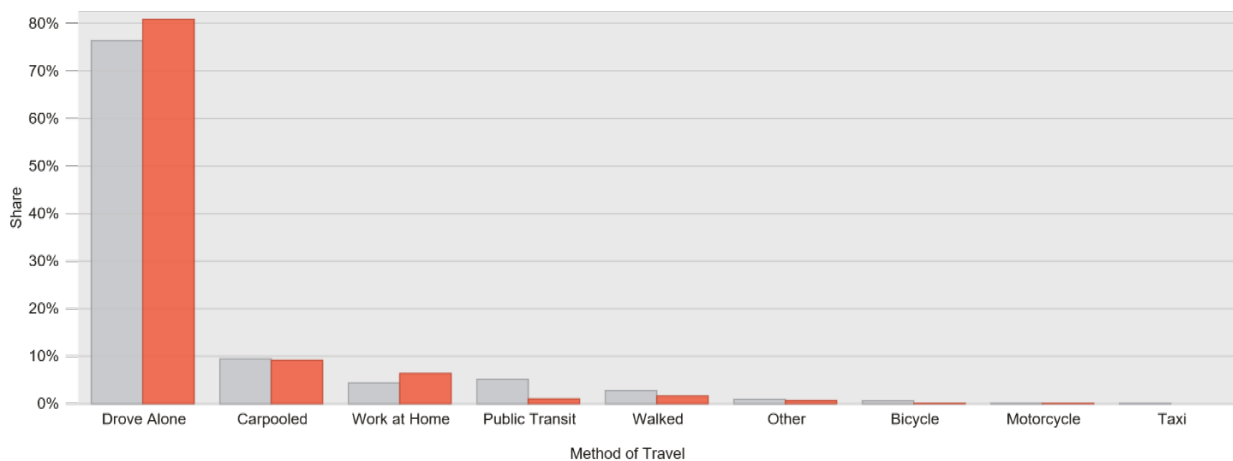
| | Minnesota | | Dodge County | |
|---|-----------|---------|--------------|---------|
| | Estimate | Percent | Estimate | Percent |
| Car, truck, or van -- drove alone | 2,133,374 | 78.1% | 8,644 | 81.6% |
| Car, truck, or van -- carpooled | 241,094 | 8.8% | 983 | 9.3% |
| Public transportation (excluding taxicab) | 95,068 | 3.5% | 73 | 0.7% |
| Walked | 77,257 | 2.8% | 158 | 1.5% |
| Other means | 44,703 | 1.6% | 114 | 1.1% |
| Worked at home | 141,703 | 5.2% | 621 | 5.9% |
| Mean travel time to work (minutes) | 23 | | 23.7 | |

The average commute time for residents of Dodge County is 23.7 minutes. Over 80% of those residents that commute reported that they drove alone. Encouraging efficiency options for commuters such as carpooling and mass transit (bussing) could reduce traffic congestion and wear on the county's transportation system as the population continues to grow. These options could also increase the need for the county and its municipalities to increase public parking options for commuters, such as park and ride parking lots.

Figure 44

Commuter Transportation in Dodge County

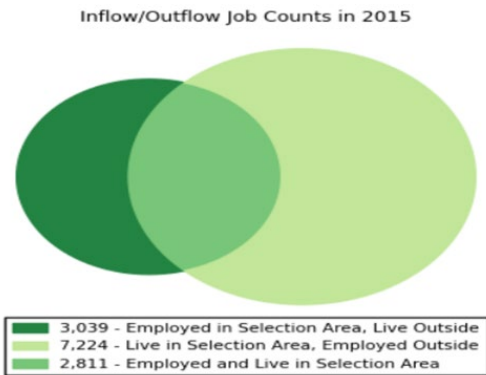
Please note that the buckets used in this visualization were not evenly distributed by ACS when publishing the data.



Dataset: ACS 5-year Estimate
Source: Census Bureau

DATAUSA:

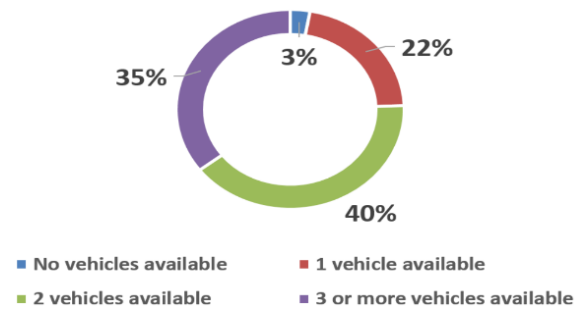
Figure 45



Source: US Census Bureau; Laborshed Analysis Statistics

Figure 46

Vehicles Available Per Household



Source: US Census Bureau; 2015 American Community Survey

3.3 - Major Roads

See map 3.a at the end of this section.

3.4 - Highway 14 Expansion

Highway 14 Segment 1

The segment of Highway 14 from Highway 280 east to Steele County Road 180 was completed in October of 2015. That project increased that 2.5-mile segment of Highway 14 from 2-lanes to 4-lanes. It also increased intersection safety in that segment by lengthening turn lanes and minimizing access points.

Highway 14 Segments 2 and 3

MnDOT has been working with property owners in Steele and Dodge counties in the areas where the new alignment will go. Some properties have been acquired and many of the buildings of those properties were either sold for removal or will be dismantled or demolished.

The Minnesota Legislature approved funding of the final two segments. Construction is scheduled to begin in the fall of 2019.

Corridors of Commerce Funding

On May 30, 2018 Governor Mark Dayton signed the State bonding bill, that included additional funding for the Corridors of Commerce, into law. This funding will allow the next Corridors of Commerce projects in line to be funded. The selected projects will enhance the movement of freight and people in the regions where these projects are located which will aid the economy and reduce congestion.

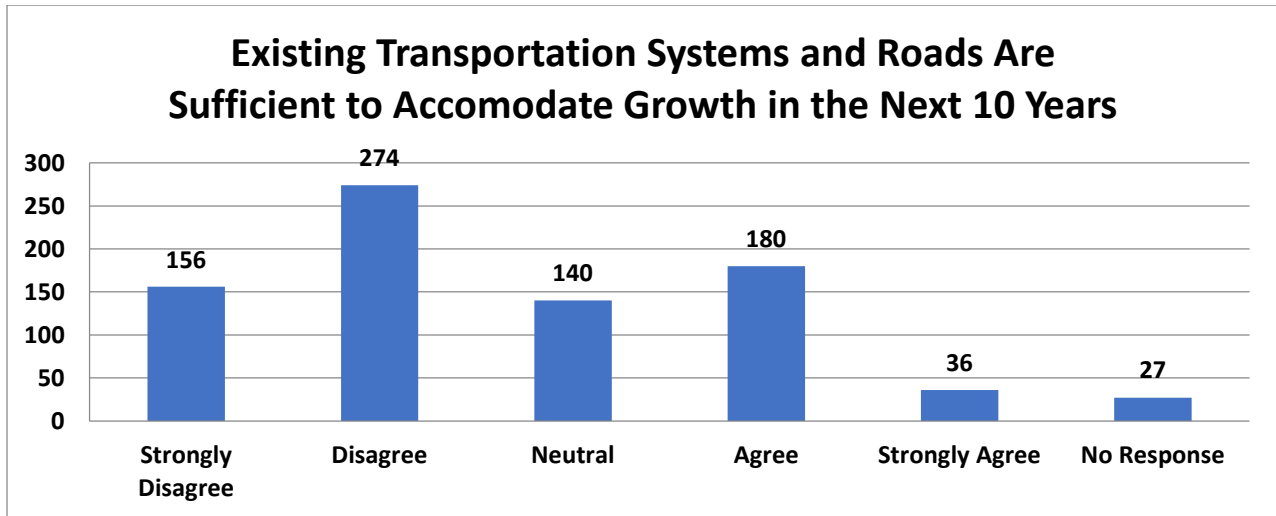
Highway 14 was among the three projects selected in this round.

Highway 14 will be expanded from two lanes to four lanes between Owatonna and Dodge Center. This project will complete a continuous four-lane roadway between Mankato and Rochester. MnDOT District 6 has indicated that the intention to start construction on this project in the fall of 2019.

3.5 – Results of the 2017 Survey

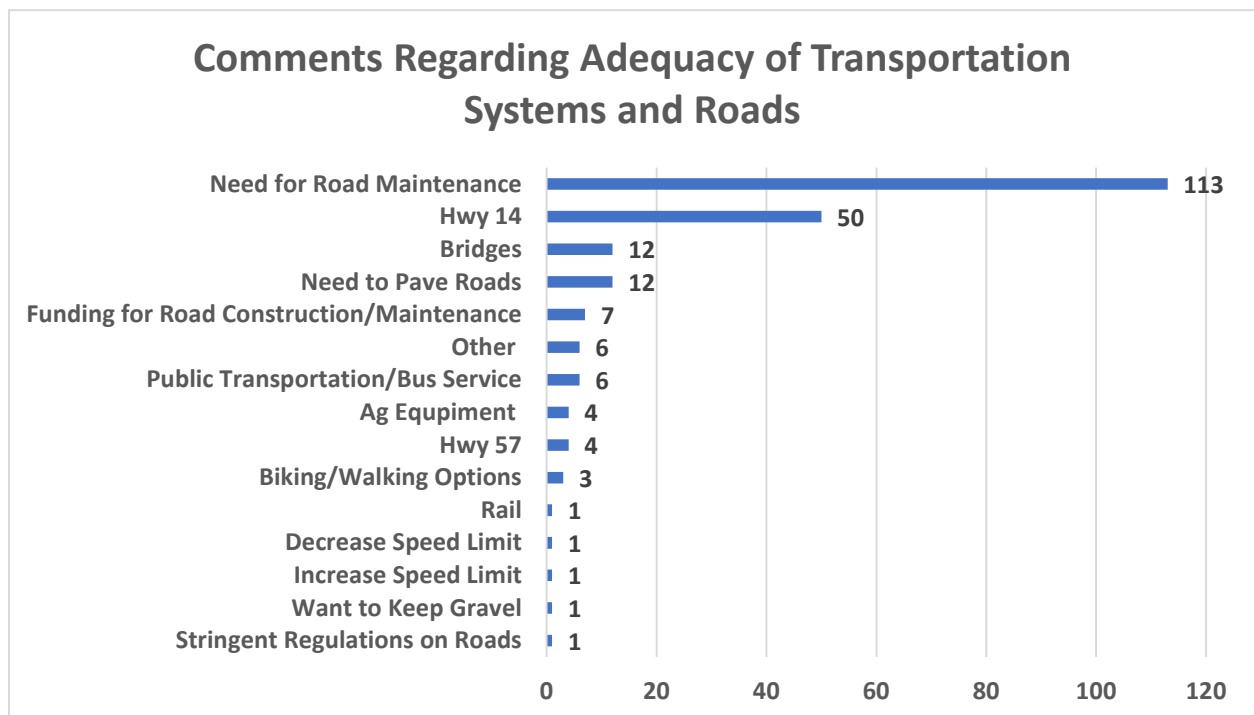
The following graphs summarize responses from county-wide survey conducted in 2017. See **Appendix A** for comprehensive summary:

Figure 47



During the community input segments of the comprehensive planning process, many responses and comments centered on road improvements and road maintenance. Since these items are dependent on several funding sources, some of which are beyond the county’s control, it is important for the residents to be informed about the planned improvements each year and the costs associated. Citizen input on the importance of needed improvements can play a vital role in state and federal funding decisions.

Figure 48



3.6 - Previously Adopted Goals and Policies

From the 2001 Comprehensive Plan:

1. Implement/maintain access management practices throughout Dodge County. Access management aids in reducing the number of conflict points and, thereby, reduces the overall number of crashes. There is a direct relationship between the number of access points and the crash rate. Access management can have a reduction in annual crashes of 40 percent; the level of service during peak hour traffic is improved; and roadways with access management perform better in terms of retail sales than surrounding communities with no access control.
2. Develop a set of classification criteria that is tailored to the characteristics of the County roadway system. Then develop a functional classification system for all County roads and County state aid highways.
3. Preserve adequate right of way to accommodate future reconstruction and improvements as Development/redevelopment occurs adjacent to County roads.
4. Preserve and/or consider officially mapping right of way to accommodate future interchanges Along Trunk Highway 14. Future land use conflicts and costly acquisitions can be minimized and even avoided by preserving right of way for transportation improvements.
5. Consider jurisdictional classification changes to low volume County roads. Several County roads have extremely low Average Daily Traffic volumes and should be considered candidates for future jurisdictional classification changes. For current ADT volumes see <http://www.dot.state.mn.us/traffic/data/maps-county-alpha.html>
6. The County should support and encourage private companies and local units of government in carrying out travel demand management strategies. This might include cooperating with local units of government in establishing additional park and ride lots, working with local transit providers in providing additional public transit routes and with private employers in their individual efforts.
7. The County should provide support to the Dodge County Trail Association and local units of government in establishing additional bicycle and pedestrian ways such as the proposed Stagecoach Regional Trail and the Iron Horse Trail, and to coordinate the orderly continuation of existing facilities in developed urban areas.
8. Maintain open lines of communication with the townships of Ashland, Canisteo, Claremont, Concord, Ellington, Hayfield, Mantorville, Milton, Ripley, Vernon, Wasioja, and Westfield in planning for future transportation issues.
9. Consider implementing programs aimed at preserving and enhancing the natural roadway/road ditch and built environmental features. Also, consider programs/practices to enhance the health and diversity of wildlife populations, encourage developers of private and public lands to retain natural areas or restore them with native species after construction, and encourage practices recommended by DNR: DNR's Best Practices for protection of species and Roadways and Turtles Flyer for self-mitigating measures to incorporate into design and construction plans. Other related programs may include Scenic Wildflower Routes and/or Roadsides for Wildlife. Furthermore, environmental impacts for specific projects should be thoroughly evaluated on a per project basis as part of the environmental documentation process.

3.7 - Updated Policy for 2018 County Wide Comprehensive Plan

Maintain a quality and effective transportation system through continuation of the 2001 adopted policy above.

3.8 - Ten Year Implementation Plan

1. Update County Transportation Capital Improvement plan as needed.
2. Continue to work with the State for the expansion of Minnesota Highway 14, including space for (and or development of) a trail corridor on the back slope between Dodge Center and Owatonna.
3. Regularly examine County commute patterns and determine if additional mass transit options are needed based on population growth in Dodge County and job growth in Rochester.
4. Continue to support the Dodge Center Airport.
5. Expand non-motorized trail system options in the County. Work with Department of Natural Resources to access possible funding and/or technical assistance for these projects.
6. Continue to support “Safe Routes to School” planning and implementation.

Section 4: County Property



Introduction: Due to the number of and types of services provided by Dodge County to its citizens, the county owns and maintains a select number of structures/facilities. As the county's population continues to grow, it should consider the potential need for increased number(s) of and/or augmented basic facilities and services. An underlying focus should exist on providing facilities and services that will not only allow for the subsistence of existing businesses and residents, but also for the perpetuated strategic growth projected for the county. See Map 4.a for locations of County Property.

City and township specific infrastructure and services such as schools, water/sewer services, fire/police protection services, specific non-county recreation areas and other items not facilitated by the county are implicitly planned and supported by corresponding cities and townships and are not included in this plan.

4.1 - Government Services Center

The county's Government Services Center is located at 721 Main Street North in Mantorville, MN. This building exists to provide a multitude of services for county residents and businesses. Within the structure are the following departments:

- A. Administration,
- B. Assessor, Recorder,
- C. Building Operations,
- D. County Commissioner's Room,
- E. Environmental Services/Planning & Zoning,
- F. Extension Services,
- G. Information Technology,
- H. Employee Relations, Finance,
- I. And Recorder/Abstractor



4.2 - Courthouse

The Dodge County Courthouse is located at 22 6th Street East in Mantorville, MN. This building is the oldest operational courthouse in the State of Minnesota. The Courthouse allows for the operation of the following departments:

- A. Attorney,
- B. Court Services,
- C. Drug Court,
- D. Emergency Management,
- E. MN Prairie,
- F. Sheriff's Office,
- G. and Veteran's Services



Source: Dodge County GIS

4.3 - Transfer Station / Recycling Center and Landfill

The county's Transfer Station is located at 62236 240th Avenue in Kasson, MN. The Transfer Station acts as a waste collection area for the county. It accepts waste from haulers, businesses, and residents. The waste is processed and transported to the Olmsted Waste-to-Energy Facility where it is converted into steam and electricity. The station also accepts: construction & demolition debris, brush & leaves, clean wood, fluorescent lamps, appliances, used oil & filters, tires, antifreeze and electronic waste.



Source: Dodge County GIS

4.4 - Fairview Nursing Home/Fairview Care Center

The Fairview Care Center is located at 702 10th Avenue Northwest in Dodge Center, MN. The Care Center serves the senior population in the county with the provision of services that fulfill physical, mental, social and spiritual needs. They are certified for Medicare and Medical Assistance. This facility employs approximately 100 persons.

Services provided include:

- A. Medical Services,
- B. Therapy Services,
- C. and Recreation Programs



Source: Dodge County GIS

4.5 - Public Health Service Center

The Public Health Service Center is located at 42 East Main Street in Dodge Center, MN. The county's Public Health has been in operation since 1922. They strive to promote "healthy community" in Dodge County.

Public Health is responsible for important acts such as the prevention of epidemics and spread of disease, protection against environmental hazards, prevention injuries, promotion and encouragement of healthy behaviors and mental health, response to disaster and assistance to communities in recovery.

Public Health includes the following departments:

- A. Disease Prevention,
- B. Senior Home and Community Based Services,
- C. Family Health,
- D. Environmental Health,
- E. and Health Promotion



4.6 - Highway Department

The Dodge County Highway Department is located at 16 South Airport Drive in Dodge Center, MN. This department is responsible for construction and maintenance of the county roads and bridges. This work includes but is not limited to:

- A. Routine County Highway Maintenance,
- B. Road Repair,
- C. Grading,
- D. Drainage,
- E. Signing,
- F. Snow Removal,
- G. Ice Control,
- H. Minor Improvements
- I. Issuance of Permits,
- J. Rural Addressing,
- K. Maintaining County Highway Maps,
- L. Applying Dust Control,
- M. Updating Road Restrictions
- N. And Installation of Rural Mailbox Posts with the Swing-Away Arm



4.7 - 218 Fleet Maintenance Shop

This 2,650 sqft building is Dodge County's fleet maintenance shop, servicing 27 Dodge County Sheriff's Office vehicles, 16 County Administration vehicles, and 6 atv/snowmobiles.

Preventative maintenance, tire changes and light mechanical work is all done within this shop. The overall condition of the structure is good. Had a complete new roof installed in 2011, the brick work all around show no sign of moisture.



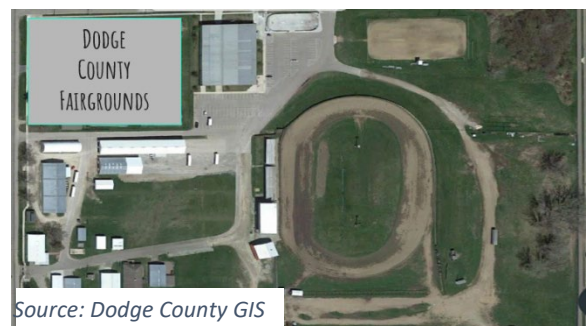
4.8 - Dodge County Museum and Historic Sites

Dodge County owns an historic 1869 church located in Mantorville. The building is now the home of the Dodge County Museum, operated by the Dodge County Historical Society. The limestone building is listed on the National Register of Historic Places as part of the Mantorville Historic District. Dodge County also owns Seminary Park in Wasioja which is maintained and managed by the Dodge County Highway and Parks Department, with guidance from the Dodge County Historical Society and assistance from the Friends of Wasioja. The ruins and the nearby historic buildings were designated a State Historic District in 1971, and listed on the National Registry of Historic Places in 1975.



4.9 - County Fairgrounds

The Dodge County Fairgrounds are located in Kasson, MN. These ground host the Annual Dodge County Fair and several other events each year.



4.10 – Dodge County Building Values By Site - 2018

| | |
|-------------------------------|---------------------------------------|
| <u>Fair Ground Buildings</u> | <u>Service Center (Public Health)</u> |
| \$1,462,382 | \$798,901 |
| <u>Transfer Station</u> | <u>Historical Sites/Museum</u> |
| \$1,848,735 | \$369,211 |
| <u>Courthouse/Annex</u> | <u>Government Service Bldg.</u> |
| \$8,744,309 | \$4,626,842 |
| <u>218 Maintenance Garage</u> | <u>Fairview Care Center</u> |
| \$235,362 | \$8,549,000 |
| <u>Highway Building</u> | |
| \$2,174,268 | |

4.11 - Previously Adopted Goals and Policies:

There were no policies specific to County Facilities in the previous comprehensive plan.

4.12 - Updated Policy for 2018 County Wide Comprehensive Plan:

Regularly evaluate County facility needs by:

1. Inventorying existing facilities
2. Assessing improvements needed
3. Predicting future demand and opportunities for efficiency

4.13 - Ten-year Implementation Plan:

1. Update capital improvement plan each year
2. Conduct energy assessments on all County facilities
3. Continue sustainable regional partnerships (e.g. Olmsted County) in waste management.
4. Prepare a long-range plan for the County Fairgrounds that addresses future use, facilities, and location.

Section 5: Broadband And Communication Technology



Introduction: Use of cell phones and the internet in recent decades has greatly increased in its capability and integration into everyday life for both individuals and businesses. As people find more ways to use the internet and these uses produce a heavier need for data, some communities are finding that their broadband service needs are not being met. In response, communities are using a variety of tools to stimulate broadband development, defined as the increased adoption, utilization and especially accessibility of broadband.

5.1 – Current Conditions

In the information age of today, even those more rural areas have become increasingly dependent on access to the internet and adequate broadband for work, school, and overall quality of life. (See “Housing” section of this plan for more information on developments and housing expansions in rural areas)

As Dodge County US Census American Community Survey data indicates that over 7% of the workforce population in the county currently works from home, the provision of adequate high-speed internet access is an important issue to address. This need will continue to grow as the county’s population steadily increases.

There are approximately 15 providers working to deliver internet access in Dodge County. These providers offer an array of services: DSL, Cable, Fiber and Fixed Wireless. Dodge County should foster relationships with relevant providers to encourage the expansion of services to unserved and underserved areas in the county.

The map below shows the vast majority of the area of the county is either “underserved” meaning a wired service or at least 25 Megabytes per second(Mbps) download and 3Mbps upload speed but less than 100Mbps download and 20Mbps upload is available or “unserved” which means that no service of even 25Mbps download and 3Mbps upload speeds is available in terms of access to quality broadband.

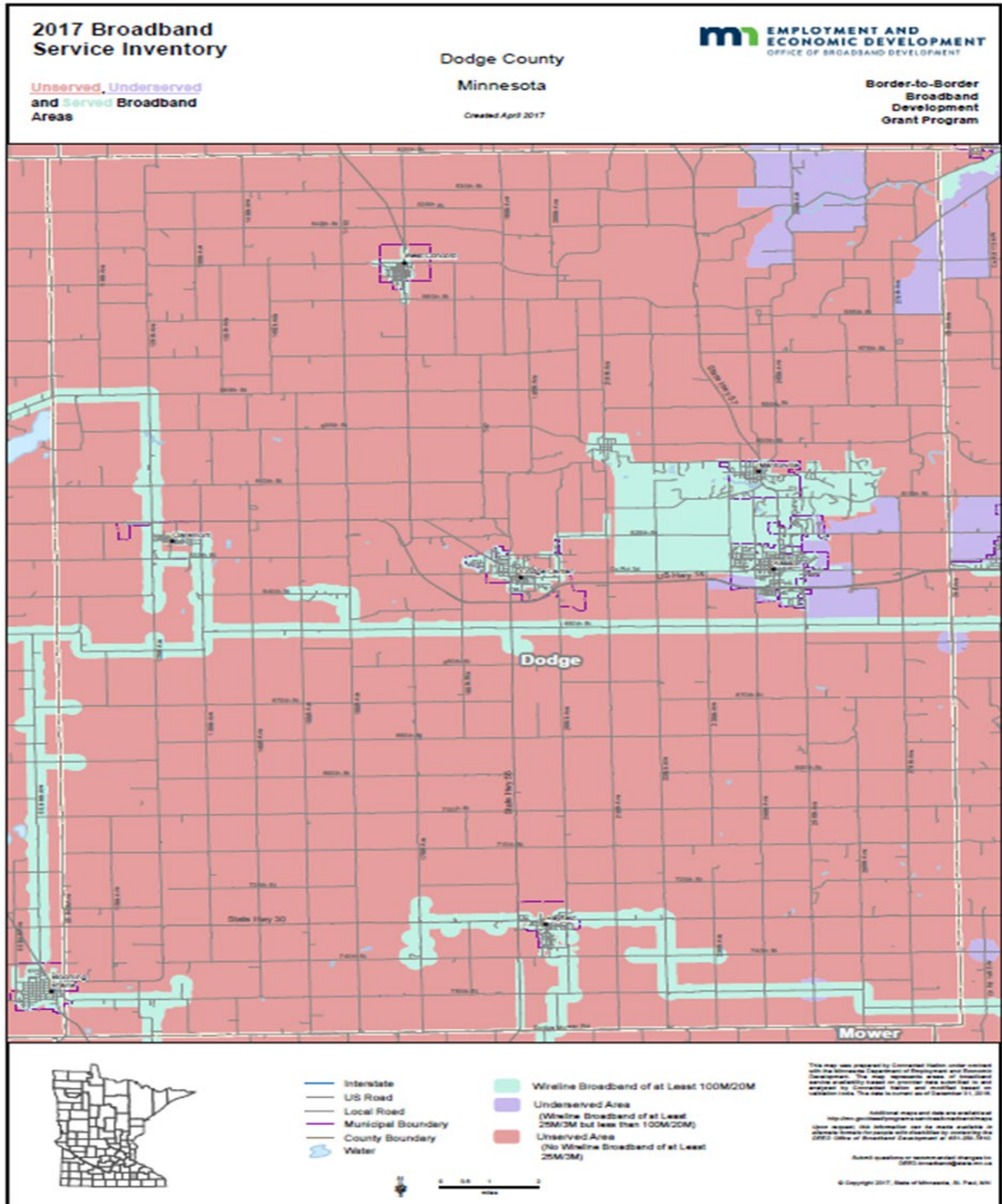
Broadband is high-speed Internet access that is “always on” and faster than traditional dial-up access, and which uses a wide range of frequencies, allowing large amounts of data to be transmitted simultaneously.

Adequate broadband refers to broadband services that are “always on”, that is, service that is available at all times without unreasonable interruption, and services that are of sufficient capacity for needs of all users.



5.2 - Dodge County Broadband Coverage Map

Below is a copy of the Broadband Service Inventory Map from the MN Department of Employment and Economic Development. This map can be found at the following link. https://mn.gov/deed/assets/infrastructure-grant-dodge_tcm1045-134125.pdf



5.3 - Previously Adopted Goals and Policies

There were no policies specifically dealing with communication in the previous comprehensive plan.

5.4 - Updated Policy for 2018 County Wide Comprehensive Plan

Promote access to quality broadband for all of the County's residents by:

1. Communicating with existing private broadband providers to discuss challenges to provide broadband service to the rural areas of the County
2. Identify opportunities to access State and Federal funding programs to assist in broadband projects.

5.5 - Ten Year Implementation Plan

1. Identify key stakeholders and convene a meeting with broadband providers.
2. Consider formation of Dodge County Broadband Taskforce
3. Facilitate public input meetings to help define demand for improved broadband access.
4. Support communication infrastructure needs for emergency services throughout the County.

Section 6: Natural Resources and Environment



Introduction: The natural resources most important to the economic base of the county are prime agricultural soils and clean/abundant groundwater. Citizens have also voiced that preserving open space and natural areas is very important to maintain the quality of life in Dodge County.

6.1 - Land Use and Prime Agricultural Soils:

Most of the soils in Dodge County are highly productive and considered “Prime Farmland” by the US Department of Agriculture criteria. **See Map 6.a.** As a result, production agriculture dominates the landscape and forms the economic base of the county. Non-farm development on Prime Farmland will limit the value of this natural resource for production agriculture.

6.2 - Land Use and Water Quality:

All drinking water used by municipalities, rural residents, businesses and farms comes from groundwater aquifers. The way we use land affects both surface water quality and groundwater quality. About 70 percent of the land area in Dodge County is used for row crop production, primarily corn and soybeans. Generally, pollutants found in our water are a reflection of our land use. Common pollutants are excessive sediment, nutrients, and fecal bacteria.

Dodge County has been sampling drinking water for 20 years. The database includes results from over 2500 water samples collected from private drinking water wells. Test results indicate that nitrate is present above background concentrations in 21% of all wells and above the health risk limit in 7% of all wells.

Drinking water sources are highly vulnerable to surface contamination in about 1/3 of the county. These are the areas with shallow soils over limestone and over sand aquifers. People living in these areas have a greater likelihood of drinking water contaminated by nitrogen. **See Map 6.b.**

Water sampling conducted by the MPCA reveals that many streams in the county are impaired. **See Map 6.c.** A comprehensive assessment of the condition of rivers and streams in Dodge County can be found in MPCA’s website: <https://www.pca.state.mn.us/water/watersheds>. Recent

testing has revealed the presence of e-coli bacteria from human and livestock sources in portions of the Cedar River. Some strains of E.coli can cause intestinal infection, and, nationally, numerous cases of illness due to consumption of contaminated water have been documented. E.coli is present, occasionally at high levels, across virtually all southeastern MN streams. Natural wildlife sources of E.coli abound, and its population in rural streams is augmented by other sources, including animal manure, and waste from malfunctioning septic systems. **See Exhibit 6.b** for more information about this subject.

Adopted in December 2016, the County's Water Management Plan addresses the following priority concerns:

1. Fertilizers and herbicides from agricultural fields seeping into drinking water
2. Nutrients and chemicals from animal feedlots flowing into rivers and streams
3. Nutrients and chemicals from animal feedlots seeping into drinking water
4. Soil, fertilizers and herbicides from agricultural fields flowing into rivers and streams
5. Loss of natural vegetation and habitat due to urban and rural development
6. Flash flooding or the quick rise and fall of water and stormwater management.
7. Inadequate individual septic systems, municipal sewers, and community systems that drain to field tile, wetlands, streams or rivers.

The Water Management Plan is available on the County's web site or by contacting the Environmental Services Department.

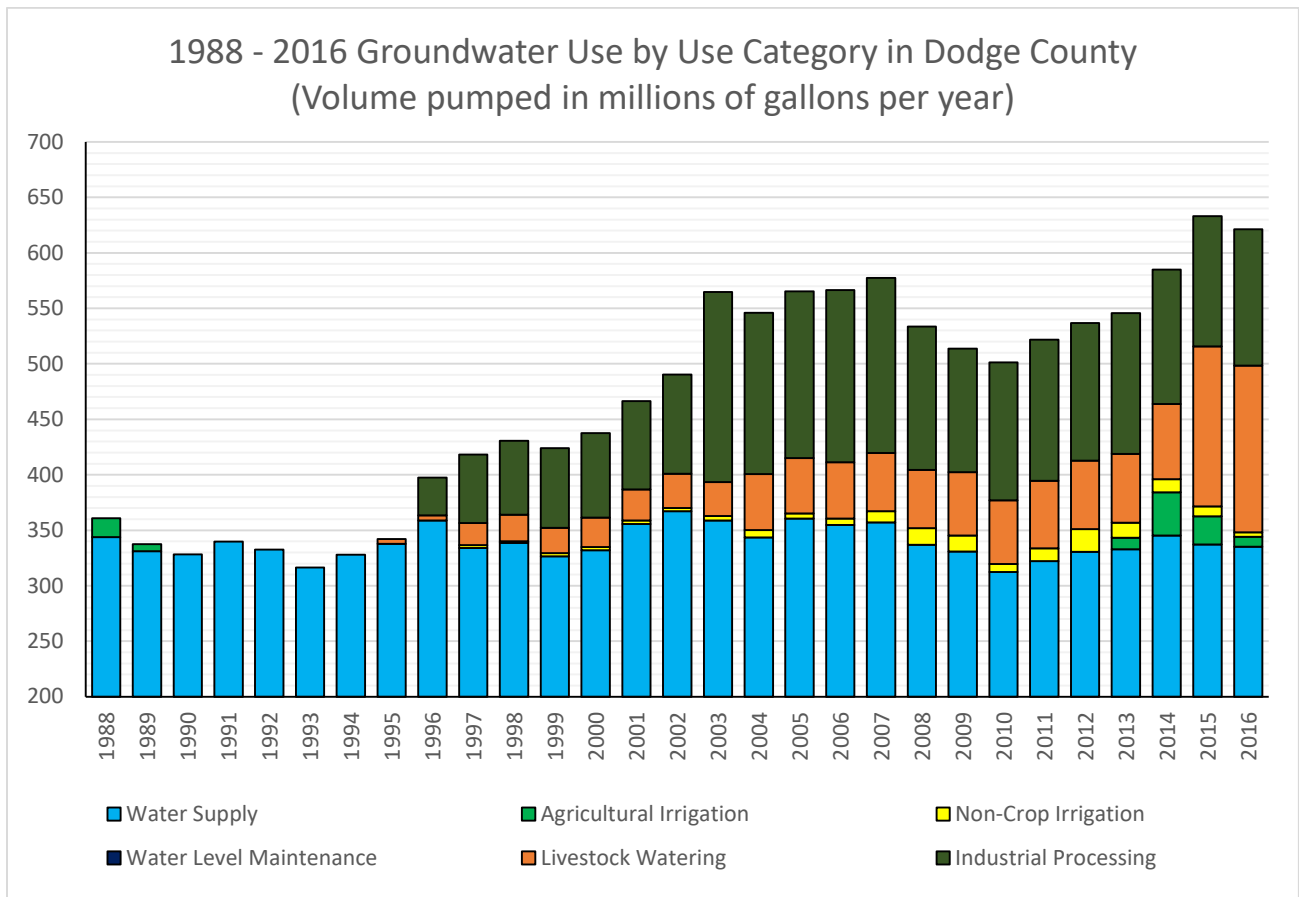
Cities in Dodge County have developed Drinking Water Supply Management Areas (DWSMA). As a part of their DWSMAs, cities have defined the geographic area that represents their Wellhead Protection Area (WPA) along with plans to protect water quality. WPAs can extend beyond city limits into areas regulated by Dodge County. The county should consider the WPAs when reviewing land use proposals and growth plans. For maps of Wellhead Protection Areas for cities, see Source Water Protection program on the MN Dept of Health web site:

<http://www.health.state.mn.us/divs/eh/water/swp/about/>.

Radium is a naturally occurring radioactive element that is present in varying amounts in rocks and soil within the earth's crust. Small amounts of radium also can be found in groundwater supplies. Long-term exposure to high levels may increase the risk of cancer, but at current levels, there is not an "immediate health risk", according to information from the Minnesota Department of Health. In past years, testing by the Minnesota Department of Health has found elevated levels of radium in a few Dodge County wells. Further testing is indicated in the future.

Dodge County has an abundance of groundwater in multiple aquifers ranging from near-surface aquifers used primarily by rural homes to deep aquifers tapped by municipal wells. Generally, landowners and industry have found suitable water supply for all their needs. Preserving the quality of the groundwater ensures that abundant supply remains – therefore it is a priority of the Water Management Plan.

Figure 49



Note: Water used by industrial sector increased significantly in 2018 due to the expansion of AI-Corn Clean Fuels, now authorized to use approximately 435 million gallons per year.

6.3 - Land Use and Natural Areas:

Our land use decisions often affect natural areas both directly (e.g. removing native prairie for construction of roads) or indirectly by changing land use (e.g. changing woodland to a residential zone). Dodge County has natural areas that are important in preserving rural character. Woodland, prairie, and wetlands also provide an irreplaceable function in cleaning our water and air. Many natural areas in the county are home to unique plants and animals. See enclosed the following maps and figures:

- **Map 6.d:** Land Cover
- **Map 6.e:** Native Plant Communities
- **Map 6.f:** Roadside Native Prairies
- **Figure 6.g:** Rare Features, Plants, and Animals
- **Map 6.h:** DNR's Wildlife Action Network
- **Map 6.i:** National Wetland Inventory

6.4 - Land Use and Air Quality:

Land uses in Dodge County affect air quality.

A recent report by the MPCA: “The Air We Breathe The State of Minnesota’s Air Quality in 2017” - <https://www.pca.state.mn.us/sites/default/files/lraq-1sy17.pdf> - indicates that the primary sources of air pollution in MN are:

- On-road vehicles 24% (cars, trucks).
- Non-permitted sources 33% (small businesses, heating, woodsmoke)
- Off-road vehicles and equipment 21% (construction and agricultural)
- Permitted sources 22% (power plants, factories).

Generally, outdoor air quality related health risks are higher near urban areas. However, there are air quality health risks associated with land uses in rural areas primarily from burning of waste and farming. Radon is prevalent in some areas of the county and can be a health risk if it accumulates inside dwellings and other enclosed structures.

Waste Burning:

A 2010 survey conducted for the MPCA - <https://www.pca.state.mn.us/sites/default/files/p-rrr1-01.pdf> - indicates that approximately 30% of the households and farms in Southeast Minnesota use burn barrels, fire pits, and wood stoves to dispose of their garbage.



Information provided by the MPCA indicates that emissions from burn barrels can risk human health: <https://www.pca.state.mn.us/waste/burn-barrels-dont-burn-your-garbage>

Farming:

Certain farm practices and feedlots may emit air pollutants and odors. The most common pollutants found in air surrounding farms are ammonia, hydrogen sulfide, methane, and particulate matter, all of which have varying risks to the human respiratory system.

According to the MPCA, odor is rarely useful in determining a human health risk because not all unpleasant odors are human health concerns. At times, severe odors may lead to lifestyle changes and alter daily activity for individuals living near feedlots. Quantifying odor from feedlots can be challenging because it is a mixture of free and particle-bound compounds, which can make it hard to identify what specifically is causing the odor. For a discussion on the County’s efforts to address odor, see section 9, exhibit 9A.

Air quality impacts from farming are difficult to assess. A report from the Official USDA Agricultural Air Quality Task Force (AAQTF), September 2016, stated: *“There is a need for better understanding of the interaction between agricultural activities and air quality in order to provide an avenue for measurement and accountability of science-based and proven approaches and mitigation technologies.”* See report:

<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/?cid=stelprdb1047261>

Greenhouse Gases:

There is evidence that our global climate is changing. The MPCA’s “Summary of the Report of the Interagency Climate Adaptation Team May 2017” –

<https://www.pca.state.mn.us/sites/default/files/p-gen4-07d.pdf> – indicates a high degree of confidence that Minnesota will experience:

- Continued loss of cold extremes
- Continued increase in frequency and magnitude of flash-flooding
- Increased severity and duration of heat waves

The above changes in climate may lead to changes in the way we use land and how we protect our resources. The county currently regulates floodplains and therefore has an opportunity to plan appropriate action to limit projected impacts from flash-flooding.

Radon in Dodge County:

Radon is a colorless, odorless, radioactive gas that naturally comes from the soil, and is responsible for over 21,000 lung cancer deaths annually in the United States. Radon seeps into our homes, offices, and schools and gives off radioactive particles that, when breathed in, can damage the lining of the lungs.

In Minnesota, 40% of homes tested have radon levels that are a major health risk, with levels above the 4.0 pCi/L safe level established by the EPA. In Dodge County, that number rises to 65%, with higher levels occurring mostly in the northern and eastern portions of the County.

Testing is an important first step in addressing the radon issue. Depending on the results, licensed radon professionals can help to design and implement mitigation efforts to reduce radon levels.

6.5 - Aggregate Resources:

Aggregate (sand, gravel, limestone) is an important natural resource used for roads and construction material. The MN department of Natural Resources has developed maps that identify the most important sand and rock deposits in the County. According to the DNR maps, **Map 6.j** represents locations that have the highest potential for recovery of quality aggregate. For a more detailed description, see maps on MN DNR Web Site: http://www.dnr.state.mn.us/lands_minerals/aggregate_maps/completed/dodge.html.

Land uses that prohibit or limit extraction of these resources will reduce availability for future use.

6.6 - Results of 2017 Survey:

The following graphs summarize responses from county-wide survey conducted in 2017. See **Appendix A** for comprehensive summary:

Figure 50

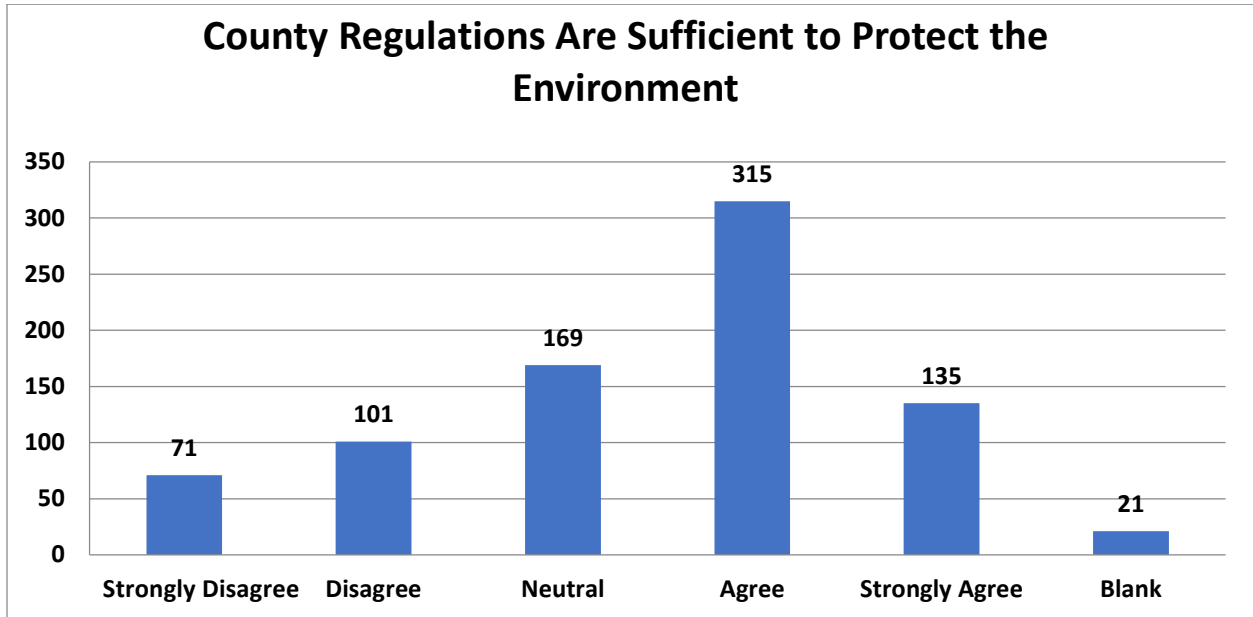
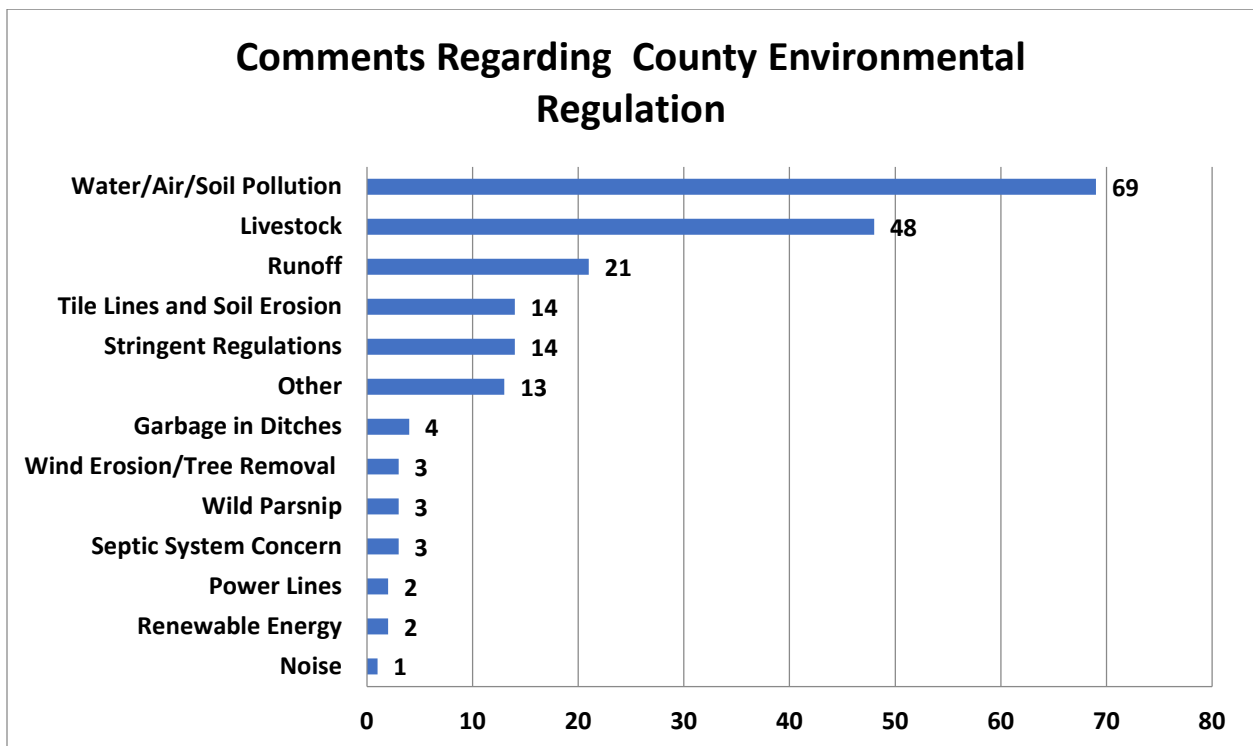


Figure 51



6.7 - Previously Adopted Goals and Policies:

The General Development Goals of the 1970 Comprehensive Plan called for the protection of prime agricultural areas and the preservation of riparian areas, wetland, and floodplains. The 1970 General Development Policies stated: *“Development beyond the incorporated limits of villages will be restricted to agricultural, conservation, recreational, and farm uses”*.

The 1993 Dodge County Comprehensive Plan called for protection of environment and open space through enforcement of regulation and implementation of the Water Management Plan. Other growth management policies related to protection of environment and open space included:

- Subdivisions in the growth management areas must be planned in such a manner as to provide economical service of water, sanitary sewer, roads, and other services and to permit proper future subdivision of adjacent land;
- The County will encourage farm operators to observe the guidelines specified in the Agricultural Best Management Practices handbook;
- Scattered rural residential subdivisions will be discouraged in the agricultural districts;
- Control locations of new feedlots to minimize potential conflicts and nuisance problems associated with their operation and maintenance;
- Encourage compliance with the U.S.D.A., Soil Conservation Service (SCS), and Dodge County Soil and Water Conservation District (SWCD) soil erosion standards;
- Woodland and wetlands of Dodge County will not be permitted to develop at higher development densities in the prime agricultural district.

The 2001 Comprehensive Plan further defined goals and policy related to protection of the environment as follows:

- Dodge County intends to amend the County Zoning Ordinance to include districts that protect agriculture, forest areas, significant natural areas, and vital natural resources.
- Dodge County intends to practice “smart growth principles” including:
 - ✓ Make efficient and effective use of land resources and existing infrastructure by encouraging development to areas with existing infrastructure or capacity to avoid costly duplication of services and costly use of land.
 - ✓ Provide a mix of land uses to create a variety of housing choices and opportunities.

- ✓ Make development decisions predictable, fair, and cost-effective.
- ✓ Provide a variety of transportation choices including pedestrian-friendly neighborhoods.
- ✓ Maintain a unique sense of place by respecting local cultural and natural environmental features.
- ✓ Conserve open space and farmland and preserve critical environmental areas.
- ✓ Encourage stakeholder collaboration and community participation rather than conflict.
- ✓ Provide staged and managed growth in urban transition areas with compact development patterns.
- ✓ Enhance access to equitable public and private resources for everyone.
- ✓ Promote the safety, livability, and revitalization of existing urban and rural communities.

