

# 2024 Comprehensive Plan Jackson County, Iowa

Adopted \_\_\_\_\_, 2024



**Rural Landscape in Jackson County**

*Source: Jackson County website*



**Jackson County Welcome Center in Sabula, Iowa**

*Source: Travel Iowa website*



**Jackson County along the Mississippi River at Bellevue, Iowa**

*Source: Jackson County Economic Alliance website*



**Weimerskirk Farm conservation project in Jackson County**

*Source: Iowa Natural Heritage Foundation*

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RESOLUTION ADOPTING  
COMPREHENSIVE PLAN

RESOLUTION # \_\_\_\_\_

ADOPTING THE JACKSON COUNTY COMPREHENSIVE PLAN

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WHEREAS, the State of Iowa has adopted Iowa Code Chapter 18B Land Use – Smart Planning as a way to guide and encourage the development of local comprehensive plans; and

WHEREAS, the draft Jackson County Comprehensive Plan is consistent with the 10 Smart Planning Principles and the 13 Comprehensive Plan Elements in Iowa Code Chapter 18B; and

WHEREAS, the Jackson County Board of Supervisors has utilized a public planning process, a community survey, and a community engagement effort led by the Jackson County Zoning Commission, with guidance provided by the Jackson County Comprehensive Plan Steering Committee, to create a shared vision statement, broad goals, future priorities, and an implementation strategy for the draft Jackson County Comprehensive Plan; and

WHEREAS, the Jackson County Zoning Commission has held public meetings throughout the planning process to review the draft Jackson County Comprehensive Plan and to provide input on plan language, goals, objectives, and an implementation strategy; and

WHEREAS, the Jackson County Zoning Commission, after holding a public hearing on the draft Jackson County Comprehensive Plan, recommends adoption of said plan.

NOW, THEREFORE BE IT RESOLVED, that the final draft of the Jackson County Comprehensive Plan is hereby adopted and approved by the Board of Supervisors of Jackson County, Iowa, this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

AYE: \_\_\_\_\_  
Mike Steines, Chair

NAY: \_\_\_\_\_

\_\_\_\_\_  
Nin Flagel, Member

ATTEST: \_\_\_\_\_  
Alisa Smith  
Jackson County Auditor

\_\_\_\_\_  
Don Schwenker, Member

**ACKNOWLEDGEMENTS**

The Jackson County Comprehensive Plan would not have been possible without the input, feedback, and expertise of the Jackson County Board of Supervisors, Zoning Commission, Planning and Zoning Staff, and Comprehensive Plan Steering Committee as well as all those residents, stakeholders, and organizations who shared their time, ideas, and experiences.

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# JACKSON COUNTY COMPREHENSIVE PLAN

## EXECUTIVE SUMMARY

### What is the purpose of the Comprehensive Plan?

The plan presents a shared vision for the future, with long-range goals and objectives for all activities that affect growth and development of the county. It is a 20-year policy guide shaped by public input that covers a wide range of issues.

### How was the plan created?

To bring people together to build a community consensus around a vision for the future, a transparent and inclusive community outreach process provided diverse interests with the opportunity to participate in a variety of settings and formats: websites, public meetings, Facebook, contact cards, community survey, direct contacts with stakeholders and the general public, and media contacts.

### What is the Shared Vision?

The shared vision statement for Jackson County declares where the community wants to be in the future:

**Jackson County, Iowa is an engaging community, enthusiastically creating opportunity, supporting growth, and enhancing quality of life for all who live, work, and visit.**

The shared vision helps local governments, organizations, businesses, and individuals to make strategic decisions that align with the following broad goals and future priorities to enable Jackson County to reach the destination described in the shared vision.

### BROAD GOALS AND FUTURE PRIORITIES

1. Rural quality of life and safe communities that compete well with larger cities
2. Recreational opportunities, historic sites, natural resources, unique amenities, and river access points
3. Business retention, expansion, and recruitment
4. Available, trained workforce of professionals, skilled trades, and labor in general
5. Locally owned and operated shops and restaurants engaged in their communities
6. Quality, affordable, and accessible housing options and pathways, especially for underserved populations
7. Affordable childcare available countywide
8. Strong volunteerism

The full plan is available to view and download at: <https://jacksoncounty.iowa>

### COMPREHENSIVE PLAN CHAPTERS

1. Introduction	6. Transportation	11. Hazard Mitigation
2. Jackson County Snapshot	7. Economic Development	12. Land Use
3. Public Participation	8. Housing	13. Intergovernmental Collaboration
4. Community Facilities and Services	9. Agriculture and Natural Resources	14. Implementation
5. Infrastructure and Utilities	10. Parks, Recreation, and Cultural Resources	Appendix (separate document)

In the Jackson County Comprehensive Plan, Chapters 4 through 13 identify goals. Chapter 14 provides an implementation strategy to reach these goals. The chapter goals are summarized below.

#### 4. COMMUNITY FACILITIES & SERVICES

- Address the top three community health priorities through community partnerships.
- Ensure high-quality child care opportunities are available and affordable to all residents.
- Support efforts to attract, maintain, and expand child care services in the region.
- Continue to support the Jackson County Campaign for Grade-Level Reading.