6.8 - Updated Policy for 2018 County-Wide Comprehensive Plan:

Protect natural resources through:

1. Enforcement of regulation
2. Implementation of Water Management Plan
3. Public education and technical assistance, and
4. Zoning standards that:
 - a) Promote “*smart growth principles*” defined in 2001 County Wide Comprehensive Plan (above),
 - b) Protect prime agricultural soils, significant natural areas, important aggregate resources, drinking water aquifers, wetlands, floodplains, public waters, and other vital resources.

6.9 - Ten-year Implementation Plan:

1. Amend Zoning Ordinance to satisfy Policy as needed.
2. Participate with other local governments in the development and implementation of watershed-based Water Management Plans. (One Watershed-One Plan).
3. Consider including in the Zoning Ordinance, a Groundwater Protection Overlay District to protect drinking water in areas that are most susceptible to contamination as outlined in attached Concept Paper - **Exhibit 6.a.**

4. Consider including in the Zoning Ordinance protection standards, or an Overlay District, designed to protect Highly Desirable Sand and Aggregate Deposits as identified in DNR's Aggregate Resources Maps.
5. Consider limiting air quality impacts by prohibiting burning of trash
6. Work with MN Department of Agriculture on implementation of their Nitrogen Management Plan.
7. Consider establishing Wetland Preservation Areas to promote preservation and restoration of high-valued wetlands that maintain and improve water quality as allowed by the Wetland Conservation Act.
8. Make use of new Geologic Atlas to educate public and to help set policy to achieve goals of adopted plans.
9. Provide assistance to landowners wishing to voluntarily reduce pollution impacts.
10. Review DNR's Rare Features Map, Native Plant Community Map, and Wildlife Action Network Map when review zoning permit applications.

Section 6 Exhibits and Maps

CONCEPT PAPER FOR 2018 COMPREHENSIVE PLAN – GROUND WATER PROTECTION STRATEGY**By Dean Schrandt, Dodge County Water Program Manager, March 2018**

Dodge County has access to ample ground water supplies drawn from three principal aquifers. Making best use of such a valuable resource requires active management and protection strategies. As such, our principal goal is to *develop an overlay zoning district to define high risk ground water contamination areas and implement effective protection strategies in those areas.*

With agriculture being the dominant land use in the county, and application of nitrogen fertilizers unregulated, nitrate has become the primary ground water contaminant of concern. The first limestone aquifer, from which most rural wells draw their drinking water, is greatly impacted by nitrate contamination, especially in areas where soil depth is less than 50 ft. A consistent effort of well location and well water testing since the 1990s has allowed development of a *Highly Sensitive Ground Water Region* in the county where a high correlation exists between high nitrate wells and shallow depth-to-bedrock conditions.

Assessment: Assessment programs are an important way to gather data regarding nitrate and other ground water contaminants. Underground movement of nitrate through aquifers and the soil profile is not well understood and requires additional study. Completion of the Dodge County Geologic Atlas by 2021 will aid greatly in this effort. Of special importance is to delineate sensitive areas of the county such as the Decorah Edge, existing Highly Sensitive Ground Water Region, shallow sand aquifers, and karst features, which together will comprise the overlay zoning district.

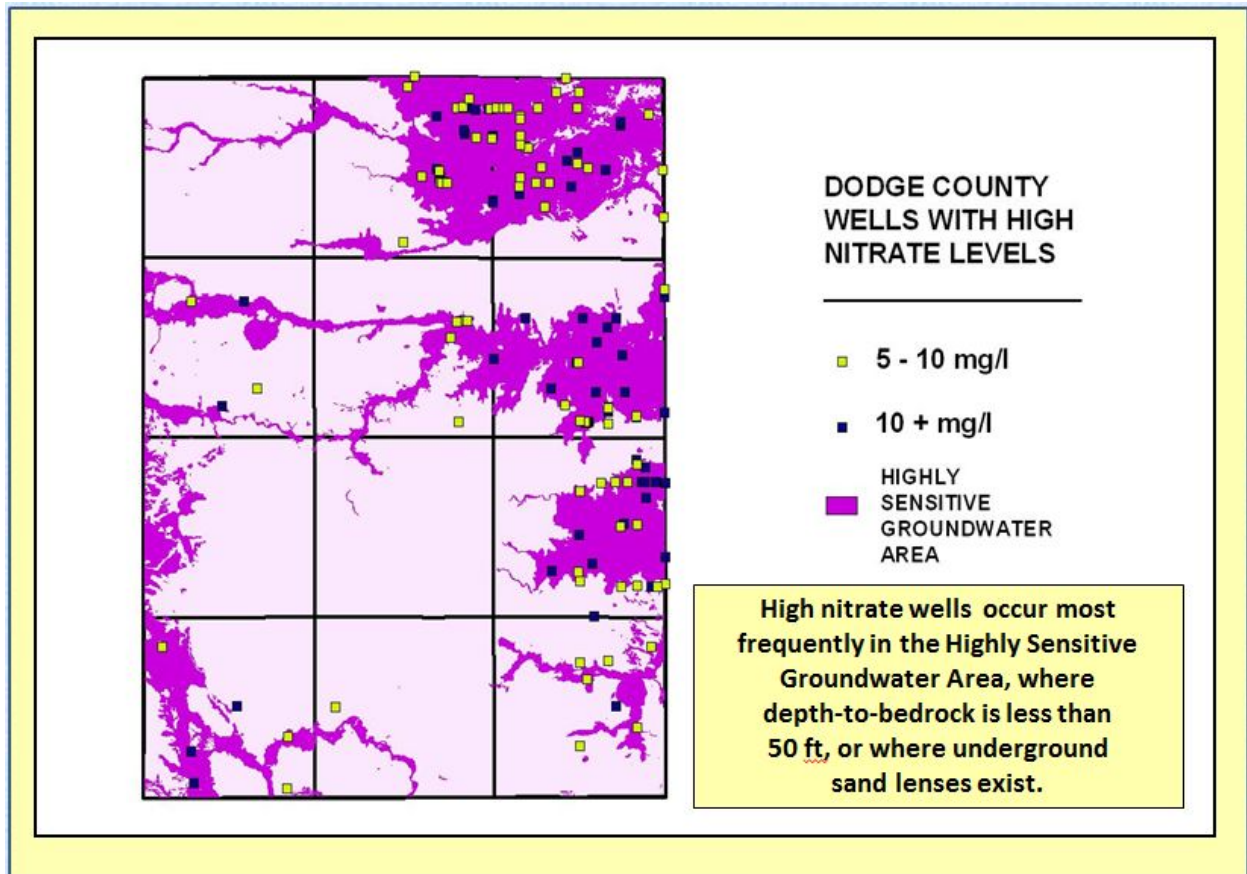
Protection Strategies: Development of protection strategies for areas sensitive to ground water nitrate contamination revolve around the development of, and adherence to, appropriate Best Management Practices (BMPs). The MN Department of Agriculture (MDA) has developed a list of region-specific BMPs, and other recommended practices, on pages 81-82 of the Nitrogen Fertilizer Management Plan. <http://www.mda.state.mn.us/chemicals/fertilizers/nutrientmgmt/~media/Files/chemicals/nfmp/nfmp2015.pdf>

These BMPs include, but are not limited to, following University of Minnesota recommendations for the amount and timing of fertilizer used, development of a nitrogen management plan for each field and crop, use of cover crops, and restriction of fall, or frozen ground, fertilizer application in vulnerable ground water areas.

Education: Following a protocol similar to that developed in MDA's Nitrogen Fertilizer Management Plan, BMP implementation will be at first voluntary and accompanied by an educational outreach component. Nitrate reduction goals will be generated based on sampling results, with the possible formation of local advisory groups to make BMP recommendations and facilitate the process. At such time that voluntary BMP implementation is not carried out, or proves ineffective at reducing ground water nitrate levels, a move to mandatory BMPs will be considered. Mandatory BMPs may include crop nutrient management plans and specific management practices.

Evaluation: Adequate evaluation of BMP adoption should include the following criteria:

- At least two rounds of well sampling in successive years
- At least one full crop rotation to implement the BMPs
- A reasonable amount of lag time to allow improvements in water quality to occur



Highly Sensitive Ground Water Region in Dodge County

E.coli is a type of bacteria that normally live in the intestines of people and animals. Some strains of E.coli can cause intestinal infection, and, nationally, numerous cases of illness due to consumption of contaminated water have been documented.

E.coli is present, occasionally at high levels, across virtually all southeastern MN streams. Natural wildlife sources of E.coli abound, and its population in rural streams is augmented by other sources, including animal manure, and waste from malfunctioning septic systems.

The state (and EPA) have set a relative safety limit for E.coli of 126 bacteria colonies/100 ml (about a half-cup), measured 5X/month over a 3 month period. This is the level considered safe for body contact.

Many scientific studies have been conducted in an effort to learn more about E.coli and its existence in our environment. Once thought to not survive well in an open environment, recent studies have shown E. coli's ability to survive, and thrive, in many adverse conditions, including a stream environment. It can find nutrients in the stream, survive for long periods of time, and even overwinter in the stream-bottom sediment. This ability to thrive in the stream, and re-suspend and re-locate during storm events, makes for difficult sampling and source-tracking.

Accurate sampling of E.coli is a particularly challenging task. E.coli is a living system in the stream, which responds to environmental changes, and is not evenly distributed throughout the water column, as are some other pollutants. Studies reveal that the average random uncertainty in E.coli sampling is 73%; even higher when sampling manually. In order for data to be considered valid and useful, it is vital that tight protocols are maintained throughout the sampling process.

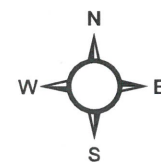
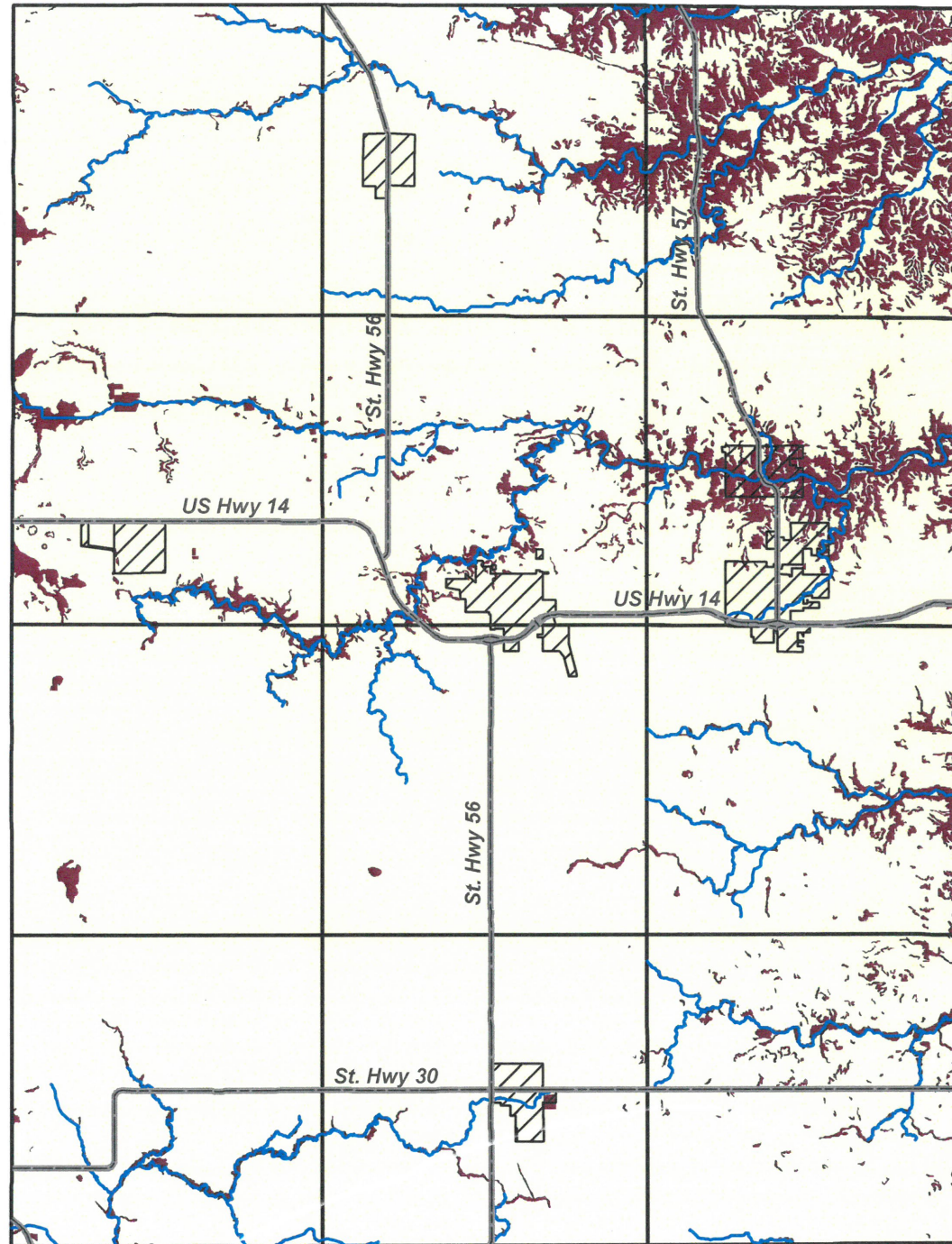
Somewhat recently, the technology to utilize DNA tracing for E.coli has been developed, allowing for the identification of swine, cattle, human, and wildlife sources within a stream sample. This practice can provide general screening guidelines for what E.coli sources may be present in a watershed. However, since E.coli can hide in the sediment, then re-suspend after a storm and successfully overwinter, using E.coli DNA tracing cannot reliably indicate specific point sources.

Efforts to reduce E.coli levels are best undertaken before it reaches the stream. For human waste, standard septic systems remove approx. 84% of E.coli from the waste effluent, while municipal systems utilizing ultraviolet light can remove 99%. For agriculture-related waste, best management practices exist to control feedlot runoff and utilize field manure before it can run off into a stream. These practices may help to reduce the levels of E.coli, but due to the input of wildlife sources and its innate ability to survive in the stream, E.coli will never be eradicated from our waters.

E.coli bacteria have existed in the streams long before we set standards for them. They are one of the risks of using the stream that we can mitigate by not swallowing stream water, swimming with open sores, avoiding stream contact during flood events, and by showering after leaving the stream. These simple precautions should allow us to continue to use our streams as a recreational resource.

Dean Schrandt
Dodge County Water Program Manager
Dean.schrandt@co.dodge.mn.us 507-635-6273

Dodge County Prime Farmland



Source: Minnesota Department of Agriculture
National Resource Conservation Service

8-18-2008

Dodge County Prime Farmland

Prime Farmland is of major importance in meeting the nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our nation's prime farmland.

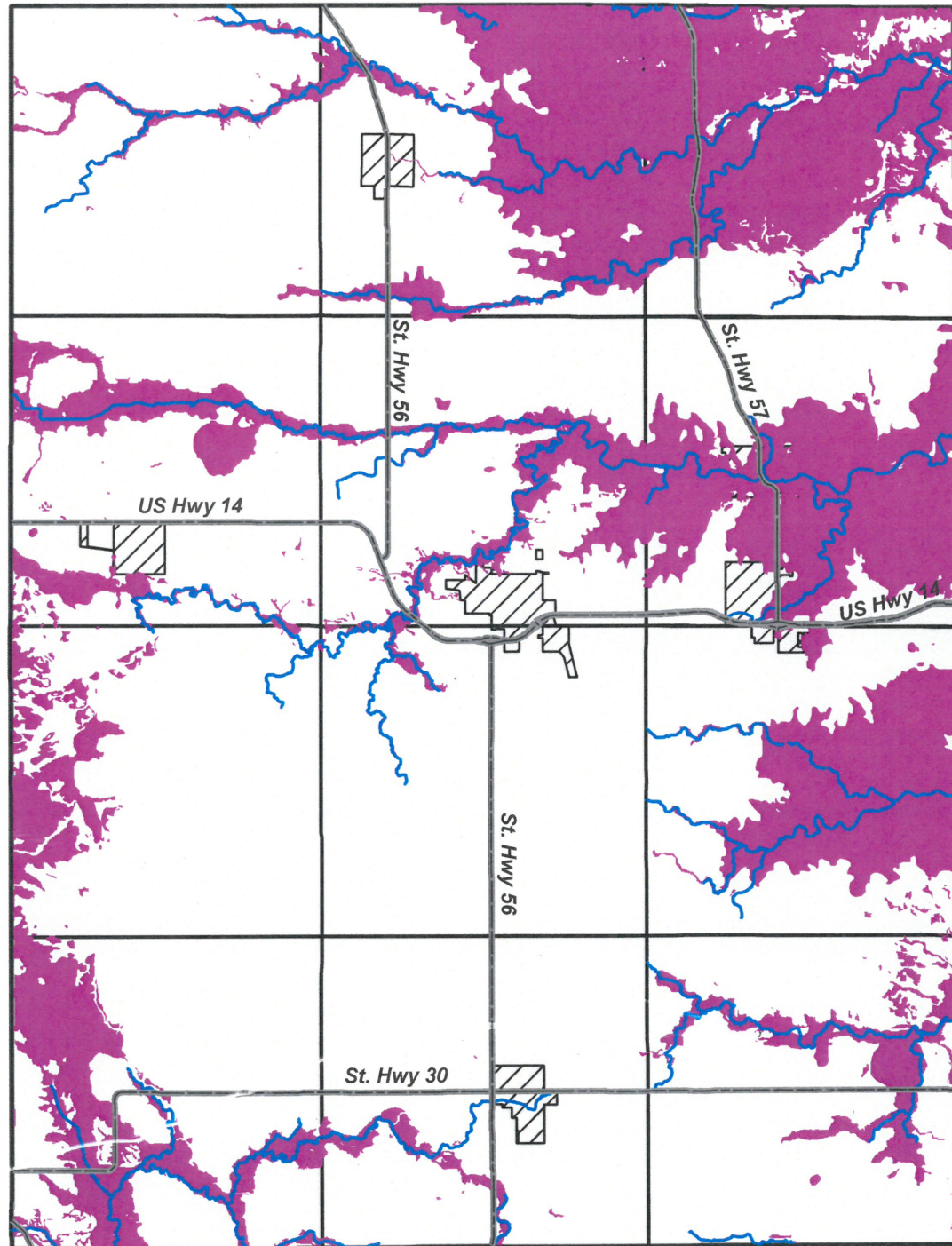
Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

LEGEND:

- Prime Farmland
- Not Prime Farmland
- Cities
- Townships
- Major Roads
- Protected Waters

Information may be incorrect and maps may be inaccurate up to several hundred feet. They are to be used for broad examination of site conditions. Data may change frequently. Check with the Environmental Services Office before using data for construction purposes.

Dodge County High Groundwater Sensitivity Region



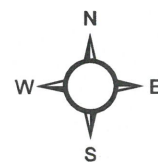
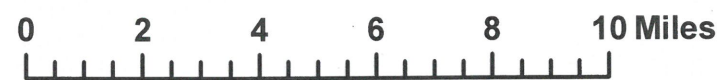
Dodge County High Groundwater Sensitivity Region

This layer represents regions of the county where the groundwater is very sensitive to surface contamination. Shallow, first aquifer wells drilled in this region tend to exhibit the highest degree of nitrate contamination in the county.

The layer is comprised of a combination of regions where the depth from the surface to the first drinking well aquifer is less than 50 feet, along with areas where the soil type is very porous, allowing water to travel from the surface to a distance of 10 vertical feet in less than 170 hours.

LEGEND:

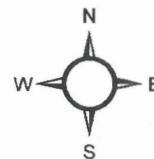
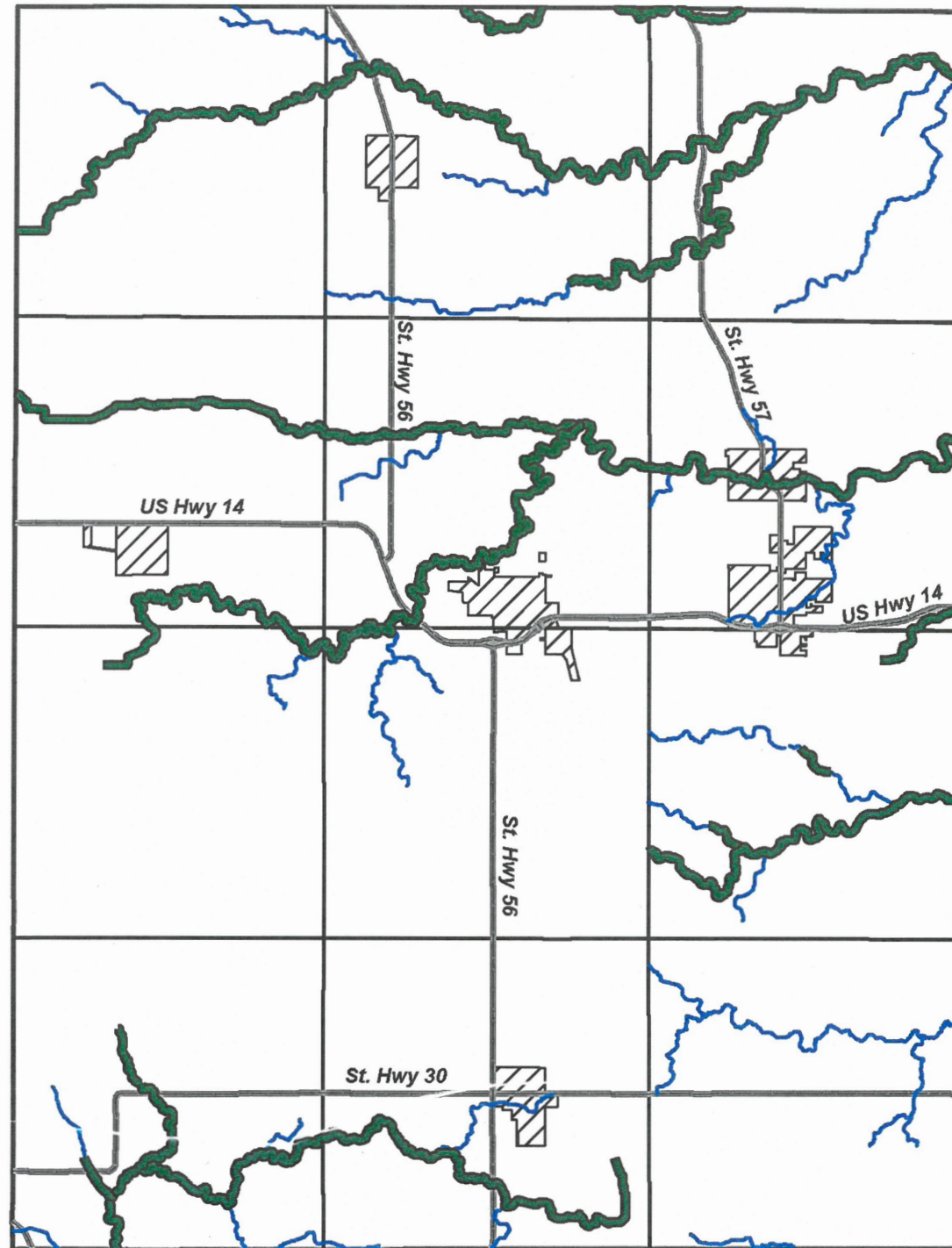
- High Ground Water Sensitivity
- Major Roads
- Protected Waters
- Cities
- Townships



Source: MN Department of Natural Resources 4-14-2017

Information may be incorrect and maps may be inaccurate up to several hundred feet. They are to be used for broad examination of site conditions. Data may change frequently. Check with the Environmental Services Office before using data for construction purposes.

Dodge County Impaired Waters



Source: MN Department of Health 8-7-2013

Dodge County Impaired Waters

A body of water is considered “impaired” if it fails to meet one or more water quality standards. Minnesota water quality standards protect lakes, rivers, streams, and wetlands by defining how much of a pollutant such as bacteria or nutrients can be in water before it is no longer drinkable, swimmable, fishable, or useable in other, designated ways (called “beneficial uses”). Waters that do not meet their designated uses because of water quality standard violations are impaired. Monitoring suggests that about 40% of Minnesota's lakes and streams are impaired, which is comparable to impairment rates in other states.

The federal Clean Water Act requires the MPCA to:

- Assess all waters of the state to determine if they meet water quality standards
- Create a list of impaired waters that do not meet standards, and update the list every even-numbered year.
- Set pollutant-reduction goals needed to restore impaired waters, called the total maximum daily load.

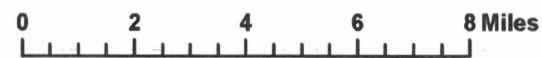
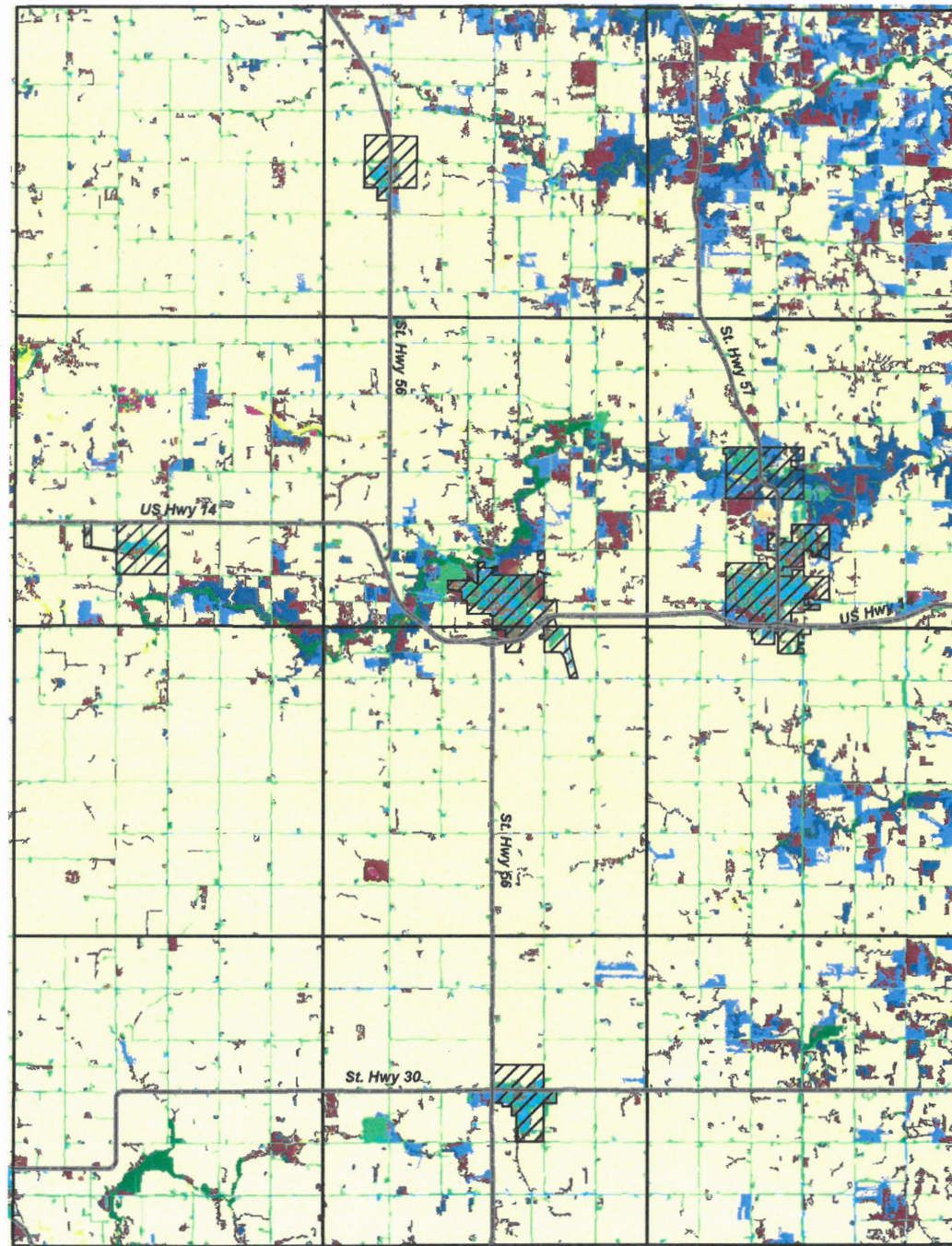
LEGEND:

- 2012 Impaired Waters
- Protected Waters
- Major Roads
- Cities
- Townships

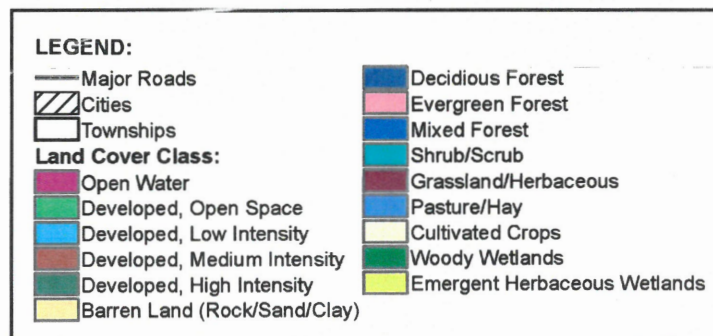
Information may be incorrect and maps may be inaccurate up to several hundred feet. They are to be used for broad examination of site conditions. Data may change frequently. Check with the Environmental Services Office before using data for construction purposes.

Dodge County Land Cover

Prepared by Dodge County Environmental Services Department



Source: U.S. Geological Survey 2-5-2018



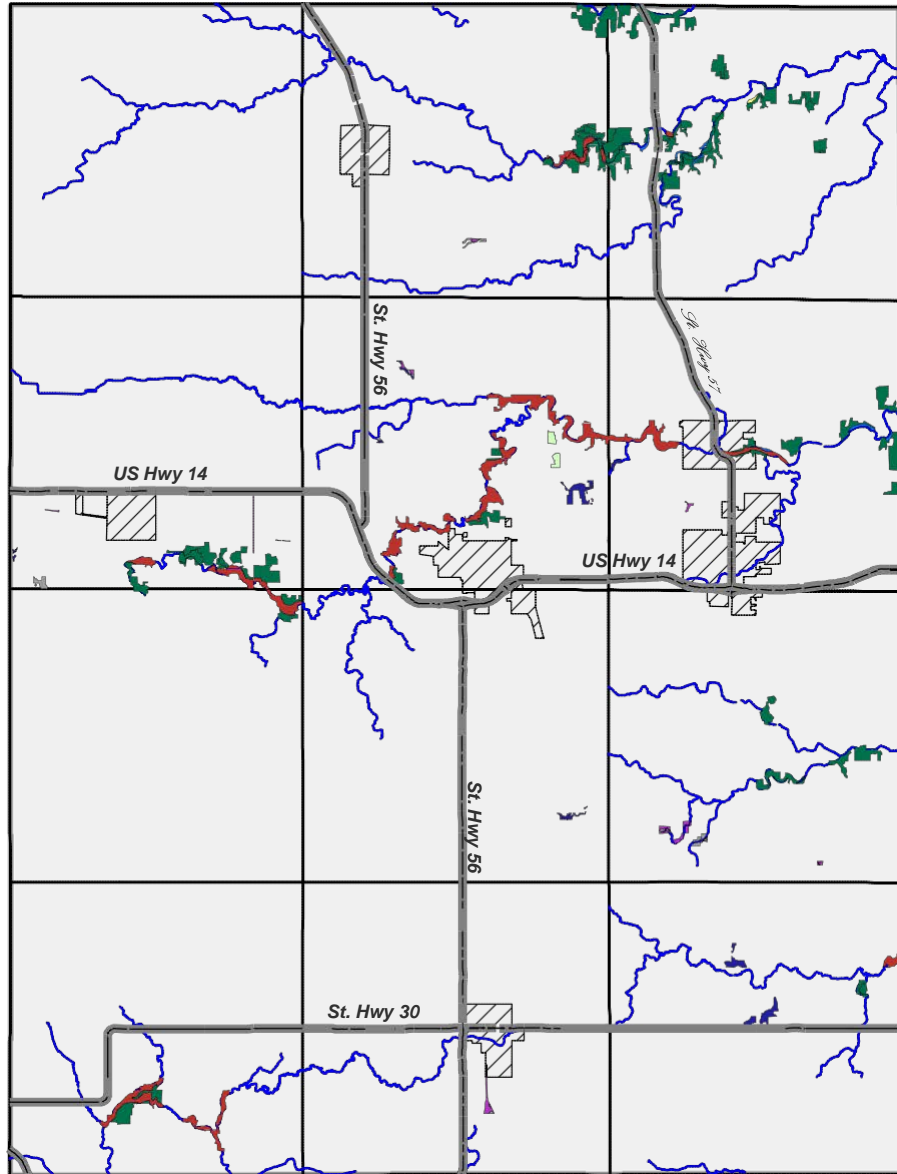
Dodge County Land Cover:

The National Land Cover Database products are created through a cooperative project conducted by the Multi-Resolution Land Characteristics (MRLC) Consortium. The MRLC Consortium is a partnership of federal agencies (www.mrlc.gov), consisting of the U.S. Geological Survey (USGS), the National Oceanic and Atmospheric Administration (NOAA), the U.S. Environmental Protection Agency (EPA), the U.S. Department of Agriculture (USDA), the U.S. Forest Service (USFS), the National Park Service (NPS), the U.S. Fish and Wildlife Service (FWS), the Bureau of Land Management (BLM) and the USDA Natural Resources Conservation Service (NRCS).

The success of NLCD over nearly two decades is credited to the continuing collaborative spirit of the agencies that make up the MRLC. NLCD 2011 is the most up-to-date iteration of the National Land Cover Database, the definitive Landsat-based, 30-meter resolution land cover database for the Nation.

Information may be incorrect and maps may be inaccurate up to several hundred feet. They are to be used for broad examination of site conditions. Data may change frequently. Check with the Environmental Services Office before using data for construction purposes.

DNR Native Plant Communities



DNR Native Plant Communities:

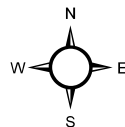
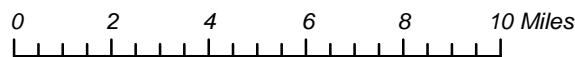
This dataset contains results of the Minnesota Biological Survey (MBS), State Park land cover data, Forestry native plant community data, and Wildlife Management Areas land cover data. It includes polygons representing the highest quality native plant communities remaining in surveyed areas (typically counties). These native plant communities are important areas for conservation.

Areas that are not mapped as native plant community polygons primarily represent: 1) land where modern human activities such as farming, overgrazing, wetland drainage, recent logging, residential, and commercial development have destroyed or greatly altered the natural vegetation; and 2) native plant community polygons that were below minimal size criteria.

Native plant communities are generally classified and described by considering vegetation, hydrology, land forms, soils, and natural disturbance regimes. The native plant community types and subtypes in this data layer are classified primarily by vegetation and major habitat features.

LEGEND:

- Cliff/Talus System
- Fire-Dependent Forest/Woodland System
- Floodplain Forest System
- Mesic Hardwood Forest System
- Open Rich Peatland System
- Upland Prairie System
- Wet Forest System
- Wet Meadow/Carr System
- Wetland Prairie System
- Cities
- Townships
- Major Roads
- Protected Waters

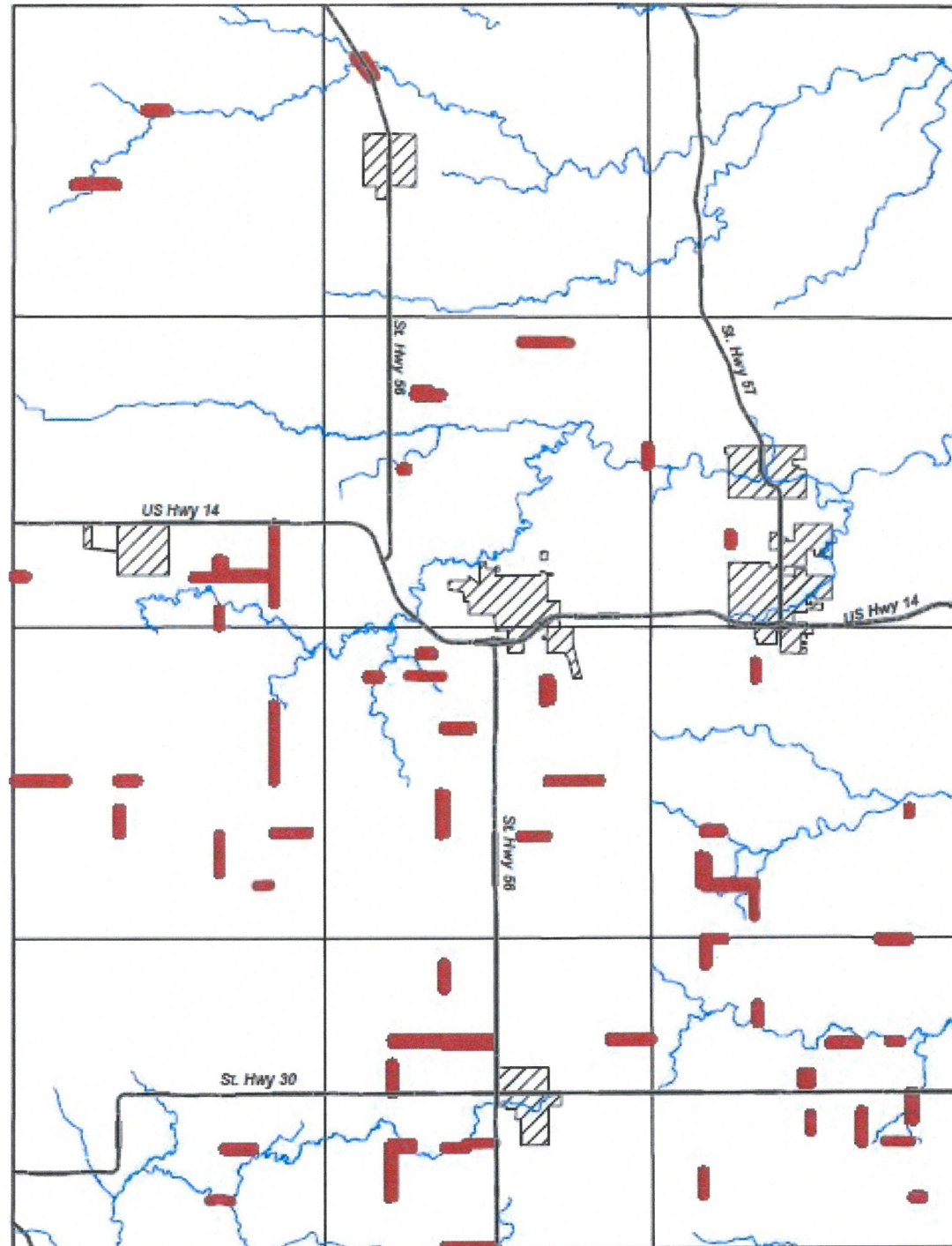


Source: Minnesota DNR 12-4-14

Dodge County Native Roadside Prairie

Map 6.f

Prepared by Dodge
County Environmental
Services Department



0 2 4 6 8 10 Miles

Source: County Roadside Prairie Inventory
Bonestroo & Associated - March 2003.
Partially Funded by Minnesota DNR

LEGEND:

- Native Prairie
- Major Roads
- Protected Waters
- Cities
- Townships



Description:

Dodge County Native Roadside Prairie

Prior to European settlement, more than 18 million acres of prairie covered Minnesota. Our prairie lands were part of the largest ecosystem in North America, stretching from Canada to Mexico and from the Rockies to Indiana. A wealth of diverse species, habitats and cultures thrived here. With its fertile soil and nutritious grasses, prairie became the basis for an agricultural empire.

Today, less than two percent of Minnesota's native prairie remains. It is North America's most endangered habitat type. The near elimination of native prairie has inspired many efforts to protect remaining parcels.

Information may be incorrect and maps may be inaccurate up to several hundred feet. They are to be used for broad examination of site conditions. Data may change frequently. Check with the Environmental Services Office before using data for construction purposes.

Figure 6.g

List of Endangered and Threatened Species Observed in Dodge County or adjacent Township

| SPECIES | AREA |
|--------------------------------|------------------------------|
| Blanchard's Cricket Frog | Rock Dell |
| Blanchard's Cricket Frog | Pine Island |
| Poweshiek Skipperling | Sargeant |
| Goldenseal | Byron |
| Wild Quinine | Hayfield, Sargeant |
| Western Prairie Fringed Orchid | Sargeant |
| Loggerhead Shrike | Rock Dell |
| Loggerhead Shrike | Byron |
| Henslow's Sparrow | Pine Island |
| Wild Quinine | Hayfield, Hayfield NW |
| Loggerhead Shrike | Hayfield |
| Goldenseal | Byron |
| Loggerhead Shrike | Byron |
| Butternut | Claremont |
| Butternut | Concord |
| Goldenseal | Concord |
| Butternut | Byron |
| Wood Turtle | Rock Dell |
| Wood Turtle | Douglas, Dodge Center, Byron |
| Sullivant's Milkweed | Sargeant |
| Sullivant's Milkweed | Hayfield |
| Tuberous Indian-plantain | Sargeant |
| Edible Valerian | Bixby, Blooming Prairie |
| Edible Valerian | Sargeant |
| Edible Valerian | Sargeant |
| Wood Turtle | Claremont, Dodge Center |

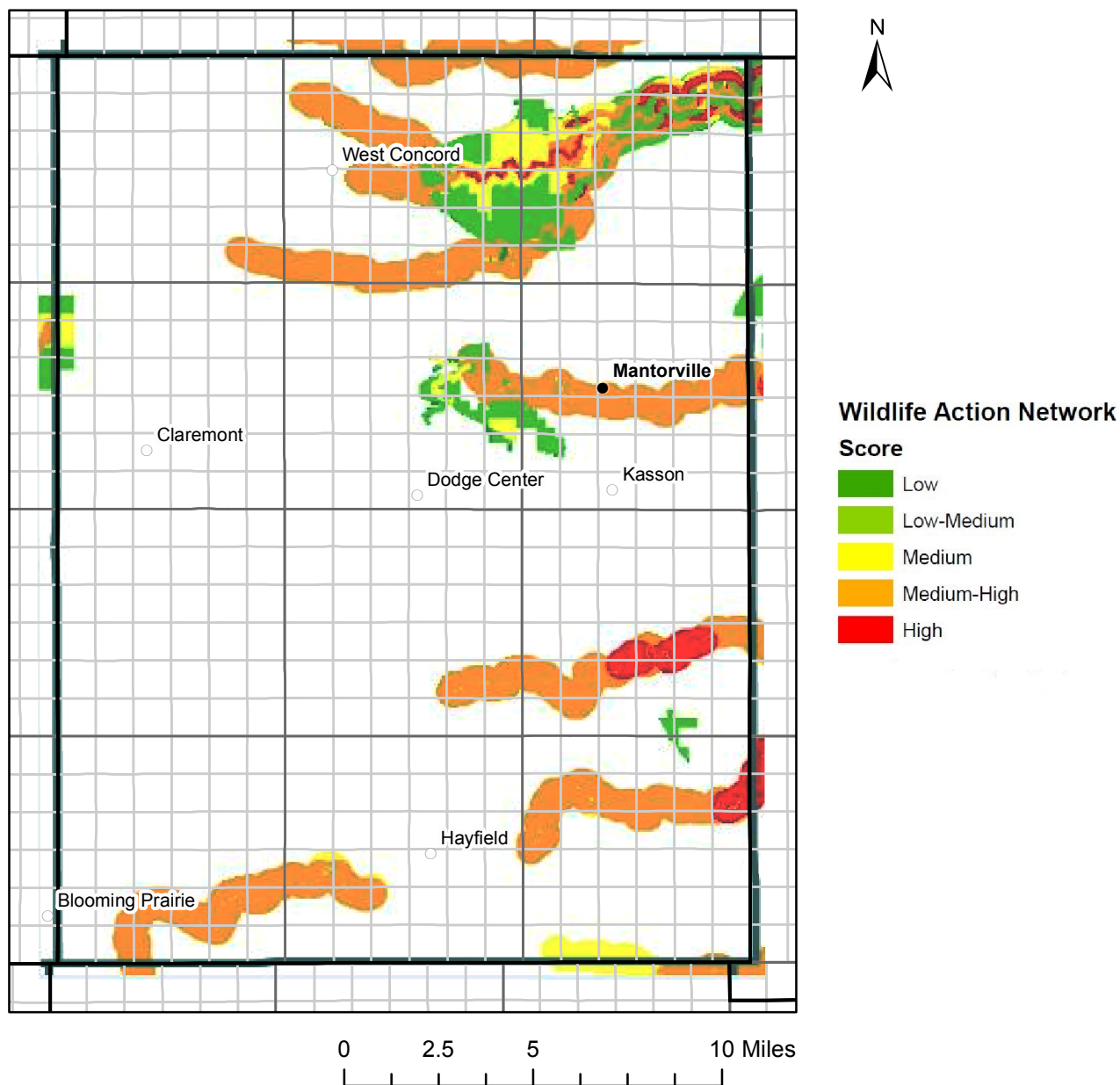
| SPECIES | AREA |
|-----------------------|----------------------|
| Edible Valerian | Owatonna SE |
| Edible Valerian | Dodge Center |
| Fluted-shell | Dodge Center |
| Mucket | Byron |
| Edible Valerian | Rock Dell |
| Edible Valerian | Rock Dell |
| Blanding's Turtle | Claremont |
| Prairie Bush Clover | Rock Dell |
| Edible Valerian | Owatonna SE |
| Blanding's Turtle | Rock Dell |
| Edible Valerian | Blooming Prairie |
| Tuberclcd Rein Orchid | Claremont |
| Ellipse | Rock Dell |
| Edible Valerian | Owatonna SE |
| Edible Valerian | Dodge Center |
| Prairie Bush Clover | Dodge Center |
| Edible Valerian | West Concord, Moland |
| Edible Valerian | Claremont |
| Ellipse | Concord |
| Ellipse | Dodge Center |
| Ellipse | Byron |
| Elktoe | Byron |
| Glade Mallow | Rock Dell |
| Glade Mallow | Rock Dell |
| Sullivant's Milkweed | Hayfield NW |
| Sullivant's Milkweed | Hayfield |
| Sullivant's Milkweed | Hayfield NW |
| Jointed Sedge | Claremont |
| Edible Valerian | Claremont |
| Edible Valerian | Hayfield |
| Sullivant's Milkweed | Hayfield |
| Glade Mallow | Concord |
| Ellipse | West Concord |
| Blanding's Turtle | Waltham |

Source:

DNR License Agreement #908: Copyright 2018, State of Minnesota, Department of Natural Resources (DNR). Rare Features Data and Mussels Survey Site Data included here were provided by the Division of Ecological and Water Resources, Minnesota DNR, and were current as of 1-6-2018. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

Minnesota's 2015-2025 Wildlife Action Plan

Wildlife Action Network, Dodge County

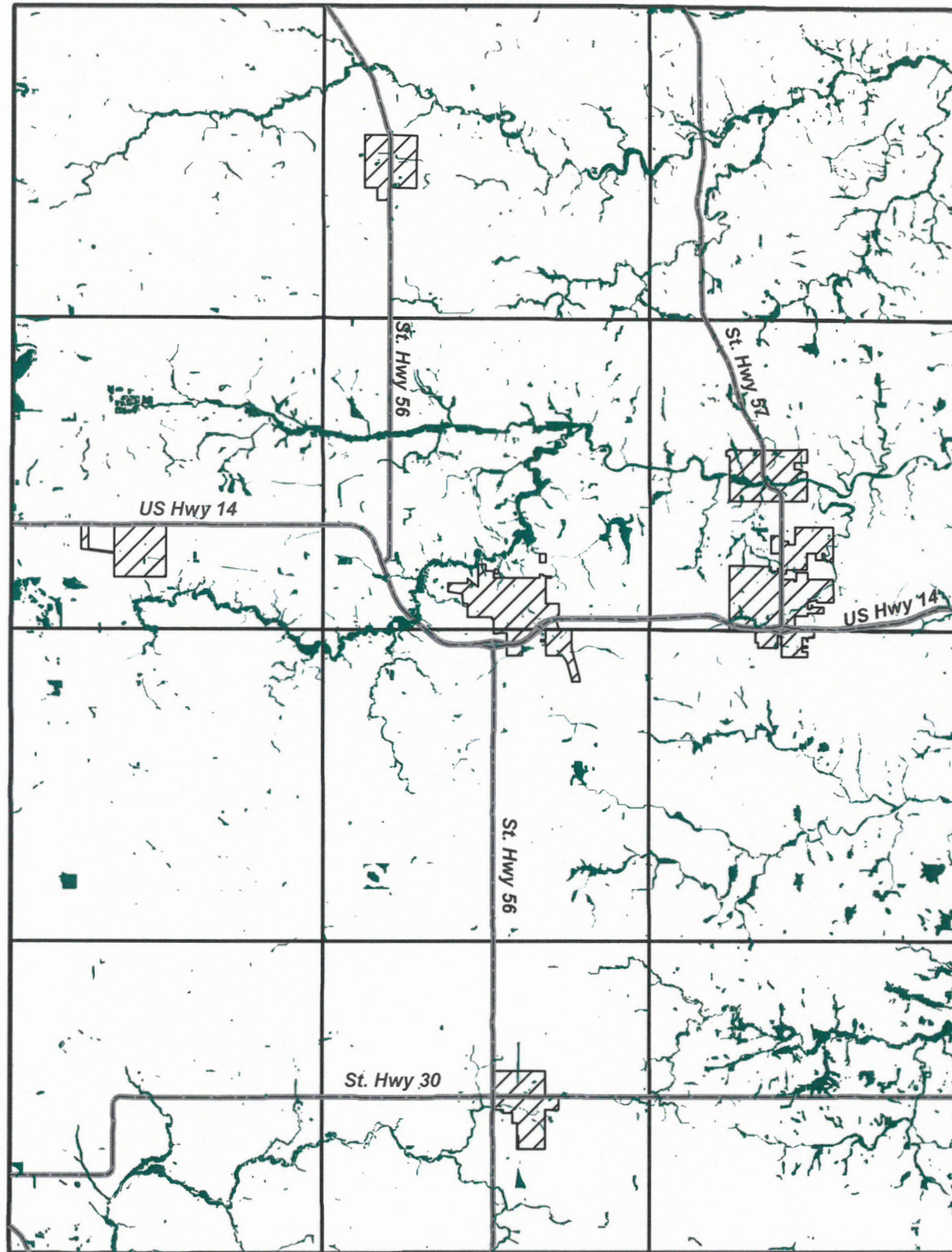


The Wildlife Action Network is composed of mapped terrestrial and aquatic habitats, buffers, and connectors that represent a diversity of quality habitats that support Species in Greatest Conservation Need (SGCN). Scores are based on five scalable metrics: SGCN population viability scores, SGCN richness, spatially prioritized MN Biological Survey Sites of Biodiversity Significance, ranks of Lakes of Biological Significance, and Stream Indices of Biological Integrity (IBI). Lower scores (green) in a given area indicate the metric scores for any of these five components were either relatively low or zero, while high scores (red) indicate that multiple metrics of high scores overlap. For example, a red area could indicate several good or outstanding SGCN populations and/or high SGCN richness (including species that did not have population maps available) along with a high score from another prioritization layer. See Chapter 1 and Appendix E of the 2015-2025 MN Wildlife Action Plan for more information.



Dodge County National Wetland Inventory

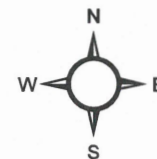
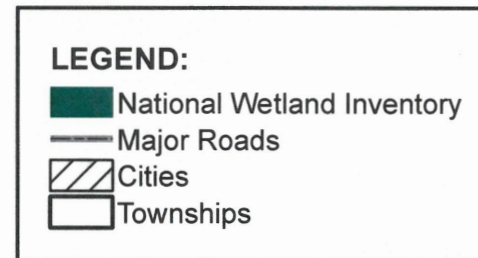
Map 6.i



Dodge County National Wetland Inventory

The updated NWI data is primarily based on spring aerial imagery acquired in 2010 and 2011 and LiDAR elevation data as well as other modern ancillary data. These data are intended to replace the original 1980s NWI. NWI data support effective wetland management, protection, and restoration. The data provide a baseline for assessing the effectiveness of wetland policies and management actions.

These data are used at all levels of government, as well as by private industry and non-profit organizations for wetland regulation and management, land use and conservation planning, environmental impact assessment, and natural resource inventories.



Source: Minnesota DNR 3-20-2017

Information may be incorrect and maps may be inaccurate up to several hundred feet. They are to be used for broad examination of site conditions. Data may change frequently. Check with the Environmental Services Office before using data for construction purposes.

Section 7: Recreation Opportunities and Tourism



Introduction: As a nation, we are increasingly aware of the benefits of outdoor recreation, exercise, and leisure activities. Keeping with the national trend, citizens of Dodge County have also shown a great deal of interest in these areas as demonstrated by resident comments at public meetings and survey responses. Pressures of population growth, changing land use patterns and life styles, and fiscal realities will continue to test the government’s ability to provide park and recreational services consistent with public needs.

7.1 - Trails:

Trails create recreation and transportation opportunities by providing people of all ages with attractive, safe, accessible places to bike, snowmobile, walk, hike, jog, or skate. Trails help people of all ages incorporate exercise and recreation into their daily routines by connecting them with places they want or need to go. Linear greenspaces and corridors also provide links for people and places. Finally, trails and green space often provide an economic boost for communities. Many regional leaders have been surprised at how trails have become sources of regional identity and pride.

For many years, the Dodge County Trails Association (DCTA) has worked to secure new trails. The DCTA functions as a non-profit, 501c3 organization. To date, there are two trails that link Kasson and Mantorville; the Sunset Trail and Sunrise Trail. **See Map 7.a.** Maintenance of the trails has been the responsibility of the County Highway Department.

The DCTA worked with neighboring counties and the MN Department of Natural Resources (MNDNR) to establish the legislatively authorized Stagecoach State Trail.

The Master Plan for the Stagecoach State Trail is found on MNDNR Web site: http://files.dnr.state.mn.us/input/mgmtplans/trails/stagecoach/master_plan0312.pdf.

The Stagecoach State Trail is planned to connect the state trail system near Owatonna with the state trails near Rochester, travelling across Dodge County and the communities of Wasioja and Mantorville. Completion of the trail has stalled recently due to the difficulty of securing dedicated right-of way for the trail. The greatest opportunity for the next stage appears to be the Mantorville to Wasioja link with only a couple of landowners uncommitted. A representative of the MNDNR has indicated that it will take leadership by local communities to make progress on the trail, primarily in effort to secure approval from private landowners for the trail right-of-way.

Several other opportunities have been discuss locally including a trail between Kasson and Byron along 16th Street, and a trail connecting the Sunset Trail to the Sunrise Trail via extension of 16th Street east of State Highway 57 to 240th Ave, north of Kasson. The City of Hayfield is also considering a trail that loops around, and through, the city.

The DNR has indicated that there was once discussion of plans to build an “Iron Horse Trail” that followed the old railroad bed between Austin and Kenyon.

Trail alignment in Kasson is also a part of a Safe Routes to School Plan:

<https://greenstep.pca.state.mn.us/viewFile.cfm?id=3927>

Mantorville is a starting point for the Zumbro River Water Trail.

https://files.dnr.state.mn.us/maps/canoe_routes/zumbro.pdf

The Zumbro River Water Trail also extends into the northeast corner of Dodge County but there is currently no public access to this portion of the river.

An increasing number of people are using the rivers in southeast Minnesota for canoeing, kayaking, and tubing.

Dodge County also has an active snowmobile club that has established and maintained snowmobile trails shown on **Map 7.b**.

7.2 - Parks and Attractions:

Dodge County does not have extensive parkland outside city limits. Nearly all public parks are located inside city boundaries. Several historic attractions including the Seminary and Civil War Recruiting Station in Wasioja, provide passive recreation opportunities. These sites, and others in the city of Mantorville, are cooperatively managed by the Dodge County Historical Society, Mantorville Restoration Association, Friends of Wasioja, and Dodge County. Rice Lake State park occupies about 230 acres of land within Dodge County and offers a wide variety of outdoor activities.

Dodge County owns vacant land between Kasson and Mantorville that is currently used to protect the County’s Waste Management Facility from the encroachment of incompatible land uses. These properties may offer an opportunity to develop a park-like recreational site, especially if done in conjunction with the restoration of neighboring “Stussy Quarry”. The quarry’s restoration

plans include a lake (when groundwater fills the quarry) and a park on the southern shore of the lake. According to the plans, restoration may begin between years 2023 and 2028.

7.3 – Public Natural Areas:

The Department of Natural Resources owns and operates public natural areas in fifteen separate locations throughout the county as shown on **Map 7.c**. For details see MNDNR Web site: <http://www.dnr.state.mn.us/maps/compass/index.html>.

The MNDNR natural areas include two Scientific and Natural Areas (SNAs) with a combined 75 acres of land available for passive recreation including hiking and photography. SNAs are exceptional places where native plants and animals flourish. The MNDNR natural areas also include ten Wildlife Management Areas (WMA) and one Aquatic Management Area (AMA) providing 995 acres of land for passive recreation and hunting/fishing. According to MNDNR staff, adding new public land is most likely in areas near existing public land. Land donations are another method in which MNDNR may expand public recreation opportunities. MNDNR has also identified areas of high natural resource value known as SNA Conservation Opportunity Areas as shown on **Map 7.d** and other focus areas for potential preservation and restoration in southern MN as shown on **Map 7.e**.

The state has designated hundreds of miles of waterways in Dodge County as “Public Waters”. The Public Waters are available for water recreation including canoing and fishing. However, suitable access to Public Water is limited because access to the water must be over public land, not private land.

7.4 County Fairgrounds:

Dodge County owns 44.44 acres that make-up the county fairgrounds. The fairgrounds is located entirely within the boundary of the City of Kasson but it has not been annexed to the city so it is under the jurisdiction of the county. Therefore, the Fairgrounds provides opportunity for additional county sponsored recreation at the current location. The location within Kasson also provides opportunity for converting the property to municipal uses and relocating fairgrounds. **See Map 7.f**

7.5 Other Public Recreation Opportunities

Cities within the county also provide a wide range of recreation opportunities including parks, trails, sports facilities, and swimming pools.

7.6 Private Facilities and Other Recreation

Private recreational opportunities in the county include gun clubs, golf courses, and a riding stable. Growth of private recreation is limited by demand and current zoning standards.

7.7 - Results of 2017 Survey:

The following graphs summarize responses from county-wide survey conducted in 2017. See **Appendix A** for comprehensive summary:

Figure 52

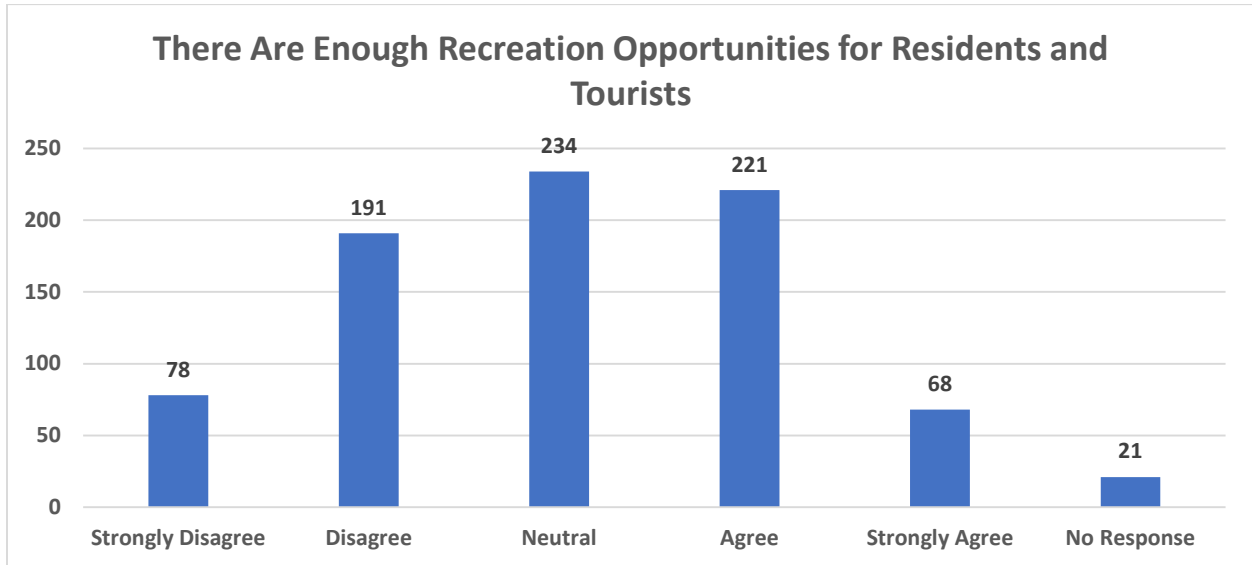
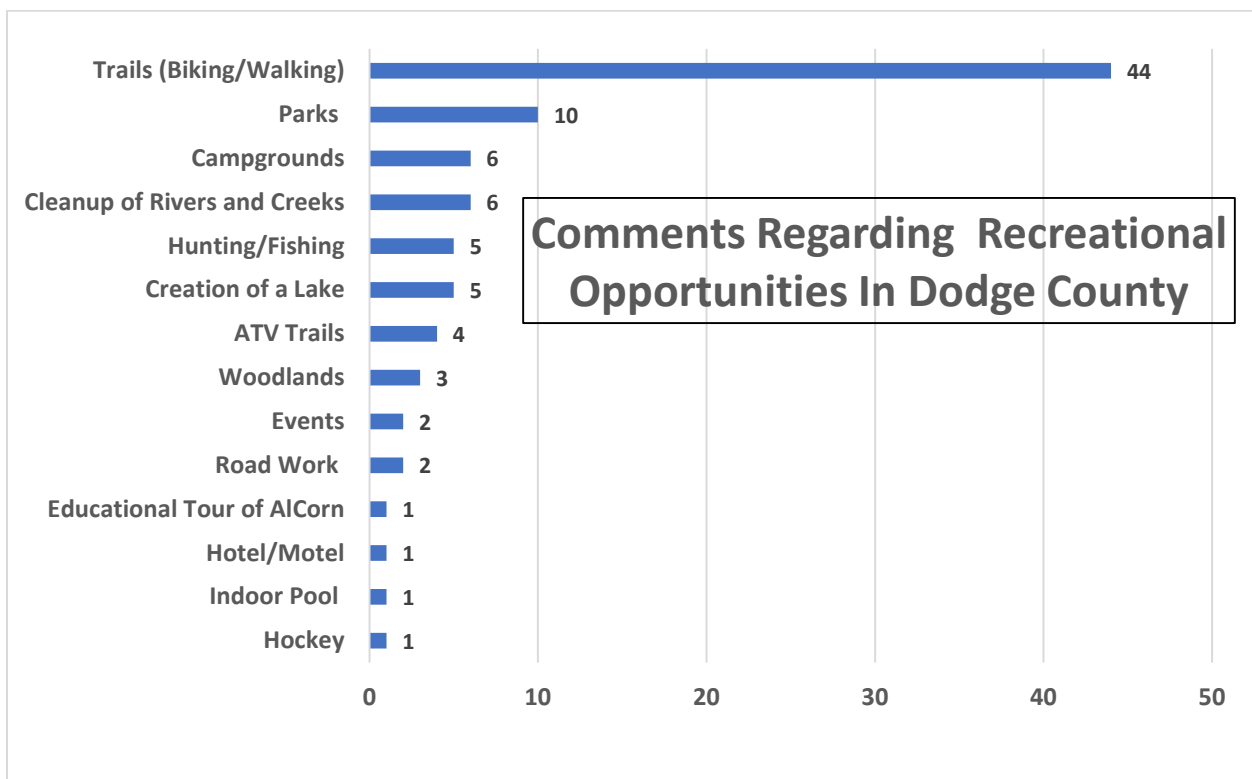


Figure 53



In the listening session with Department of Natural Resources (DNR) staff, they provided the following statements:

- There is possibility for reviving the Iron Horse Trail between Hayfield and Kenyon.
- Stussy Quarry reclamation is opportunity to provide regional recreation opportunity tied to bike trail and native prairie wetland community.
- Potential trail corridors are identified in the State Trail Master Plan, provided on DNR Web site.
- County Parks systems can be successful and there is grant money available through Clean Water Legacy and MN Parks and Trails association and Greater MN Coalition. Consider starting a dedicated county fund to receive gifts and/or for annual county contribution.
- Current DNR recreation focus does not include new Wildlife Management Areas unless they are at least 160 acres, which is why expansions of existing WMAs is probably the best option in Dodge.
- Dodge County Economic Development Authority may be a good organization to revive bike trail and recreation interest.

7.8 - Previously Adopted Goals and Policies:

The 1970 Comprehensive Plan called for the county to explore every feasible opportunity to acquire open space for public use with priority placed on river and stream property.

The 1993 Dodge County Comprehensive Plan adopted a goal to provide recreational opportunities for County residents and for stimulating tourism. Approved policy called for developing agreements with public agencies for joint development of recreational facilities. The policy also called for coordinating planning activities to provide a hiking and biking trail system within the county.

The 2001 Comprehensive Plan does not further define specific goals or policy related to recreation and tourism.

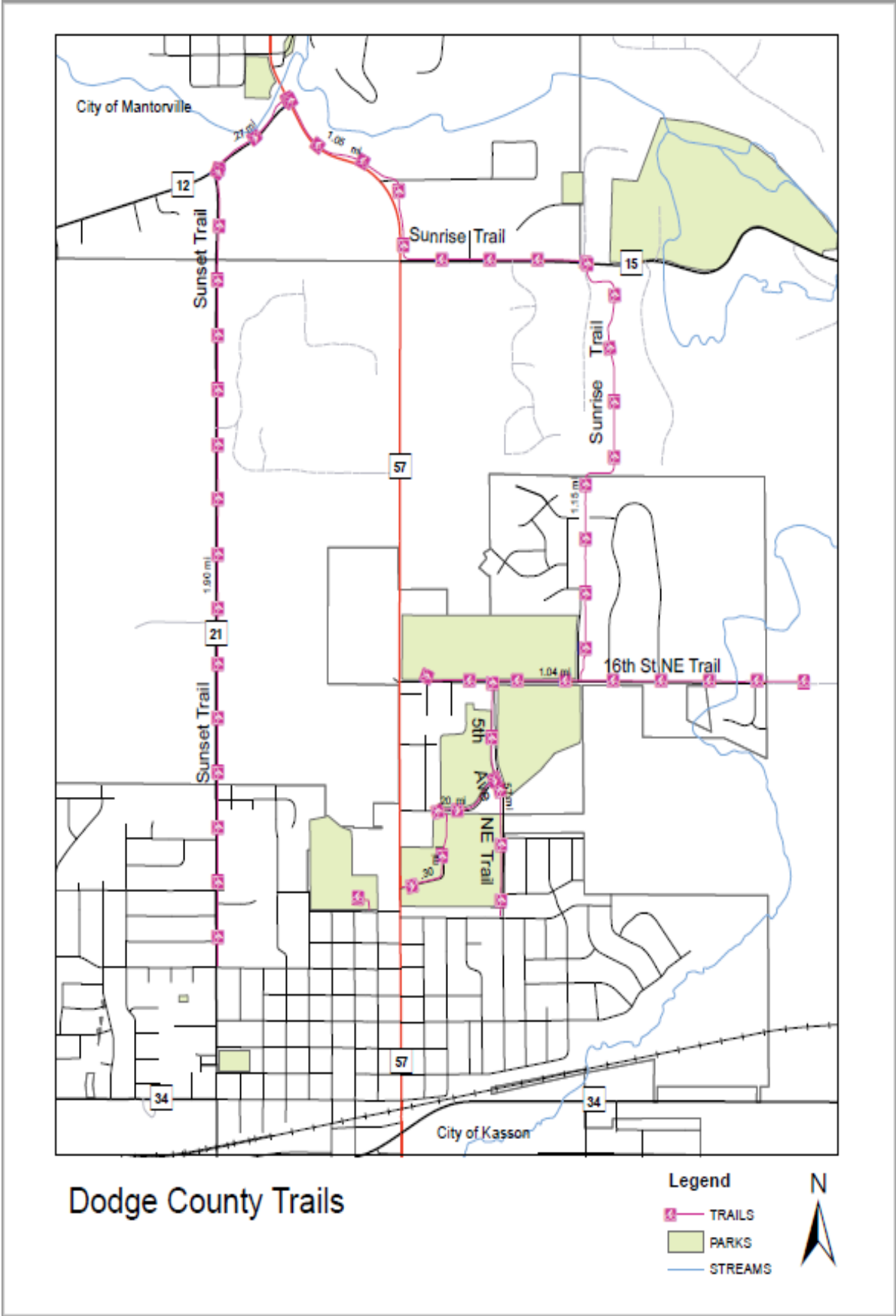
7.9 - Updated Goals and Policy for 2018 County Wide Comprehensive Plan:

Continue implementation of Goals and Policy set by 1993 Comprehensive Plan as outlined above.

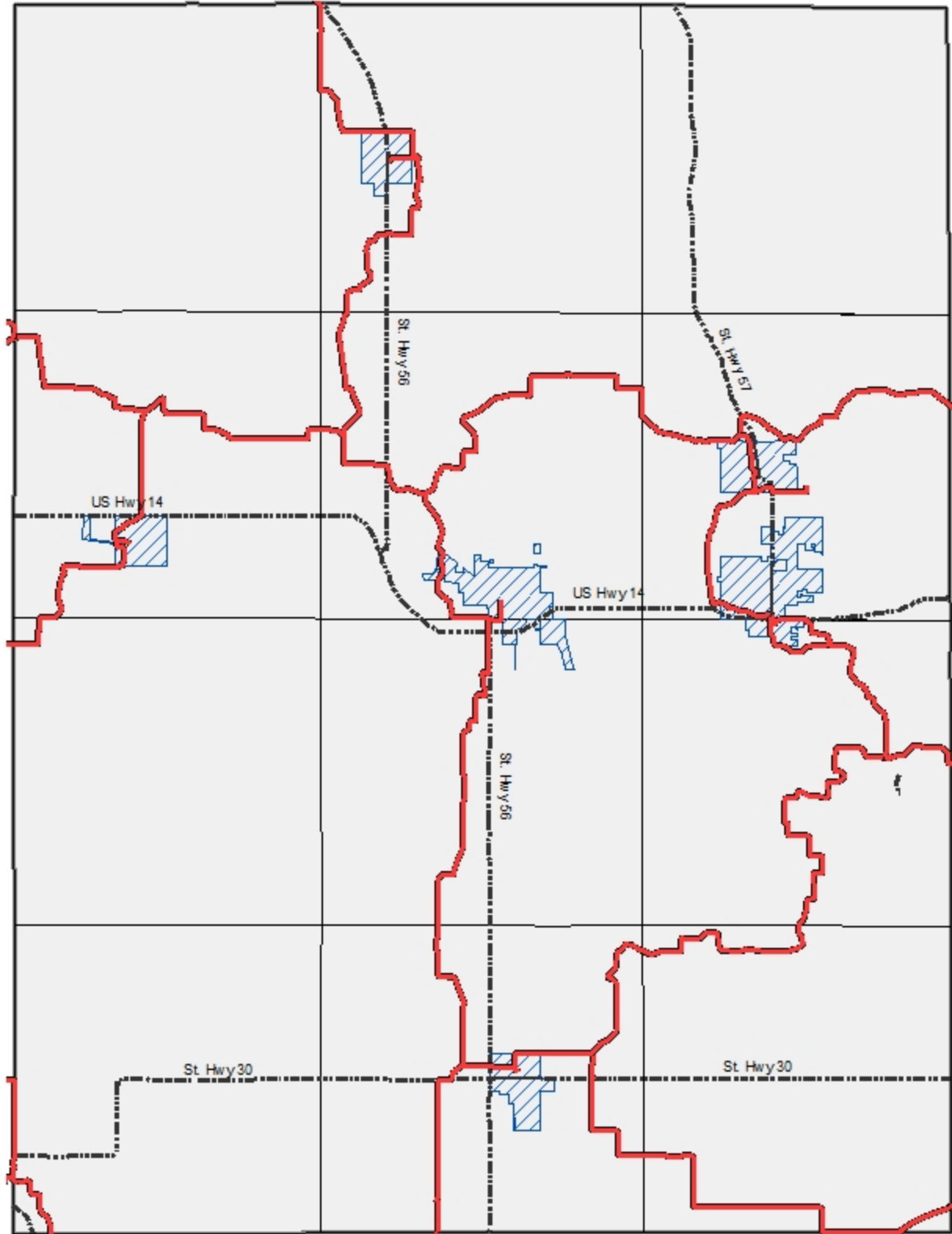
7.10 - Ten-year Implementation Plan:

1. Dodge County EDA will facilitate discussion and action needed to implement the Master Plan for the Stagecoach State Trail.
2. Dodge County EDA will facilitate discussion with owners of Stussy Quarry, City of Kasson, City of Mantorville and Township of Mantorville regarding the restoration of the quarry and associated public recreation opportunity.
3. Dodge County will request the DNR to complete a Biological Survey to identify important natural communities that may serve as possible public SNAs or WMAs.
4. Dodge County will seek to increase public access to Public Waters for recreational purposes in connection with the State Water Trail system.
5. Dodge County EDA will coordinate public education to inform citizens of available recreation areas and promote tourism.
6. Dodge County will promote and encourage the acquisition and management of public lands.
7. Dodge County will consider amending the zoning ordinance to encourage connectivity of open space in subdivision and public open space.

Section 7 Exhibits and Maps



Dodge County - Snowmobile Trails



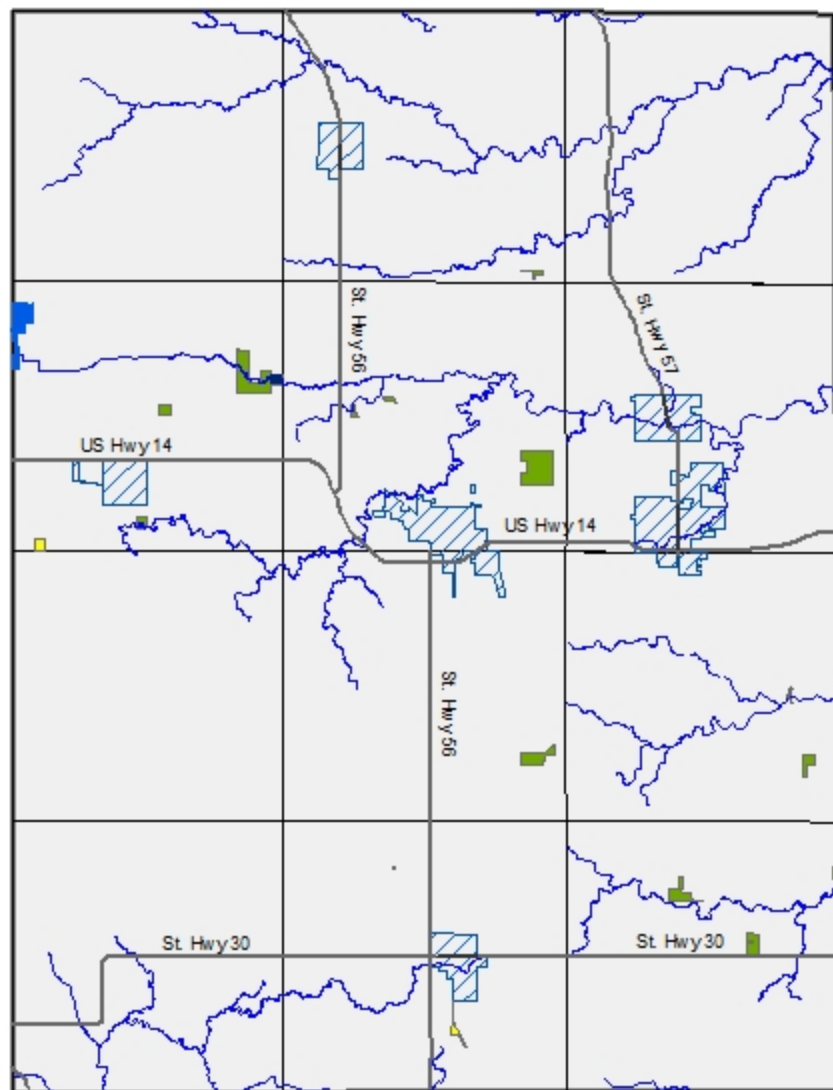
0 2 4 6 8 Miles



LEGEND:

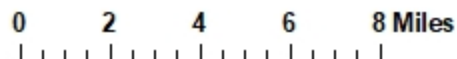
-  Snowmobile Trails
-  Major Roads
-  Cities
-  Townships

Dodge County Public Natural Areas



LEGEND:

- State Park
- Aquatic Management Areas
- Wildlife Management Areas
- Scientific and Natural Areas
- Protected Waters
- Major Roads
- Cities
- Townships



Source: Minnesota DNR 3-16-2018

Dodge County - Public Natural Areas

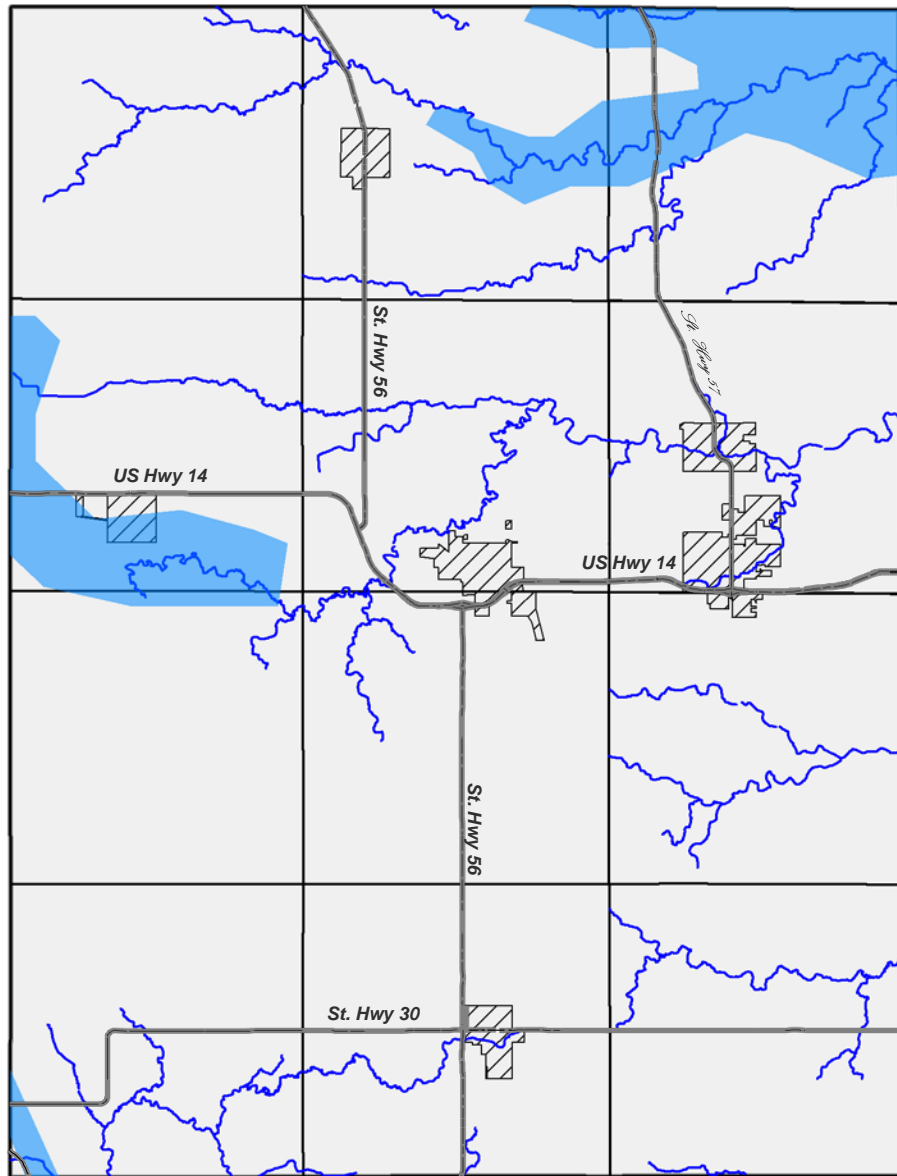
Wildlife staff use the WMA facilities and features layers for managing wildlife habitat on WMAs; local mapping, contracting for maintenance and development projects, visitor use maps, management use maps, project planning and acquisition planning. The layers will also be used for public information about the public use facilities that can be found on WMAs. WMAs are included in the Recreation Compass on the DNR website, which can be accessed by the public to print maps of public use facilities found on a particular WMA.

Scientific and natural areas are established to protect and perpetuate in an undisturbed natural state those lands and waters embracing natural features of exceptional scientific and educational value. The SNA Program's goal is to ensure that no single rare feature is lost from any region of the state. This requires protection and management of each feature in sufficient quantity and distribution across the landscape.

AMAs are established to "protect, develop, and manage lakes, rivers, streams, and adjacent wetlands and lands that are critical for fish and other aquatic life for water quality, and for their intrinsic biological value, public fishing, or other compatible outdoor recreational uses".

Information may be incorrect and maps may be inaccurate up to several hundred feet. They are to be used for broad examination of site conditions. Data may change frequently. Check with the Environmental Services Office before using data for construction purposes.

SNA Conservation Opportunity Areas



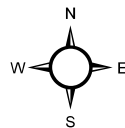
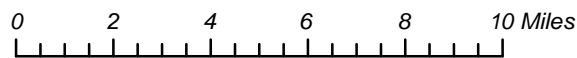
DNR Scientific and Natural Areas:

DNR Scientific and Natural Areas (SNA) are selected for their capacity to provide the following:

- Significant rare resources, native communities, natural features, or biodiversity significance.
- Partners that are willing to plan, implement, and evaluate conservation actions.
- Conservation that is motivated by an agreed-upon conservation purpose and set of objectives.
- Contributions to a conservation network that provides pathways for species mobility, which is particularly critical when addressing climate change concerns

LEGEND:

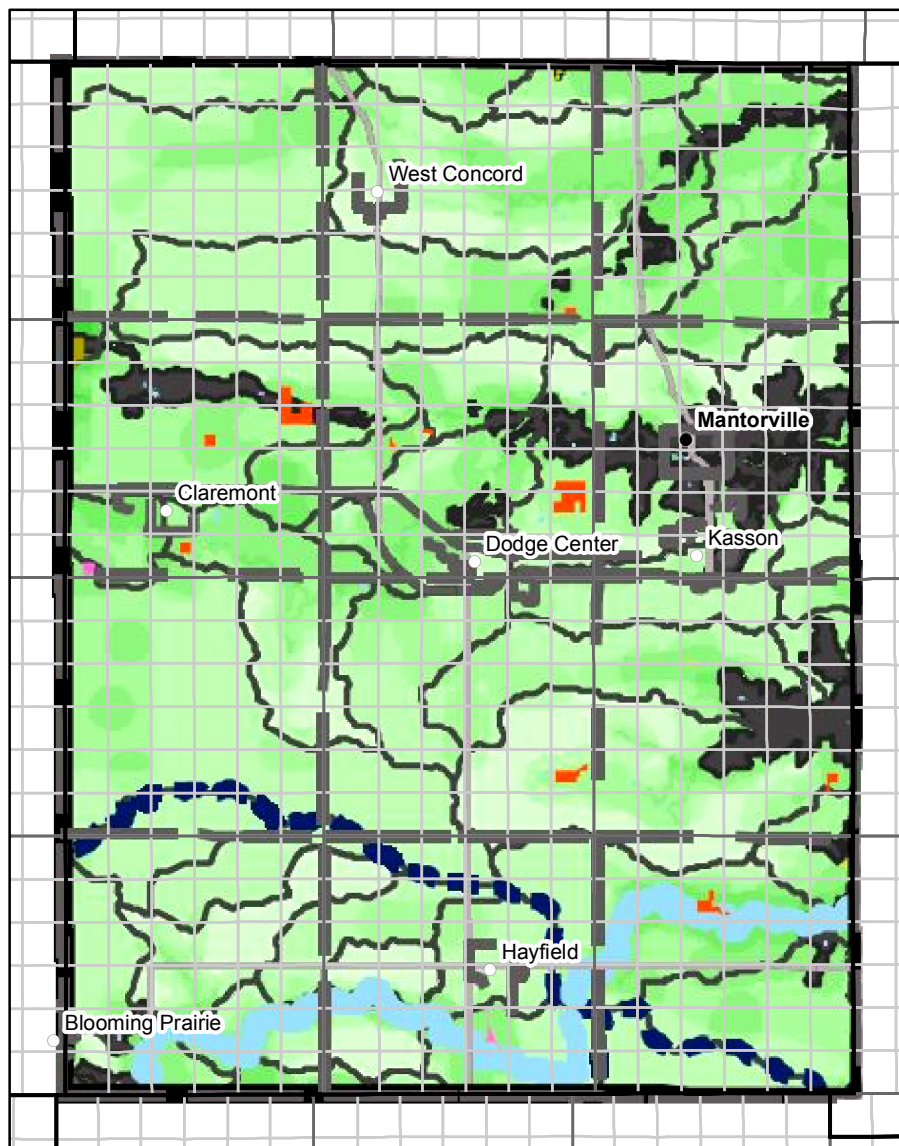
- SNA Conservation Opportunity Areas
- Cities
- Townships
- Major Roads
- Protected Waters



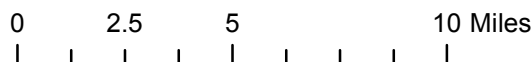
Source: Minnesota DNR 5-5-16

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Southern Region Conservation Focus Areas, Dodge County



- Municipal Boundaries
 - Interstate
 - Federal Trunk
 - State Trunk
 - Scientific and Natural Area Boundaries
 - State Wildlife Management Area Boundaries
 - Water Access Sites
 - Major Rivers
 - DNR Watersheds Level 08
 - Lakes
 - WPA
 - MWR
 - RIM/CRP
 - Designated Wildlife Lakes
 - High potential Aggregate Deposits
 - TNC
 - Working Land Initiative
- | Southern Region Conservation Focus Areas | |
|--|--|
| VALUE | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |



This interdisciplinary map is the compilation of the "High Conservation Focus Area" layers developed by Region IV Area Managers.

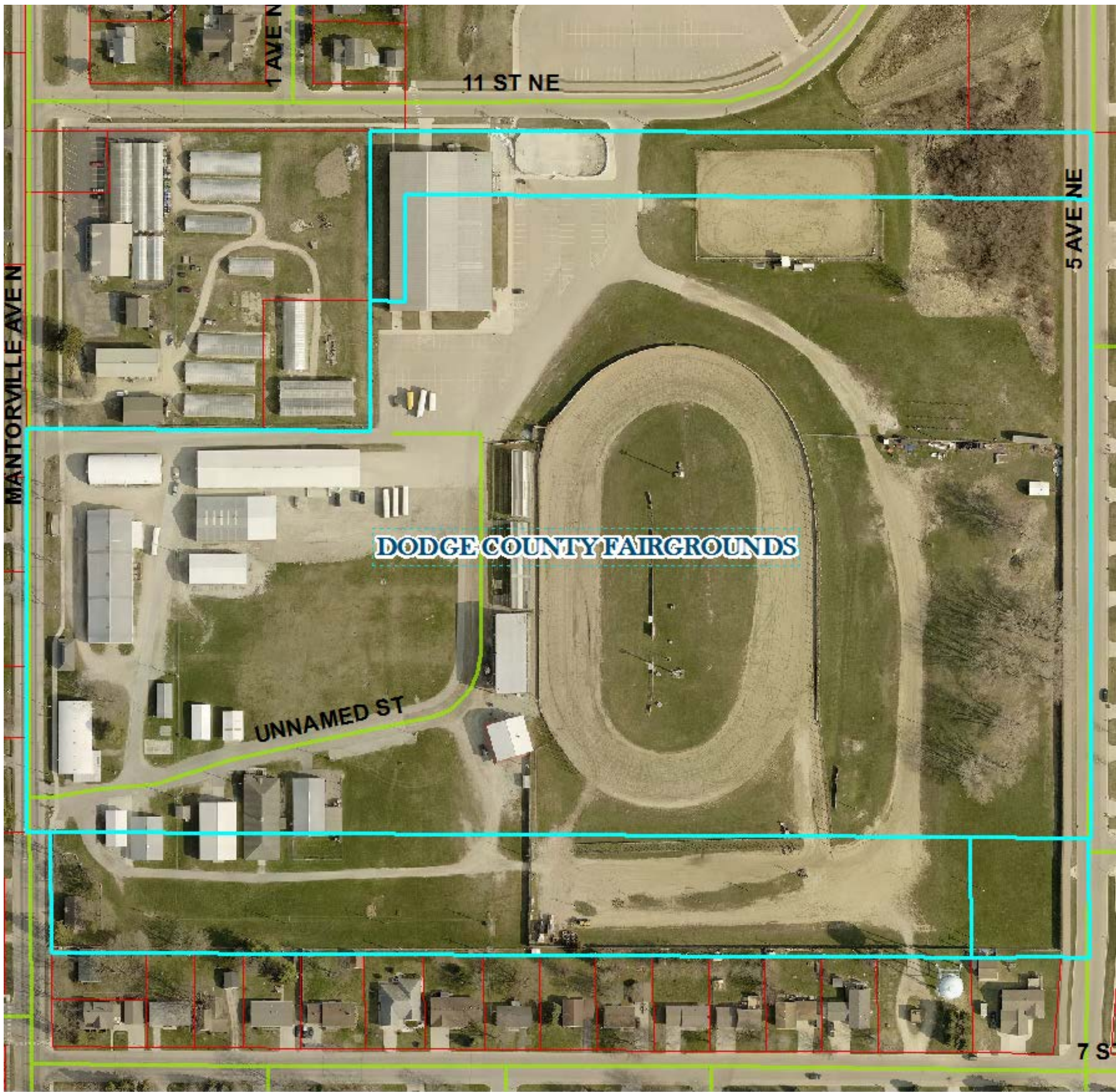
This data is solely intended for Region and Countywide analysis and may not be appropriate for other purposes. Use of this map without accompanying written criteria is strongly discouraged.

This map shows varying degrees of overlap in conservation interests as identified by Area Managers. The darker shades of green indicate that more Divisions identified a particular area as a high focus area.

The lighter green shaded areas are not indicative of limited natural resources value, but indicate lower priority areas for conservation efforts. Lack of GIS data layers, or current interest among the Divisions may also result in lighter shading.

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Dodge County Fairgrounds Property



Section 8: History and Culture



Introduction:

The cultural resources of Dodge County include historic buildings and sites listed on the National Register of Historic Places, museums, churches, cemeteries, old country schools, and other buildings deemed culturally, or historically, significant by the community. Protection of these unique places is integral to maintaining a strong sense of place and a connection to the County's past. New development and progress will lead the county into the future, but the value and necessity of maintaining historic and cultural resources is an important decision-making consideration. Appreciation and attention to these resources leads to long-term success of a community as they create opportunities for commerce through tourism, attracting new people to the area, and improving the overall quality of life for residents.

Historic preservation is the protection, rehabilitation, restoration and reconstruction of cultural resources. Cultural resources include communities, areas, structures, sites and objects having historic, archaeological, architectural, social or cultural significance.

8.1: Existing Historic and Cultural Resources:

A summary of Dodge County's history and cultural sites is found on the Dodge County Web Site:

http://www.co.dodge.mn.us/government/dodge_county_history.php

Historic sites and buildings include, but are limited to, the following:

- a. St Johns Episcopal Church, Mantorville, built in 1869 and now home of the Dodge County Historical Society Museum (pictured right).
- b. 1856 "Red House" in Mantorville built by Henry Naegeli
- c. The log house located on the Dodge County Fairgrounds.
- d. The 1855 Civil War Recruiting Station in Wasioja



- e. The 1860 2-story limestone school house in Wasioja
- f. The 1858 Free Will Baptist Church, perhaps the oldest west of the Mississippi
- g. The 1881 one room school, District #38, built in Ashland Township and moved to Mantorville.
- h. The Dodge County Courthouse built in 1865 and still active today.
- i. The Wasioja Seminary founded in 1858 was called “Minnesota Seminary” and began functioning as a school in 1860.
- j. The first settlement in Dodge County; the unincorporated village of Concord was the site of the first settler’s dwelling in Dodge County.
- k. Plowville in Wasioja Township; the site of the first National Soil Conservation District Field Day and Plow Matches held on September 6, 1952.

8.2 - Previously Adopted Goals and Policies:

General Development Policies from the 1970 Comprehensive Plan included: “historic preservation and restoration shall be continued in Wasioja and Mantorville and development in restoration areas shall conform to established historic styles and architecture”.

A high priority goal identified in the 2001 Comprehensive Plan was the “preservation of significant historic sites (close to 30 platted ghost towns and 81 school districts)”.

An approved policy of the 2001 Comprehensive Plan is: “Dodge County will consider policies or amendments to the County Zoning Ordinance to include language that addresses the preservation and protection of historical assets that reflect standards suggested by the Minnesota State Historic Preservation Organization, while considering other local area factors”

8.3 - Updated Goals and Policy for 2018 County Wide Comprehensive Plan:

Continue implementation of Goals and Policy set by 2001 Comprehensive Plan (as outlined above).

8.4- Ten-year Implementation Plan:

1. Consider amendments to the County Zoning Ordinance to include language that addresses the preservation and protection of historical assets that reflect standards suggested by the Minnesota State Historic Preservation Organization, while considering other local area factors.
2. Dodge County will encourage the Dodge County EDA, Dodge County Historical Society, and partners to:
 - Increase awareness of the social and economic value of historic preservation.

- Encourage the arts in community development plans throughout the county.
- Promote the cultural heritage and highlight the importance of century old farm homesteads.
- Preserve older and historic structures, landscapes, and features in order to provide a sense of identity.
- Encourage the revitalization and maintenance of historic structures.
- Encourage the collection of artifacts at archaeological sites during excavation for new construction and consider alternative development patterns if necessary.
- Seek funding and cooperation from the private and nonprofit sectors to assist with historic preservation and cultural outreach projects.
- Promote initiatives furthering the arts and culture as part of community development.
- Publicize the success of preservation efforts and encourage similar actions.
- Promotional and educational activities can increase the public's awareness. These activities can make a critical difference in the effectiveness of any historic preservation efforts.
- Support existing historical districts

Section 9: Land Use and Growth Management



Introduction: Dodge County’s population will grow over next 10 years, posing many land use challenges. The balance between protection of natural resources, maintaining the character of the area, and the demands for additional industrial, commercial, and residential opportunities will continue to be the driving forces for future planning efforts. Growth management is how population and business growth translates into changes in the built environment. Where will the future residents live, work, shop and play?

9.1 - Current Land Use and Zoning:

Zoning is the primary tool the county uses to carry out the goals and policies of the Comprehensive Plan. **See Map 9.a** for map of current Zoning Districts. The majority of land in the unincorporated area of Dodge County is zoned Agricultural.

Section 8.1 (Purpose) of Chapter 8 (Agricultural District) the Dodge County Zoning Ordinance states:

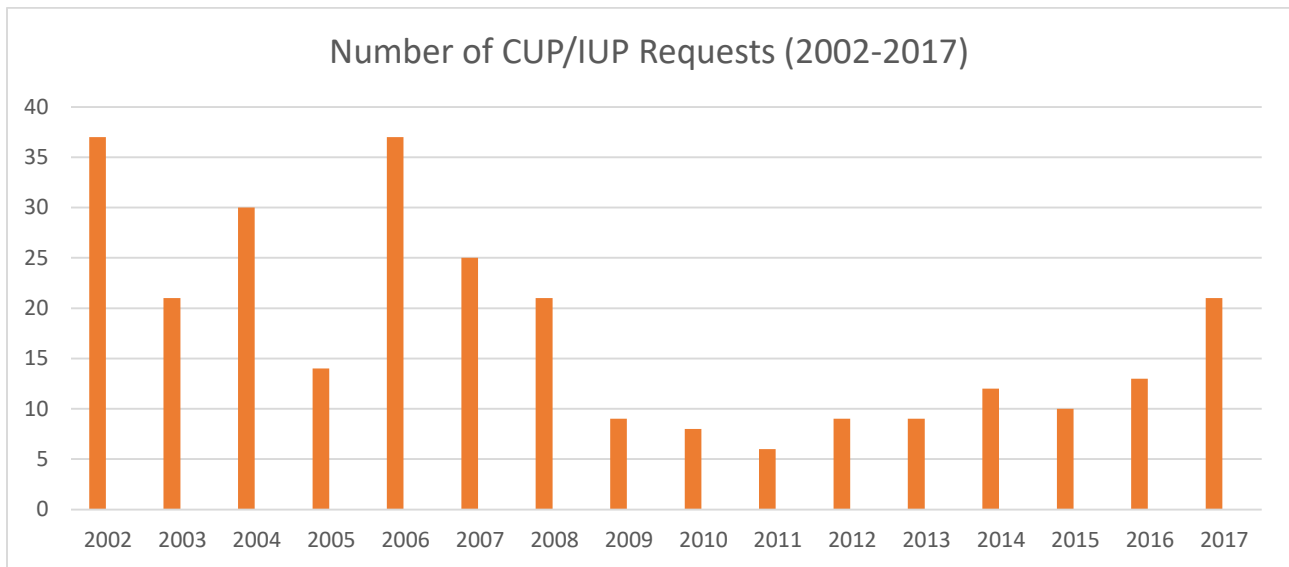
“The purpose of the Agricultural District is to retain, conserve, and enhance agricultural land in Dodge County and to protect this land from scattered residential development”

The Zoning Ordinance defines permitted, conditional, and interim uses allowed in each district, and general district performance standards. In addition, some allowed uses require additional performance standards (i.e. increased setbacks, siting limitations, etc...) which can be more restrictive than the general district performance standards.