#### 5. INFRASTRUCTURE & UTILITIES

- Maintain/modernize critical infrastructure for transportation, broadband, water, sewer, downtowns, and community facilities.
- Install solar panels on county buildings.
- Create solar-ready zoning and building codes.
- Expand data collection for solar installations.
- Advocate for clean energy policy.
- Encourage involvement in the Grow Solar Jackson County Program.

#### 6. TRANSPORTATION

- Strategically preserve existing infrastructure and focus future investment in areas already served by significant public investments.
- Increase the safety, security, and resiliency of the transportation system.
- Support improvements and projects that promote economic development.
- Provide a high degree of multimodal accessibility and mobility for individuals, and better integration and connectivity between modes of travel.
- Support efficient freight system in the region.

#### 7. ECONOMIC DEVELOPMENT

- Attract and maintain a diverse population and workforce that can meet the needs of regional employers.
- Continue to support business retention and expansion through capital investments and entrepreneurial centers.
- Improve the region's desirability by enhancing and expanding access to the arts and recreational opportunities.

#### 8. HOUSING

- Provide affordable housing to make Jackson County attractive for young workers.
- Increase and diversify housing options throughout Jackson County.
- Provide more housing options for seniors.

#### 9. AGRICULTURE & NATURAL RESOURCES

- Implement Jackson County Soil and Water Conservation District 5-year priority goals.
- Implement Maquoketa River Watershed Management Plan – Phase 1 and Phase 2.
- Implement 2023 Outdoor Recreation Plan.

#### 10. PARKS, RECREATION, & CULTURAL RESOURCES

- Implement 2023 Environmental Education Plan's 5-Year Plan for programming.
- Implement 2023 Outdoor Recreation Plan.
- Enhance quality of life through honoring arts and cultural events and natural resources.
- Promote celebration of arts & cultural events.
- Ensure cultural sustainability for the wellbeing of all.

- Enhance access to natural excursion areas and recreational activities.
- Implement the updated Grant Wood Loop Master Plan's Future Priorities.

#### 11. HAZARD MITIGATION

- Protect the health, safety and quality of life while reducing or eliminating property losses, economic costs, and damage to the natural environment caused by a disaster.
- Ensure government operations, response, and recovery are not significantly disrupted by disasters.
- Expand public awareness and encourage intergovernmental cooperation, coordination and communication to build a more resilient community against all hazards.

#### 12. LAND USE

- Keep Land Use Policy current with changing growth conditions in the region.
- Ensure that cities are coordinating with each other for their best development.
- Preserve and protect viable agriculture land, parks, open spaces, and natural resources.

#### 13. INTERGOVERNMENTAL COLLABORATION

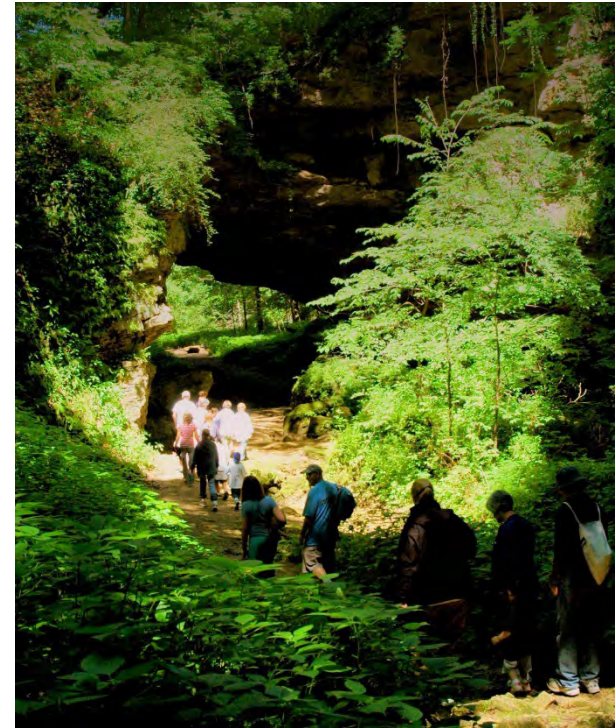
- Build capacity of local governments, non-profits, and community organizations.
- Collaborate with Jackson County, cities, schools, hospital, and service organizations.
- Promote engagement and entrepreneurship among the county's youth, including professional development opportunities for young workers.

# Chapter 1. Introduction



**Rural Jackson County landscape**

*Photo Credit: Jackson County website*



**Maquoketa Caves State Park**

*Photo Credit: Jackson County Area Tourism website*

## COUNTY OVERVIEW

Located along the Mississippi River in eastern Iowa's Driftless Region, Jackson County features limestone bluffs, rolling hills, woodlands, farm fields, natural caves, and winding waterways. Home to over 19,000 people, Jackson County prides itself on providing a diverse blend of agriculture, industry, and tourism.

Like most rural areas in Iowa, Jackson County's economy suffered during the farm crisis of the 1980s. The resulting high unemployment rates led to an 11% population decline between 1980 and 1990. Since then, Jackson County has maintained its population and focused on growing and diversifying its economy.

To take advantage of its unique location, resources, and heritage, Jackson County decided to adopt its first comprehensive plan. The comprehensive plan identifies issues and opportunities, and provides a guide for implementation of goals and objectives to achieve a shared community vision.