The current Zoning Ordinance is available on the county’s Web Site: http://www.co.dodge.mn.us/departments/land_use.php.

The following table illustrates the number and trend of Conditional Use Permits (CUP) and Interim Use Permits (IUP) in the Agricultural Zoning District for the years 2002 through 2017. The number of requests appear to be greatly influenced by the trend in the economics of this time-period, which is expected.

Figure 54



During the time-period of 2002-2017, the greatest number of requests for CUPs/IUPs were for dwellings on less than 53 acres in the Agricultural Zoning District, sometimes referred to as “*non-farm dwellings*”. Over the last 16+ years, the number of requests for dwellings has been three times greater than requests for any other land use, including feedlots (new/expansions) and limited rural businesses (home occupations operated out of an accessory structure).

Since 2012, requests for dwellings on less than 53 acres continues to be the number one request, with 38 permits for dwellings approved from 2012 – 2017. During this time-period there has been a rise in permit requests for limited rural businesses (11) and solar energy systems in the Agricultural District (8). Since 2015, Dodge County has approved eight (8) solar facilities generating 15 Megawatts and occupying approximately 117.5 acres, most of it cropland or on soils that are considered “prime farmland”.

It appears that newly permitted activities in the Agricultural District are generally shifting towards allowable uses that are less agricultural in nature, as evidenced by the increase in limited rural businesses and solar energy facilities. Based on projected population growth, proximity to Rochester, private projects such as the Destination Medical Center (DMC), as well as past permitting history, county staff predict that there will continue to be a high demand for dwellings on less than 53 acres. This will include both increases in the number of dwellings in the Agricultural Zoning District and frequency of these types of requests under current ordinance provisions. Additionally, demand for land uses that are not traditionally considered “agricultural” are also likely to rise.

With the increase in rural dwellings, the requests for limited rural businesses are also expected to rise proportionately. Home based businesses vary widely within the Agricultural Zoning

District. Current ordinance language allows these types of uses to occur as a permitted use provided they are operated out of the dwelling or any attached garage. Businesses operated out of an accessory structure require a public hearing. The previous ordinance language was vague and had few performance standards, allowing almost all proposals to be approved regardless of the type of use. Additional performance standards were added to the ordinance which addressed some issues; however, it is clear that more work needs to be done in this area to clearly define what uses would be allowed as a limited rural business in an agricultural zoning district.

As solar energy is a new and emerging issue in Dodge County, it is unknown if the requests for solar energy farms will continue or be self-limiting due to infrastructure, incentives, or other issues. Dodge County has supported renewable energy, in general, and solar energy farms are currently allowed within both the Urban Expansion and Agricultural Districts. Current solar farms are located primarily within 3 miles of the Hwy 14 corridor and most have been sited on land that is utilized for agricultural crop production. This type of land is likely favorable due to topography and the lack of obstructions that are available to shade the array. Solar energy farms can occupy between 4 to 10 acres of land per 1 MW, depending upon the site plan. Based upon permitted projects, approximately 117.5 acres have been, or will be converted, from cropland or lands classified as prime farmland to solar energy facilities. Project proposers have indicated that the typical lifespan of the solar projects is 25 to 30 years. At that point, facilities could be proposed for update (“repowered”) or extended for additional time-periods.

In the last 15 years, there have been several occasions when the siting of a new feedlot has created significant concern for neighboring property owners (concerns voiced by both farm owners and non-farm owners). In these cases, citizens have voiced concern about the number of animal feedlots in their neighborhood and related impacts on water quality and air quality. Dodge County has the challenging task of balancing impacts and issues of all land uses in the Agricultural Zoning District while recognizing that practices traditionally considered appropriate and acceptable are not always agreeable to all. **See Exhibit 9.a.** for a more detailed discussion of feedlot odor and land use in the Agricultural District.

9.2 - Results of 2017 Listening Sessions and Survey:

The following graphs summarize responses from county-wide survey conducted in 2017. See **Appendix A** for comprehensive summary:

Figure 55

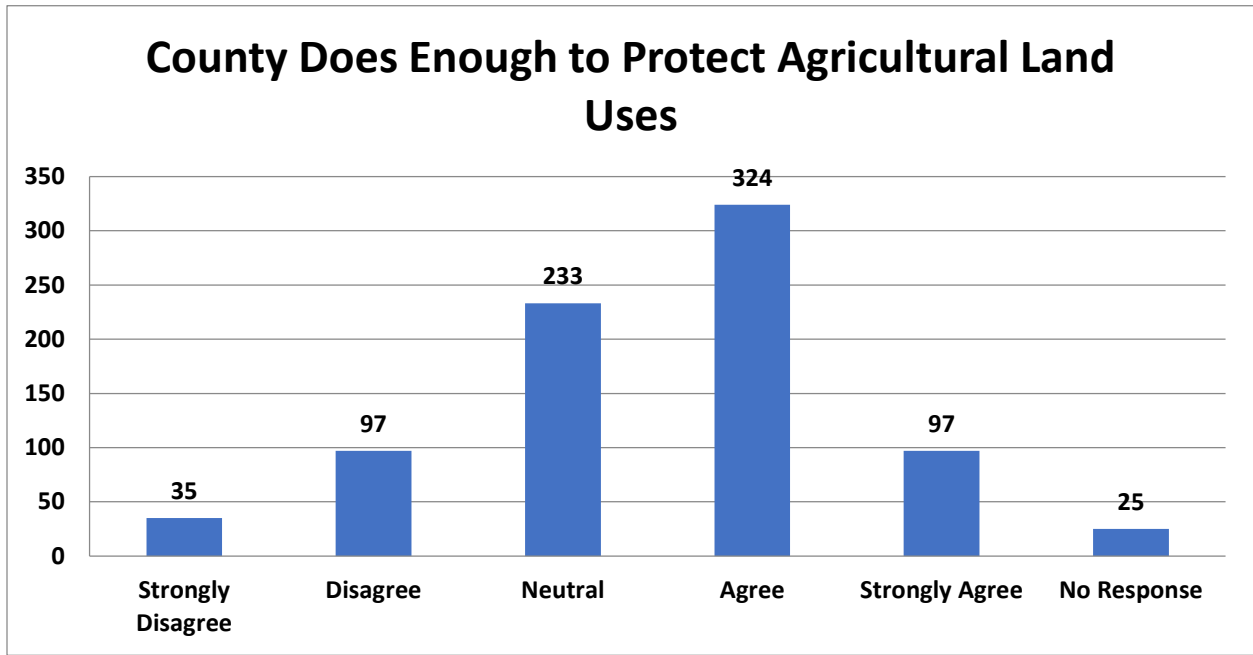


Figure 56

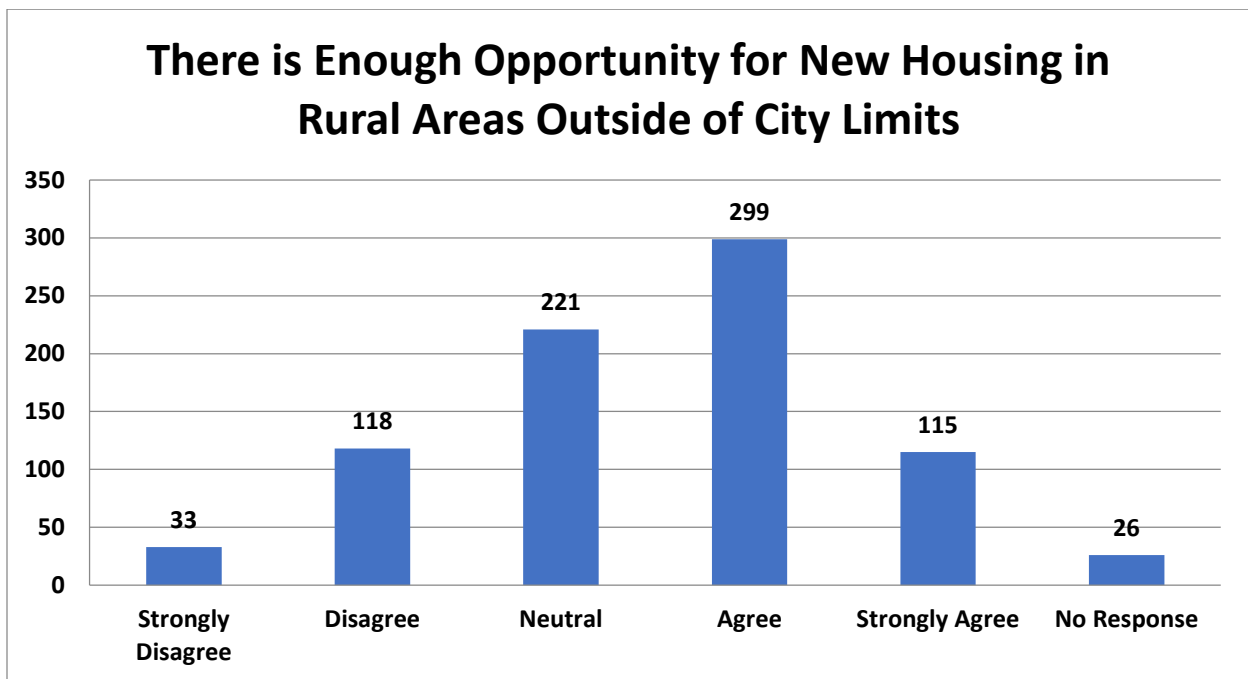


Figure 57

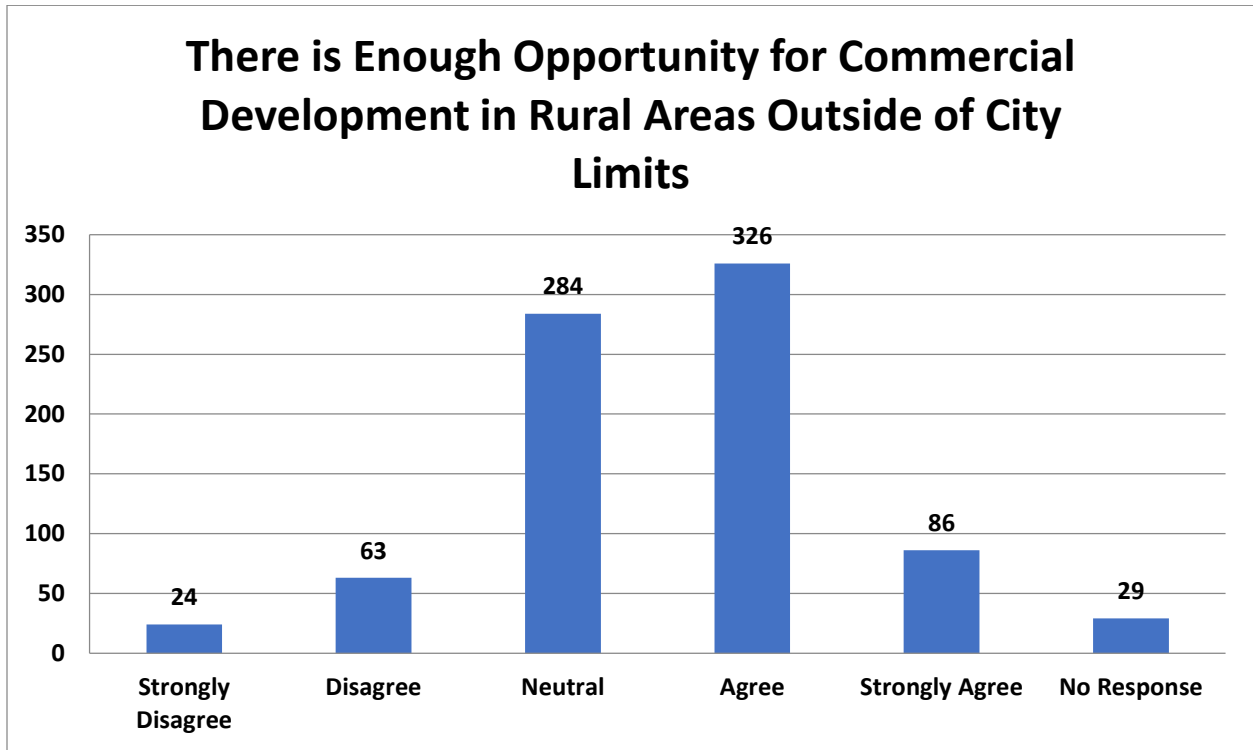
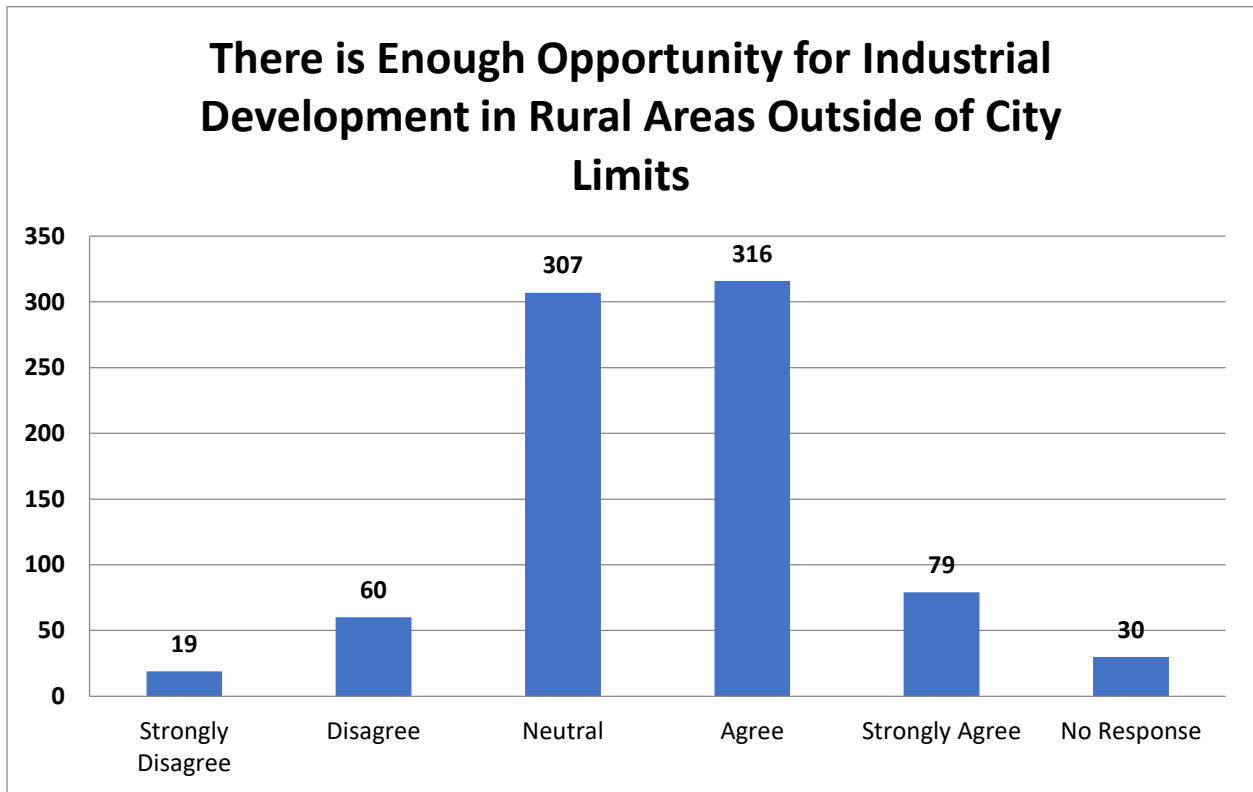


Figure 58



9.3 - Previously Adopted Goals and Policies:

The 1993 Dodge County Comprehensive Plan called for protection of agricultural land from non-farm encroachment while providing opportunities for commercial, industrial, and residential development. Proposed implementation policies included:

- a) A Primary Agricultural Zoning District that limited non-farm residential development to one home per 160 acres.
- b) A Secondary Agricultural Zoning District that allow a higher density of residential development to two homes per 40 acres.
- c) A rural residential district anticipated to be used in existing rural subdivisions and in unincorporated villages such as Wasioja and Concord, and
- d) Residential, commercial, and industrial uses that can be accommodated by urban services as defined in growth management areas and/or annexation agreements.

The 2001 Comprehensive Plan further defined land use goals and policy as follows:

- Dodge County intends to amend the County Zoning Ordinance to include districts that protect agriculture, forest areas, significant natural areas, and vital natural resources.
- Dodge County intends to practice “smart growth principles” including:
 - ✓ Make efficient and effective use of land resources and existing infrastructure by encouraging development to areas with existing infrastructure or capacity to avoid costly duplication of services and costly use of land.
 - ✓ Provide a mix of land uses to create a variety of housing choices and opportunities.
 - ✓ Make development decisions predictable, fair, and cost-effective.
 - ✓ Provide a variety of transportation choices including pedestrian friendly neighborhoods.
 - ✓ Maintain a unique sense of place by respecting local, cultural, and natural environmental features.
 - ✓ Conserve open space and farmland and preserve critical environmental areas.
 - ✓ Encourage stakeholder collaboration and community participation rather than conflict.
 - ✓ Provide staged and managed growth in urban transition areas with compact development patterns.
 - ✓ Enhance access to equitable public and private resources for everyone.
 - ✓ Promote the safety, livability, and revitalization of existing urban and rural communities.

9.4 - Updated Policy for 2018 County Wide Comprehensive Plan:

Dodge County will continue implementation of the general Policy set by the 2001 Comprehensive Plan (as outlined above).

9.5- Ten-year Implementation Plan:

1. Meet regularly with cities and townships to discuss land use plans in joint effort carry out growth policies and realize opportunities.
2. Amend Zoning Ordinance Urban Expansion Districts to be consistent with future urban growth areas identified in approved city plans and/or annexation agreements with townships.
3. Set specific ordinance criteria and limitations on/for rezoning requests.
4. Implement protections through agricultural preservation districts, transfer of development rights, or other options to protect prime farmland.
5. Review and modify allowable uses in specific zoning districts for compatibility with district purpose.
6. Review criteria and performance standards for home occupations, solar energy systems dwelling density, and other uses to address issues of incompatibility with the purpose of Agricultural Zoning District.
7. Reconsider the recommendations of the Land Use Task Force (2005-2008) regarding alternatives for allowing higher residential densities in some parts of the Agricultural District, a "2nd Agricultural District", and similar methods to protect Prime Farmland but accommodate for residential development.
8. Amend zoning districts to be compatible with Dodge County Airport Plans.
9. Continue to work with Townships that currently have Township Zoning Ordinances; with goals of consistency, efficiency, and compatibility with County Zoning ordinance and procedures.
10. Consider a zoning overlay district, or similar action, that will protect planned transportation infrastructure from encroachment of non-compatible uses

Section 9 Exhibits and Maps

LAND USE: FEEDLOT ODOR

The majority of land within the unincorporated area of Dodge County is Zoned Agricultural.

Chapter 8 (Agricultural District) of the Dodge County Zoning Ordinance clearly identifies the deference to agricultural uses within this district. Dodge County views the Agricultural District as a zone in which land is used primarily for Agricultural uses and crop production. When an owner of land in the Agricultural District is legally engaged in an appropriate Agricultural use of a property and is in compliance with Ordinance, permit provisions and/or other applicable regulations for the Agricultural use, then such use is a part of "normal and accepted agricultural practices and operations" in Dodge County. Owners, residents, and other users of property in this district may be inconvenienced from, exposed to, or impacted by *normal and accepted agricultural practices and operations*, including but not limited to: noise, odors, dust, operation of machinery of any kind including aircraft, flying debris, the storage and disposal of manure, and the application of fertilizers, soil amendments, herbicides, and pesticides. Dodge County recognizes that owners, residents, and users of property within the Agricultural District should be prepared to accept such inconveniences, exposure or impacts from *normal and accepted agricultural operations*.

Dodge County has received various complaints with regards to both crop and animal agricultural operations. However, the majority of reported agricultural use conflicts have revolved around feedlots, primarily issues with odor.

Based upon information from the Minnesota Pollution Control Agency, odorous gases can be measured either directly or through gas surrogates. While the ability to measure odor has improved over the last several years, there are still difficulties in matching "annoyance level" of a particular odor to a measured concentration across a diverse population. As a result, it is not possible to adopt a state ambient air quality odor standard.

Further, the MPCA has indicated that odor is rarely useful in determining a human health risk. Not all unpleasant odors are human health concerns. At the same time, many unhealthy chemicals have no odor. In some limited circumstances, however, a feedlot that reduces its emissions of certain chemicals may also reduce neighborhood odor. In these rare cases, the MPCA may be able to use odor measurement as a surrogate for specific chemical concentrations. Generally the MPCA will address health concerns by considering the primary pollutants, with odor reduction a by-product of reducing those pollutants.

In Dodge County, odor from feedlots is currently addressed in the following ways:

1. There is a setback for new feedlots of 1000 feet from a dwelling, which is reciprocal for new dwellings proposed next to existing feedlots. Certain townships that have adopted zoning have greater setbacks than the county.
2. There is a density limit on dwellings constructed on less than 53 acres in the agricultural district. Only one dwelling is allowed per quarter section on less than 53 acres of land. After that density is taken, the quarter section is closed to additional dwelling requests on less than 53 acres. This was an attempt to limit potential conflict between agricultural and non-agricultural users.
3. A Conditional Use Permit (CUP) is required for new or expanded feedlots that are 500 AU or greater. Under the CUP process:
 - a. An assessment tool called OFFSET (Odors From Feedlots Setback Estimation Tool) is used to determine potential odor impacts of a livestock operation. OFFSET was developed by the University of Minnesota and is based on science and research. The OFFSET model is considered a “worst case” scenario due to built-in assumptions into the program.
 - b. A Feedlot Advisory Board performs a site reviews of all proposed new and expanded feedlot operation requests to evaluate feedlot siting including, but not limited to, type of barn proposed, setbacks from road and potential impact to traffic, and sensitive features in the area including potential odor impacts to neighboring properties. For odor, the FAB considers type of barn, prevailing wind direction, lazy air, topography, screening, adjacent land uses, and the OFFSET annoyance value.
 - c. Based upon FAB evaluation, conditions may be made added to the CUP to address odor from barns, when considered appropriate. It should also be noted that Dodge County was the first county in Minnesota to proactively address odor from feedlots through conditional biofilters to address odor.

Due to the predicted increase in population to Dodge County, it is anticipated that there would also likely be an increase in agricultural related complaints as more people move into the unincorporated Agricultural District.

With the current 1000 foot dwelling setback, siting for new feedlots is limited. The eastern townships have a greater dwelling density that would limit new

feedlots and the expansion of existing feedlots. The central and western townships have less dwellings and do have locations where new facilities could be sited. (See attached map "Dwellings with 1000 foot Feedlot Setback Shown)

Dodge County has evaluated odor from feedlots and based upon this evaluation, has determined that intensity and annoyance value as predicted by OFFSET varies considerably based upon:

1. Type of species
2. Type and size of operation
- 3 Type and size of manure storage or open lots
4. Type of operation
5. Type of barn
6. Distance to receiver

From observation, odor impacts also vary with siting, weather conditions and time of year, considering prevailing wind and normal agricultural operations. It has also been observed that odor impacts are also highly subjective, based upon the receiver's perception of feedlots in general.

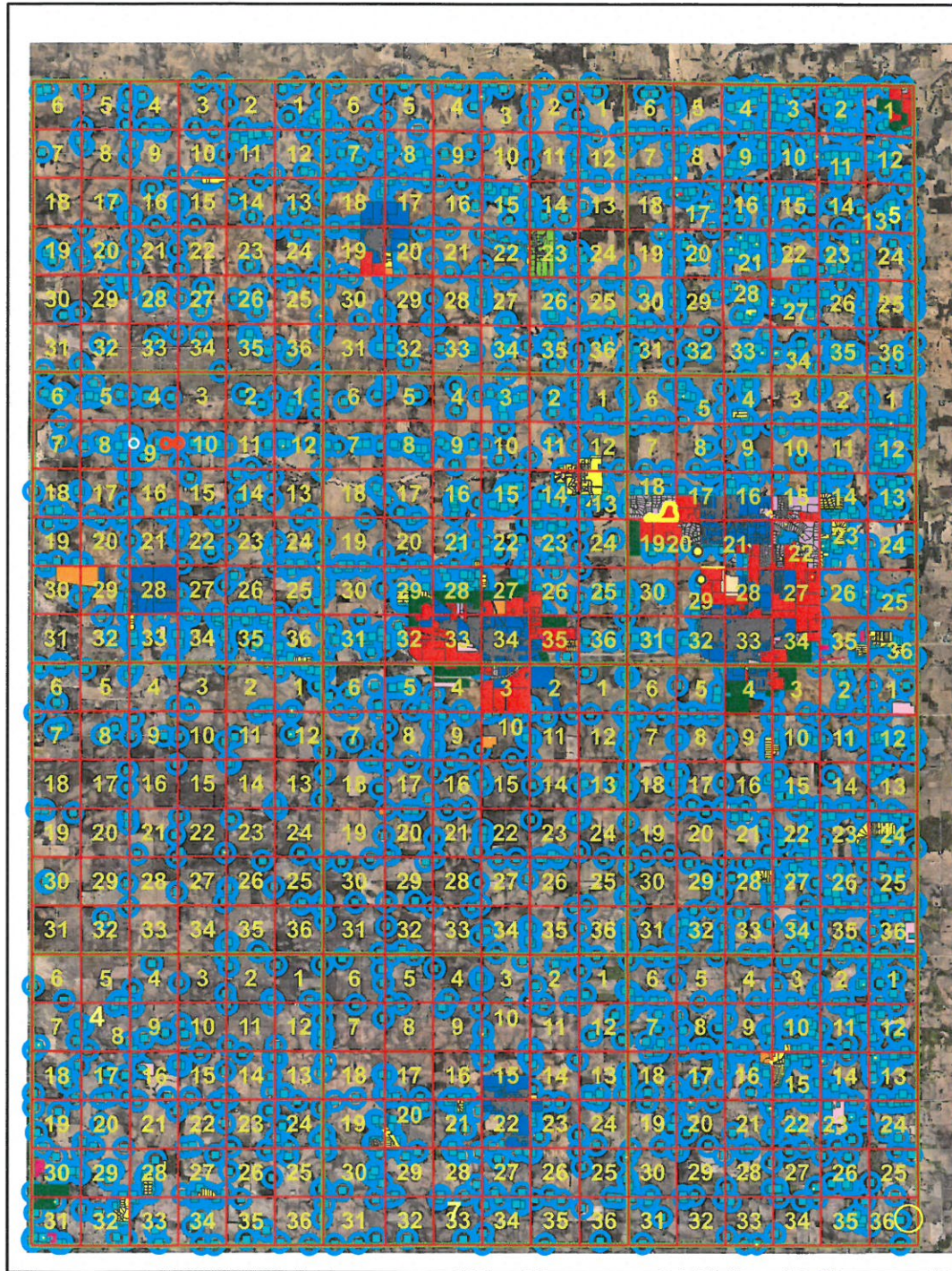
In addition to odor evaluation, in the future Dodge County could also consider actions to limit the impact of odor including:

1. Further limitations on dwelling density in the unincorporated areas
2. Setting a maximum capacity on feedlots within townships
3. Transfer of development rights; or
4. Designation of Agriculture protection districts (primarily central/western townships) paired with possible increased dwelling density allowed in the more populated eastern townships, subject to a farmland evaluation (green/white concept)
5. Implementing an odor standard on new and existing barns
6. Increasing reciprocal setbacks and urban expansion setbacks
7. Limitations on types of barn or manure storage allowed
8. Further siting performance standards

It is not expected, nor is it intended, that all odor will be entirely eliminated through new ordinance regulations/restrictions. Dodge County is an

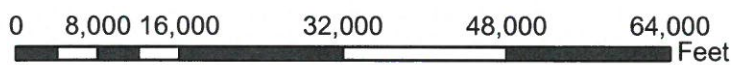
agricultural county in which agricultural crop production occurs on approximately 73% of the county's land, based upon 2010 USDA agricultural statistics. Manure has been and will continue to be valuable local source of organic fertilizer for agricultural production which offsets or eliminates the cost of commercial fertilizer on Dodge County crops. As a result, impacts from odor will continue to occur from time to time, as manure application is considered normal and accepted agricultural operation in the agricultural zoning district.

Dwellings with 1000 Foot Feedlot Setback Shown



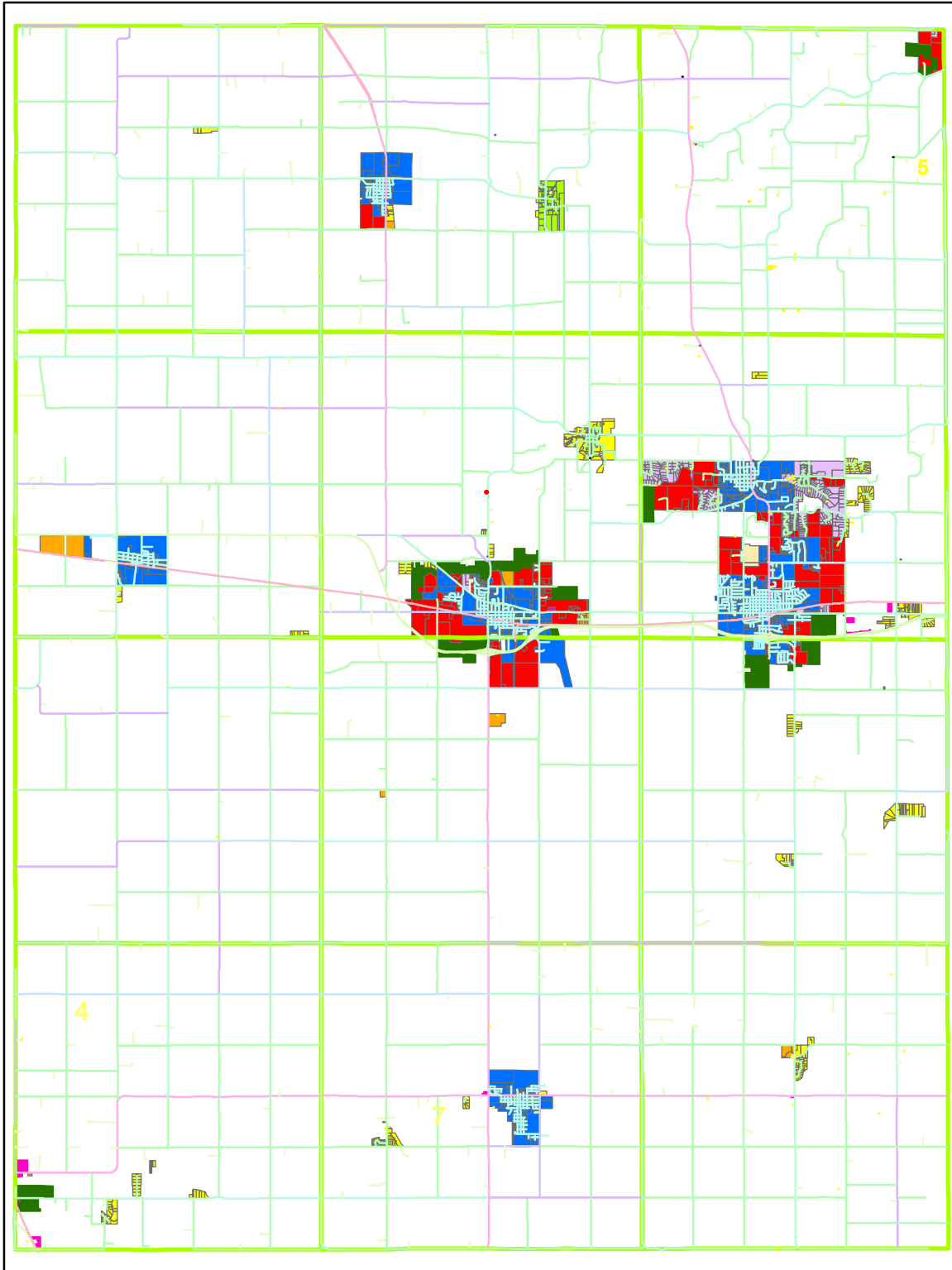
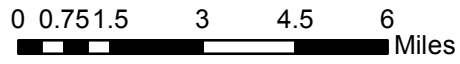
Legend

- Houses
- House Buffer



Map 9.a

Zoning Map



Legend

Zoning Districts

- Agricultural
-  City
-  Closed Landfill
-  Commercial
-  Hamlet
-  Industrial
-  Rural Residential
-  Split
-  Urban Expansion
-  Urban Expansion Res

Appendix A

Survey Data

Appendix A: Summary of public Input for 2018 Comprehensive Plan

The purpose of the Comprehensive Plan is to establish County policy related to future growth including new development of land. The plan reflects the collective public input received from the following:

1. A 2017 written survey mailed to all homestead parcels in the county. We received approximately 824 written responses, which are summarized in this Appendix A.

Review of the written survey revealed that survey respondents generally feel:

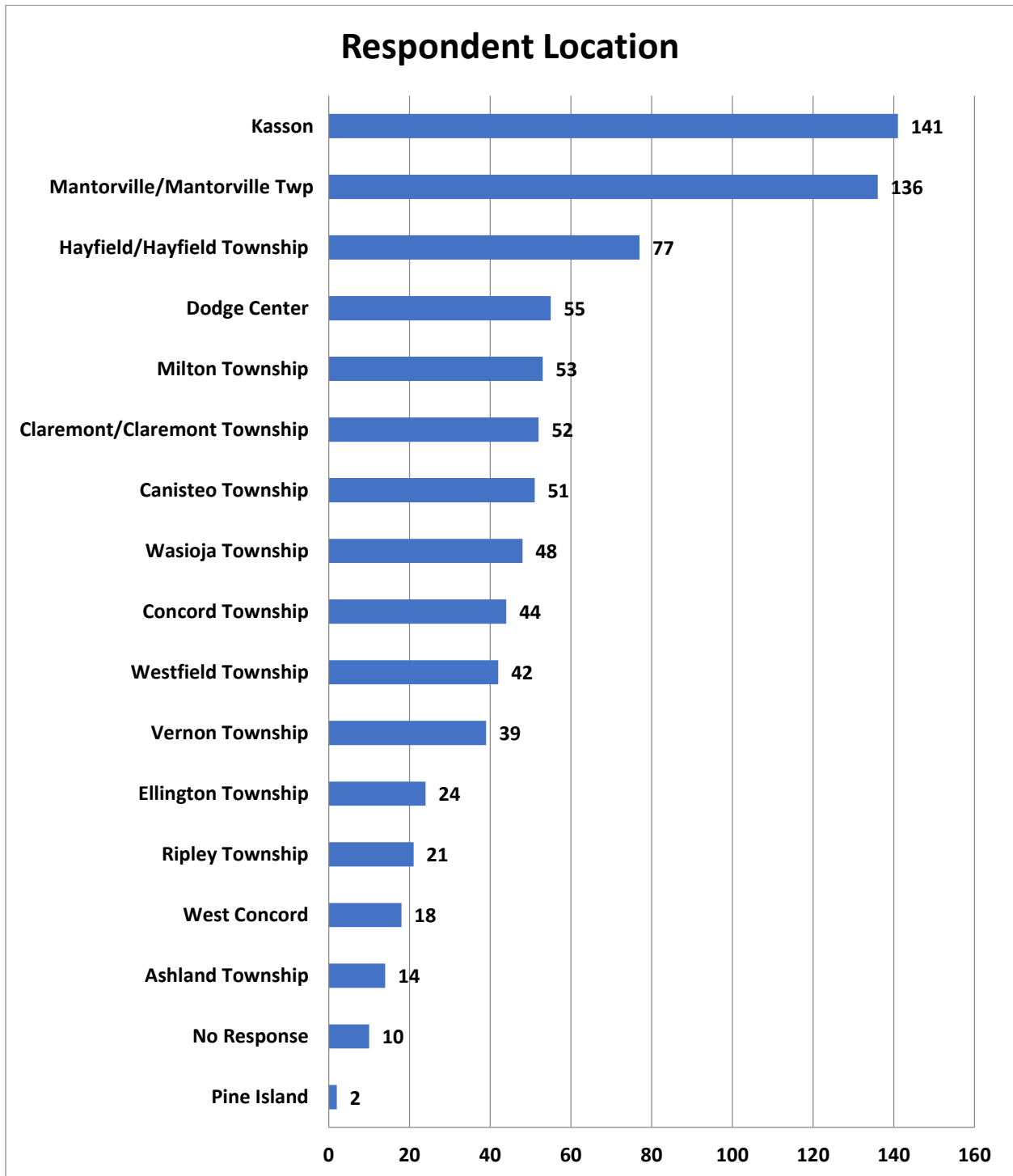
- a. The County is currently doing enough to protect agricultural land uses.
 - b. County regulations are sufficient to protect the environment but many are concerned about water pollution related to farming practices, especially feedlots.
 - c. There is enough opportunity for new housing in rural areas outside city limits.
 - d. There is enough opportunity for industrial development in rural areas outside city limits.
 - e. There is enough opportunity for commercial development in rural areas outside city limits.
 - f. There is a desire for more recreational opportunities. Survey responses were split on the question of recreation opportunities; with half saying that there is enough opportunity and half disagreeing. A majority of the comments revealed a desire for more trails and natural areas.
 - g. The transportation system and roads are not sufficient to accommodate growth in the next 10 years.
2. Community meetings in every City and with each township board. Meetings were also held with each County department, City staff, and school district. Other input meetings were held with regional stakeholders such as MNDOT, healthcare institutions, energy cooperatives, etc.. The goal of these meetings was to have an open discussion exploring the Strengths, Weaknesses, Opportunities, and Threats for Dodge County now and into the future. Several common themes were heard throughout these meetings and those can be summarized as follows:
 - a. Strengths
 - i. Agriculture
 - ii. Proximity to the regional economic center of Rochester
 - iii. Quality schools
 - b. Weaknesses
 - i. Limited access to broadband
 - ii. Deteriorating infrastructure
 - iii. Senior housing shortage
 - c. Opportunities
 - i. Expansion of Highway 14
 - ii. Job growth locally and regionally
 - iii. Expansion of parks and recreational opportunities for residents and to attract visitors
 - d. Threats

- i. Urban sprawl from Rochester
- ii. Cost of infrastructure
- iii. Residential encroachment into traditional ag land

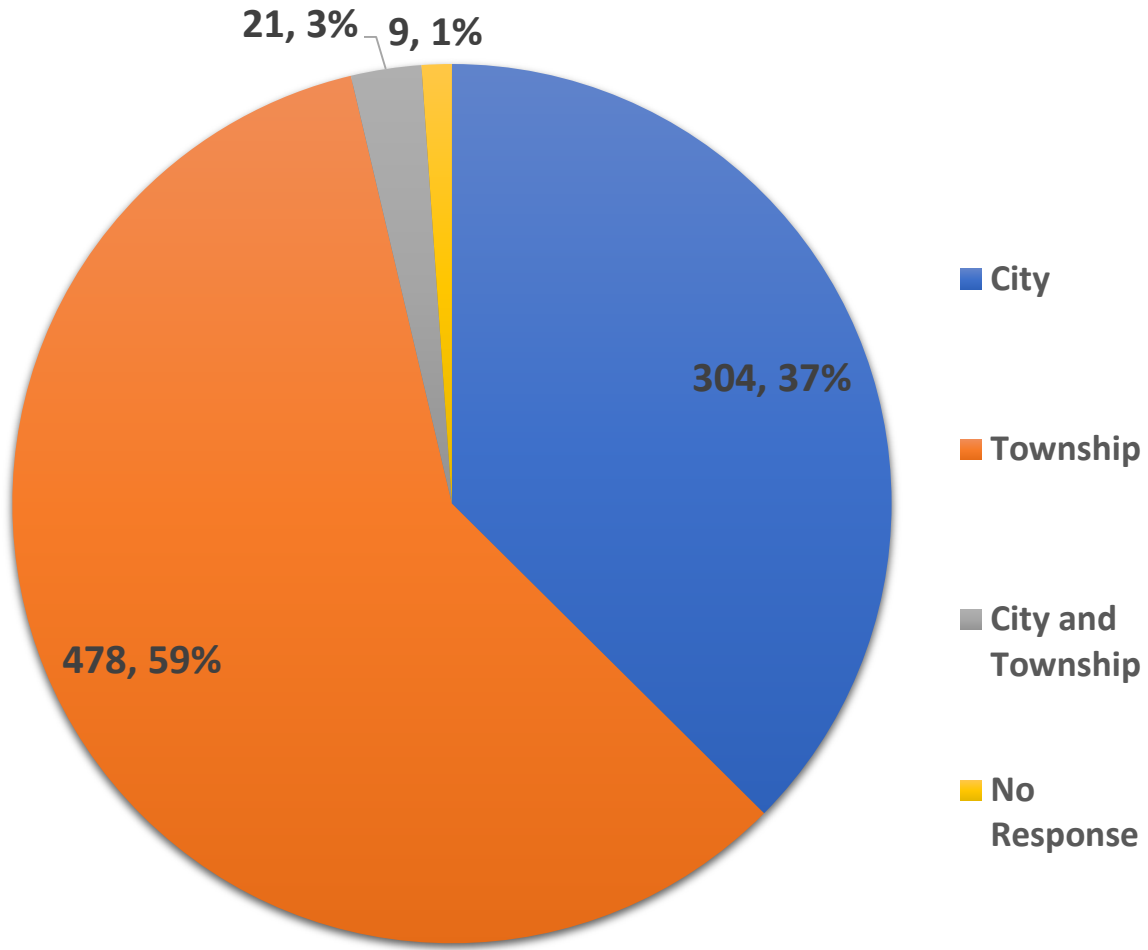
3. A countywide public meeting was held on February 20, 2019. Appendix E includes notes and written comments received for the meeting.

4. A Public Hearing (yet to be held)

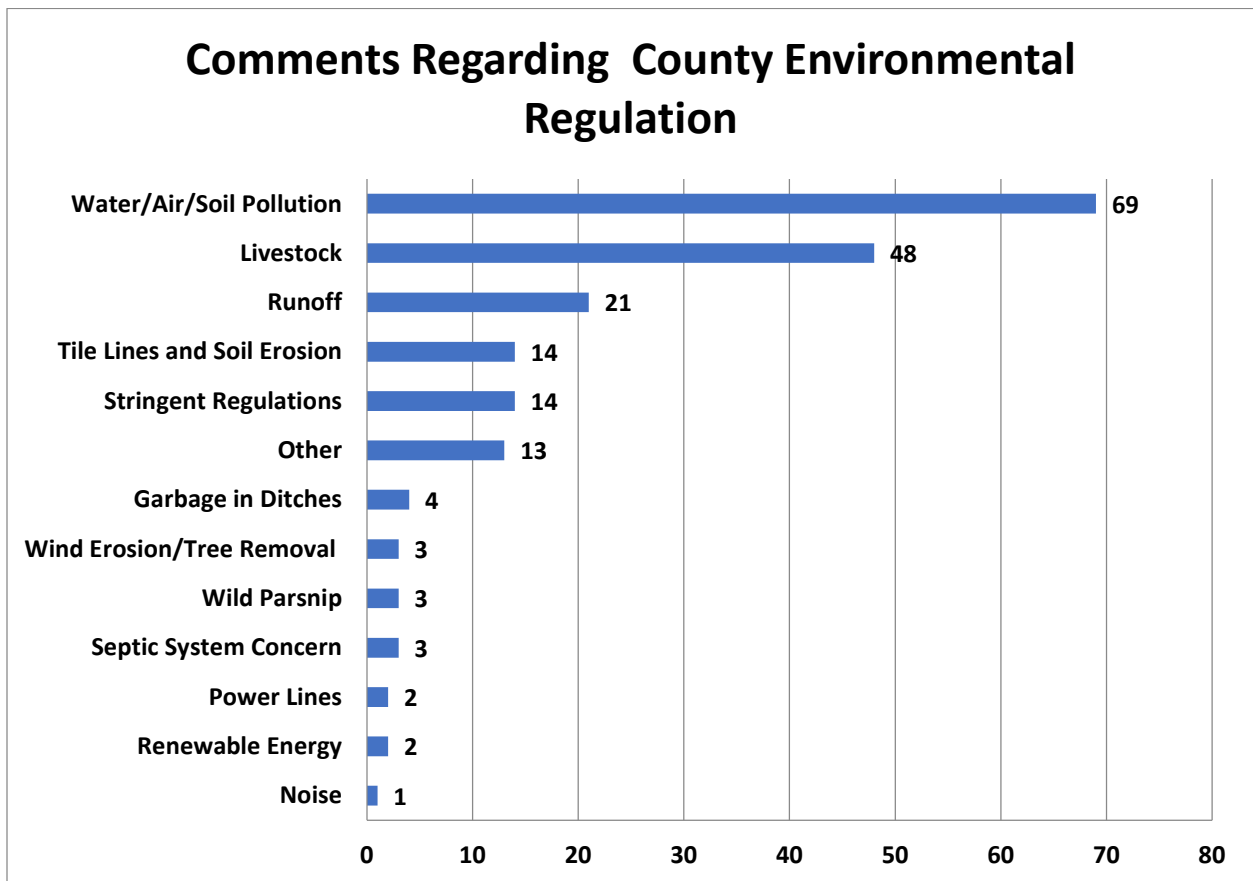
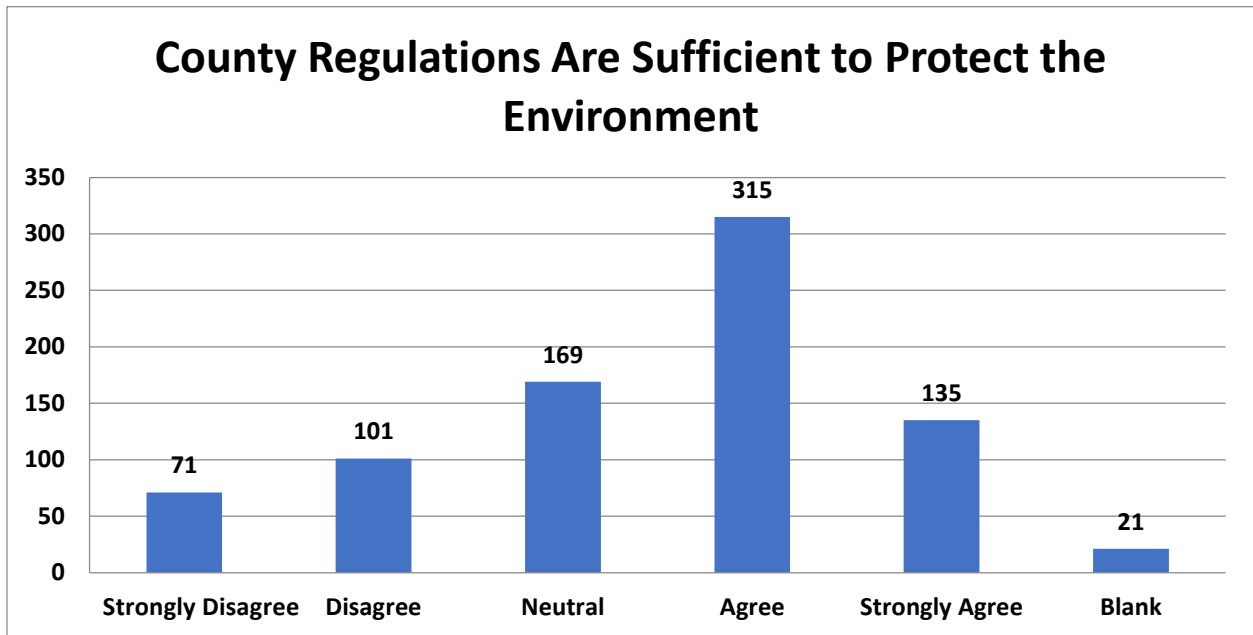
Respondent Location



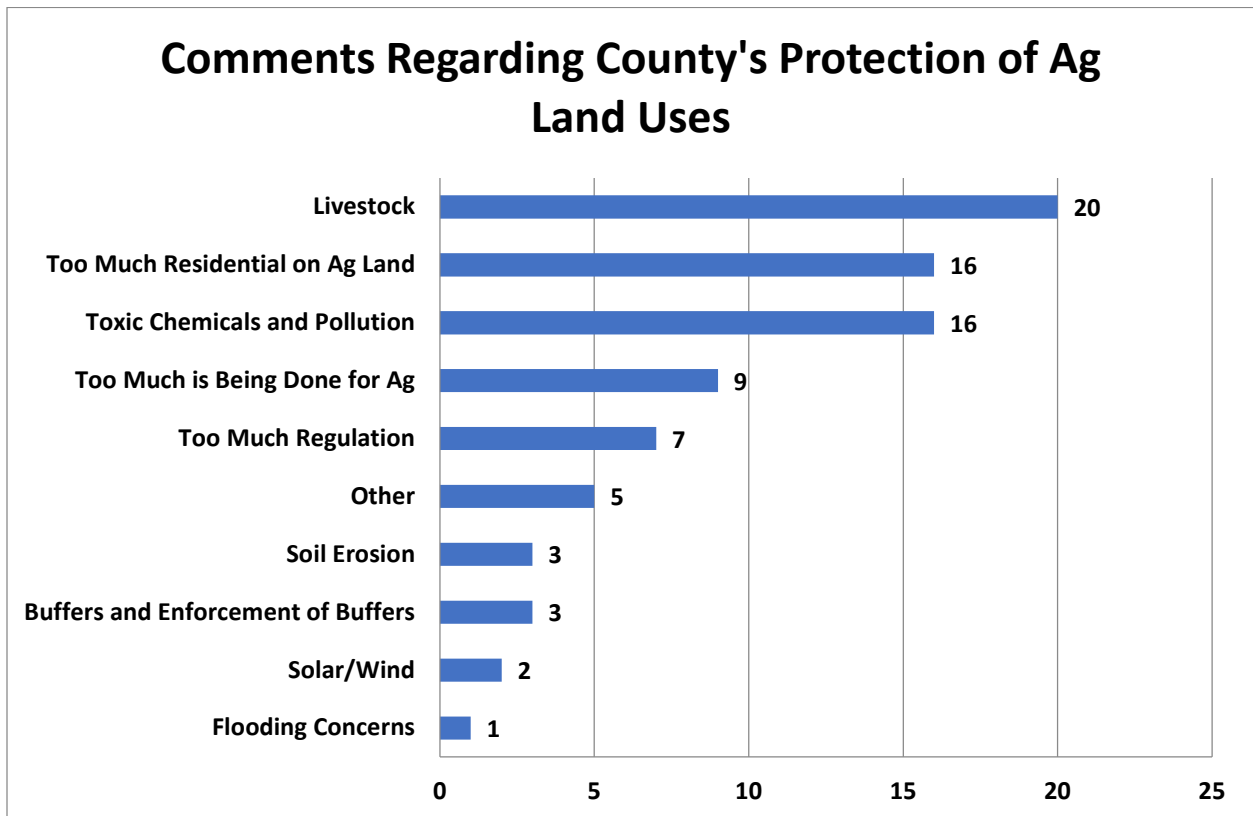
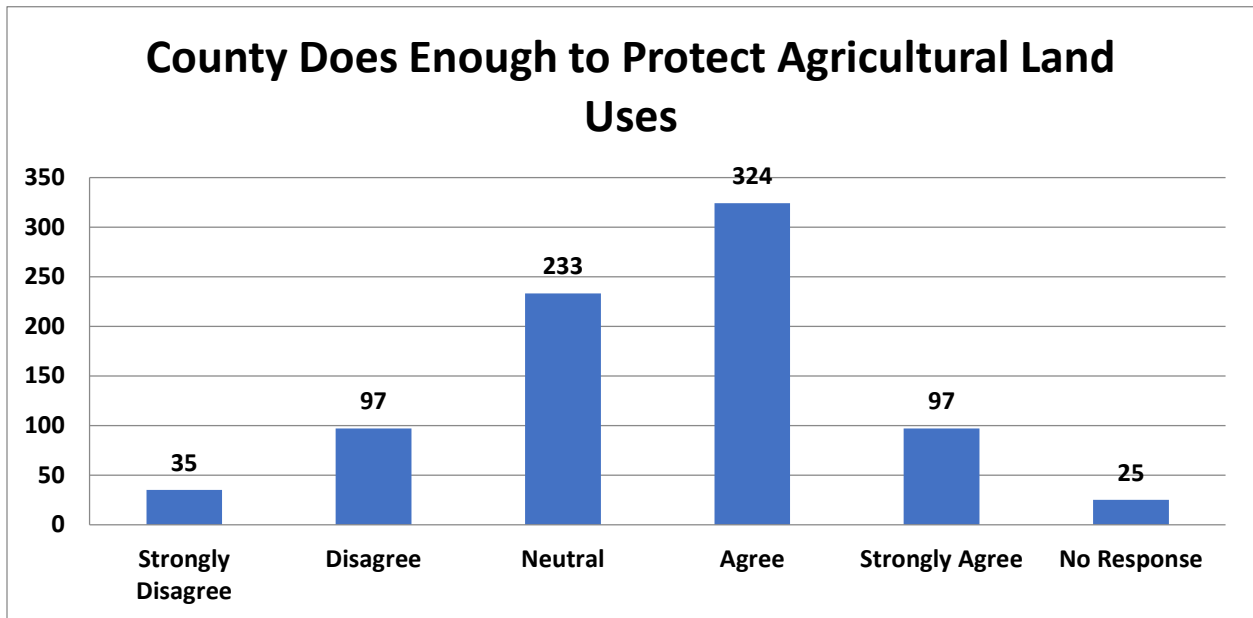
City or Township Respondent



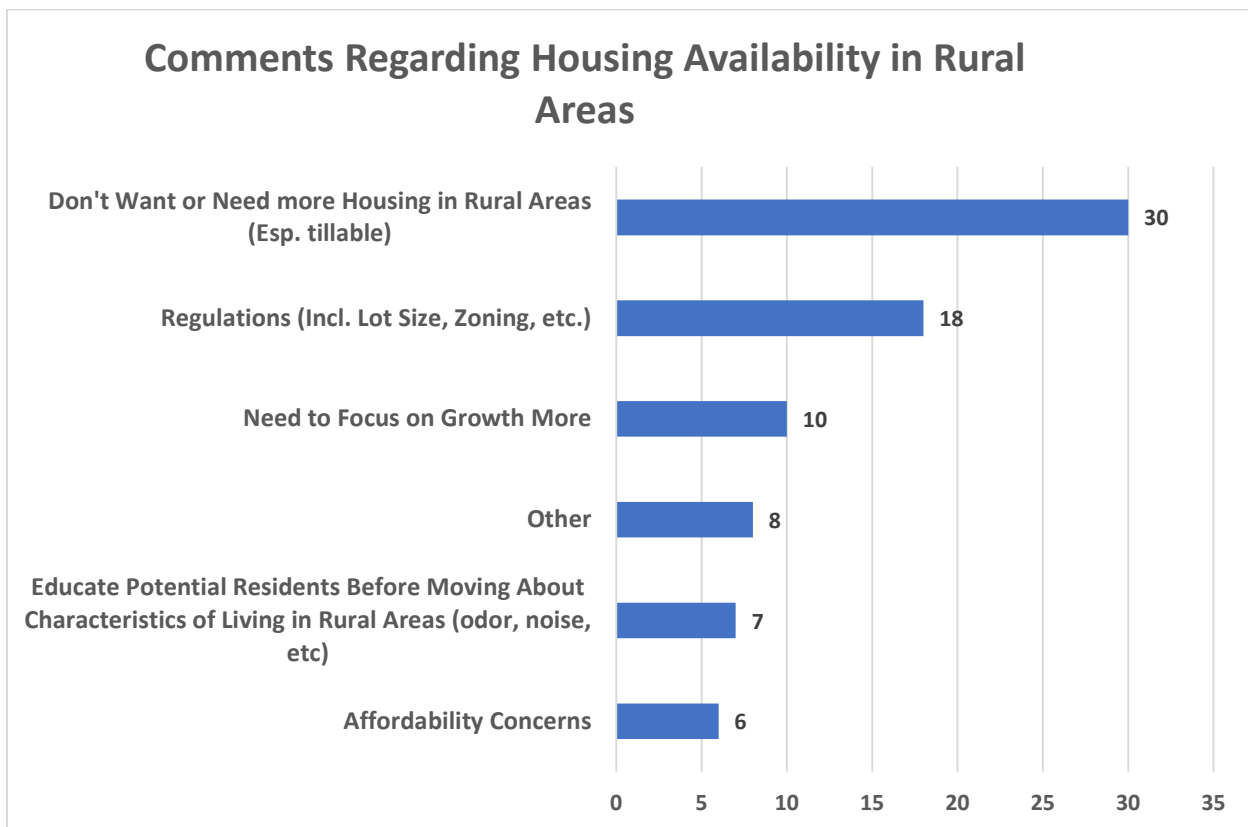
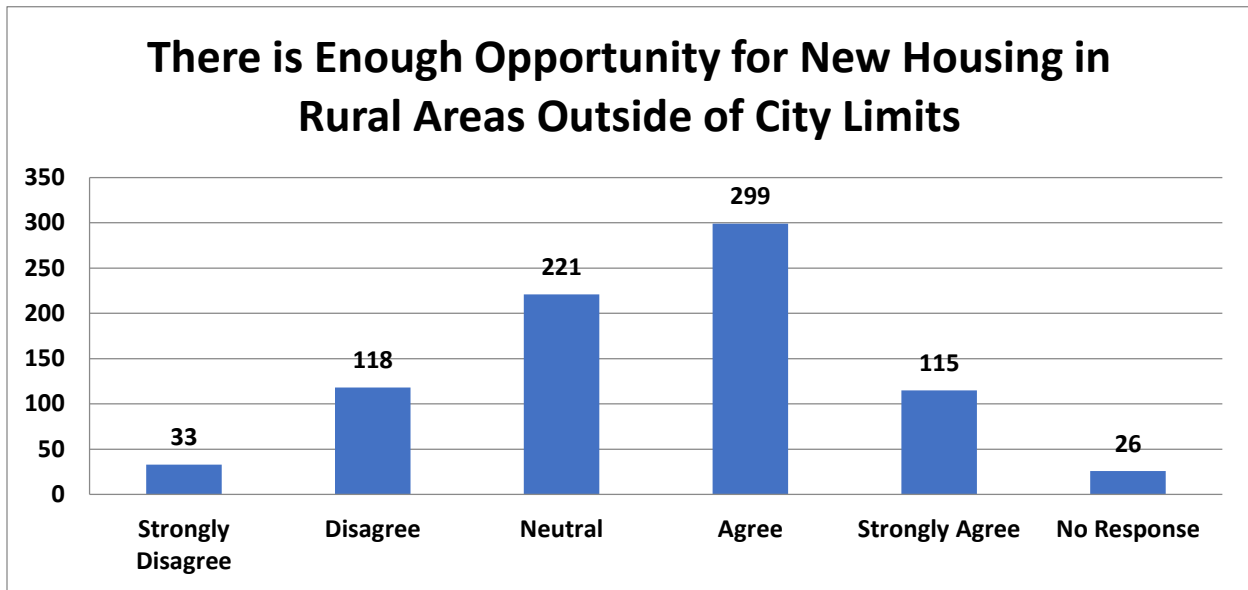
(3A) County regulations are sufficient to protect environment.



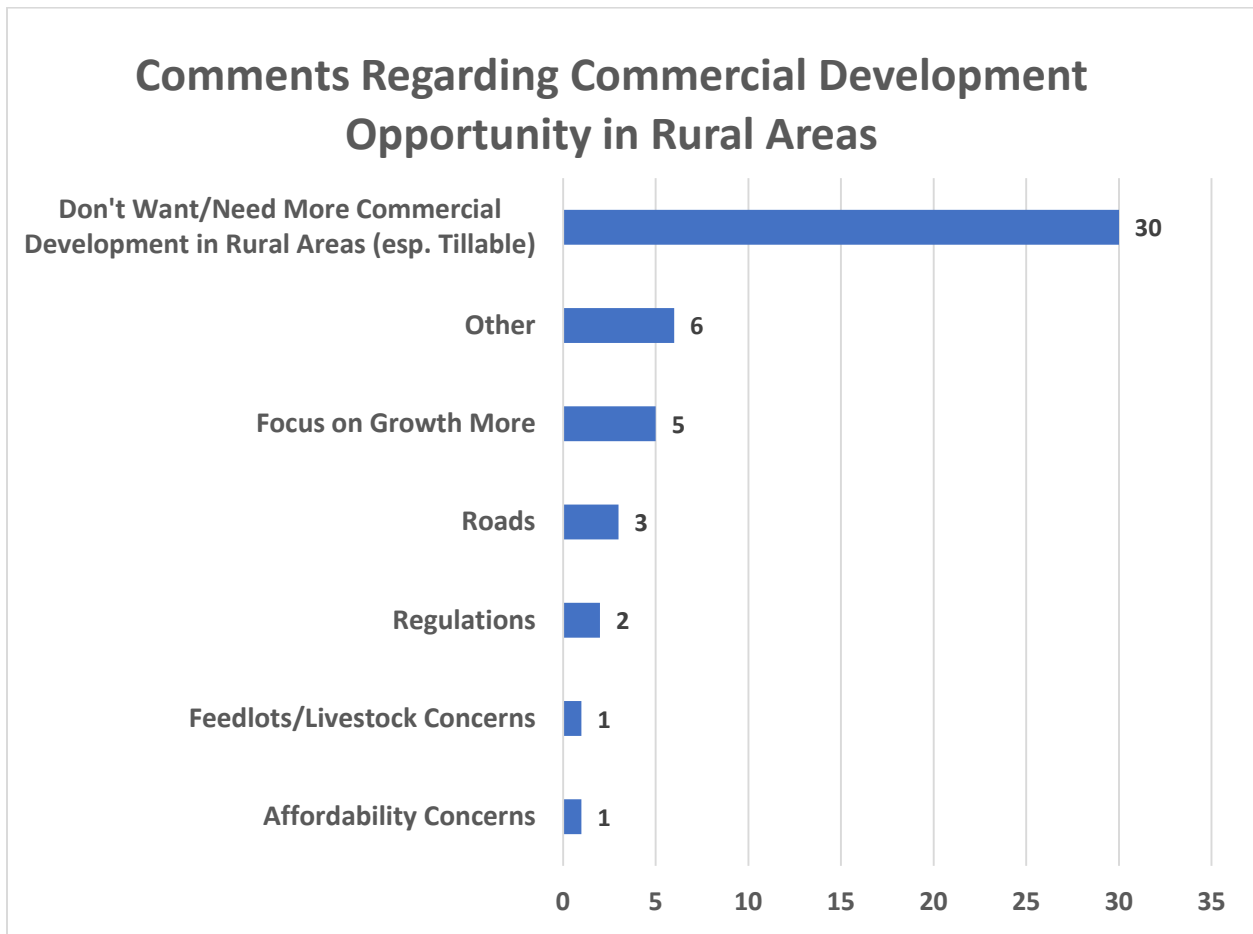
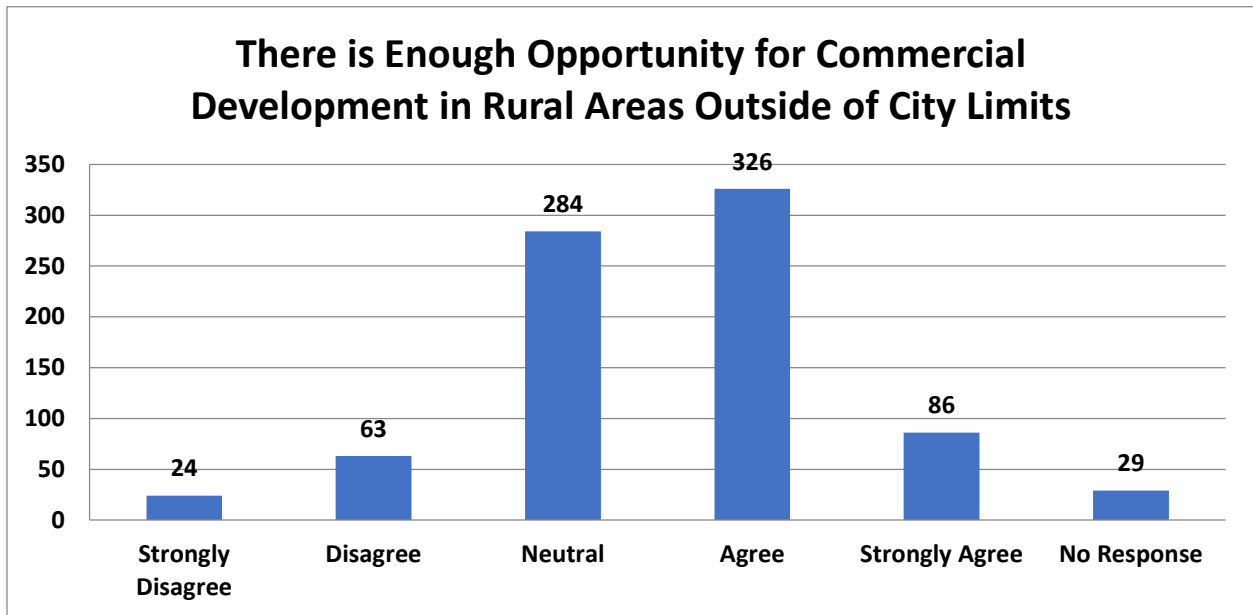
(3B) County does enough to protect ag land uses.



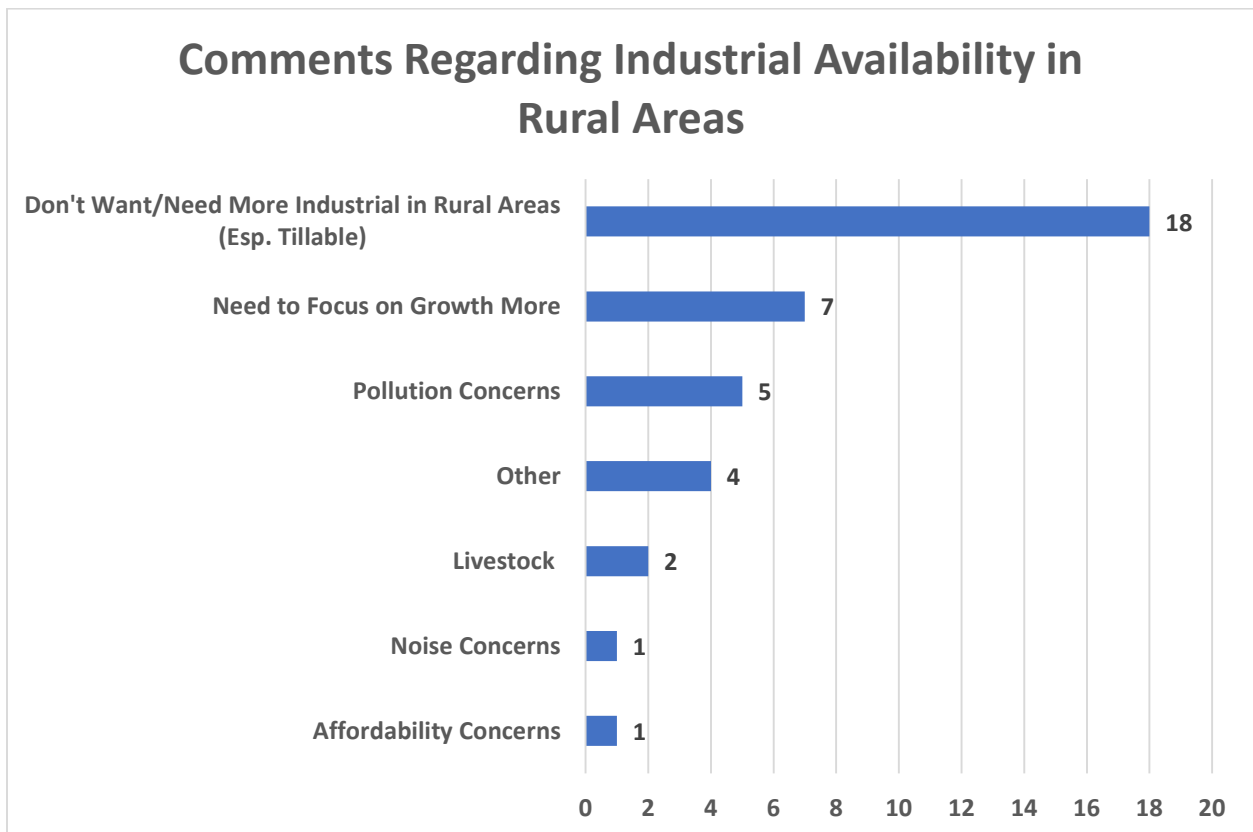
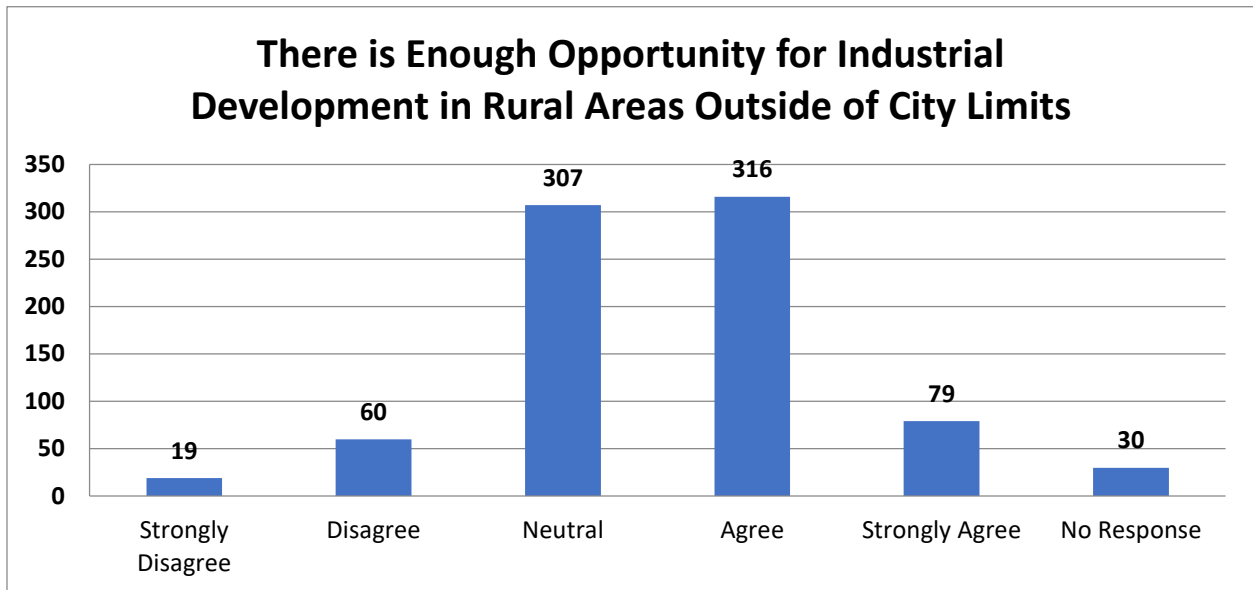
(3C) There is enough opportunity for new housing in rural areas outside city limits.



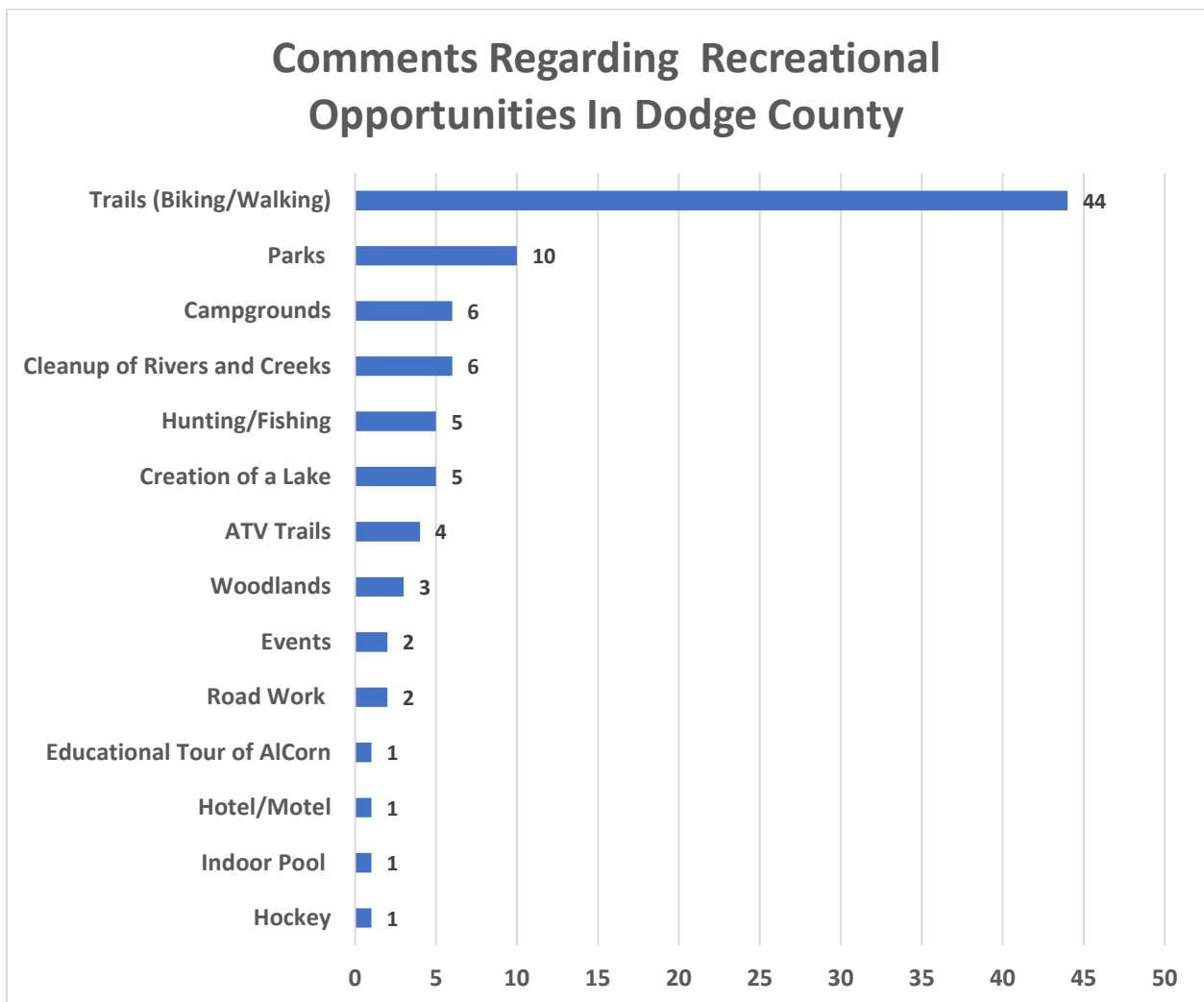
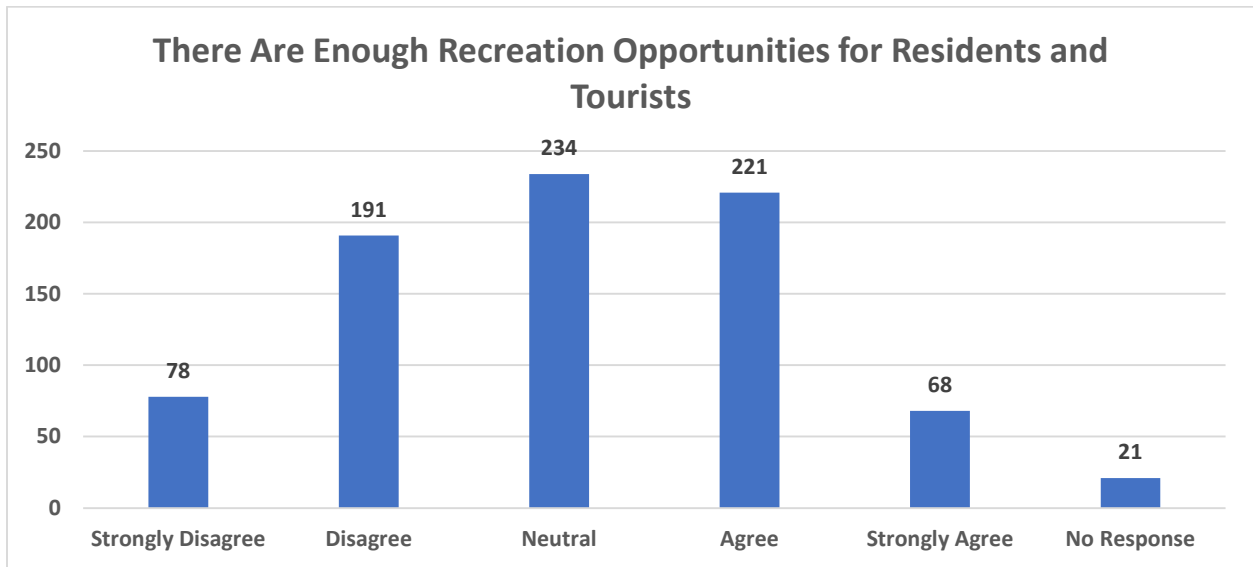
(3D) There is enough opportunity for commercial dev in rural areas outside city limits.



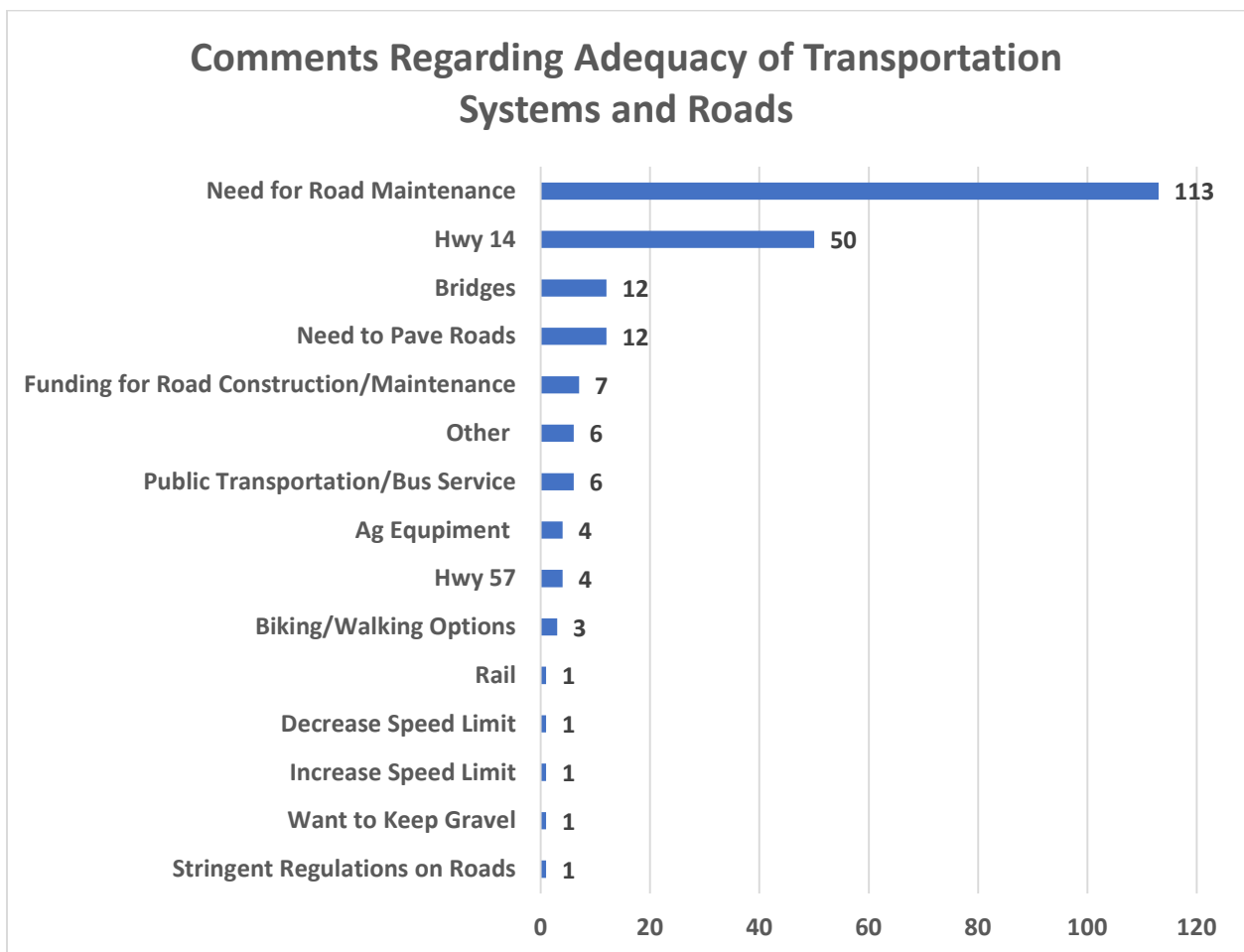
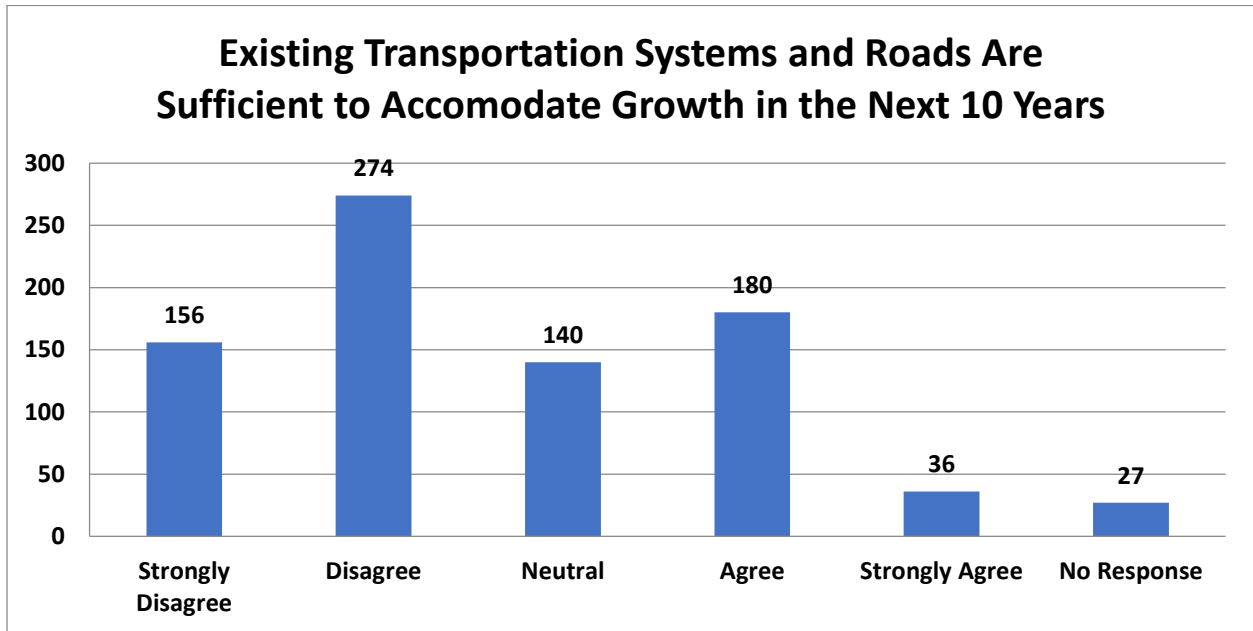
(3E) There is enough opportunities for industrial dev in rural areas outside of city limits.



(3F) There are enough recreation opportunities for county residents and for stimulating tourism.



(3G) Existing transportation systems/roads are sufficient to accommodate growth in the next 10 years.



Appendix B

City Data



POPULATION

- 2016 Estimated Population: 548
- Median Age: 32
- High School Diploma: 82.5%

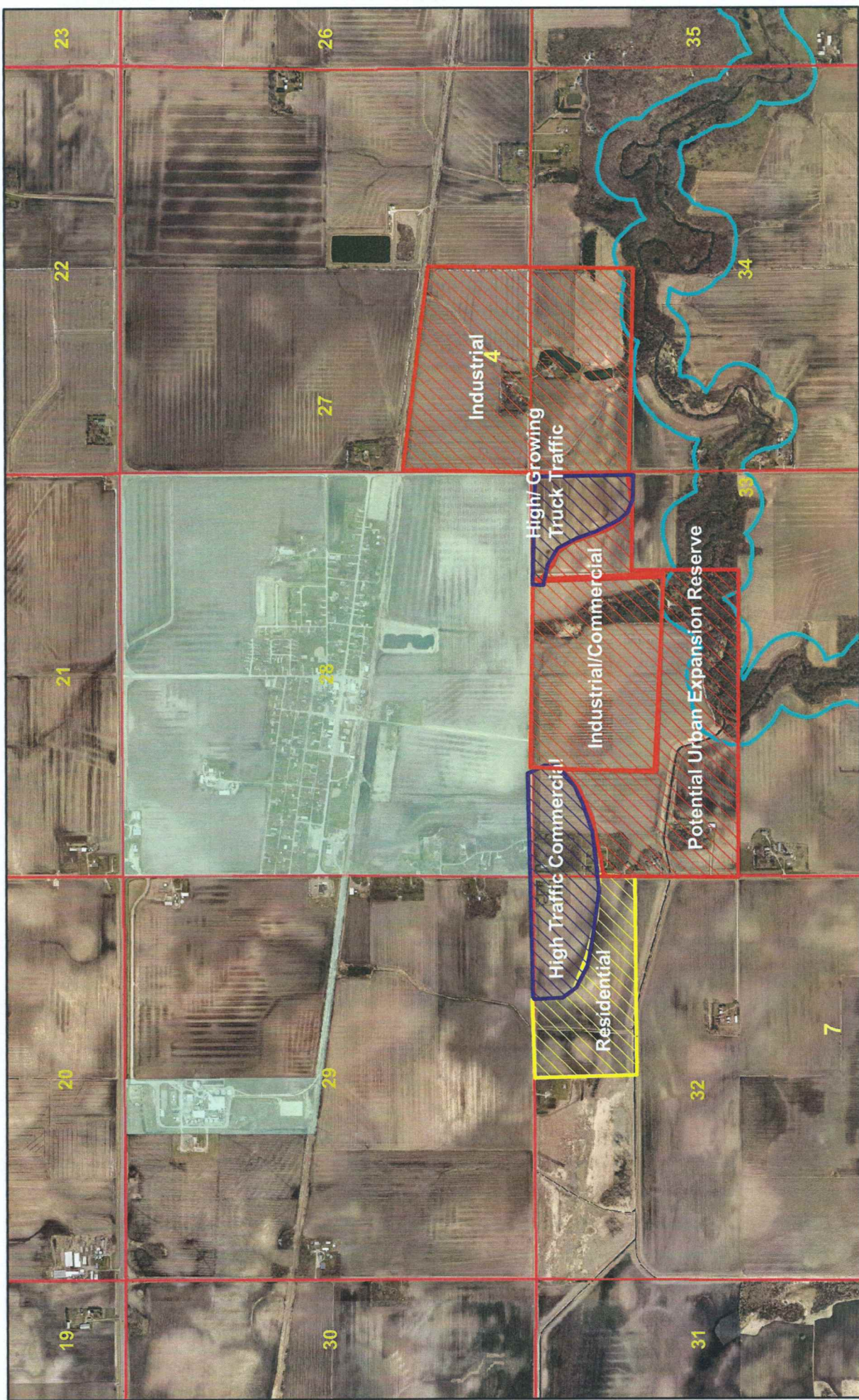
INCOME

- Per Capita Income: \$19,372
- Median Household Income: \$42,500

HOUSING

- Median Home Value: \$71,600
- Total Housing Units: 248
- Vacancy Rate: 1%
- Average Commute Time: 33.6 Minutes

City of Claremont Draft Future Land Use Map



- High Traffic Commercial
- High/Growing Truck Traffic
- Industrial
- Industrial/Commercial
- Residential
- Potential Urban Expansion Reserve

Legend

- Current City Boundary
- Section Lines





POPULATION

- 2016 Estimated Population: 2,670
- Median Age: 31
- High School Diploma: 89.4%

INCOME

- Per Capita Income: \$21,587
- Median Household Income: \$51,080

HOUSING

- Median Home Value: \$116,200
- Total Housing Units: 956
- Vacancy Rate: 1%
- Average Commute Time: 21.2 Minutes

For questions about future land use in City of Dodge Center contact the city or visit the Web Page: <https://www.ci.dodgecenter.mn.us/>



POPULATION

- 2016 Estimated Population: 1,340
- Median Age: 37
- High School Diploma: 95.4%

INCOME

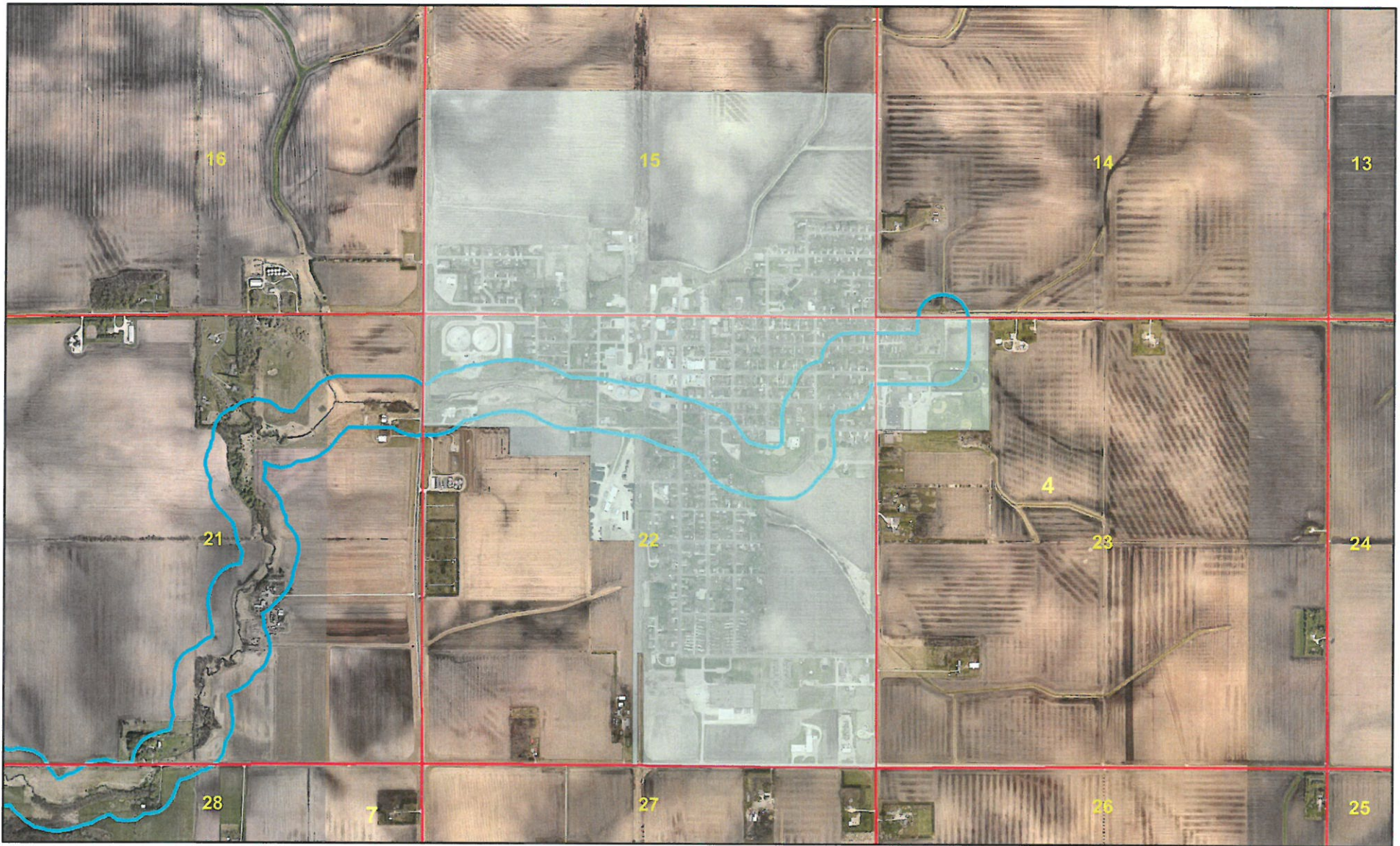
- Per Capita Income: \$24,467
- Median Household Income: \$46,500

HOUSING

- Median Home Value: \$115,100
- Total Housing Units: 624
- Vacancy Rate: 8%
- Average Commute Time: 24.9 Minutes





City of Hayfield Future* Land Use Map



*The City of Hayfield is currently in the process of completing a comprehensive land use plan. No future land use map has been completed at this time but will be at a later date.