## WHY A PLAN?

People make plans to reach their goals for home, business, farm, vacation, and retirement. Plans help guide you to where you want to be.

If you're headed into the future without a plan, you could end up somewhere you don't want to be.

Counties make plans, too. These plans help communities set goals, so their county is a place where people want to live, work, do business, and have fun.



## WHAT IS A COMPREHENSIVE PLAN?

A comprehensive plan presents a shared vision for the future, with long-range community goals. It is a guide for future policies, services, public improvements, growth, and development.

It's **comprehensive** because it covers a wide range of issues and activities.

With a **shared vision** everyone has a common destination and common goals. People then can work together as a team, supporting and encouraging each other to reach community goals.

It's **long-range** because it looks forward 20 years.

It's a **policy guide**, a road map, shaped by public participation. It's *not* rules or regulations.



**PLAN PURPOSE**

State law enables a county to create and amend a comprehensive plan. A comprehensive plan has two fundamental purposes:

- First, present a unified and compelling vision for the community and establish the specific actions necessary to fulfill that vision.
- Second, provide a legal basis for land use regulations by analyzing existing conditions and developing growth goals for the community.

The comprehensive planning process is designed to be a transparent public input process in which people create a shared vision to promote the health, safety, and prosperity of Jackson County.

State law requires that zoning, subdivision, and other land use regulations be in conformance with a comprehensive plan. The Jackson County Comprehensive Plan provides the legal basis for the county to regulate land use and development.

**PLAN IMPLEMENTATION**

The Comprehensive Plan provides the Board of Supervisors with a 20-year guide for future decision making. The plan establishes a shared community vision for the future and identifies a recommended set of actions that the county can take to realize that vision.

To achieve this shared vision, the county must actively work to incorporate the plan’s recommendations into its budgets, policies, and ordinances. Many plan recommendations will require additional research, analysis, public input, and consideration from the Board of Supervisors before they can be implemented. When choosing how to implement the Comprehensive Plan, the Board of Supervisors should consider all relevant factors and weigh the public good with the cost and impact on the county.

Once adopted, the Comprehensive Plan should be updated every 5 to 10 years, so that it continues to provide an accurate picture of how the county wants to grow, develop, and prosper.

**COMPREHENSIVE PLANNING IN IOWA**

Iowa Code Chapter 18B Land Use – Smart Planning was signed into law in 2010, as a way to guide and encourage the development of local comprehensive plans. The law describes 10 smart planning principles and 13 comprehensive plan elements for application in local plan development and public decision making.

The law’s local comprehensive planning and development guidelines are intended to improve economic opportunities, preserve the natural environment, protect quality of life, and ensures an equitable decision-making process.

A comprehensive plan developed using these guidelines must address prevention and mitigation of, response to, and recovery from a catastrophic flood.

The Jackson County Comprehensive Plan addresses all Iowa Smart Planning Principles and elements, and is organized in a way that best fits the county’s needs. The Iowa Smart Planning Act is summarized below and online at <https://www.legis.iowa.gov/docs/code/18B.pdf>

**IOWA CODE CHAPTER 18B  
LAND USE - SMART PLANNING**

**18B.1 Iowa Smart Planning Principles**

State agencies, local governments, and other public entities shall consider and may apply the following principles during deliberation of all appropriate planning, zoning, development, and resource management decisions, except that nothing in this section shall be construed to expand the eminent domain authority of a state agency, local government, or other public entity beyond that which is authorized under chapter 6A or 6B:

1. Collaboration
2. Efficiency, Transparency, and Consistency
3. Clean, Renewable, and Efficient Energy
4. Occupational Diversity
5. Revitalization
6. Housing Diversity
7. Community Character
8. Natural Resources and Agricultural Protection
9. Sustainable Design
10. Transportation Diversity

**18B.2 Local comprehensive planning and development guidelines.**

1. For the purposes of this chapter, unless the context otherwise requires:

a. (1) *“Development”* means any of the following:

- (a) Construction, reconstruction, renovation, mining, extraction, dredging, filling, excavation, or drilling activity or operation.
- (b) Man-made changes in the use or appearance of any structure or in the land itself.
- (c) The division or subdivision of land.
- (d) Any change in the intensity of use or the use of land.

(2) *“Development”* does not include any of the following:

- (a) Activities on or uses of agricultural land, farm houses, or agricultural buildings or structures, unless such buildings or structures are located in the floodplain of a river or stream.
- (b) Installation, operation, and maintenance of soil and water conservation practices.
- (c) The choice of crops or a change in the choice of crops on agricultural land.

b. *“Land development regulations”* means zoning, subdivision, site plan, corridor map, floodplain, or storm water ordinances, rules, or regulations, or other

governmental controls that affect the use of property.

c. *“Municipality”* means a city or a county.

2. A municipality shall consider the smart planning principles under section 18B.1 and may include the following information, if applicable, when developing or amending a comprehensive plan under chapter 335 or chapter 414 or when developing or amending other local land development regulations:

**Comprehensive Planning Elements**

- A. Public Participation
- B. Issues and Opportunities
- C. Land Use
- D. Housing
- E. Public Infrastructure and Utilities
- F. Transportation
- G. Economic Development
- H. Agricultural and Natural Resources
- I. Community Facilities
- J. Community Character
- K. Hazards
- L. Intergovernmental Collaboration
- M. Implementation

**COUNTY PLANNING HISTORY**

Since 1994, Jackson County has been part of the Regional Planning Affiliation (RPA) along with Clinton, Delaware, and Dubuque counties. With guidance from the State of Iowa, the RPA identifies projects and improvements and prepares plans for all parts of the regional transportation system (roads, trails, transit, rail, air, and river) in the rural areas. The RPA’s latest *Long Range Transportation Plan* for 2045 was adopted in 2022.