Legend

-  Current City Boundary
-  Section Lines





POPULATION

- 2016 Estimated Population: 5,931
- Median Age: 35
- High School Diploma: 96.1%

INCOME

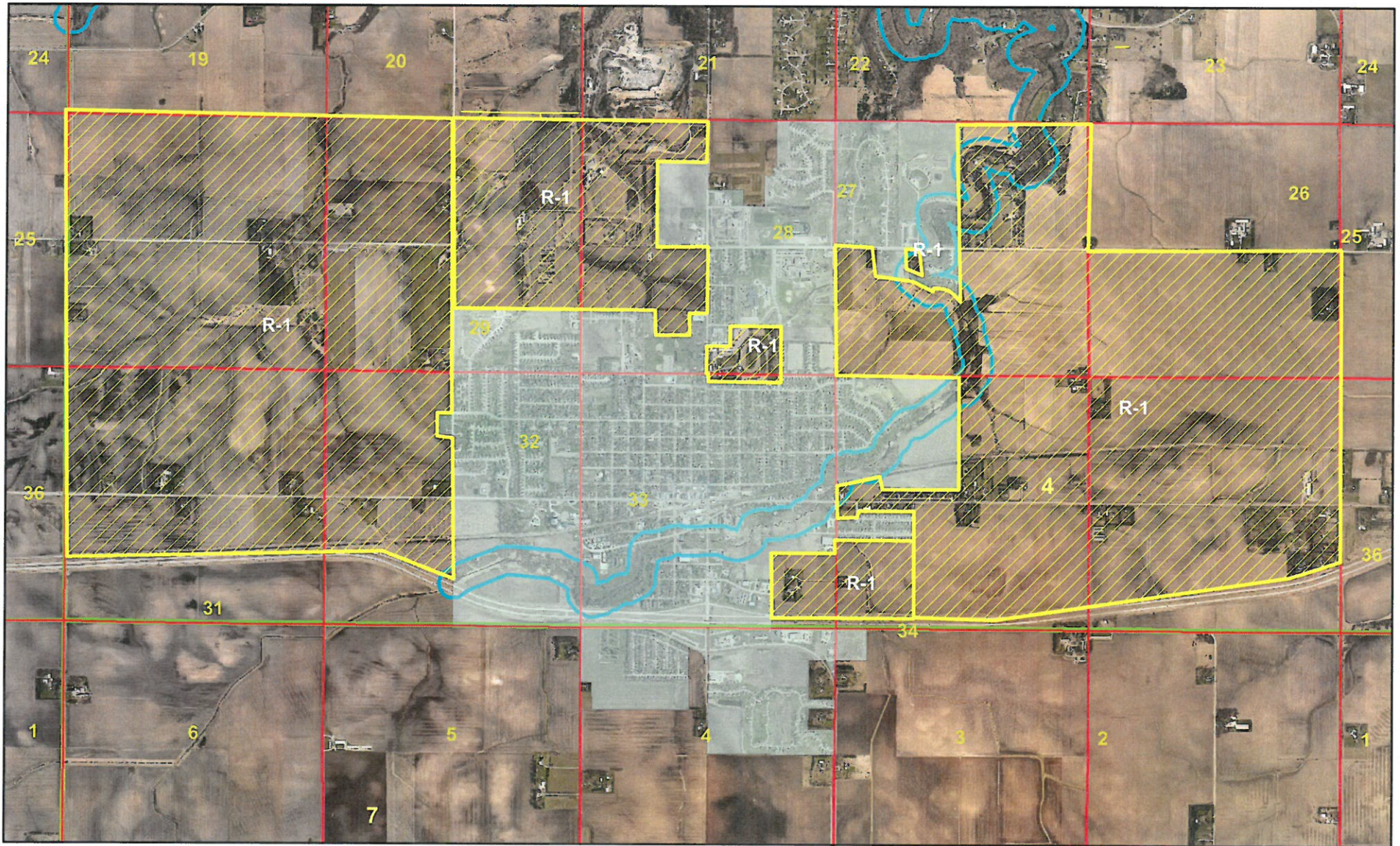
- Per Capita Income: \$27,049
- Median Household Income: \$68,200

HOUSING

- Median Home Value: \$146,600
- Total Housing Units: 2,404
- Vacancy Rate: 1%
- Average Commute Time: 20.9 Minutes





City of Kasson Future Land Use Map



R-1 Single Family Residential

Legend

-  Current City Boundary
-  Section Lines

0 0.125 0.25 0.5 0.75 1 Miles



POPULATION

- 2016 Estimated Population: 1,197
- Median Age: 42
- High School Diploma: 96.6%

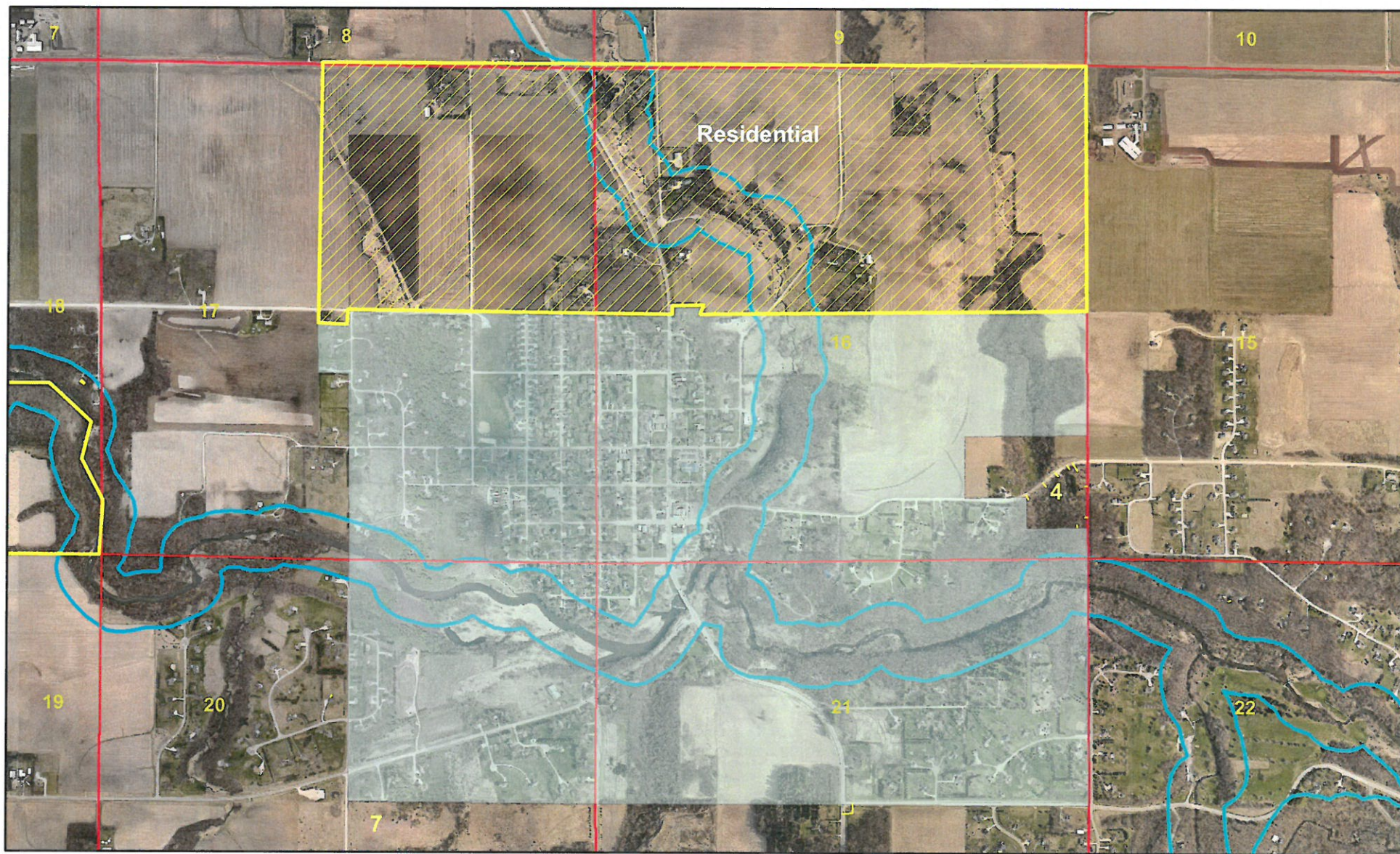
INCOME

- Per Capita Income: \$29,623
- Median Household Income: \$60,735

HOUSING



- Median Home Value: \$157,500
- Total Housing Units: 466
- Vacancy Rate: <1%
- Average Commute Time: 27.3 Minutes

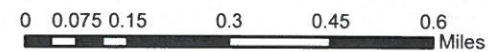
City of Mantorville Future Land Use Map



R - Residential

Legend

-  Current City Boundary
-  Section Lines





POPULATION

- 2016 Estimated Population: 782
- Median Age: 34
- High School Diploma: 85.7%

INCOME

- Per Capita Income: \$23,957
- Median Household Income: \$49,125

HOUSING



- Median Home Value: \$76,000
- Total Housing Units: 380
- Vacancy Rate: 8.5%
- Average Commute Time: 26.4 Minutes

City of West Concord Draft* Future Land Use Map



The City of West Concord does not predict growth outside of its current city boundaries. No Draft Future Land Use Map is available at this time.

Legend

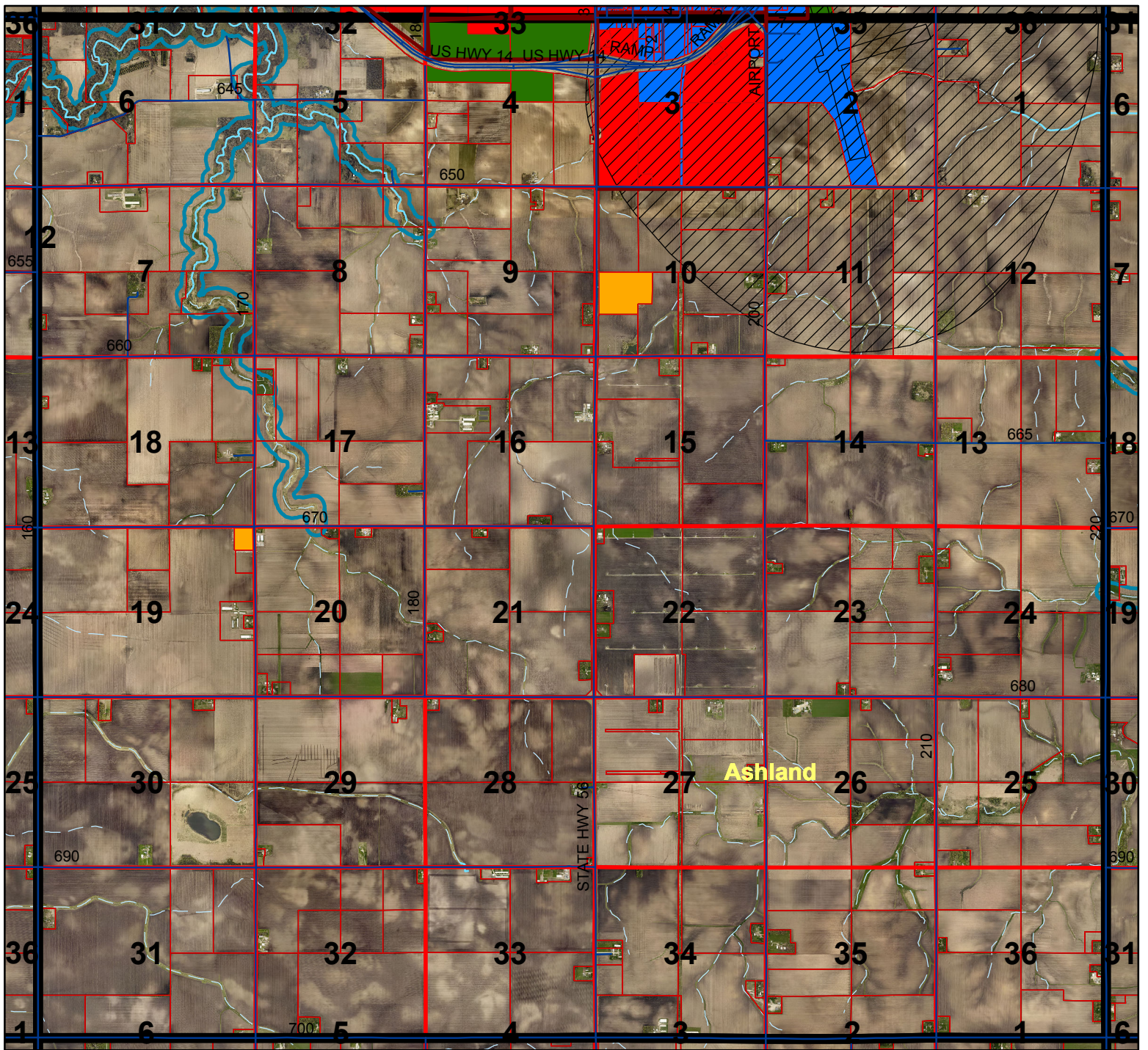
-  Current City Boundary
-  Section Lines





Appendix C
County Zoning Maps
By Township

County Zoning Maps by Township- Ashland



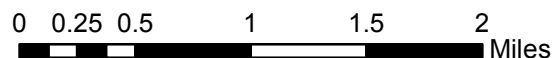
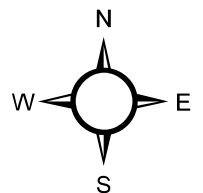
Legend

- | | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

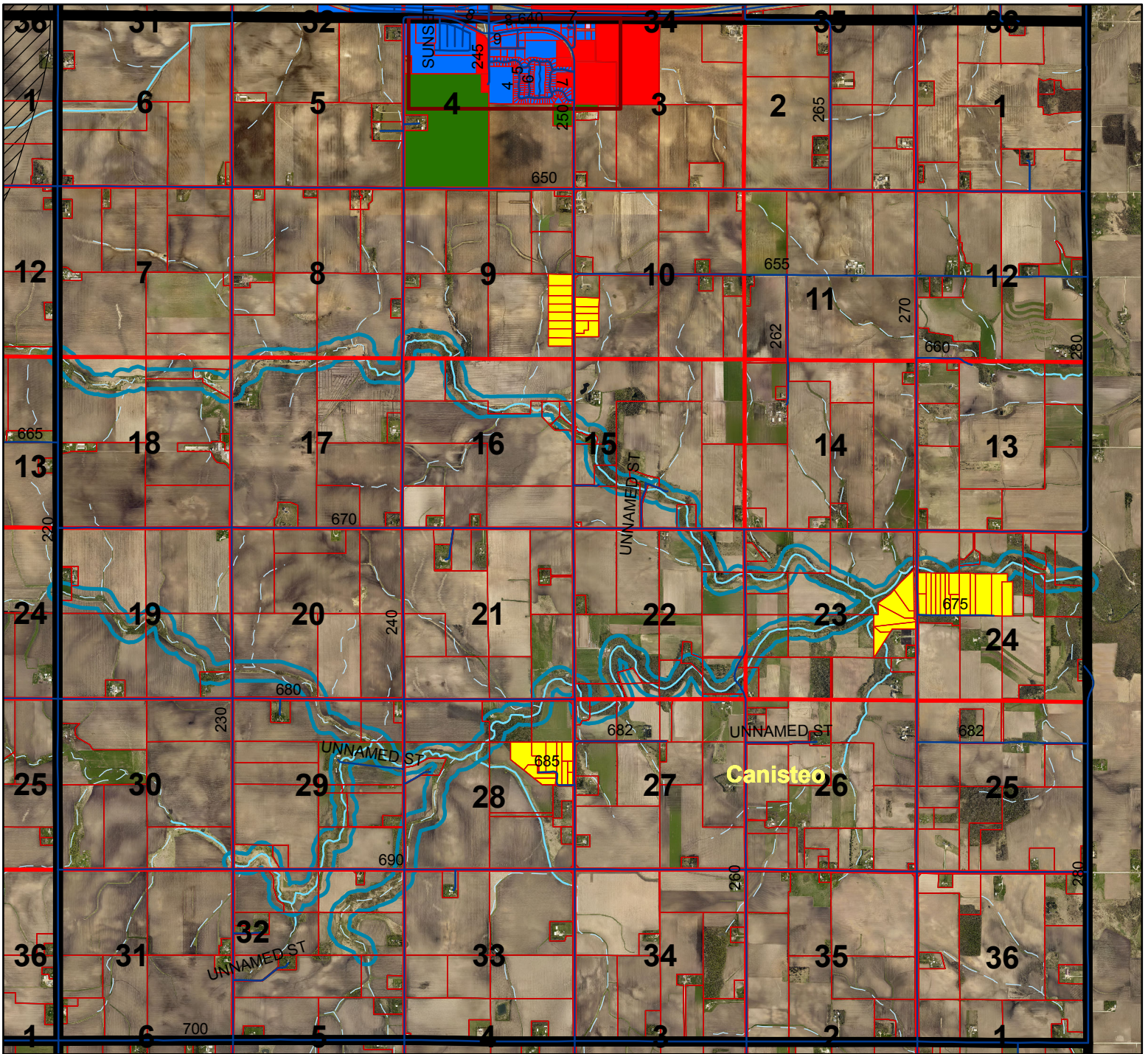
Stream Centerlines

Description

- Various Intermittent Segments
- Various Perennial Segments



County Zoning Maps by Township- Canisteo



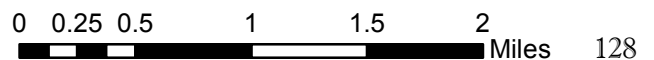
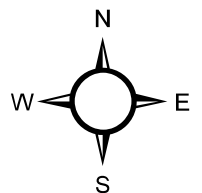
Legend

- | | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

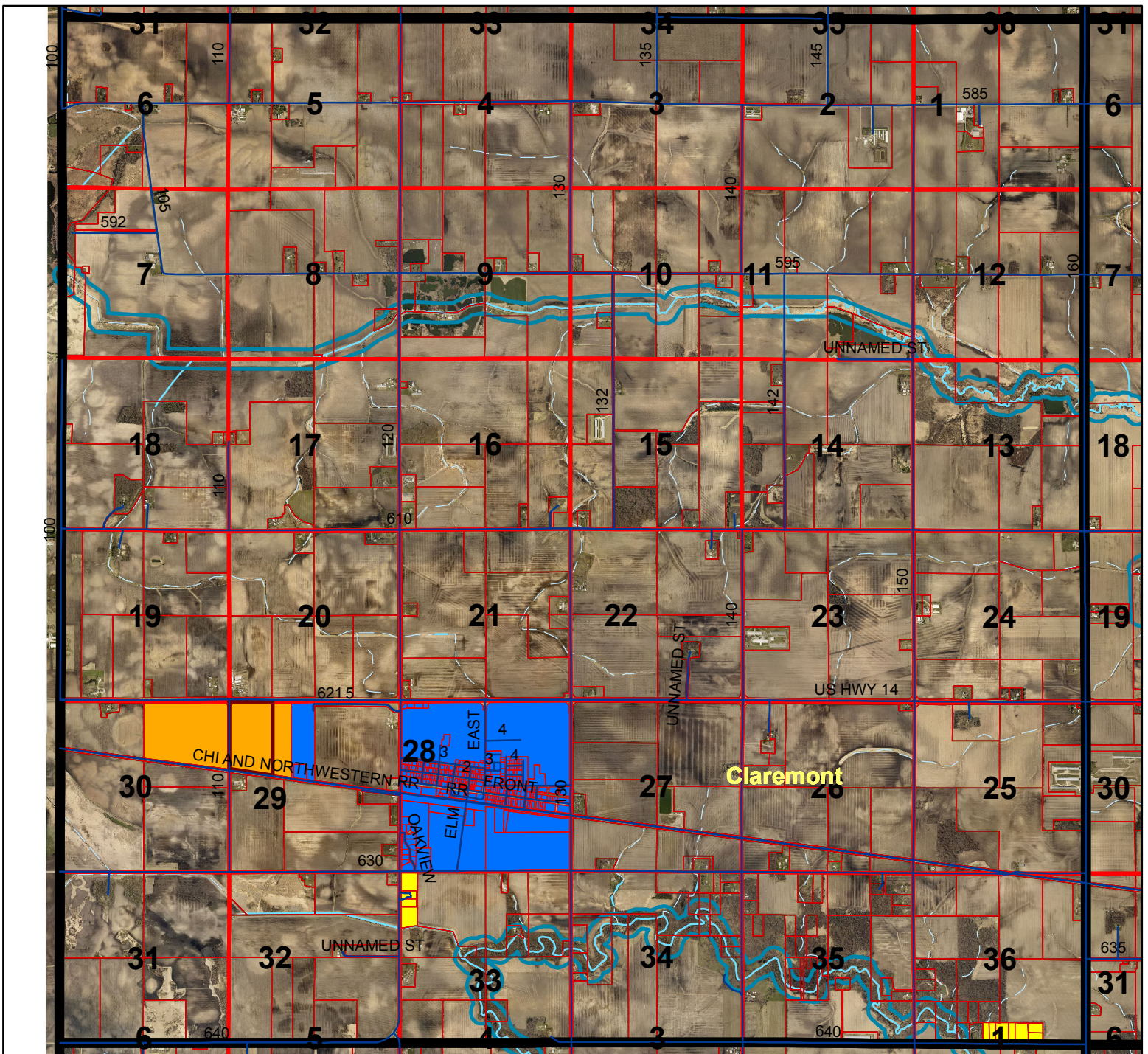
Stream Centerlines

Description

- Various Intermittent Segments
- Various Perennial Segments

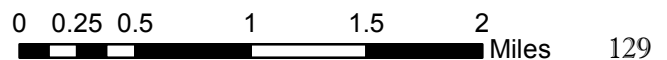
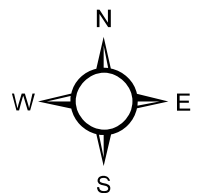


County Zoning Maps by Township- Claremont

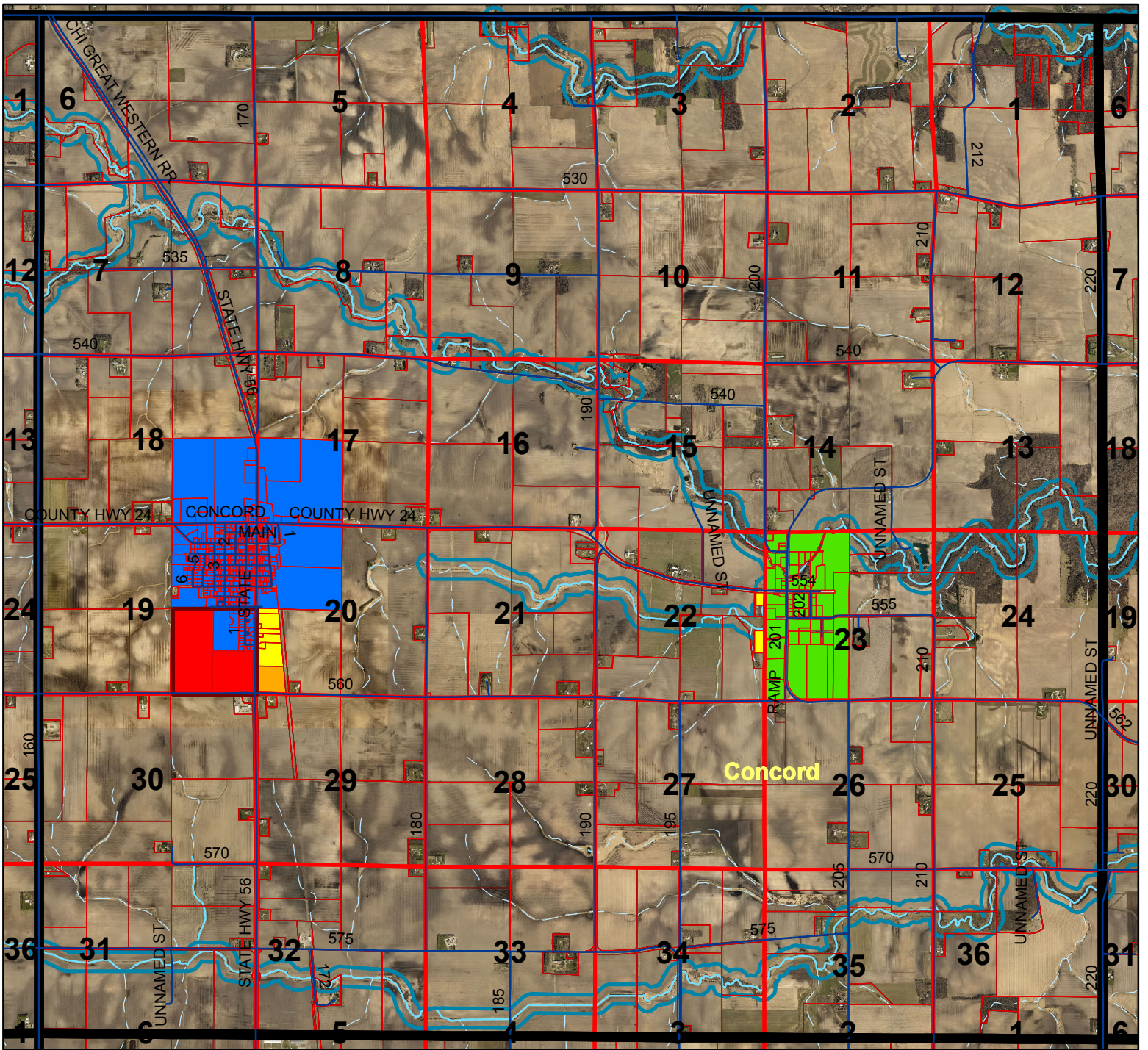


Legend

| | | |
|-----------------------------|------------------------|---|
| Roads | Agricultural | Stream Centerlines Description |
| Urban Expansion Boundary | City | |
| PLSS Townships | Closed Landfill | Various Intermittent Segments |
| Section Lines | Commercial | Various Perennial Segments |
| Parcel Lines | Hamlet | |
| Dodge Center Airport Zoning | Industrial | |
| <all other values> | Rural Residential | |
| ZONEDESC | Split | |
| <Null> | Urban Expansion | |
| | Urban Expansion Res | |
| | Shoreland Buffer 300ft | |



County Zoning Maps by Township- Concord

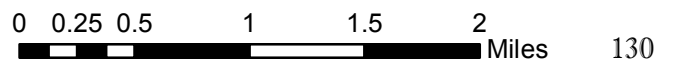
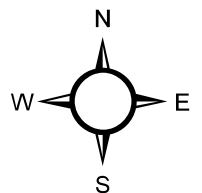


Legend

| | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

Stream Centerlines

| Description |
|-------------------------------|
| Various Intermittent Segments |
| Various Perennial Segments |



County Zoning Maps by Township- Ellington



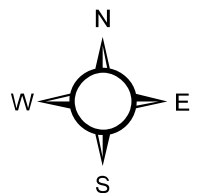
Legend

| | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

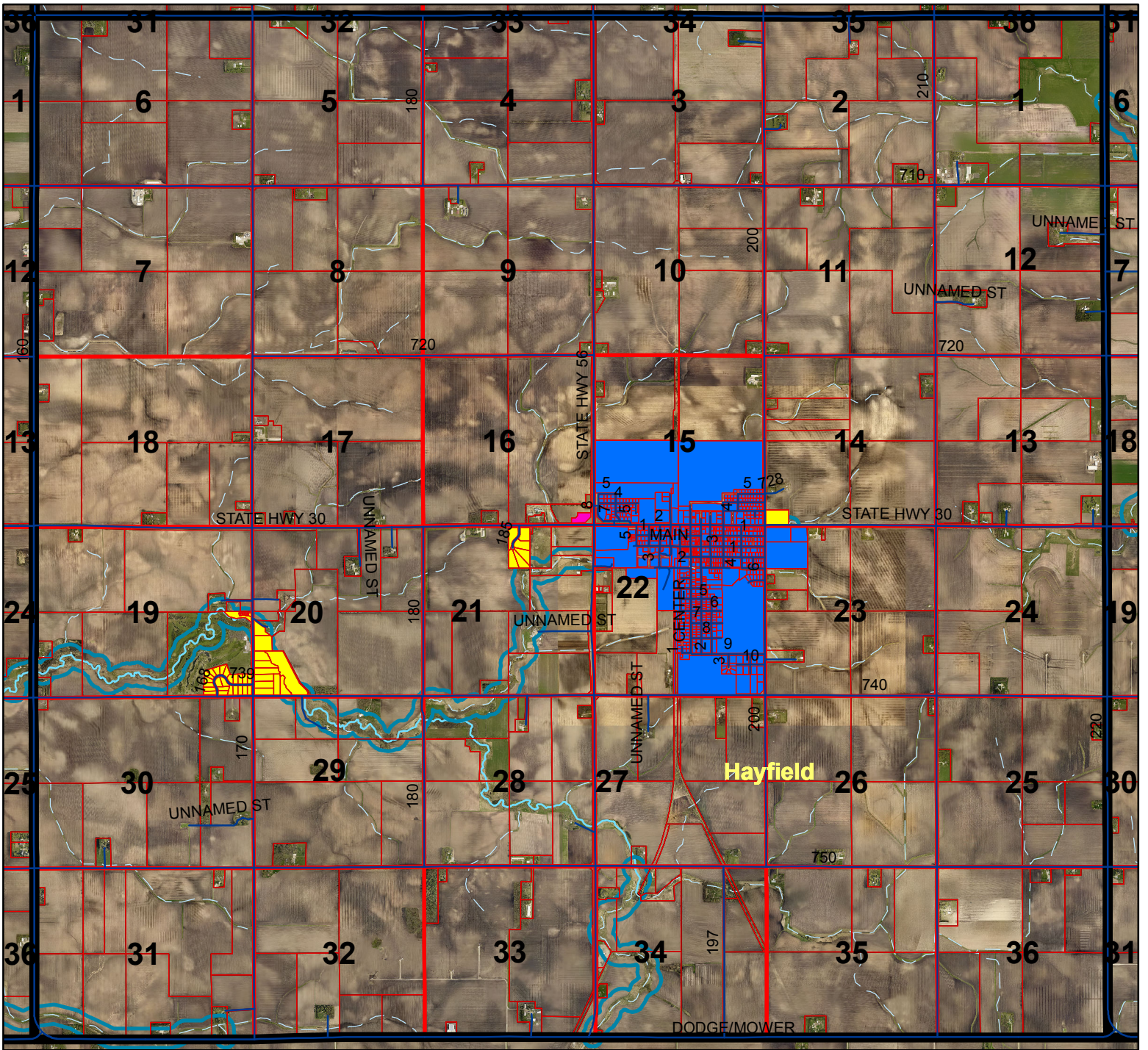
Stream Centerlines

Description

| | |
|--|-------------------------------|
| | Various Intermittent Segments |
| | Various Perennial Segments |



County Zoning Maps by Township- Hayfield



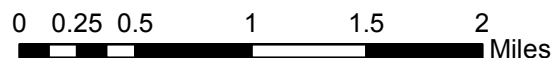
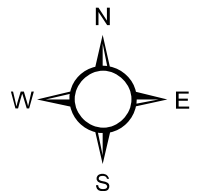
Legend

- | | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

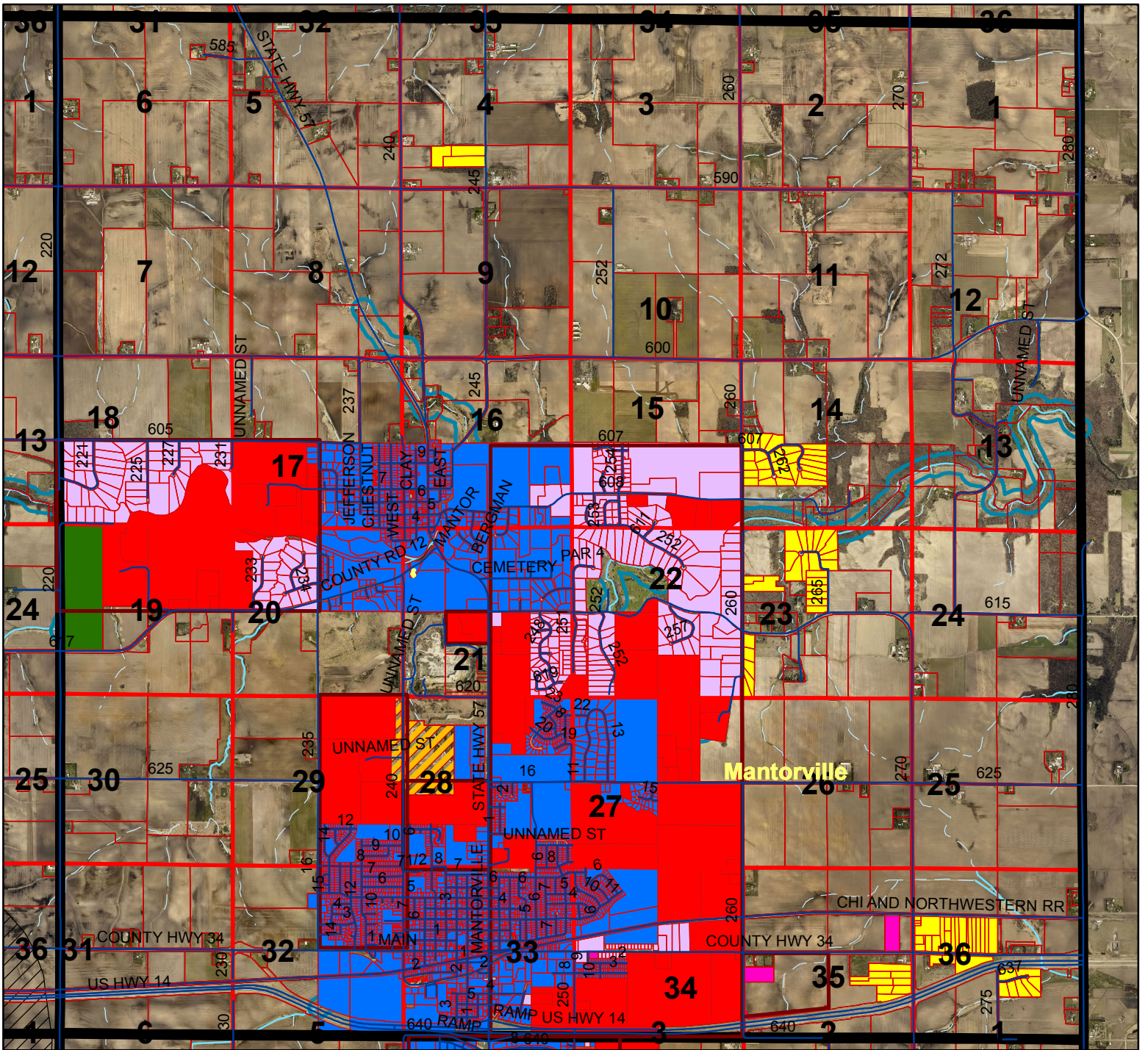
Stream Centerlines

Description

- Various Intermittent Segments
- Various Perennial Segments



County Zoning Maps by Township- Mantorville

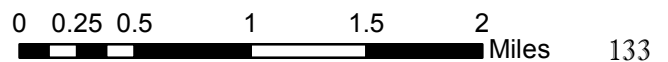
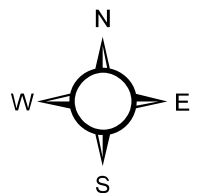


Legend

- | | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

Stream Centerlines





















- | Description |
|-------------------------------|
| Various Intermittent Segments |
| Various Perennial Segments |



County Zoning Maps by Township- Milton





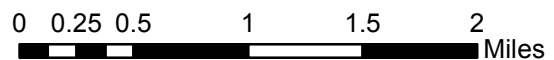
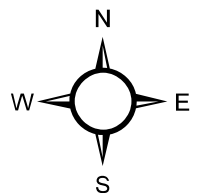
Legend

| | |
|--|--|
|  Roads |  Agricultural |
|  Urban Expansion Boundary |  City |
|  PLSS Townships |  Closed Landfill |
|  Section Lines |  Commercial |
|  Parcel Lines |  Hamlet |
|  Dodge Center Airport Zoning |  Industrial |
|  <all other values> |  Rural Residential |
| ZONEDESC |  Split |
|  <Null> |  Urban Expansion |
|  |  Urban Expansion Res |
| |  Shoreland Buffer 300ft |

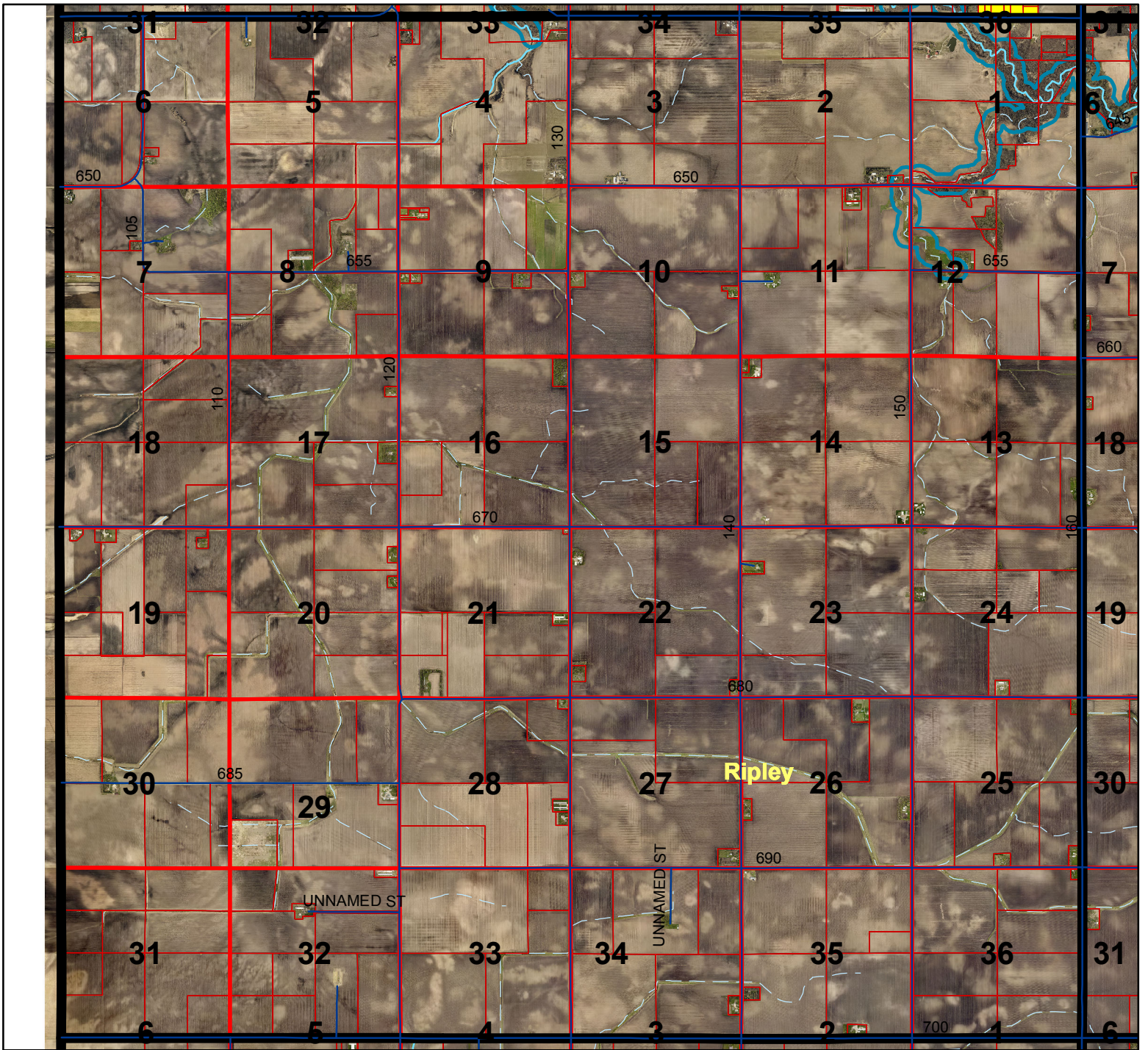
Stream Centerlines

Description

-  Various Intermittent Segments
-  Various Perennial Segments



County Zoning Maps by Township- Ripley



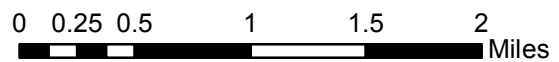
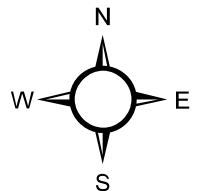
Legend

- | | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

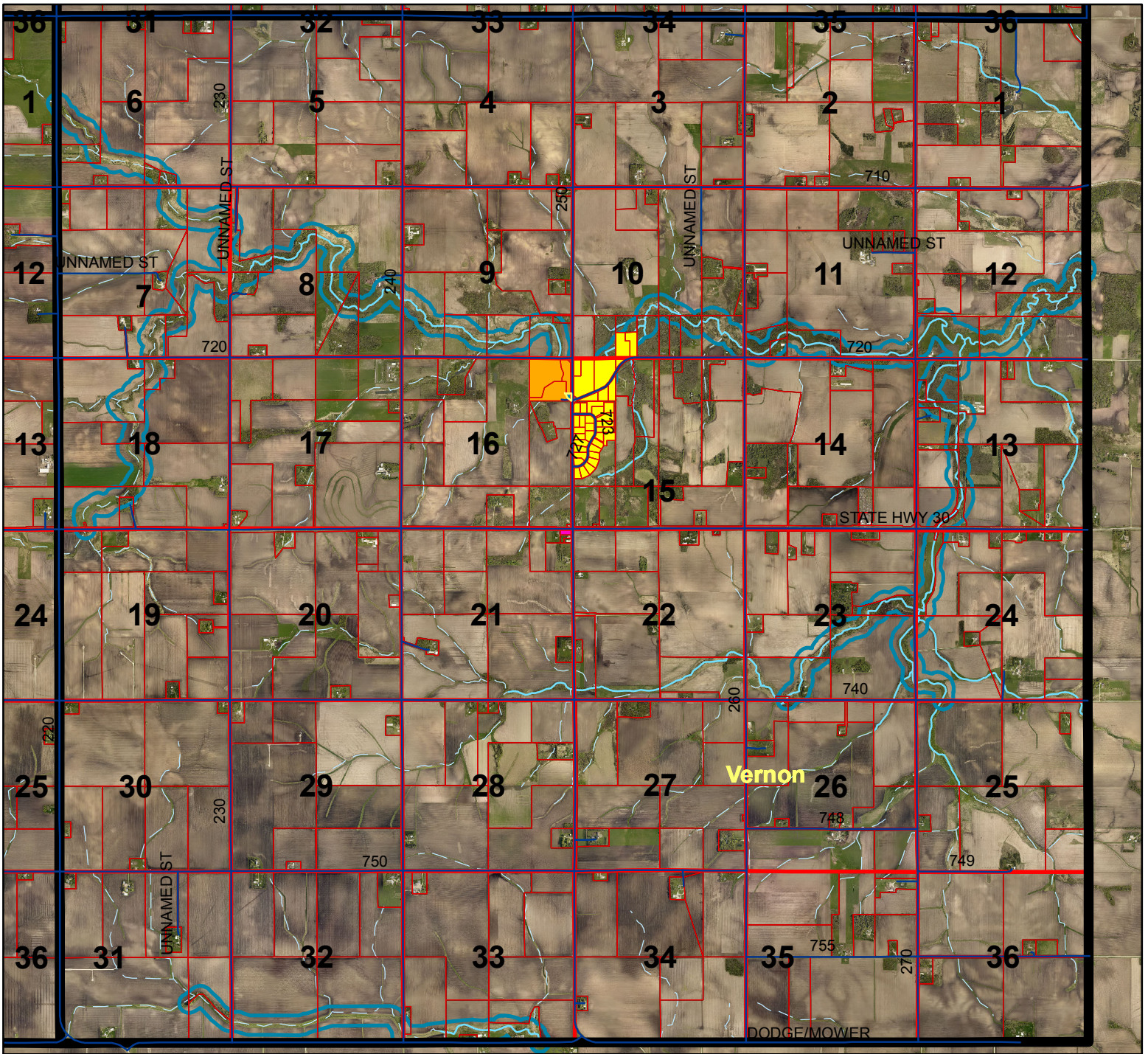
Stream Centerlines

Description

- Various Intermittent Segments
- Various Perennial Segments



County Zoning Maps by Township- Vernon



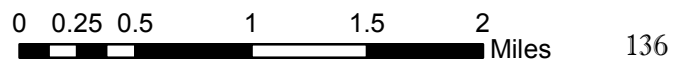
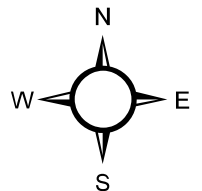
Legend

- | | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

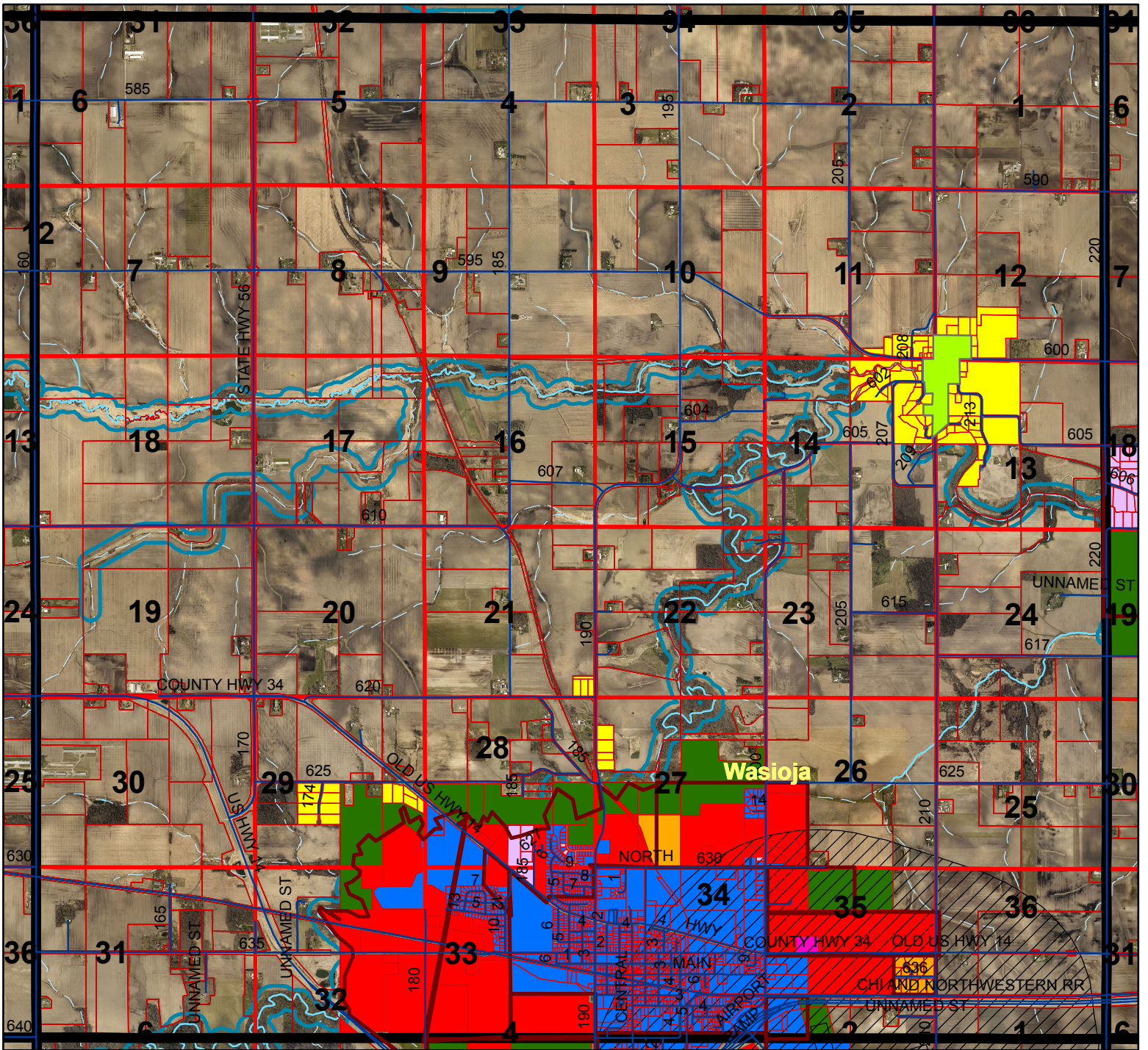
Stream Centerlines

Description

- Various Intermittent Segments
- Various Perennial Segments



County Zoning Maps by Township- Wasioja

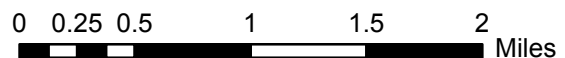
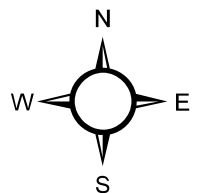


Legend

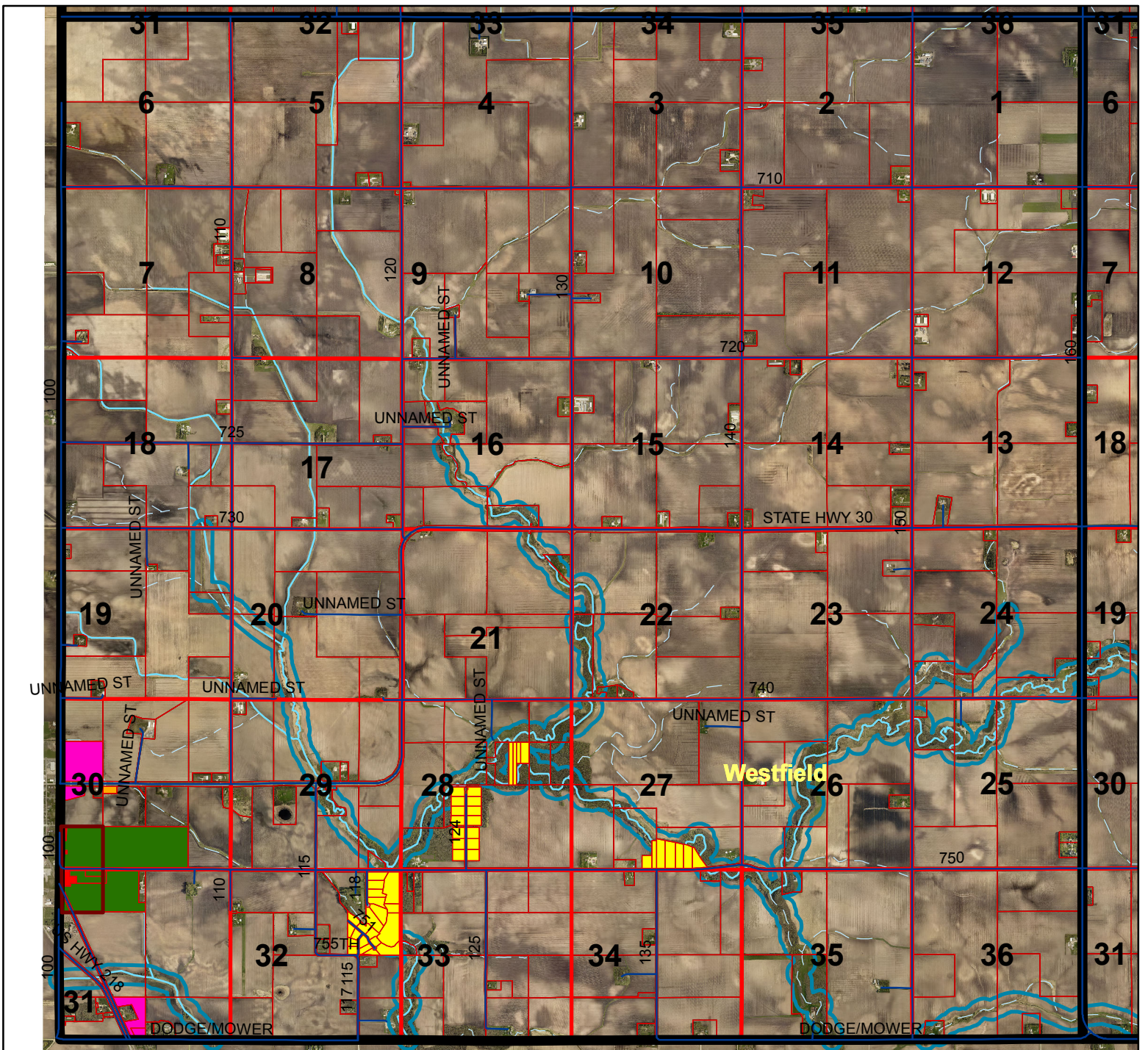
- | | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

Stream Centerlines

- Description**
- Various Intermittent Segments
 - Various Perennial Segments



County Zoning Maps by Township- Westfield



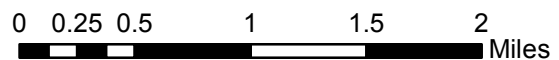
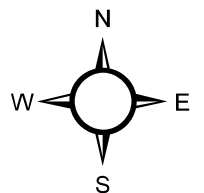
Legend

- | | |
|-----------------------------|------------------------|
| Roads | Agricultural |
| Urban Expansion Boundary | City |
| PLSS Townships | Closed Landfill |
| Section Lines | Commercial |
| Parcel Lines | Hamlet |
| Dodge Center Airport Zoning | Industrial |
| <all other values> | Rural Residential |
| ZONEDESC | Split |
| <Null> | Urban Expansion |
| | Urban Expansion Res |
| | Shoreland Buffer 300ft |

Stream Centerlines

Description

- Various Intermittent Segments
- Various Perennial Segments



Appendix D

HR&A Southeast Minnesota

Regional Economic Study

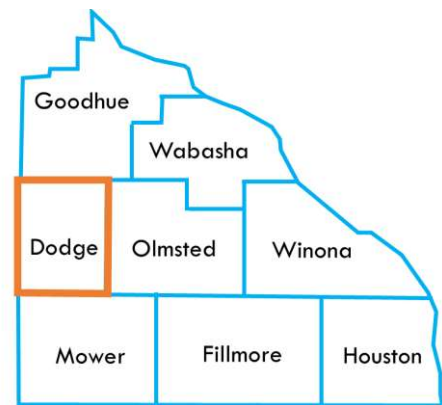
Dodge County Section

7. APPENDIX: FINDINGS BY COUNTY

7.1. DODGE COUNTY

Dodge County is situated on the western border of the Region, adjacent to Goodhue, Olmsted, and Mower Counties. Dodge County's major cities and towns include Blooming Prairie, Dodge Center, Hayfield, Kasson, and Mantorville, and it is located approximately 90 miles south of Minneapolis-St. Paul and approximately 20 miles west from Rochester. Dodge is historically agrarian, with a growing manufacturing industry.