From 2013 to 2024, Jackson County has engaged in many planning efforts at the county level and in various regional partnerships as shown in Table 1.1.

Planning efforts scheduled for completion in 2024 include an update of the 2019 Jackson County Multi-Jurisdictional Hazard Mitigation Plan and adoption of the Jackson County Comprehensive Plan.

Year	List of Jackson County and Regional Plans
2013	Jackson County <b>Multi-Jurisdictional Hazard Mitigation Plan</b> adopted
2015	Jackson County <b>Housing Needs Assessment</b> completed
2016	<b>Grant Wood Loop Master Plan</b> adopted for Dubuque, Jackson, and Jones Counties
2018	Jackson County <b>Tomorrow Strategic Plan</b> completed
2019	Jackson County <b>Multi-Jurisdictional Hazard Mitigation Plan</b> updated
2020	Jackson County <b>Community Health Needs Assessment</b> completed
2021	<b>Comprehensive Economic Development Strategy 2022-2027</b> adopted for Cedar, Clinton, Delaware, Dubuque, and Jackson Counties
	<b>Maquoketa River Watershed Management Plan: Phase 1</b> adopted for Buchanan, Clayton, Clinton, Delaware, Dubuque, Fayette, Jackson, Jones, and Linn Counties.
	Jackson County <b>Water Trails Plan</b> adopted
	Jackson County <b>Soil and Water Conservation District Five-Year Plan 2021-2025</b> completed
2022	<b>RPA 2045 Long Range Transportation Plan</b> adopted
	<b>Grant Wood Loop Master Plan Update</b> adopted
	Jackson County <b>Innovate 120 Final Report</b> completed
	Jackson County <b>Clean Energy Plan</b> completed
2023	<b>Maquoketa River Watershed Management Plan: Phase 2</b> adopted for Buchanan, Clayton, Clinton, Delaware, Dubuque, Fayette, Jackson, Jones, and Linn Counties.
	<b>RPA Federal Fiscal Year 2024-2027 Transportation Improvement Program</b> approved
	Jackson County <b>Conservation 5 Year Outdoor Recreation Plan</b> completed
	Jackson County <b>Conservation 5 Year Environmental Education Plan</b> completed
	Jackson County <b>Engineering 5 Year Road Plan Fiscal Year 2024-2028</b> approved
2024	<i>Jackson County <b>Multi-Jurisdictional Hazard Mitigation Plan</b> update</i>
	<i>Jackson County <b>Comprehensive Plan</b> adoption</i>

**VISION, BROAD GOALS, & PRIORITIES**

The comprehensive plan presents a unified and compelling vision for the future. The vision defines aspirations of what the community hopes to achieve in the future.

*Shared Vision Statement*

The shared vision statement for Jackson County declares where the community wants to be in the future:

**Jackson County is an engaging community, enthusiastically creating opportunity, supporting growth, and enhancing quality of life for all who live, work, and visit.**

The vision statement helps local governments, organizations, businesses, and individuals to make strategic decisions, aligning effort with broad goals and priorities that will enable Jackson County to reach the destination described in the shared vision statement.

*Broad Goals and Priorities*

- ✓ Rural quality of life and safe communities that compete well with larger cities
- ✓ Recreational opportunities, historic sites, natural resources, unique amenities, and river access points
- ✓ Business retention, expansion, and recruitment
- ✓ Available, trained workforce of professionals, skilled trades, and labor in general
- ✓ Locally owned and operated shops and restaurants engaged in their communities
- ✓ Quality, affordable, and accessible housing options and pathways, especially for underserved populations
- ✓ Affordable childcare available countywide
- ✓ Strong volunteerism

**PLAN ORGANIZATION**

The Comprehensive Plan begins with Chapter 1. Introduction. Chapter 2. Jackson County Snapshot highlights current community characteristics. Chapter 3. Public Participation reviews community outreach and outcomes. Chapters 4 through 13 review existing conditions and trends; local, state, and federal programs; issues and opportunities; and goals and objectives for these key planning elements:

- 4. Community Facilities and Services
- 5. Infrastructure and Utilities
- 6. Transportation
- 7. Economic Development
- 8. Housing
- 9. Agriculture and Natural Resources
- 10. Parks, Recreation, Cultural Resources
- 11. Hazard Mitigation
- 12. Land Use
- 13. Intergovernmental Collaboration

Chapter 14. Implementation aligns the chapter goals in a strategy for the future.

**CHAPTER 4. COMMUNITY FACILITIES AND SERVICES**

Goals focus on maintaining current public-private and intergovernmental partnerships and establishing new relationships to provide high quality community facilities and services that improve quality of life for residents.

**Community Health**

4.1 Address the top three health priorities for Jackson County through community partnerships.

**Child Care**

4.2 Ensure that high-quality child care opportunities are available and affordable to all residents.

4.3 Support efforts to attract, maintain, and expand child care services in the region.

**Education**

4.4 Continue to support the Jackson County Campaign for Grade-Level Reading in the four areas supporting academic achievement: School attendance, School readiness, Summer learning, Access to books.

**CHAPTER 5. INFRASTRUCTURE AND UTILITIES**

Goals focus on maintenance and improvement of public and private infrastructure and utilities, and outline strategies for a transition from non-renewable to renewable energy sources, to enhance quality of life for residents.

**Public Infrastructure**

5.1 Maintain and modernize critical infrastructure for transportation, broadband, water, sewer, downtowns, and community facilities for a more competitive region.



**Residential Solar System in Springbrook**  
 Source: 2022 Jackson County Clean Energy Plan

**Renewable Energy**

5.2 Install photovoltaic (PV) solar panels on County-owned buildings.

5.3 Create solar-ready zoning and building codes.

5.4 Expand data collection for the Jackson County Energy District’s solar installation map.

5.5 Advocate for clean energy policy by the Iowa Legislature and Iowa Utilities Board.

5.6 Encourage involvement in the *Grow Solar Jackson County Program* through the Jackson County Energy District.

**CHAPTER 6. TRANSPORTATION**

Goals seek to maintain and improve the county and regional transportation network, with priority on improvements and projects that improve quality of life.

*Maintain and Improve the Existing Transportation Network*

- 6.1 Strategically preserve existing infrastructure and focus future investment in areas that are already served by significant public infrastructure investments.
- 6.2 Increase the safety, security, and resiliency of the transportation system.
- Prioritize Transportation Improvements and Projects*
- 6.3 Support transportation improvements and projects that promote existing and future economic development.
- 6.4 Provide a high degree of multimodal accessibility and mobility for individuals, and better integration and connectivity between modes of travel.
- 6.5 Support efficient freight system in the region.

**CHAPTER 7. ECONOMIC DEVELOPMENT**

Goals seek to improve economic quality and sustainability as a foundation for a resilient community and an enhanced quality of life for residents.

*Workforce Development*

- 7.1 Attract and maintain a diverse population and workforce that can meet the needs of regional employers.

*Business Attraction and Retention*

- 7.2 Continue to support business retention and expansion through capital investments and entrepreneurial centers.

*Tourism*

- 7.3 Improve the region’s desirability by enhancing and expanding access to the arts and recreational opportunities.

**CHAPTER 8. HOUSING**

Goals focus on actions that the county and its partners can take to have a supply of good-quality, affordable housing available in a variety of shapes, sizes, and price points that will ensure an improved quality of life for residents.

*Workforce Housing*

- 8.1 Provide affordable housing to make Jackson County attractive for young workers.

*Housing Options*

- 8.2 Increase and diversify housing options throughout Jackson County.

*Age-Friendly Housing*

- 8.3 Provide more housing options for seniors.

**CHAPTER 9. AGRICULTURE AND NATURAL RESOURCES**

In coordination with Chapter 10, goals seek to maintain and improve the quality of agriculture and natural resources to enhance quality of life for residents.

*Soil Health and Water Quality*

9.1 Implement Jackson County Soil and Water Conservation District (SWCD) Five-Year Soil and Water Resources Conservation Plan’s priority goals for 2021-2025.

*Watershed Management*

9.2 Implement Maquoketa River Watershed Management Plan – Phase 1.

9.3 Implement Maquoketa River Watershed Management Plan – Phase 2 as a subwatershed action plan to guide local authorities and residents in putting Phase 1 into practice.

*Natural Resources Conservation*

9.4 Implement Jackson County Conservation’s 2023 Outdoor Recreation Plan.

**CHAPTER 10. PARKS, RECREATION, AND CULTURAL RESOURCES**

In coordination with Chapter 9, goals focus on improvements for county parks and recreation areas, as well as conservation and interpretation of cultural and natural resources, to enhance quality of life.

*Environmental Education*

10.1 Implement the 2023 Environmental Education Plan’s 5-Year Plan for programming.

*Outdoor Recreation and Conservation*

10.2 Implement the 2023 Outdoor Recreation Plan.

*Honor Cultural and Natural Resources*

10.3 Enhance quality of life through honoring arts and cultural events and natural resources in the region.

10.4 Promote celebration of the arts and cultural events.

10.5 Ensure cultural sustainability for the wellbeing of all.

10.6 Enhance access to natural excursion areas and recreational activities.

*Regional Collaboration*

10.7 Implement the updated Grant Wood Loop Master Plan’s Future Priorities.



**Education at Hurstville Lime Kilns**  
 Source: Jackson County Conservation

**CHAPTER 11. HAZARD MITIGATION**

Goals focus on mitigation, prevention, and preparedness to reduce potential losses and enhance quality of life.

**Mitigation**

11.1 Protect the health, safety and quality of life for Jackson County citizens while reducing or eliminating property losses, economic costs, and damage to the natural environment caused by a disaster.

**Prevention**

11.2 Ensure government operations, response and recovery in Jackson County are not significantly disrupted by disasters.

**Preparedness**

11.3 Expand public awareness and encourage intergovernmental cooperation, coordination and communication in Jackson County to build a more resilient community against all hazards.