Figure 63: Dodge County in the Region



7.1.1. Existing Conditions and County-Wide Trends

Dodge is the second-least populous county in the Region and has the third-lowest number of employees. Though it is not a major population or economic center in the Region, the county's population and number of employees are growing at a faster rate than the Region as a whole. The county's population is concentrated at the poles of the age spectrum; nearly 70% are either under 18 or over 65 years old.

Population Trends

Figure 64: Dodge County Trends, 1970-2015

| | 1970 | 1980 | 1990 | 2000 | 2010 | 2015 | Annualized Growth |
|-------------------|--------|--------|--------|--------|--------|--------|-------------------|
| Population | 13,000 | 14,800 | 15,700 | 17,700 | 20,100 | 20,400 | 1.01% |
| Employment | 5,000 | 6,500 | 7,700 | 7,800 | 8,400 | 9,400 | 1.41% |

Source: Census, ACS

Figure 65: Dodge County Trends, 1970-2015

| Population by Age Cohort | 2015 | Share |
|--------------------------|-------|-------|
| Ages 0-4 | 1,300 | 6.4% |
| Ages 5-17 | 4,700 | 24.6% |
| Ages 18-24 | 1,100 | 7.6% |
| Ages 25-34 | 2,300 | 15.0% |
| Ages 35-44 | 2,700 | 19.1% |
| Ages 45-64 | 5,500 | 43.7% |
| Ages 65-74 | 1,500 | 18.9% |
| Ages 75+ | 1,300 | 18.3% |

Source: ACS

As seen in Figure 66, major industries include manufacturing and government, both of which have grown since 2001, and which together make up more than 40% of the county's jobs. Some major employers in the county include McNeilus, a manufacturer of ready-made concrete mixer trucks, garbage trucks, and related machinery, and various government entities and public service providers, including the school district and the city government. As seen in Figure 67, the county's median household income is higher than that of the Region, though it is growing more slowly.

Major Industries

Figure 66: All Industries, Dodge County

| Industry | 2001 | 2015 | Absolute Change | Annualized Change |
|--|-------|-------|-----------------|-------------------|
| Manufacturing | 1,130 | 1,570 | 440 | 2.38% |
| Government | 1,160 | 1,180 | 20 | 0.12% |
| Construction | 690 | 830 | 140 | 1.33% |
| Agriculture, Forestry, Fishing and Hunting | 950 | 790 | (160) | -1.31% |
| Retail Trade | 850 | 760 | (90) | -0.80% |
| FIRE | 290 | 750 | 460 | 7.02% |
| Wholesale Trade | 460 | 660 | 200 | 2.61% |
| Tourism | 520 | 580 | 60 | 0.78% |
| Transportation and Warehousing | 140 | 540 | 400 | 10.12% |
| Health Care and Social Assistance | 290 | 360 | 70 | 1.56% |
| Professional, Scientific, and Technical Services | 190 | 360 | 170 | 4.67% |
| Educational Services | 380 | 110 | (270) | -8.47% |
| Other ¹²³ | 830 | 880 | 50 | 0.42% |

Source: Emsi

Median Household Income

Figure 67: Median Household Income, 2009-2016

| Area | 2009 | 2016 | Change, 2009-2016 |
|--------------------------|----------|----------|-------------------|
| Dodge County | \$62,000 | \$69,000 | 11% |
| Southeast Region | \$52,000 | \$59,000 | 13% |
| Minneapolis-St. Paul MSA | \$65,000 | \$71,000 | 9% |
| Minnesota | \$57,000 | \$63,000 | 11% |
| United States | \$51,000 | \$55,000 | 8% |

Source: ACS; Shown in 2016\$

Key Trends and Initiatives

Dodge County has experienced both public and private investment in recent years, supporting continued economic strength. The county has seen a growing trend of younger business owners buying, starting, or transitioning to ownership of existing businesses, as older business owners age out of the workforce. This trend, and other economic development initiatives, have helped support population and employment growth above the Region's growth rate. Recent economic development initiatives include:

- The \$146 million expansion of Al-Corn created approximately 12 FTE jobs and over 300 construction jobs. The project was nominated for "Project of the Year" by the Economic Development Association of Minnesota.
- The County partnered with Clean Energy Resource Teams to adopt PACE financing. The first project to receive PACE financing was a 40kW solar system.
- The expansion of French's Repair and Fabrication created 2 FTE jobs.
- The Con-Tech expansion, which stemmed from the MN-56 project, is projected to create 55 FTE jobs.
- The MN-56 Turn and Bypass Lanes project was selected to receive a 2017 Transportation Economic Development ("TED") award up to a maximum amount of \$135,450. The project is anticipated to create 55 net FTE jobs and leverage approximately \$59,336 in private capital investments in street improvements.

¹²³ "Other" includes Mining, Utilities, Management of Companies and Enterprises, Administrative and Waste Management Services, Federal Civilian and Military Employment, and Other Services, except Public Administration.

- Communities in Dodge County recognize the value of placemaking by leveraging historic assets. The City of Mantorville identified the importance of the character of old buildings in the city as a critical piece of the city's ongoing planning processes.

7.1.2. Baseline Forecast¹²⁴

To understand the projected growth of the Region over the next 20 years, this Study establishes a Baseline Forecast for each county within the Region. The Baseline Forecast projects employment by industry, gross regional product, income, labor force productivity, households and population, and average annual wages and compensation, taking into consideration existing forecasts for the Region. Establishing an appropriate Baseline Forecast is important to understand the projected net new impacts of proposed or underway economic initiatives. Building on the Baseline Forecast, this Study subsequently models the impact of various regional initiatives to understand how this projected growth could change depending on the implementation of policies and plans in the Region. The Baseline Forecast accounts for both historical trends and existing population and economic forecasts for the Region, including county-level forecasts and forecasts completed by the Minnesota State Demographic Center.

Figure 68: Dodge County Baseline Forecast, 2015-2040

| Population Change | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | Annualized Change, 2015-2040 |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------------------------|
| Population | 20,400 | 20,700 | 21,100 | 21,500 | 22,200 | 22,400 | 0.37% |
| Employment | 9,400 | 9,600 | 9,500 | 9,700 | 9,900 | 10,100 | 0.29% |

Source: REMI, HR&A Analysis

Figure 69: Dodge County Baseline Age Cohort Forecast, 2015-2040

| Age Cohort | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | Annualized Change, 2015-2040 |
|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------------------------|
| Ages 0-4 | 1,289 | 1,231 | 1,383 | 1,499 | 1,478 | 1,356 | 0.20% |
| Ages 5-19 | 4,730 | 4,148 | 3,680 | 3,560 | 3,828 | 4,071 | -0.60% |
| Ages 20-24 | 1,119 | 1,355 | 1,186 | 1,048 | 886 | 862 | -1.04% |
| Ages 25-34 | 2,291 | 2,562 | 3,158 | 3,195 | 2,968 | 2,700 | 0.66% |
| Ages 35-44 | 2,728 | 2,711 | 2,549 | 2,784 | 3,379 | 3,432 | 0.92% |
| Ages 45-64 | 5,482 | 5,466 | 5,252 | 5,051 | 4,927 | 5,135 | -0.26% |
| Ages 65-74 | 1,472 | 1,814 | 2,185 | 2,333 | 2,228 | 2,077 | 1.39% |
| Ages 75+ | 1,252 | 1,448 | 1,662 | 2,032 | 2,464 | 2,770 | 3.23% |

Source: REMI, HR&A Analysis

¹²⁴ It is important to note that while the Baseline Forecast for the Region is representative of this Study's overarching findings and conclusions, as geographies become smaller and sample sizes for population and employment decrease, forecast findings begin to show more statistical noise. Directionally, these findings are accurate.

Figure 70: Dodge County Baseline Major Industry Forecast, 2015-2040

| Industry | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | Annualized Growth, 2015-2040 |
|--|--------------|--------------|--------------|--------------|--------------|---------------|-------------------------------------|
| Manufacturing | 1,570 | 1,640 | 1,730 | 1,870 | 2,050 | 2,250 | 1.45% |
| Government | 1,200 | 1,100 | 1,060 | 1,080 | 1,100 | 1,120 | -0.28% |
| Construction | 830 | 900 | 900 | 930 | 980 | 980 | 0.67% |
| Retail Trade | 760 | 810 | 800 | 800 | 800 | 820 | 0.30% |
| Tourism | 580 | 610 | 600 | 590 | 570 | 560 | -0.14% |
| Agriculture, Forestry, Fishing and Hunting | 800 | 780 | 700 | 700 | 670 | 650 | -0.83% |
| Health Care and Social Assistance | 360 | 400 | 400 | 420 | 420 | 420 | 0.62% |
| Transportation and Warehousing | 540 | 560 | 560 | 570 | 580 | 600 | 0.42% |
| FIRE | 750 | 730 | 690 | 670 | 650 | 620 | -0.76% |
| Professional, Scientific, and Technical Services | 360 | 380 | 390 | 390 | 400 | 410 | 0.52% |
| Educational Services | 110 | 110 | 110 | 110 | 110 | 110 | 0.00% |
| Other ¹²⁵ | 1,540 | 1,580 | 1,560 | 1,570 | 1,570 | 1,560 | 0.05% |
| Total | 9,400 | 9,600 | 9,500 | 9,700 | 9,900 | 10,100 | 0.29% |

Source: Source: REMI, HR&A Analysis

7.1.3. Impact of Initiatives

To understand the overall benefit to the county of these initiatives, this Study uses REMI to aggregate the various inputs from initiatives and methodologies described in Section 5 into a single model simulation (“All Initiatives Model”). The results of this All Initiatives Model are compared to the SDC Forecast, which assumes a business-as-usual trend, reflecting historical population change and projecting this into the future. Important to the SDC Forecast is an implicit assumption about housing production; previous housing production in the Region generally kept pace with past population growth, and this trend and development pattern will persist in the future. However, the housing production pace seen today, and the housing needed for the population projected by the State Demographer, is significantly lower than what is anticipated under the All Initiatives Model. While these initiatives will need to be implemented in coordination for the greatest impact, the most important initiatives for the county’s economic growth will be solving for the housing gap and labor participation rates.

Figure 71: Dodge County All Initiatives Impact, 2015-2040

| | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | Annualized Change, 2015-2040 |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------------------------|
| Population, SDC Forecast | 20,400 | 20,600 | 20,700 | 20,700 | 20,600 | 20,500 | 0.02% |
| Population, All Initiatives | 20,400 | 20,800 | 21,100 | 21,500 | 22,100 | 22,300 | 0.36% |
| Difference | - | 200 | 400 | 800 | 1,500 | 1,800 | 0.34% |
| Employment, SDC Forecast | 9,400 | 9,500 | 9,400 | 9,500 | 9,600 | 9,700 | 0.13% |
| Employment, All Initiatives | 9,400 | 9,600 | 9,600 | 9,700 | 10,000 | 10,300 | 0.37% |
| Difference | - | 100 | 200 | 200 | 400 | 600 | 0.24% |

Source: REMI, HR&A Analysis

¹²⁵ “Other” includes Mining, Utilities, Management of Companies and Enterprises, Administrative and Waste Management Services, Federal Civilian and Military Employment, and Other Services, except Public Administration.

Appendix E

Draft Minutes from Public Hearing held on August 7, 2019 by the Dodge County Planning Commission regarding the 6-18-19 draft of the Comprehensive Plan

And

Summary of Comments Received at Public Input Meeting held by Planning Commission on February 20, 2019 regarding the 12-12-18 draft of the Comprehensive Plan

Minutes of the Dodge County
Planning Commission Meeting
August 7th, 2019

1. Call to Order

The Regular Meeting of the Planning Commission was called to order by Darren Durst at 7:00 PM on Wednesday, August 7th, 2019. Present were Planning Commission members Beth Davis, Darren Durst, Minor Buckingham, Richard Wolf, Joshua Toquam, Gene Dornink and Jim Checkel, County Commissioners Rod Peterson, Tim Tjosaas, Rhonda Toquam, Environmental Service Director, Mark Gamm and Zoning Administrator, Melissa DeVetter.

2. Approval of Agenda & Minutes

- Planning Commission - Regular Meeting - Jul 3, 2019 7:00 PM

| | |
|------------------|--|
| RESULT: | ACCEPTED [UNANIMOUS] |
| MOVER: | Jim Checkel |
| SECONDER: | Beth Davis |
| AYES: | Checkel, Buckingham, Toquam, Wolf, Durst, Davis, Dornink |

- Public Hearing notice

| | |
|----------------|-------------|
| RESULT: | READ |
|----------------|-------------|

3. Dodge County Comp Plan

- **ZA#19-04 Dodge County Comprehensive Plan**

Notice of Intent to Adopt Amendments to the Dodge County Comprehensive Plan.

The first public hearing is to consider amending and updating the Dodge County Comprehensive Plan which was last revised on March 27th, 2001. The Comprehensive Plan is an in-depth analysis of countywide goals and aspirations. The Plan defines future policy and action for a wide variety of issues including land use, housing, economic development, transportation, broadband technology, natural resources and environment, recreation, and history and culture. The Comprehensive Plan enables the county to adopt, amend and enforce land use controls including zoning.

Cris Gastner, CEDA, was here to present the final draft of the Comp Plan to the Planning Commission. Mr. Gastner gave power point of the history of comp plan process and meetings and the proposed changes that would be made to the Comp Plan. See file for the power point of this presentation.

Rod Westgard, 26697 520th St Pine Island, stated that he has lived in northeast part of Milton Township for over 25 years. He had purchased the neighboring 8 acres of land with the intent to build a retirement home when it came time to retire. That time has now come and now this land is unbuildable because the quarter section is close. He was hoping that an adjustment in the Comp Plan could be made to allow him to build.

Sonja Trom Eayrs stated that she is representing the Dodge County Concerned Citizens; grew up in Westfield Township but now lives in Maple Grove. In February of this year she submitted a multi-page letter and two of the attachments that were submitted were not included in the draft Comprehensive Plan. One is a summary of all the feedlot operators in Dodge County and the second is a listing of all of the large CAFOs, 1000+ animal unit across the State of Minnesota. She asked that those items be included in the appendix of the comprehensive plan and that the spelling of her name be corrected. Ms. Eayrs reiterated the comments of her letter and indicated that none of the changes suggested were incorporated into the plan. Ms. Eayrs expressed that multi-generational farming families have a "birthright" to the land and its use above others. Ms. Eayrs also stated that she had concerns with garbage in the ditches, stop sign being shot at, and the harassment of her and her family.

Brad Trom stated that this marks his 50th year of selling dogs out there. He stated that the odor from the hog barns are bad and it is affecting his dogs.

Douglas Eayrs stated that there are two things that he is concerned about. One is the three branches of the Zumbro River coming out of Dodge County. What Dodge County does will affect the neighboring counties and he feels that Olmsted County will be upset with us. Second is the drinking water and we should be thinking about the Karst area within the county. Mr. Eayrs identified problems with the quality of the well water for drinking at his family's farm in Concord.

Ken Folie stated that there is always concerns about water usage. Water that is used in agricultural practices and feedlot is returned to the watershed that it is taken out of. Water that communities use is shipped out. Any water from impervious surfaces or watering the lawns runs off and ends up on the river. Regarding trash in the ditches, it is everywhere - no one is being picked on. The township also has had to replace quite a few signs because they are used as target practice.

Rod Peterson stated that he wanted to thank everyone for all of the hard work that they have done to get this comp plan out there. This is just the ground work that gives us some indication of where our citizens think we need to go.

Nancy Peterson stated that she has a concern with the water problems and flooding in the Wasioja area.

Motion by Jim Checkel, seconded by Gene Dornink to submit into the record email from Sonja Trom Eayrs with a correction of her name on page 145 and to add the the two additional documents she indicated were missing from the appendix to the comp plan. Motion passed unanimously.

Mark Gamm stated that it is under the county's discretion to choose to add documents to the Appendix or not. Jim Checkel reiterated that the motion was to include these two documents in the comp plan.

Motion by Darren Durst, seconded by Joshua Toquam, to close the public hearing. Motion passed unanimously.

Jim Checkel inquired if Mr. Westgard had an option to ask for a variance.

Melissa DeVetter stated no, he does not. That would be a use variance which is not allowed under State Statute since the ordinance only allows one dwelling per quarter section. At this time, an ordinance change would be the only way he could build dwelling on that parcel.

Darren Durst stated that his family had lived in the county for many generations. He sees a lot of farm families where the kids want to come home to farm. They have to do something for them to get them into farming, like building up hog or turkey barns or to try and rent more land.

Regarding smell, there are odors within the city as well as the country. He works in the City of Pine Island and notes the smell from the Land O Lakes cheese factory and septic system. Seeing road signs shot up is nothing new as they are all over.

Jim Checkel stated that he is the 3rd generation on his farm. He does not feel that being a 3rd generation give him any right over someone who moves across the road that is 1st or 2nd generation. He does not believe in birthright by generation. If someone moves into the area that person should be able to say that he owns this property. They should be able to do what they want to as long as the county or state allows it.

Joshua Toquam stated that as far as the garbage, he had to move full couches and carpet with inches of rain on it from road edge a driveway. It just a part of living out in the county and he does not like it any more than anyone else does.

Beth Davis stated that we don't have a lot of crime and it's good that we don't have to deal with crime. People want to live here.

Motion by Jim Checkel, seconded by Beth Davis, to recommend approval of the Dodge County Comprehensive Plan as presented with the additional documents. Motion passed unanimously.

| | | |
|------------------|--|--------------------------------|
| RESULT: | RECOMMENDED APPROVAL [UNANIMOUS] | Next: 8/13/2019 9:30 AM |
| MOVER: | Jim Checkel | |
| SECONDER: | Beth Davis | |
| AYES: | Checkel, Buckingham, Toquam, Wolf, Durst, Davis, Dornink | |

4. CUP/IUP

- **CUP#19-05 Nexamp Solar LLC/Mussman 1 MW Solar Energy Farm**

The second public hearing is to consider an application for a Conditional Use Permit to allow a Solar Energy Farm in the Ag District. The parcel is 318.42 acres and the Solar Energy Farm (Solar Garden) will cover approximately 15.5 acres located in the S ½ EX Comm SE COR of the SE ¼, Section 28 Ashland Township. Nexamp Solar, LLC is the applicant and Duane & Mary Lou Mussman are the property owner.

Matt Walsh and Luke Payne were present to explain this proposal. Mr. Walsh gave a history of their company. This project will be a 1 MW solar energy farm. Nexamp works with the landowner in finding a location, they develop and construct the site and will maintain the site for the life of the project. Community solar is primary geared to individual who can't put solar on the roofs of their homes. The goal is to provide clean air and water. They are temporary in nature and their leases are for 25 years however, they could be extended up to 40 years. They do have requirement to remove the system. These solar farms allow farmers to diversify their income.

Luke Payne stated that they obtain the tile maps and the intent is to avoid contacting the tile lines. If a tile will be impacted they will go around them. There will be a 7 foot chain link fence surround the project. There will be one access point off of State Hwy 56. These panels are tracking panels with anti-glare coating.

Jim Checkel, Ashland Supervisor, stated that they did meet with Ashland Township and they had no objection to this proposal.

Motion by Joshua Toquam, seconded by Minor Buckingham, to close the public hearing. Motion passed unanimously.

Darren Durst inquired if there was going to be a pond and what happens when that pond gets full.

The following is summary of comments at the Public Input meeting held on February 20, 2019 by Dodge County Planning Commission regarding 12-12-18 Draft of the Dodge County Comprehensive Plan

Sonja Eayrs – on behalf of Dodge County Concerned Citizens (written comments also received)-

There are 2 long term trends that need to be considered:

1. Dodge County is becoming an urban county
 - a. Greater MN Revised and Revisited Report classifies Dodge County as Urban
 - b. Population of the county has increased by 14%. This is unheard of in rural counties.
 - c. There is an increase in demands for acreages outside of the city limits. Rural dwelling requests have been 3x greater than any other land use request.
 - d. Proximity to Rochester, Private development (DMC), etc. help them to predict that there will be a high demand for dwellings on less than 53 acres. Therefore, they're asking that the comprehensive plan listen to citizens and allow people to live in the country while still living near Rochester.
 - e. Don't promote policies that require 53-acre minimums for dwellings but allow smaller acreages for factory farms.
2. There is a rejection by the public at large to the industrial ag model (factory farming)
 - a. Other rural counties are pushing back against this.
 - b. Siting of feedlots cause serious concerns for water quality and air quality.
 - c. High nitrates are above the concentration levels for health risks in wells.
 - d. There are dangerous levels of E. coli in the water.
 - e. There are also dangerous air emissions. These feedlots cause this.
 - f. We need to consider ground water resources that were provided to the county.
 - g. Asking the county to create a taskforce to preserve natural resources and protect the public health.
 - i. Consider the number of animal units allowed
 - ii. Reduction of nitrates/E. coli
 - iii. Improved management of facilities.

Nancy Peterson – vocational education resource (Kasson, Triton and Hayfield) –

1. 4 areas of bench cubed are transportation, housing, daycare and health. This is important for families.
 - a. Transportation is an issue that needs attention.
 - i. Dodge County has 60% of families that commute.

- ii. There is a major concern for young families—they aren't able to access public transportation (especially if their car dies)
 - 1. There are a lot of single families that need this.
 - iii. Parking of Highway 14 is a challenge.
 - iv. 50% of property from Rochester to the Cities is rural. This needs to be preserved.
 - v. There is a lot of history that can be offered and this needs to be preserved.
 - vi. Families need to be able to work, live and stay in the county.
 - b. Wasioja preservation of the water and trail systems is important.
 - c. Education system has a lot of offer.
 - i. We need to include the good things happening in education system.
 - d. Affordable housing is difficult to find in the Rochester area. People will move away if they cannot access housing. This needs to be considered.
 - e. Recreation is important.
 - i. People want to spend time with family where they live.
 - f. Highway 14 needs to be done.
 - i. This is "death lane"
 - ii. It is a safety concern.
 - g. There are a lot of business opportunities, but what Dodge County offers families is paramount.
- 2. Bench Cubed has a united project with the University of MN.
 - a. Innovate, collaborate, Design project was launched at the Steam Conference.
 - i. This will turn Wasioja into a vocational site.
 - 1. Eagle's View for Boy Scouts
 - ii. Tie education into the restoration of the river.
- 3. We need to send children to the capital to help them change laws.
 - a. This feeds into youth development.

2 additional written comments were received. Comments were provided to the Planning Commission and will be shared with Commissioners. Do not need to be read.

- Ken Olson, Milton Township Landowner
- Department of Natural Resources.

Comments from Planning Commission members:

Jim Checkel:

1. Need to look at access into the communities.
 - a. It's hard to get into Kasson/onto Hwy 57 from Hwy 14 and stretch from Kasson to Mantorville should be improved.
2. Wasioja Historic District is important but underutilized.
 - a. The civil war recruiting station is something people don't know about.
 - b. We need to increase awareness.

Stephanie Lawson, Dodge County EDA

A comment was made by EDA coordinator Lawson that the EDA is working on a blog that will promote historical features in the county to draw awareness to the county. This will be a stronger web-based presence.

Dodge County Concerned Citizens

Memorandum

To: Dodge County Environmental Services Department

From: Dodge County Concerned Citizens

Re: 2018 Comprehensive Plan, Dodge County, MN (Draft 12/12/18)

Date: February 20, 2019

The following comments are filed on behalf of Dodge County Concerned Citizens in response to the 2018 Comprehensive Plan, Dodge County, MN (Draft 12/12/18) (hereinafter "Draft Plan").

While the Draft Plan acknowledges that "Comprehensive Plans look beyond current issues to gain a perspective on issues and opportunities"¹ and "looks well into the future in depicting future land-use patterns,"² we challenge the Dodge County Environmental Services Department, county employees, and elected officials to do more. This is an opportunity for the leadership in Dodge County to put citizens first, not large industry intruders who are trying to chart the course of the county.

Dodge County – Classified as "Urban" by Minnesota State Demographer

According to a recent report issued by the Minnesota State Demographic Center entitled ***Greater Minnesota – Refined and Revisited***, "many Minnesota counties are on the cusp of a new era of slowing or negative natural change."³ But, not Dodge County. Dodge County, with its proximity to Rochester and Destination Medical Center, is

¹ 2018 Comprehensive Plan, Dodge County, MN (Draft 12/12/18) (hereinafter "Draft Plan") at II.

² Id.

³ *Greater Minnesota – Refined and Revisited*, Minnesota State Demographic Center, January 2017 at 41.

actually classified by the Minnesota State Demographic Center as “urban” as the “census tract is within a metropolitan area and has a higher primary commuting to an urbanized area.”⁴ Over a 15-year period, **the population in Dodge County increased 14%** from 17,735 as of April 1, 2000 to 20,364 as of July 1, 2015.⁵ It’s important to understand the demographic changes in Dodge County, as it transitions from rural to urban and to address these changes in the comprehensive plan.

The Draft Plan indicates that there is an “[i]ncreasing demand for “homes on acreages” outside city limits”⁶ and that “[o]ver the last 16+ years, the number of requests for dwellings has been three times greater than requests for any other land use, including feedlots (new/expansions) and limited rural businesses (home occupations operated out of an accessory structure).”⁷ The Draft Plan further acknowledges that “[b]ased on projected population growth, proximity to Rochester, private projects such as Destination Medical Center (DMC), as well as past permitting history, county staff predict that there will continue to be a high demand for dwellings on less than 53 acres.”⁸ Listen to your citizens, many of whom are third, fourth and fifth generation families. The citizens have spoken regarding land use issues. They want to live in the country and should have the right to live in rural areas that their ancestors settled, while enjoying the benefits offered by the Rochester metropolitan area.

Despite increasing demand for dwellings on smaller acreages, “[t]here is a density limit on dwellings constructed on less than 53 acres in the agricultural district”⁹ in Dodge County. Yet, Dodge County allows for the construction of factory farms on postage-stamp parcels of just 5 or 6 acres. This is idiotic. Why is the County requiring 53 acres to construct a rural dwelling, but only a few acres for a factory farm? The Draft Plan explains that “[t]his was an attempt to limit potential conflict between agricultural land and non-agricultural users.”¹⁰ No, this was an attempt by corporate outsiders to force as many factory farms into Dodge County as possible despite the changing character of the county.

Given its urban classification, Dodge County is in an ideal and unique situation to encourage rural dwellings on less than 53 acres, *not* factory farms on just 5 or 6 acres. Follow the mandate in the Draft Plan to “look well into the future in depicting future land-use patterns”¹¹ and listen to your citizens.

⁴ Id at 9.

⁵ Id. at 66.

⁶ Id. at V.

⁷ Id. at 87.

⁸ Id.

⁹ Id. at 95.

¹⁰ Id.

¹¹ Id.

Failure to Address Factory Farms

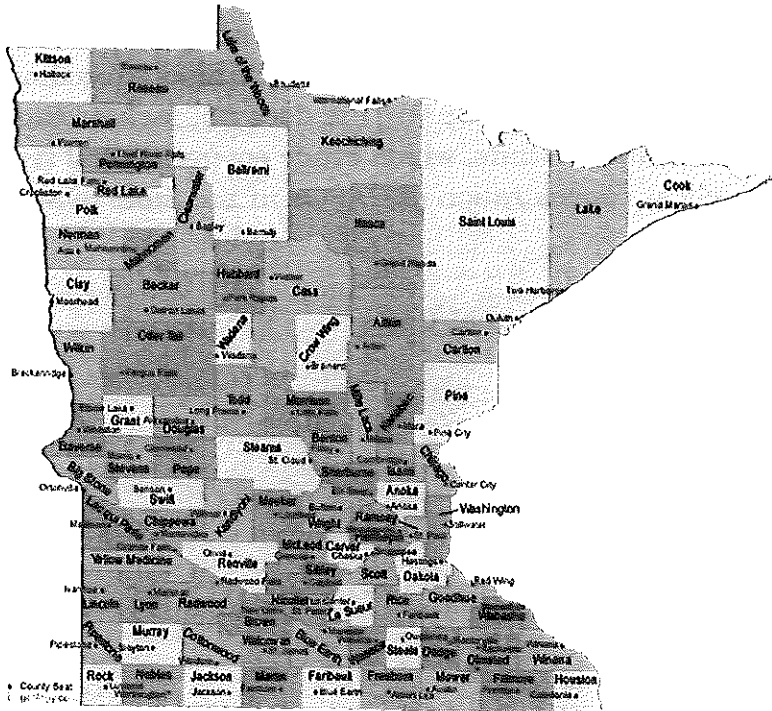
We have serious concerns regarding the environmental degradation of Minnesota waters and public health consequences due to the size and concentration of large factory farms, which are not adequately addressed in the Draft Plan.

Based upon data obtained from the MPCA regarding the presence of Confined Animal Feed Operations (CAFOs) in the State of Minnesota, those operations exceeding 1,000 animal units, there are 1,219 CAFOs in the State.¹² This does not include thousands of feedlots that are less than 1,000 animal units, which evade environmental review. As the summary indicates, the highest concentration of CAFOs in the State of Minnesota are located in southern Minnesota:

| <u>County</u> | <u># Animal Units</u> |
|---------------|-----------------------|
| Blue Earth | 61,101 |
| Brown | 51,602 |
| Chippewa | 13,969 |
| Cottonwood | 45,618 |
| Dodge | 27,275 |
| Faribault | 24,910 |
| Freeborn | 40,894 |
| Jackson | 60,998 |
| Kandiyohi | 52,189 |
| Lac Qui Parle | 26,564 |
| Le Sueur | 12,003 |
| Lincoln | 19,173 |
| Lyon | 38,665 |
| Martin | 141,787 |
| Meeker | 40,759 |
| Morrison | 35,794 |
| Mower | 30,572 |
| Murray | 28,824 |
| Nicollet | 64,128 |
| Nobles | 85,502 |
| Pipestone | 56,328 |
| Redwood | 34,298 |
| Renville | 75,455 |
| Rock | 65,439 |
| Stearns | 59,976 |

¹² Data as of 2014.

| | |
|-----------------|--------|
| Steele | 26,371 |
| Stevens | 66,711 |
| Swift | 39,997 |
| Watonwan | 51,731 |
| Yellow Medicine | 23,201 |



In Dodge County, there are 234 registered feedlots, including feedlots of all sizes.¹³

The Draft Plan acknowledges that “[i]n the last 15 years, there have been several occasions when the siting of a new feedlot has created significant concern for neighboring property owners (concerns voiced by both farm owners and non-farm owners). In these cases, citizens have voiced concern about the number of animal feedlots in their neighborhood and related impacts on water quality and air quality.”¹⁴ The easy permitting of factory farms has been encouraged and promoted by county leadership who have boldly forced large industrial factory farms into the county to the detriment of citizens they were elected to represent. Elected and appointed officials in Dodge County are not listening to citizens who directly oppose installation of these large industrial factory farms.

¹³ Dodge County Feedlot Summary, Dodge County Feedlot Officer.

¹⁴ Id. at 88.

While the Draft Report acknowledges that **there is a problem** with factory farms, county leadership does not make a concerted effort to change direction in order to **solve this serious problem**. There is **no effort** in the Draft Report to address feedlots, as specifically detailed in Dodge County Ordinance 16.24.4. Specifically:

1. There is no effort to limit the size of feedlots. Currently, Dodge County allows a single site containing up to 3,000 animal units. For a swine operation, this amounts to installation of a factory farm housing nearly 10,000 pigs. Can you imagine? 10,000 pigs next door! The county has the power and the authority to limit the size of feedlots; yet, there is no effort in the Draft Plan to limit the size of these operations.
2. There is no effort to limit the proximity of feedlots from any public or private well. Currently, the ordinance provides that new feedlots shall not be located closer than 100 feet from any public or private well. The county could adopt a stricter standard such as 500 feet.
3. There is no effort to limit the setback from a stream, river or lake. Currently, the ordinance provides that new feedlots shall be setback a minimum of 300 feet from the normal high mark of a stream, river or lake. The county has the power and authority to prohibit the installation of factory farms near streams, rivers or lakes; yet, they make no effort to do so. The county could adopt a stricter standard such as 1,000 feet.
4. There is no effort to limit the setback from a public or private drainage ditch. Currently, new feedlots must be setback at least 100 feet from a public or private draining ditch. The county could adopt a stricter standard such as 500 feet.
5. There is no effort to further limit the setback of factory farms. Currently, animal feedlots require a setback of only 1,000 feet, although the county could adopt a stricter standard such as 5,000 feet. At present, animal feedlots of thirty (30) animal units or more only require a setback of only 1,000 feet from:
 - a. Residential Dwellings (except the feedlot owner's or operator's dwelling);
 - b. The boundary of any subdivision;
 - c. Golf courses, churches, cemeteries, camp grounds, public buildings, public assembly areas; and
 - d. Licensed daycare facility and any facility with a public water supply well.

The county can and must do more to protect all citizens by adopting stricter setback requirements.

Failure to Address Land Use and Water Quality Problems

There is a serious problem with high nitrates in private wells in Dodge County. The Draft Plan acknowledges “that nitrate is present above background concentrations in **21%** of all wells and above the health risk limit in 7% of all wells.”¹⁵ The Draft Plan also acknowledges that “[d]rinking water sources are highly vulnerable to surface contamination in about 1/3 of the county. These are the areas with shallow soils over limestone and over sand aquifers. People living in these areas have a greater likelihood of drinking water contaminated by nitrogen.”¹⁶

There is also a serious problem with E. coli bacteria in virtually all southeastern Minnesota streams. The Draft Plan reports that “[w]ater sampling conducted by the MPCA reveals that many streams in the county are impaired.”¹⁷ “Recent testing has revealed the presence of e-coli bacteria from human and livestock sources in portions of the Cedar River. Some strains of E. coli can cause intestinal infection, and, nationally, numerous cases of illness due to consumption of contaminated water have been documented. E. coli is present, occasionally at high levels, across virtually all southeastern MN streams.”¹⁸

Citizen scientists are taking action to test area streams and rivers impaired by factory farms, due to the failure of state and local units of governments to protect local citizens. Our citizens group, Dodge County Concerned Citizens, worked with the Izaak Walton league to collect water samples in the Cedar River during summer 2017 and summer 2018. The Lowell and Evelyn Trom farm is located at the headwaters of the Cedar River that flows south to Austin, MN, world headquarters of Hormel Corporation. The Trom family farm is surrounded by 11, and soon a 12th, swine factory farm in a 3-mile radius of the farm. Dodge County Concerned Citizens is tired of the industry using area streams and rivers as their toilet.

The 2017 test results are attached for your information, which included test sites in both Dodge County and Mower County. As noted, 70 percent indicated E. coli exceeding state health standards. After major rainstorms, testing consistently revealed E. coli readings on most streams and tributaries 5X, 10X, 20X or more of the standard. As stated in the report, “this indicates to us that the rain is flushing e-coli on the land, and in tile lines and ditches into the streams.”

¹⁵ 2018 Comprehensive Plan, Dodge County, MN (Draft 12/12/18) (hereinafter “Draft Plan”) at 48.

¹⁶ Id.

¹⁷ Id.

¹⁸ Id. at 49.

During 2017, limited DNA testing indicated at least three sources of fecal contamination: swine, cattle and human.

During 2018, testing occurred in five sites in Dodge County along the Cedar River. Of the five sites, four tested positive for swine DNA.

Despite acknowledgements in the Draft Plan regarding dangerous levels of high nitrates and E. coli from livestock sources, there is limited effort to address manure management. Dodge County Concerned Citizens audited the manure management plans on file with the county. Of the 234 registered feedlots in the county, only 37 manure management plans were on file with the County Feedlot Officer in 2015. While we understand that not every feedlot in Dodge County (and Minnesota) is required to file a Manure Management Plan, given the size of the numerous registered feedlots in Dodge County, there should be at least 100 Manure Management Plans on file. These Manure Management Plans should have been filed at the time of application, so the County Feedlot Officer, Planning Commission members, Board of Commissioners and the public have some idea where the manure from these operations will be spread on the land.

Recently, the Minnesota Pollution Control Agency (“MPCA”) issued the ***Minnesota River E. coli Total Maximum Daily Load and Implementation Strategies, Draft Report, January 2019*** (“MPCA Report”). The MPCA Report acknowledges that “[w]hile a full accounting of the fate and transport of manure was not conducted for this project, it is clear that a large portion of it is ultimately applied to the land surface and therefore, this source is of significant concern.”¹⁹ In our experience, Dodge County officials fail to take a hard look at manure management issues and determine whether a proposed factory farm has sufficient acres and that the manure will be applied properly to protect area waters. Pledging the same land for multiple factory farms is common among local operators.

In Minnesota, county feedlot programs have responsibility for implementing state feedlot regulations, including registration, permitting, inspections, education and assistance and complaint follow-up. County feedlot programs have responsibility for implementing state feedlot regulations for facilities with fewer than 1,000 animal units, or those that do not require federal permits.²⁰

In November 2016, Dodge County finally exited the Delegated Program altogether and returned responsibility to the MPCA. Now that Dodge County is no longer part of the

¹⁹ Minnesota River E. coli Total Maximum Daily Load and Implementation Strategies, MPCA (Draft, January 2019) at 30.

²⁰ Id.

Delegated Program, what efforts are underway, if any, to ensure oversight of area factory farms? Given the incestuous and unusually close ties of feedlot operators to county officials, thus guaranteeing approval of large factory farms, with little or no meaningful review of feedlot permitting, what efforts are underway to ensure due process to *all* citizens impacted by factory farms? How does the county intend to address this abuse of power? And, once constructed, what efforts are underway at the local level to provide for regulatory oversight of area factory farms?

Also, what efforts are underway in Dodge County to ensure that Manure Management Plans are followed within the County? Is there any effort by the Dodge County Environmental Services to determine where and how much manure is being applied to the land?

Failure to Address Dangerous Air Emissions

The Draft Plan acknowledges that “Dodge County has received various complaints with regards to both crop and animal agricultural operations. However, **the majority of reported agricultural use conflicts have revolved around feedlots primarily issues with odor.**”²¹ Further, the Draft Plan acknowledges that “[c]ertain farm practices and feedlots may emit air pollutants and odors. The most common pollutants found in air surrounding farms are ammonia, hydrogen sulfide, methane, and particulate matter, all of which have varying risks to the human respiratory system.”²² Despite this acknowledgment, there is no effort to address serious air emissions from area factory farms.

In neighboring Goodhue County, neighbors to a proposed 4,700-head hog factory farm conducted monitoring for hydrogen sulfide (H₂S) emissions from existing hog facilities at the property boundaries. Using a Jerome J605 Hydrogen Sulfide Analyzer and following a scientific protocol, a team of 15 citizens conducted 47 monitoring sessions over a 35-day period. The neighbors prepared a report entitled, ***A Community at Risk: A Report on Citizens’ Hydrogen Sulfide Monitoring at Kohlnhofer Factory Hog Farms in Goodhue County, Minn.*** (released September 14, 2017). According to the Minnesota Department of Health, H₂S becomes a health risk when levels exceed **7 ppb** (parts per billion) over a 13-week average (Minn. R. 4717.8150). The Goodhue County study shows 122 readings over 7 ppb at four operations, with readings up to **56.48 ppb**.

What efforts are underway in Dodge County to limit dangerous air emissions from area factory farms? Are county officials making any effort to:

²¹ Id. at 94.

²² Id. at 51.

- a. Adopt a moratorium on the construction of factory farms until the industry addresses dangerous air emissions and other environmental concerns?
- b. Require installation of bio-filters on all factory farms;
- c. Ensure that bio-filters on area factory farms, once installed, are in proper working order;
- d. Purchase a Hydrogen Sulfide Analyzer to test air emissions from area factory farms;
- e. Limit the size of factory farms in Dodge County;
- f. Limit the concentration of factory farms in Dodge County;
- g. Increase setbacks relating to installation of factory farms; and
- h. Engage in any other efforts to limit air emissions?

Failure to address dangerous air emissions from factory farms will only add to agricultural use conflicts.

Irresponsible Use of Groundwater Resources

Figure 49 (page 50) is quite troubling. This graphic illustrates the volume of water pumped in millions of gallons per year. With the advent of industrial factory farms in the mid-90s, livestock watering has increased significantly over the subsequent 20-year period. A single swine factory farm of 2,400 hogs draws an estimated four (4) gallons of water per day from the aquifer or approximately 10,000 gallons of water per day. Over a one-year period, this amounts to nearly 3.5 million gallons of water. With 11 swine factory farms in a 3-mile radius of the Lowell and Evelyn Trom farm, this amounts to nearly 40 million gallons of water per year. Irresponsible.

A water use (appropriation) permit from the Minnesota DNR is required for all users withdrawing more than 10,000 gallons of water per day or 1 million gallons of water per year.²³ In 2015, Dodge County Concerned Citizens made an inquiry with the Minnesota DNR to determine whether local factory farm operators possessed requisite water (appropriation) permits. Of the 234 registered feedlots in the county, only six (6) possessed a water (appropriation) permit. The industry apparently does not want the public to know the millions of gallons of groundwater per year that are being drawn from area aquifers to feed livestock raised in water-intensive factory farms.

Of most concern, Figure 49 notes that Al-Corn Clean Fuels “is now authorized to use approximately 435 million gallons [of water] per year.”²⁴ 435 million gallons of water per year! It’s unfathomable.

²³ https://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/permits.html

²⁴ Id. at 50.

The county should preserve natural resources which belong to everyone, not just industrial ag. As part of the comprehensive plan, what efforts are being employed by the county to address groundwater usage and preserve this valuable natural resource for future generations?

The Comprehensive Plan, while it identifies a number of problems, does not do enough to solve these problems. Dodge County must take a hard look at environmental degradation and preserve the rich natural resources for future generations.

Attachments:

Greater Minnesota – Refined and Revisited, Minnesota State Demographic Center, January 2017

Summary of Confined Animal Feeding Operations, State of Minnesota (1,000+ animal units)

Feedlot Summary, Dodge County

Izaak Walton League Cedar River Watershed Project (February 2018)

Minnesota River E. coli Total Maximum Daily Load and Implementation Strategies, Draft Report, January 2019

A Community at Risk: A Report on Citizens' Hydrogen Sulfide Monitoring at Kohlnhofer Factory Hog Farms in Goodhue County, Minn. (released September 14, 2017)

IZAACK WALTON LEAGUE CEDAR RIVER WATERSHED PROJECT

February 2018

Goal: Fishable, swimmable waters throughout the watershed, as called for by the Clean Water Act, passed 45 years ago.

2017 STREAM MONITORING FOR E-COLI

The Cedar River is designated and promoted as a Water Recreation Route, encouraging boating, swimming and other water-based activities.

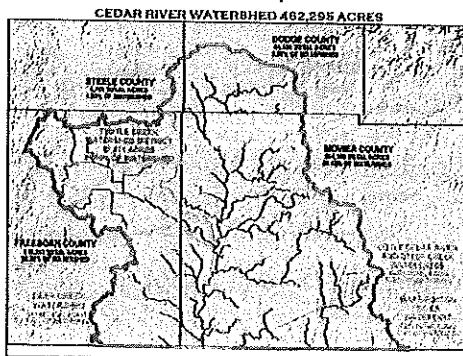
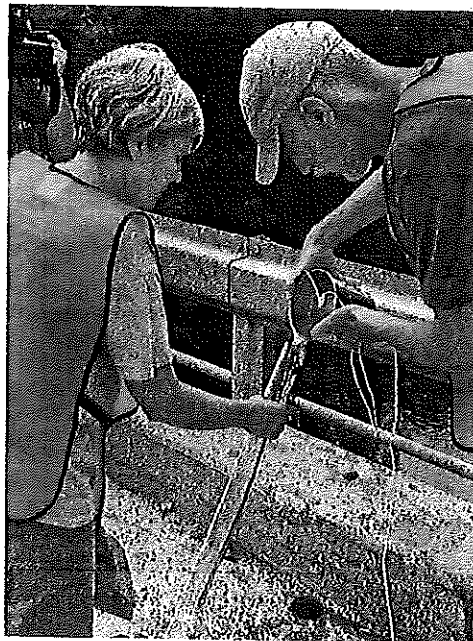
40 volunteers sampled over a 19-week period from late June to early October.

83 sites, 498 samples from across the watershed.

70% (345/498) of samples indicated e-coli exceeding health standards.