**CHAPTER 12. LAND USE**

Goals seek to minimize conflicts between incompatible land uses, preserve key resources, and ensure that Jackson County can grow while keeping its rural character and quality of life for residents.

**Best Practice**

12.1 Keep Land Use Policy current with changing growth conditions in the region.

12.2 Ensure that cities are coordinating with each other for their best development.

**Preservation**

12.3 Preserve and protect viable land for agriculture.

12.4 Preserve and protect parks, open spaces, and natural resources.

**CHAPTER 13. INTERGOVERNMENTAL COLLABORATION**

Goals seek to improve and expand intergovernmental collaboration to build on Jackson County’s active community spirit and strong volunteerism to improve quality of life for residents.

**Build Local Capacity**

13.1 Build capacity of local governments, non-profits, and community organizations in Jackson County.

**Informal Collaboration**

13.2 Jackson County Economic Alliance (JCEA) collaborates with Jackson County, cities, schools, hospital, and service organizations.

**Youth Development**

13.3 Promote engagement and entrepreneurship among the county’s youth, including professional development opportunities for young workers.

**See CHAPTER 14. IMPLEMENTATION of this Comprehensive Plan for the implementation strategies for Chapters 4 through 13, including goals and objectives, potential sponsors and partners, timeframes, and related plans.**



# Chapter 2. Jackson County Snapshot

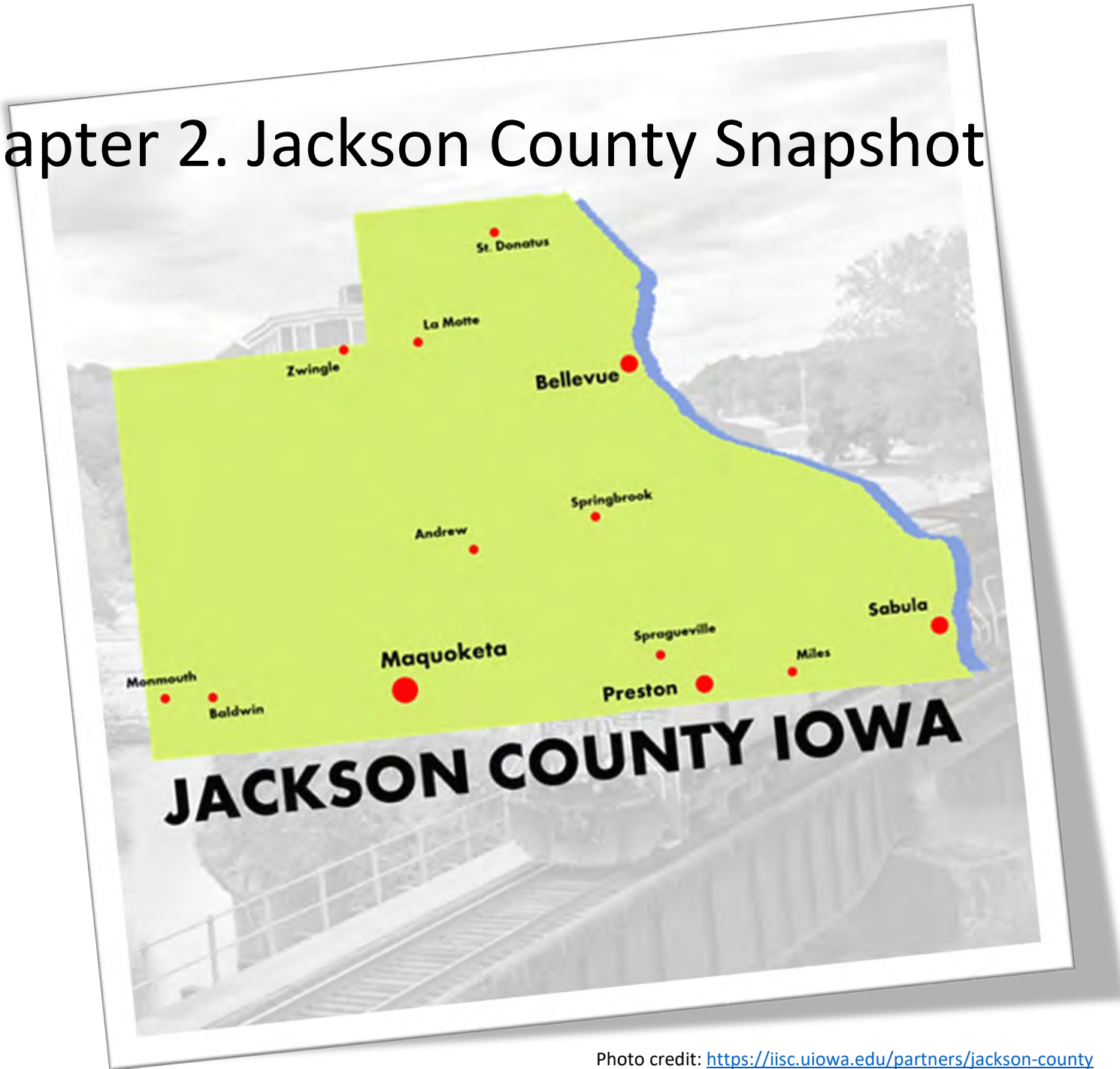


Photo credit: <https://iisc.uiowa.edu/partners/jackson-county>

2. JACKSON COUNTY SNAPSHOT

**GOVERNMENT SNAPSHOT**

The main forms of government in Jackson County are county, city, and township.

*Jackson County Government*

County governments are required to provide a number of functions which are mandated by the State of Iowa: election administration, social/human services, recording of documents and vital statistics, prosecution of state laws and county ordinances, licensing, jail administration, law enforcement, and road maintenance.<sup>1</sup>

Jackson County government operates under the Board of Supervisor form of government. The Board of Supervisors is the chief administrative body of county government. Full-time elected officials are the county Board of Supervisors, Sheriff, Recorder, Treasurer, Attorney, and Auditor. Other county offices include: Conservation, Community Service, Emergency Management, Engineer/Secondary Roads, Environmental Health, General

Assistance, Geographic Information System (GIS), Human Resources, Information Technology, Mental Health, Planning and Zoning, Veteran Affairs, and Waste Authority. For more information, see Chapter 4. Community Facilities and Services.

*City Governments*

An incorporated city is able to have its own elected officials, usually a mayor and city council. It also can make its own rules, with some exceptions under state law. An incorporated city often provides public services and amenities for its residents and businesses.

Population changes for incorporated cities based on the 2010 and 2020 U.S. Census data are shown in Table 2.1. The 13 incorporated cities in Jackson County comprised nearly 60% of the county’s population in 2020, a slight increase from 2010.

Unincorporated communities are governed by the Board of Supervisors.

**Table 2.1 Cities ranked by 2020 population**

City	2020	2010	Percent Change
Maquoketa	6,128	6,141	-0.2%
Bellevue	2,363	2,191	+7.9%
Preston	949	1,012	-6.2%
Sabula	506	576	-12.2%
Miles	408	445	-8.3%
Andrew	380	434	-12.4%
La Motte	237	260	-8.8%
Springbrook	143	144	-0.7%
Monmouth	129	153	-15.7%
St. Donatus	120	135	-11.1%
Baldwin	99	109	-9.2%
Spragueville	92	81	+13.6%
Zwingle*	84	91	-7.7%
<b>TOTAL</b>	<b>11,638</b>	<b>11,772</b>	<b>--1.1%</b>
<b>Percentage</b>	<b>59.7%</b>	<b>59.3%</b>	<b>+0.7</b>

*\*partially in Dubuque County*  
 Source: U.S. Census Bureau

Figure 2.1 is a map of incorporated cities and unincorporated communities in Jackson County.