21 DNA tests from 7 sites indicated human, swine and cattle contamination. This situation is complex!

Data indicate that the city of Austin is not the source.



Izaak Walton League
Upper Mississippi River Initiative
Cedar River Monitoring and Clean-up

Our Findings

- In 2017, forty volunteer stream monitors drew almost 500 samples from 83 sites across the Cedar River watershed and tested for e-coli, an indicator of fecal contamination.
- Seventy percent of the samples had e-coli contamination which exceeded human health standards for body contact (swimming, wading, boating, etc.)
- After major rainstorms, we consistently found extremely high e-coli readings on most streams and tributaries at 5X, 10X, 20X or more of the standard. This indicates to us that the rain is flushing e-coli on the land, and in tile lines and ditches into the streams.
- Limited DNA testing indicated at least three sources for the fecal contamination: swine, cattle and humans.
- We have no reason to believe that our results are not reflective of the conditions of the other streams and rivers of our county and region.
- We are concerned about the health of children and adults who enjoy our streams, rivers and lakes, and request an urgent effort by all members of our community to address this and other related sources of pollution.

Our requests

- Hormel corporation and partners in the Cedar River Partnership have already been requested to take a lead in addressing contamination coming from hog rearing and related manure spreading.
- The Mower County Soil and Water Conservation District should be provided the resources to work with smaller (unregulated) cattle feeding operations to encourage best practices to move cattle and manure piles away from waterways to reduce fecal contamination from these sources
- Mower County should immediately notify the estimated 1700 home owners across the county with questionable sewage disposal that they will be required to verify that their systems are up to standards, and if not, to bring them up to today's standards for the good of the community.
 - We support public assistance for lower income individuals to comply with this necessary upgrade which protects us all.
 - We urgently request that all such homes along both north and south Dobbins Creek be required to be in compliance by December 31st, 2018, because both the Hormel Nature Center and Eastside Lake are water recreation areas of high use by our children.
 - We request that all homes throughout the county be required to be in compliance by December 31st, 2020.



Minnesota
Pollution
Control
Agency

Revised Regional TMDL Evaluation of Fecal Coliform Bacteria Impairments in the Lower Mississippi River Basin

Regional
Division

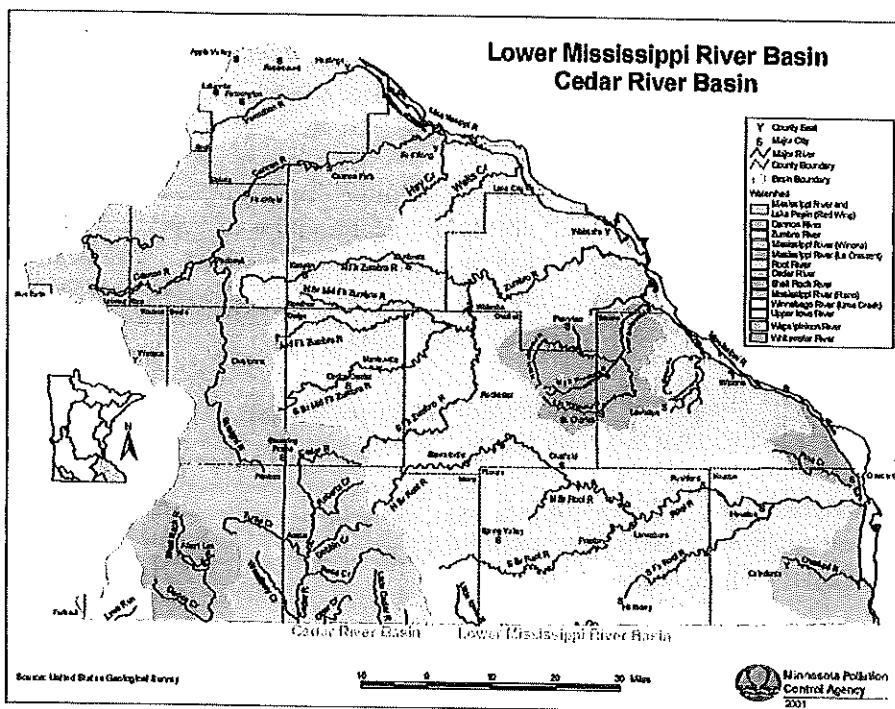
Water Quality/Impaired Waters #9.02a, August 2005

Impaired
Waters
Program

The federal Clean Water Act and the United States Environmental Protection Agency's Water Quality Planning and Management Regulations require states to develop Total Maximum Daily Loads (TMDLs) for water bodies that do not meet water quality standards.

The TMDL process establishes the allowable level of pollutants for a water body based on the relationship between pollutant sources and water conditions. Development of a TMDL Report provides a basis for determining the pollutant reductions necessary from point and nonpoint sources to restore and maintain the quality of water resources.

Thirty-nine stream reaches in the Lower Mississippi and Cedar River Basins are impaired for swimming use. Fecal coliform levels in these reaches violate Minnesota water quality standards. The purpose of this 2005 TMDL Report is to revise a 2002 TMDL developed for fecal coliform impairments in the same geographic area.



2002 Report

In 2002, the MPCA submitted a report titled, *Regional Total Maximum Daily Load Evaluation of Fecal Coliform Bacteria Impairments in the Lower Mississippi River Basin in Minnesota* to the U.S. Environmental Protection Agency (EPA). The report satisfied the requirements of the federal Clean Water Act for 20 stream reaches in the Lower Mississippi and Cedar River basins. The original report is available for review on the MPCA web site at <http://www.pca.state.mn.us/water/tmdl/index.html#finaltmdl>. The report was approved by the EPA in November 2002, a decision that was later challenged by the Minnesota Center for Environmental Advocacy (MCEA).

MPCA Area Offices:

Rochester area:

507/285-7343

Mankato area:

507/389-5977

Marshall area:

507/537-7146

Willmar area:

320/214-3786

Detroit Lakes area:

218/847-1519

Brainerd area:

218/828-2492

Duluth area:

218/723-4660

Metro area:

651/296-6300

Toll-Free Number:

800/657-3864



Results of Legal Challenge

In a June 2005 ruling, the United States District Court for Minnesota remanded the TMDL report back to the EPA for revisions. The complete court ruling is available on the MPCA Web site at

<http://www.pca.state.mn.us/water/tmdl/index.html#finaltmdl>. In short, the court ruling states that the revised TMDL must

- Be established at a level necessary to implement the applicable water quality standards for each reach impaired with fecal coliform contamination
- Contain a margin of safety that accounts for lack of knowledge concerning the relationship between effluent limitations and water quality
- Properly account for straight pipe septic systems in the wasteload allocation of the TMDL

Wasteload allocation: all point sources or permitted facilities in the TMDL affected area

Load allocation: all nonpoint sources, including those considered part of the natural background, in the TMDL affected area

Additional Revisions

Prior to the court ruling, the MPCA had begun revisions in two other areas of the TMDL. First, a number of reaches have been added to the impaired waters list since the original TMDL was submitted for approval. As such, the revised TMDL includes 39 reaches as opposed to the 20 contained in the original report. In addition, based on new EPA guidelines, municipal separate storm sewer systems and confined animal feedlot operations are now included in the wasteload allocation, rather than the load allocation.

A Different Approach

Based on the requirements of the court order, the approach to the revised TMDL is quite different from that of the original. The original TMDL report set source-specific fecal coliform reduction goals for the entire basin. The revised report establishes monthly fecal coliform loading capacities and allocations for each individual impaired reach. Based on these loading capacities and allocations, reduction goals will be reviewed as part of an implementation plan update process.

Implementation

Despite the legal challenge, the MPCA proceeded to develop and put in place an implementation plan for the TMDL. Implementation plans detail the source reductions and needed activities for meeting the pollutant load allocations set in the TMDL. A wide range of efforts to reduce fecal coliform bacteria in the rivers and streams of the basin are underway. A few of the specific efforts include:

- Reduction of runoff from smaller, open lot livestock feedlots through increased technical, educational, and financial support
- Assistance to beef and dairy producers to accelerate the use of rotational grazing
- A doubling in the rate at which inadequate septic systems and small unsewered communities are being upgraded

Upon approval of the revised TMDL report, a public process for reviewing and updating the existing implementation plan will begin.

For More Information

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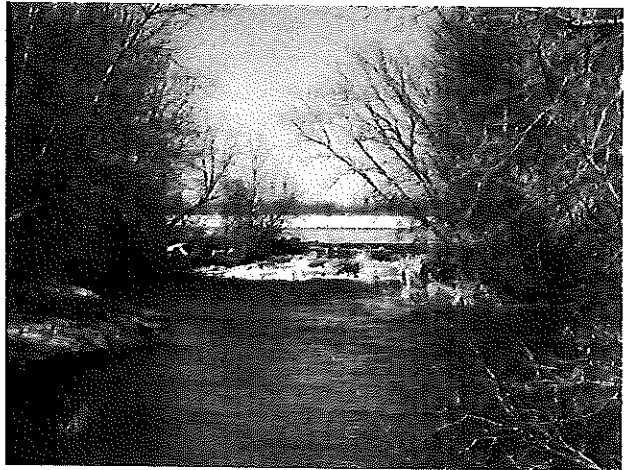
TTY users may call the MPCA teletypewriter at (651) 282-5332 or 1-800-657-3864.

On the Web, visit <http://www.pca.state.mn.us/water/tmdl>

The draft TMDL report is located on the Web at <http://www.pca.state.mn.us/water/tmdl/index.html#drafttmdl>

Minnesota River *E. coli* Total Maximum Daily Load and Implementation Strategies

DRAFT



mn MINNESOTA POLLUTION
CONTROL AGENCY

January 2019

wq-iw7-48b



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Abbreviations

| | |
|-----------------|---|
| AFO | animal feeding operation |
| AUID | assessment unit identification |
| billion org/day | billions of organisms per day |
| BMP | best management practice |
| BWSR | Board of Water and Soil Resources |
| CAFO | concentrated animal feeding operation |
| CFR | Code of Federal Regulations |
| DMR | discharge monitoring report |
| <i>E. coli</i> | <i>Escherichia coli</i> |
| EIMS | Environmental Information Management Systems |
| EPA | United States Environmental Protection Agency |
| EquIS | Environmental Quality Information System |
| HUC | hydrologic unit code |
| HSPF | Hydrologic Simulation Program–FORTRAN |
| IPHT | imminent public health threat |
| LA | load allocation |
| MCES | Metropolitan Council Environmental Services |
| MnDOT | Minnesota Department of Transportation |
| mi ² | square mile |
| MOS | margin of safety |
| MPCA | Minnesota Pollution Control Agency |
| MS4 | municipal separate storm sewer system |
| NASS | National Agricultural Statistics Service |
| NPDES | National Pollutant Discharge Elimination System |
| NWIS | National Water Information System |
| org/100 mL | organisms per 100 milliliters |
| SDS | state disposal system |
| SSTS | subsurface sewage treatment system |
| SWPPP | stormwater pollution prevention plan |
| TMDL | total maximum daily load |
| USDA | United States Department of Agriculture |
| USGS | United States Geological Survey |
| WLA | wasteload allocation |
| WPLMN | Watershed Pollutant Load Monitoring Network |
| WRAPS | watershed restoration and protection strategies |
| WWTP | wastewater treatment plant |
| 1W1P | One Watershed, One Plan |

Executive Summary

The Clean Water Act, Section 303(d) requires that total maximum daily loads (TMDLs) be established for surface waters that do not meet applicable water quality standards necessary to support their designated uses. A TMDL determines the maximum amount of a pollutant a receiving waterbody can assimilate while still achieving water quality standards, and allocates pollutant load reductions to pollution sources. This TMDL study covers five *Escherichia coli* (*E. coli*) bacteria impairments along the Minnesota River main stem. The project area is the Minnesota River Basin, excluding the local drainage area to the river reaches downstream of the city of Carver (Figure 1). The Minnesota River Basin covers 12 eight-digit hydrologic unit code (HUC8) watersheds from the headwaters to the mouth of the Minnesota River.

Many fecal coliform and *E. coli* TMDLs have been previously completed on impaired reaches located within the watersheds of the impairments addressed in this report. Because loading capacities and allocations have already been developed for the reaches with approved TMDLs, this report focuses on the watershed areas of the five Minnesota River impairments that are not already covered by an approved TMDL. This area is referred to as the “TMDL project focus area” in this report.

Land use in the Minnesota River Basin is dominated by agriculture consisting of primarily corn and soybean rotations. There are also small sections of developed area, wetland, and forest. The monitoring data and source assessment suggest that the bacteria impairments are due to a mix of sources and pathways. Livestock from unpermitted animal feeding operations (AFO) and septic systems that are imminent public health threats (IPHTs) are the primary sources of concern in the TMDL project focus area. The impairments are of a low to moderate magnitude compared to the degree of impairment of the tributaries.

A load duration curve approach was used to determine the TMDL, or allowable pollutant load, for each impaired stream. The load duration curves represent the allowable *E. coli* load at any given flow condition. Allocations for load, wasteload, and margin of safety (MOS) are provided. The load allocation (LA) for each TMDL represents the allowable amount of loading from non-permitted sources, including unregulated watershed runoff and IPHT septic systems. Wasteload allocations (WLAs) for permitted sources are provided for wastewater, regulated stormwater, and permitted AFO. Water quality data were compared with the water quality standard to estimate reduction needs. Reductions needed to meet the TMDLs range from 19% to 60%, with the highest reductions needed in the watershed of the most downstream reach (i.e., Minnesota River from Cherry Creek to High Island Creek).

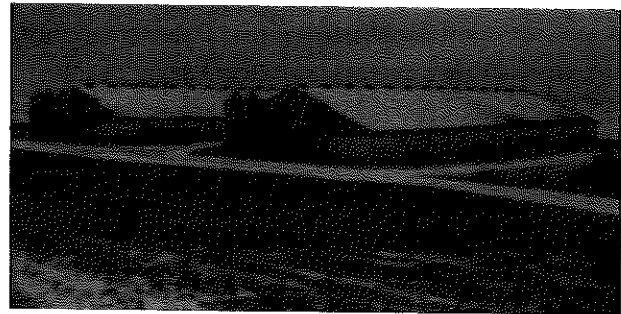
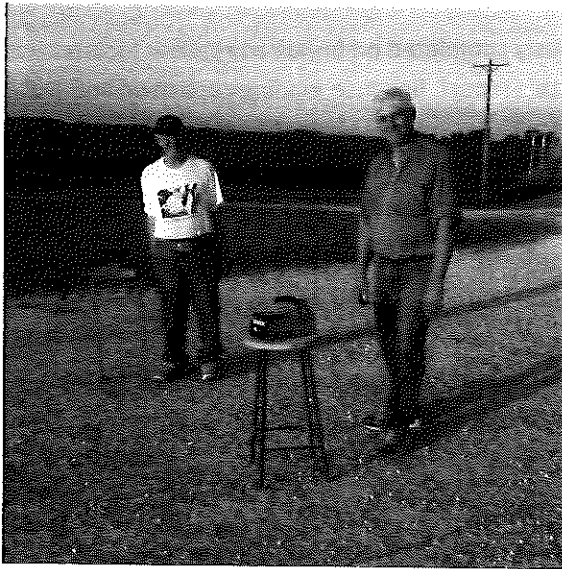
This report includes an implementation strategies section to substitute for a separate strategies report. The Minnesota Pollution Control Agency (MPCA) believes this is an appropriate approach given that the main stem river impairments addressed in this report may in large part be due to the tributary impairments already addressed (or will be later addressed) in separate TMDLs. The implementation strategy prioritizes geographic areas for implementation and provides a description of management activities to reduce *E. coli* loading from permitted sources and the non-permitted sources identified as high priority sources—livestock and IPHT septic systems. The goal of the strategies is to restore impaired streams and protect unimpaired streams from impairment.

Full Report Found on MPCA WEB SITE =

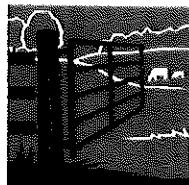
<https://www.pca.state.mn.us/water/minnesota-river-bacteria-tmdl-and-strategies-report>

A Community at Risk:

A Report on Citizens' Hydrogen Sulfide Monitoring at Kohlhofer Factory Hog Farms in Goodhue County, Minn.



RELEASED SEPTEMBER 14, 2017



**LAND
STEWARDSHIP
PROJECT**

Pictured on the front cover (clockwise from left):

- Zumbrota Township farmers Frederick Fredrickson and Dale Post monitor for hydrogen sulfide.
- Zumbrota Township resident Sharon Pagel and farmer Marilyn Fredrickson record hydrogen sulfide levels.
- Kohnhofer finishing barns in Goodhue County.
- The Jerome Hydrogen Sulfide Analyzer shows a high reading outside a Kohnhofer hog facility.

Citizen Hydrogen Sulfide Monitoring Team

Frederick Fredrickson, Dairy Farmer, Zumbrota Township
Marilyn Fredrickson, Dairy Farmer, Zumbrota Township
Dale Post, Farmer, Zumbrota Township
Mary Post, Zumbrota Township
Kristi Rosenquist, Zumbrota Township
Bob Rosenquist, Zumbrota Township
Darwyn Tri, Zumbrota Township
Sharon Pagel, Zumbrota Township
Andrea Lodermeier, Zumbrota Township
Kathy Bramble, Zumbrota Township
Beth Slocum, Farmer, Welch
Winston Kaehler, Red Wing
Linda Walbruch, Mantorville
Marilyn Johnson, Minneapolis
Katie Doody, Policy Organizer, Land Stewardship Project

Citizens' Monitoring Shows High Levels of Hydrogen Sulfide at Kohlhofer Hog Operations

OUR STUDY: As neighbors to a proposed Kohlhofer 4,700-hog factory farm in Goodhue County's Zumbrot Township in southeastern Minnesota, we have concerns about the impacts this project will have on our air quality, water quality, property values and family farms. To analyze the impact the Kohlhofers' existing hog facilities are having on air quality in Goodhue County, we monitored for hydrogen sulfide (H₂S) emissions at the property boundaries of Kohlhofer hog operations. Using a Jerome J605 Hydrogen Sulfide Analyzer and following a scientific protocol, a team of 15 citizens conducted 47 monitoring sessions over a 35-day period.

Citizens set out to find:

- 1) Are hydrogen sulfide emissions levels exceeding **health risk values** designed by the Minnesota Department of Health (MDH)?
- 2) Are Kohlhofer hog operations violating **state ambient air quality standards** set by the Minnesota Pollution Control Agency (MPCA)?

Our data shows:

- 1) Hydrogen sulfide emissions from Kohlhofer hog facilities are likely exceeding health risk values set by the Minnesota Department of Health.
- 2) Two facilities (Jeff Finishing and Holst I Finishing) may be violating state ambient air quality standards set by the MPCA.

HYDROGEN SULFIDE & FACTORY FARMS: Hydrogen sulfide (H₂S) is a toxic gas emitted when large amounts of liquid animal waste are collected in one place. H₂S has proven negative health impacts, such as nausea, headaches, vomiting and severe diarrhea. Prolonged exposure has been associated with neurologic symptoms, which may be more serious in children.ⁱ Exposure to extremely high levels of H₂S levels is life threatening.^{ii iii}

HEALTH RISK VALUE: According to the Minnesota Department of Health, H₂S becomes a health risk when levels exceed 7 ppb^{iv} (parts per billion) over a 13-week average (Minn. R. 4717.8150).

- Our study shows 122 readings over 7 ppb at four operations, with readings up to 56.48 ppb.

STATE HYDROGEN SULFIDE STANDARDS: Minnesota state law mandates ambient air quality standards for feedlots, which creates legal limits for H₂S emissions at the property boundary. This limit is significantly higher than the health risk value, and all operations should stay well below the legal limit. The MPCA mandates that feedlots cannot exceed 30 ppb of H₂S emissions over a 30-minute period more than two times per week, or 50 ppb of H₂S emissions over a 30-minute period more than two times per year (Minn. R. 7009.0080).

- At two operations (Jeff Finishing and Holst I Finishing), our study results show:
 - 28 readings over 30 ppb.
 - 3 readings over 50 ppb.
 - 4 monitoring sessions in which the 30-minute average was over 30 ppb.

The Pollution Control Agency and the Department of Health must immediately begin continuous air monitoring at Jeff Finishing and Holst I Finishing to further investigate H₂S exceedances and impacts on public health. Meanwhile, the Kohlhofers must withdraw their Zumbrot Township proposal. Our public health is at risk.

HOW CITIZENS PREPARED FOR HYDROGEN SULFIDE MONITORING

STEP 1: RESEARCH

Citizens connected with other Land Stewardship Project members who have experienced high hydrogen sulfide levels near factory hog farms. They analyzed the models run by the Minnesota Pollution Control Agency that claim factory hog farms will be safe for neighbors. The models had many flaws, and they set out to research the actual H₂S emissions levels at Kohlhofer hog facilities.

STEP 3: TRAINING ON THE METER & THE SCIENTIFIC PROTOCOL

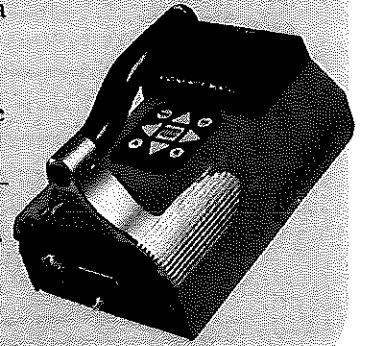


In 1996, Land Stewardship Project members in Renville County, Minn., conducted in-depth H₂S monitoring near large hog facilities. The monitoring protocol was designed by the late Paul Homme, who was the past director of the microbiology branch of the U.S. Air Force's epidemiology division and had extensive experience setting up scientific investigations.

Julie Jansen, a Renville County resident who participated in H₂S monitoring with Homme, traveled to Goodhue County to train citizens in the H₂S monitoring protocol. She also trained citizens on how to operate and care for the H₂S meter.

STEP 2: RENTING A HYDROGEN SULFIDE METER

For decades, the Minnesota Pollution Control Agency has relied on a hand-held hydrogen sulfide meter: the Jerome J605 Hydrogen Sulfide Analyzer. This high-tech machine is easy to use and displays the amount of hydrogen sulfide in parts per billion on the screen.



STEP 4: HYDROGEN SULFIDE MONITORING



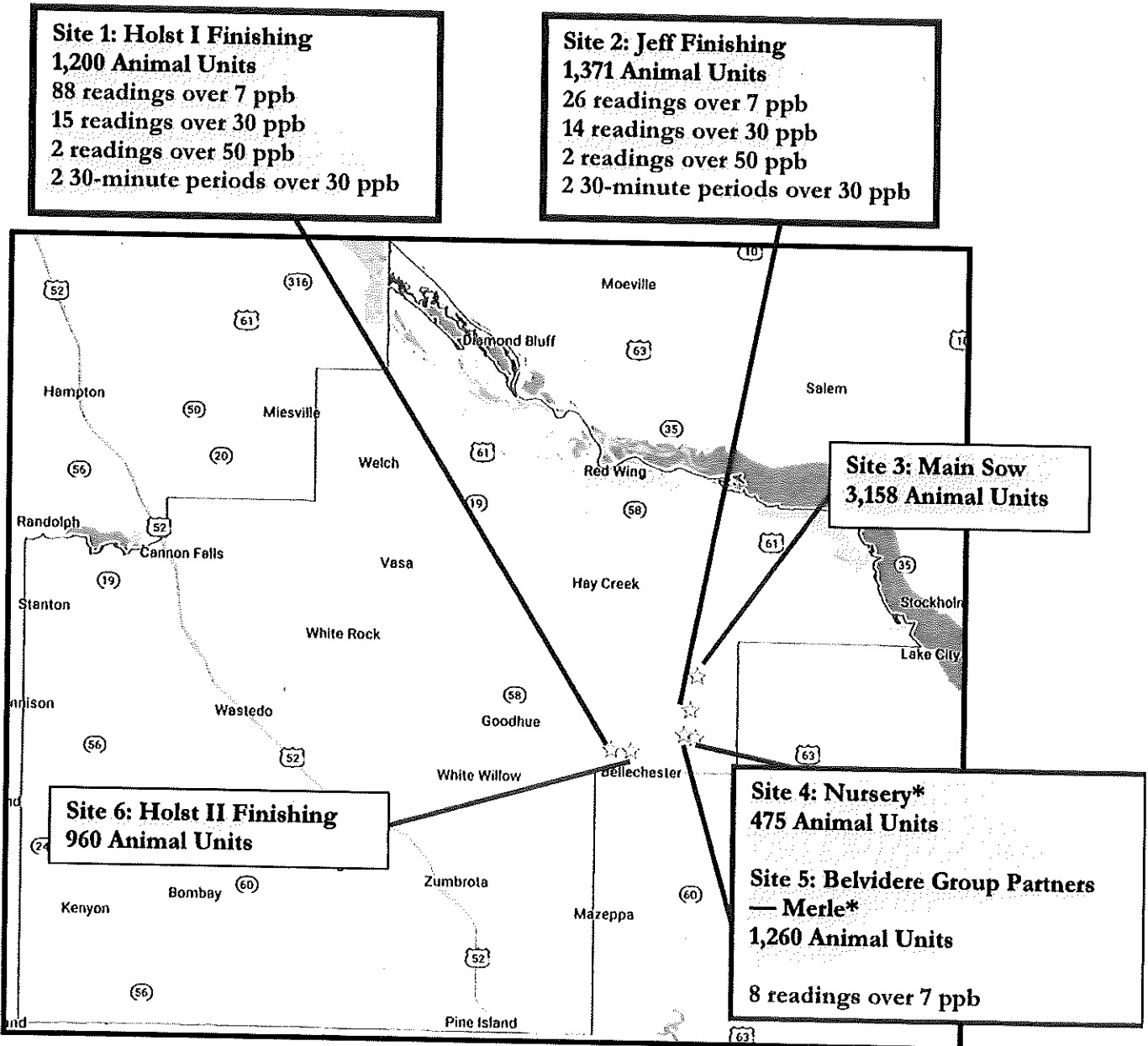
Citizens began H₂S monitoring on June 29, 2017. They monitored in teams of at least two people and recorded data in a monitoring log. Following the scientific protocol, they recorded the weather conditions and the exact location. If possible, they monitored down-wind from the manure pits.

The citizens conducted 47 monitoring sessions throughout a 35-day period, monitoring at the property boundary of 6 Kohlhofer facilities in Goodhue County. They conducted about 16 hours of monitoring, which is approximately 0.02% of available hours within the 35-day period.

Kohlhofer Factory Farms in Goodhue County and Citizen Hydrogen Sulfide Monitoring

Four Kohlhofer hog facilities consistently had hydrogen sulfide emissions readings over 7 ppb (parts per billion). The Department of Health indicates that levels above 7 ppb over a sustained period of time pose a threat to public health.

Two Kohlhofer hog facilities showed hydrogen sulfide readings over 30 ppb and 50 ppb, indicating the potential for violations of state air quality standards.



*Note: Sites 4 and 5 are across the road from each other and were monitored together.

Hydrogen Sulfide Data: Readings that Show a Threat to Public Health and Indicate Potential for Violations

The following tables present the complete data for the four Kohlnhofer facilities that recorded high hydrogen sulfide readings. **Holst I Finishing, Jeff Finishing, Nursery and Belvidere Group Partners — Merle.** These facilities consistently showed readings above 7 ppb. The Minnesota Department of Health indicates that sustained hydrogen sulfide levels above 7 ppb pose a risk to public health.

The tables also show the two operations (Holst I Finishing and Jeff Finishing) that recorded readings over 30 ppb and 50 ppb, indicating the potential for violations of our state ambient air quality standards.

Please see appendix for complete emissions data on all 6 facilities monitored.

- = Readings above 7 ppb, which show potential for violation of health risk values set by Dept. of Health.
- = Readings above 30 ppb, which indicate potential for violation of state ambient air quality standards.
- = Readings over 50 ppb, which indicate potential for violation of state ambient air quality standards.

Holst I Finishing

24589 390th St., Goodhue, MN

1,200 Animal Units (approximately 4,000 hogs)

| Date | Time | Initial Reading | 5 min. | 10 min. | 15 min. | 20 min. | 25 min. | 30 min. | 30-min. average | Potential for violation of health risk value | Potential for violation of ambient air quality standards |
|---------|----------|-----------------|--------|---------|---------|---------|---------|---------|-----------------|--|--|
| 6/29/17 | 7:05 pm | 12.29 ppb | 0 | 0 | | | | | | ✓ | |
| 7/6/17 | 7:55 pm | 6.4 ppb | 5.55 | 10.29 | 15.26 | 9.11 | | | | ✓ | |
| 7/7/17 | 9:14 pm | 15.21 ppb | 14.79 | 14.72 | 23.47 | 21.35 | 18.98 | 17.71 | 18.03 | ✓ | |
| 7/7/17 | 9:37 pm | 27.67 ppb | 28.69 | 36.83 | 32.28 | 22.08 | 25.65 | 36.11 | 29.9 | ✓ | ✓ |
| 7/10/17 | 9:05 pm | 5.42 ppb | 4.11 | | | | | | | | |
| 7/10/17 | 9:58 pm | 32.69 ppb | 29.03 | 25.45 | 25.97 | | | | | ✓ | ✓ |
| 7/12/17 | 9:31 pm | 2.40 ppb | 3.49 | 7.78 | 10.94 | 11.24 | 13.94 | | | ✓ | |
| 7/20/17 | 7:55 pm | 0 ppb | 9.3 | 22.77 | 3.19 | 0 | 0 | 5.86 | 5.87 | ✓ | |
| 7/26/17 | 9:15 pm | 29.69 ppb | 22.01 | 24.95 | 32.89 | 11.49 | 7.83 | 7 | 19.4 | ✓ | ✓ |
| 7/27/17 | 10:20 pm | 24.8 ppb | 20.81 | 17.34 | 24.08 | 11.69 | 14.7 | 12.67 | 18.01 | ✓ | |
| 7/28/17 | 10:00 pm | 27.1 ppb | 17.51 | 32.18 | 46.26 | 40.11 | | 29.52 | 35.59 | ✓ | ✓ |
| 7/30/17 | 8:45 pm | 28.24 ppb | 14.02 | 22.88 | 32.62 | 47.49 | 47.81 | 37.96 | 33 | | ✓ |
| 8/1/17 | 9:45 pm | 16.27 ppb | 13.98 | 12.05 | 11.17 | 5.49 | | | | ✓ | |
| 8/2/17 | 7:42 pm | 10.77 ppb | 24.06 | 24.01 | 15.55 | 20.32 | 17.88 | 19.45 | 18.86 | | |
| 8/2/17 | 8:17 pm | 15.07 ppb | 10.91 | 11.26 | 22.12 | 15.27 | 11.24 | 13.24 | 14.16 | | |
| 8/2/17 | 9:27 pm | 13.77 ppb | 14.11 | 16.09 | 15.15 | 20.72 | 11.84 | 15.55 | 15.32 | | |
| 8/2/17 | 10:02 pm | 10.87 ppb | 14.6 | 37.45 | 13.77 | 17.07 | 22.61 | 24.41 | 20.11 | | ✓ |
| 8/2/17 | 10:37 pm | | | | | | | | | | ✓ |

*Note: During the last monitoring session, meter read "Sensor Regeneration Required" and monitoring session was ended prematurely.

Jeff Finishing

37112 280th Ave., Goodhue, MN
 1,371 Animal Units (approximately 4,570 hogs)

| Date | Time | Initial Reading | 5 min. | 10 min. | 15 min. | 20 min. | 25 min. | 30 min. | 30-min. average | Potential for violation of health risk value | Potential for violation of ambient air quality standards |
|---------|----------|-----------------|--------|---------|---------|---------|---------|---------|-----------------|--|--|
| 6/29/17 | 7:42 pm | 0 ppb | | | | | | | | | |
| 7/3/17 | 10:15 pm | 40.65 ppb | | | 43.75 | 42.81 | 36.84 | 32.58 | 42.64 | ✓ | ✓ |
| 7/3/17 | 10:50 pm | 34.18 ppb | 39.44 | 37.41 | 31.03 | 30.4 | 40.63 | 30.6 | 33.38 | ✓ | ✓ |
| 7/5/17 | 1:09 pm | 0 ppb | | | | | | | | | |
| 7/8/17 | 7:03 am | 4.04 ppb | 0 | | | | | | | | |
| 7/8/17 | 7:15 am | 7.84 ppb | 7.34 | 4.8 | | | | | | | |
| 7/15/17 | 6:06 am | 11.25 ppb | 11.83 | 6.55 | 8.59 | 6.03 | 3.28 | | | | |
| 7/24/17 | 9:14 pm | 13.27 ppb | 12.36 | 6.29 | 9.47 | 10.23 | 25.89 | 16.74 | 13.46 | ✓ | |
| 8/1/17 | 12:27 am | 27.2 ppb | 3.84 | 0 | | | | | | ✓ | |

Nursery & Belvidere Group Partners — Merle*

*Note: These two facilities are across the road from one another and were monitored together.

Nursery:

38448 280th Ave., Goodhue, MN
 475 Animal Units
 (approximately 9,500 piglets)

Belvidere Group Partners — Merle:

38449 280th Ave., Goodhue, MN
 1,260 Animal Units
 (approximately 4,200 hogs)

| Date | Time | Initial Reading | 5 min. | 10 min. | 15 min. | 20 min. | 25 min. | 30 min. | 30-min. average | Potential for violation of health risk value |
|---------|---------|-----------------|--------|---------|---------|---------|---------|---------|-----------------|--|
| 6/30/17 | 4:43 am | 4.59 ppb | 0 | | | | | | | |
| 7/1/17 | 6:29 am | 3.23 ppb | 6.01 | 6.4 | | | | | | |
| 7/2/17 | 6:28 am | 4.19 ppb | 4.44 | 8.43 | 4.85 | | | | | ✓ |
| 7/3/17 | 9:43 pm | 5.45 ppb | 0 | 0 | 5.54 | 4.02 | | | | |
| 7/6/17 | 8:44 pm | 4.88 ppb | 6.22 | | | | | | | |
| 7/8/17 | 6:36 pm | 0 ppb | 8.02 | | | | | | | ✓ |
| 7/10/17 | 9:15 pm | 0 ppb | 17.54 | 15.03 | | | | | | ✓ |
| 7/10/17 | 9:44 pm | 3.81 ppb | 3.3 | | | | | | | |
| 7/12/17 | 8:40 pm | 0 ppb | 4.17 | | | | | | | |
| 7/27/17 | 9:50 pm | 5.7 ppb | 5.6 | 5.93 | 5.07 | 5.7 | 0 | 4.3 | 7 | |
| 7/29/17 | 9:40 pm | 25.7 ppb | 22 | 16.56 | 16.84 | | | | | ✓ |

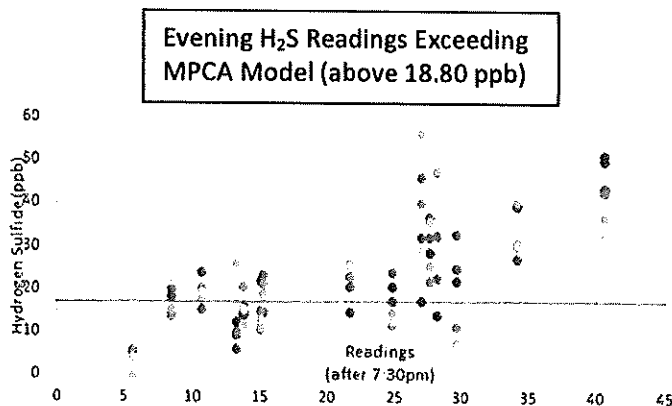
CONCLUSIONS:

Citizen hydrogen sulfide (H₂S) monitoring at Kohlhofer factory hog farms in Goodhue County, Minn., showed high levels of H₂S emissions at the property boundaries.

H₂S is a toxic gas with proven negative human health impacts. H₂S data gathered over a 35-day period by a team of 15 citizens shows:

- Kohlhofer hog facilities are likely exceeding health risk values designed by the Minnesota Department of Health, putting our community's health at risk.
- Two Kohlhofer facilities (Holst I Finishing and Jeff Finishing) may be violating our state air quality standards.

Although citizens were able to monitor for approximately 16 hours, this is only 0.02% of total hours within the 35-day period. Continuous air quality monitoring, conducted by the Minnesota Pollution Control Agency and the Minnesota Department of Health, is needed.



Our data also shows that existing Kohlhofer facilities are consistently exceeding MPCA H₂S emissions models. The MPCA's H₂S model for the Kohlhofers' proposed 4,700-hog facility in Zumbrota Township predicts that the project would never exceed 18.80 ppb of H₂S emissions at the property line. Our data shows that smaller Kohlhofer operations are consistently exceeding this amount, especially in the evening. We do not have confidence that the proposed operation will be safe for our community.

- **To further investigate H₂S emissions exceedances, the MPCA and MDH should immediately begin continuous air quality monitoring at Holst I Finishing and Jeff Finishing. If or when violations are found, the MPCA and MDH should take immediate corrective action to protect the health of the community.**
- **The Kohlhofers must immediately withdraw their proposal for a 4,700-hog facility in Zumbrota Township. Our community's health is at risk.**

Appendix

- I. Monitoring Protocol
- II. Calibration Certificates for Jerome J605 Hydrogen Sulfide Analyzers
- III. Complete List of H₂S Recordings

Original monitoring sheets are available online at:

http://landstewardshipproject.org/repository/1/2251/original_h2s_monitoring_sheets_revised.pdf

ⁱ "Medical Management Guidelines for Hydrogen Sulfide," Agency for Toxic Substances & Disease Regulation.
<https://www.atsdr.cdc.gov/mmg/mmg.asp?id=385&tid=67>

ⁱⁱ Rapaport, Diane. "Warning: Hydrogen Sulfide," Water Engineering & Management, Jan. 1990, Vol. 137, No. 1, p. 36

ⁱⁱⁱ Yale Environmental Protection Clinic. Controlling Odor and Gaseous Emission Problems from Industrial Swine Facilities: A Handbook for All Interested Parties, Kerr Center for Sustainable Agriculture, Poteau, Okla., 1998, 65 pages

^{iv} "Environmental Health Information: Excel Dairy, Marshall County, Minnesota," Minnesota Department of Health.
<http://health.state.mn.us/divs/eh/hazardous/sites/marshall/exceldairy/excelinfo.pdf>

February 20, 2019

Mark Gamm
Environmental Services Director
Dodge County

Adjacent or Affected Jurisdiction Name: Minnesota Department of Natural Resources

Please check the appropriate box:

- We have reviewed the proposed Plan Update, do not have any comments, and are therefore waiving further review.
- We have reviewed the proposed Dodge County Comprehensive Plan Update and offer the following comments (attach additional sheets if necessary)

As the agency charged with a mission of working with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life, the DNR's Southern Region appreciates the opportunity to provide comments on your draft plan. We support Dodge County's commitment to recognize and protect its natural resources. To further the realization of these goals in the next 10 years, please consider the following:

Section 3: Transportation DNR commends Dodge County for considering recreation and environmental feature conservation during transportation project planning and implementation. To enhance the health and diversity of wildlife populations, encourage developers of private and public lands to retain natural areas or restore them with native species after construction. One larger area is better than several small "islands" or patches; and connectivity of existing and restored habitat is important. Animals such as frogs and turtles need to travel between wetlands and uplands throughout their life cycle. Consult [DNR's Best Practices for protection of species](#) and [Roadways and Turtles Flyer](#) for self-mitigating measures to incorporate into design and construction plans.

Examples of more specific measures include:

- Preventing entrapment and death of small animals especially reptiles and amphibians, by specifying biodegradable erosion control netting ('bio-netting' or 'natural netting' types (category 3N or 4N)), and specifically not allow plastic mesh netting. (p. 25)
- Providing wider culverts or other passageways under paths, driveways and roads while still considering impacts to the floodplain.
- Including a passage bench under bridge water crossings. (p. 17) because typical bridge riprap can be a barrier to animal movement along streambanks.
- Designing curb and stormwater inlets that don't inadvertently direct small mammals and reptiles into the storm sewer. (p. 24). Installing "surmountable curbs" (Type D or S curbs) allows animals (e.g., turtles) to climb over and exit roadways. Traditional curbs/gutters

tend to trap animals on the roadway. Another option is to install/create curb breaks every, say, 100 feet (especially important near wetlands).

- Using smart salting practices to reduce impacts to downstream mussel beds, as well as other aquatic species. See smart salting training and certification resources at <https://www.pca.state.mn.us/water/smart-salting-training>
- Fencing could be installed near wetlands to help keep turtles off the road (fences that have a j-hook at each end are more effective than those that don't).

On page 39 under the Ten Year Implementation Plan, #2, consider adding “...expansion of Minnesota Highway 14, including space for (and or development of) a trail corridor on the back slope between Dodge Center and Owatonna.”

On page 39 under the Ten Year Implementation Plan, #5, consider adding “...Work with Department of Natural Resources to access possible funding and or technical assistance ~~to assist with~~ for these projects.

Section 4: County Property DNR commends Dodge County for updating policies to predict future opportunities for efficiency and to conduct energy assessments on all facilities.

Consider adding a component to the 10 year implementation Plan on page 44 to reduce impervious surface impacts on storm water and habitat fragmentation by installing rain gardens with native species where possible at county facilities. If designed and applied strategically, these can reduce mowing, filter pollutants, and provide habitat for pollinators and small birds, while increasing ground water recharge.

Section 6: Natural Resources and Environment

Section 6.2 Conservation and intentional planning around ground water quality and quantity is strategic for the long-term economics and quality of life in Dodge County.

Community-based Aquifer Management Partnership is a process for communities, officials, and groundwater users, in southern Minnesota to learn more about their aquifers and plan for future needs. Contact Tim Gieseke, Groundwater Planner, 507-359-6039, for additional information.

Section 6.3 Land-use and Natural Areas: Listing the types and amounts of public lands is a great start to raising awareness and measure progress towards your goal of supporting and encouraging an increase in public land ownership. In addition, consider listing out what is unique or special about these areas. *This may help landowners understand the types of legacies they could leave.* The local MN DNR land managers for wildlife and fisheries, scientific and natural areas, and parks and trails can provide this information.

It is preferred that maps with rare feature locations not be used, rather the focus be on the Native Plant Community (NPC) and Wildlife Action Network maps (both included in your plan). The plan should include a list of state-listed species found in the county and the habitats that they use. Text can be used to further focus on priority species habitat needs and protections.

Section 6.5 Consider adopting policies that require restoration of retired rock or aggregate mines to native species as part of the permitting process. Resources can be found here for a handbook for reclaiming sand and gravel pits in Minnesota and for Using Native Prairie Species for Reclaiming Aggregate Mining Sites.

Section 6.7 Respecting local cultural and natural environmental features is an important policy. Consider providing a list of these areas in the appendix to inform interested parties of where and how much occurs in the county.

Dodge County Minnesota Biological Survey Native Plant Community and Rare Species map [shapefile](#) is available on the [Minnesota Geospacial Commons](#).

Section 6.8 Consider adding the following to “Protect natural resources through:” 5. Review Rare Features (consult with DNR), DNR Native Plant Community Maps, and Wildlife Action Network Plan maps when considering development proposals.

Section 6.9 Wetland Preservation areas are important to help improve water quality, reduce flooding and protect rare features such as calcareous fens. Dodge County has two documented calcareous fens that should be given priority for wetland preservation areas. Strategic wetland restorations can also reduce impairments for the many impaired waters within the county.

Map 6.f Protection of native roadsides is important for pollinators. DNR urges Dodge County to continue management and protection of these remnants. DNR wildlife managers and ecologists are available for technical assistance if needed.

Map 6.h The Wildlife Action Network map for Dodge County shows important areas to apply best practices for native species protection, particularly where these areas overlap with expected growth and development areas. These areas should be considered very high priority for conservation of and enhancing or buffering existing native plant communities and animals.

Section 7 High quality natural areas and recreation facilities with adequate access add to the quality of life for local residents and help attract visitors for outdoor recreation tourism. DNR can provide technical assistance for increasing access along water courses. Contact Joel Wager at joel.wager@state.mn.us or 507-414-6193.

Dodge County rivers include two (Cedar and Zumbro) that are upstream from designated water trails. Increasingly paddlers are looking for additional, more challenging sites that are less crowded. Developing public accesses and promoting surface water best practices on the land will make these areas more attractive.

The snowmobile map on page 78 is slightly outdated and is missing an important link between Hayfield and Kasson. Updated data is available from [Minnesota Geospacial Commons](#).

Section 7.3 Public Natural Areas:

Listing the types and amounts of public lands is a great start to raising awareness and measure progress towards your goal of supporting and encouraging an increase in public land ownership. In addition, consider listing out what is unique or special about these areas. *This may help landowners understand the types of legacies they could leave.* The local MN DNR land managers for wildlife and fisheries, scientific and natural areas, and parks and trails can provide this information.

Please update the following section to reflect completed acquisitions by DNR.

"The Department of Natural Resources owns and operates public natural areas in fifteen ~~fourteen~~ separate locations throughout the county as shown on **Map 7.c**. For details see

MNDNR Web site: <http://www.dnr.state.mn.us/maps/compass/index.html>.

The MNDNR natural areas include two Scientific and Natural Areas (SNAs) with a combined 75 acres of land available for passive recreation including hiking and photography. SNAs are exceptional places where native plants and animals flourish. The MNDNR natural areas also include ~~ten~~ eleven Wildlife Management Areas (WMA) and one Aquatic Management Area (AMA)

providing 93095 acres of land for passive recreation and hunting/fishing. ~~In additional, MNDNR plans to acquire a 65 acre parcel located in Section 14 of Vernon Township for new WMA.~~ According to MNDNR staff, adding new public land is most likely in areas near existing public..."

Section 9 Solar Energy Farms can add to the diversity of the local economy and benefit pollinators. Consider requiring native vegetation establishment in solar farm developments to benefit pollinators and ground water recharge. See [DNR Pollinator Best Management Practices](#) and [Prairie Establishment and Maintenance Technical Guidance for Solar Projects](#).

Map 9.a Residential expansion zones around Manorville appear to overlap with some higher quality woodlands along the river. Consider adding to the county development standard: "Property owners are encouraged to minimize the impact on natural resource areas" *and develop woodland and/or conservation stewardship plans for the unbuilt portions of their property.*

On city and township maps, consider including high biodiversity areas and/or wildlife action network zones on the maps to raise awareness of the natural resource amenities and to help with future planning. Alternatively, a text section for each city and township could list key features in that area.

Name of Reviewer Scott Roemhildt Date 20 February 2019

Title of Reviewer Regional Director, Southern Region DNR

Signature of Reviewer 

Name of Reviewer Catherine Fouchi Date 20 February 2019

Title of Reviewer Regional Planner, Southern Region DNR

Signature of Reviewer 

From: Ken & Lynn Olson <oakridgefarm244@gmail.com>

Sent: Thursday, December 27, 2018 4:26 PM

To: Gamm, Mark <mark.gamm@co.dodge.mn.us>

Subject: RE: County Comprehensive Plan available

I am happy to read several places about the use of the information generated by the Land Use task Force and the idea of a second agricultural district. I am glad to see that those are not dead. I don't really see information included in the supporting materials related to them though.

As I see how other areas of the state and other states deal with the 'mix' of commercial agriculture and the strong desire for some people who want to live a rural life style (part-time and 'hobby' farmers) I can't help but think that there are parts of Dodge County without prime farm land/soils that would be well suited to different zoning rules and could have standards set to meet that use.

It will be interesting to see in the future how/if anything comes of this in Dodge County. Sometimes I struggle to figure out if I wonder about these things just because I am interested in this kind of lifestyle myself but I really think there are many people who have these values/interests when I think about those interested in hunting or having a few livestock or raising some specialized crops or just need more space to roam.

I hope this plan offers the opportunity for much good discussion and causes many people to really think about what's important for a wholesome community.

Ken

COMMENTS RECEIVED
AFTER PUBLIC INPUT MEETING
ON 2-20-19:

Melissa,

Here are a few comments. I think allowing building sites in areas that are not farmable, but are buildable is just wise land use. It would definitely be a financial boost to the County with increased tax revenue and very little expense for the County. Dodge County could benefit as people want to be further from Rochester as its City limits continue to expand and with more people able to work from home, Dodge County becomes more attractive to people looking for a rural environment for their homes. I am not saying we should let people develop good, productive farm land.

Thanks,

Rich Masséy, PLS
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