<sup>1</sup> <http://publications.iowa.gov/135/1/local/6-1.html>

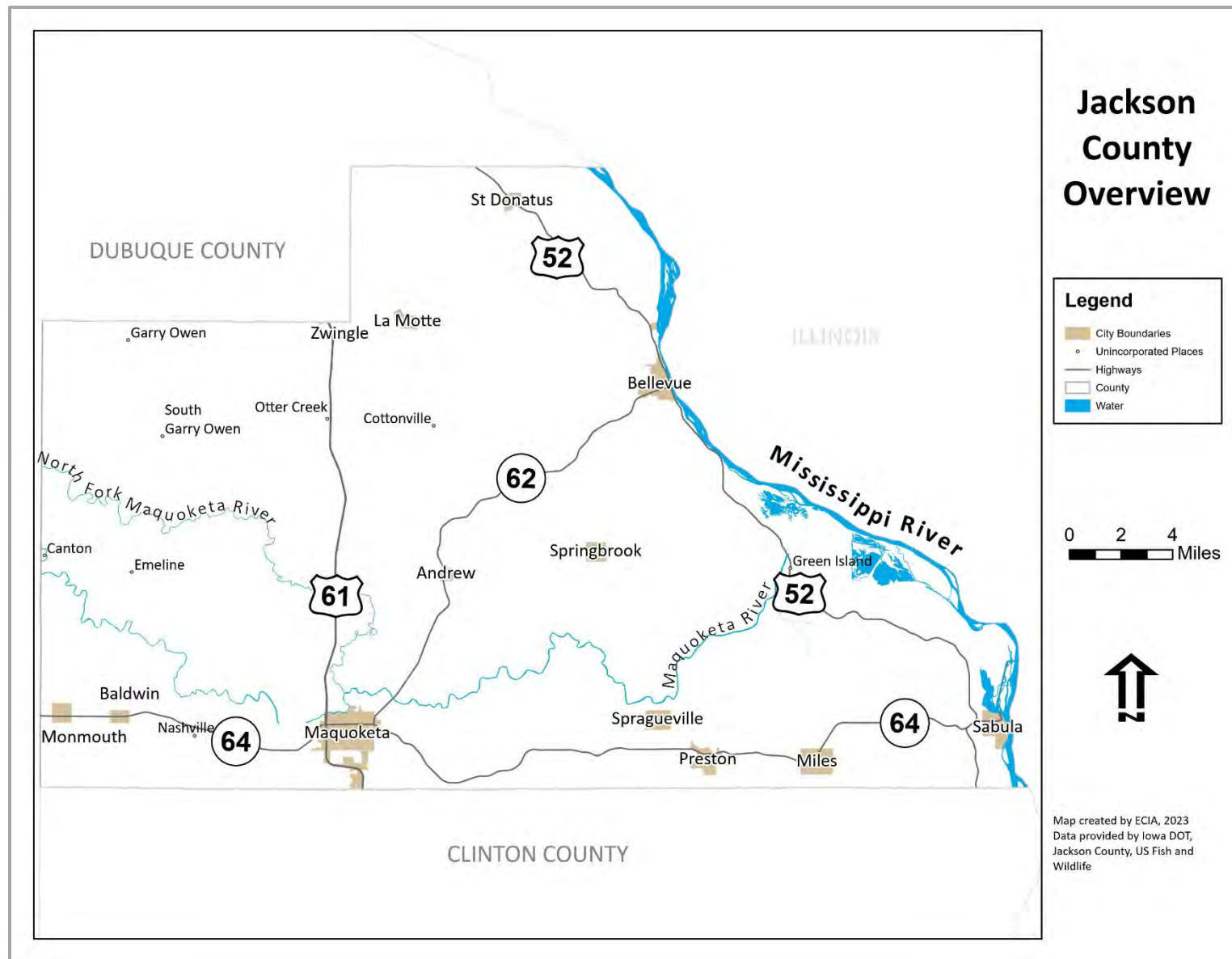


Figure 2.1 Map of Jackson County – Incorporated Cities and Unincorporated Communities

Source: ECIA, 2023

*Township Governments*

The 18 township governments within Jackson County are listed in Table 2.2. Their boundaries are shown in Figure 2.2. The primary duties of the township governments are to maintain cemeteries, provide fire protection, and mediate fence disputes. Each township government is composed of a clerk and three elected trustees.

Bellevue	Otter Creek
Brandon	Perry
Butler	Prairie Springs
Fairfield	Richland
Farmers Creek	South Fork
Iowa	Tetes des Mort
Jackson	Union
Maquoketa	Van Buren
Monmouth	Washington

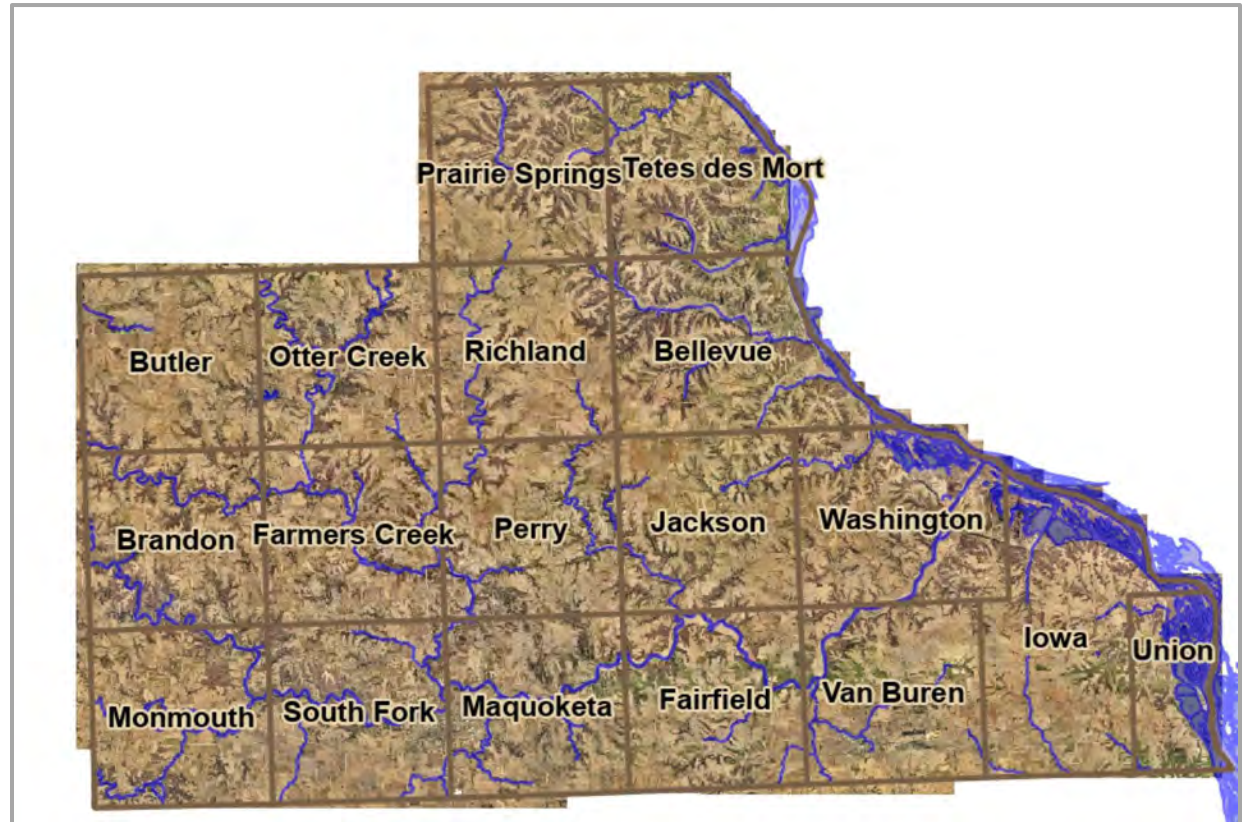


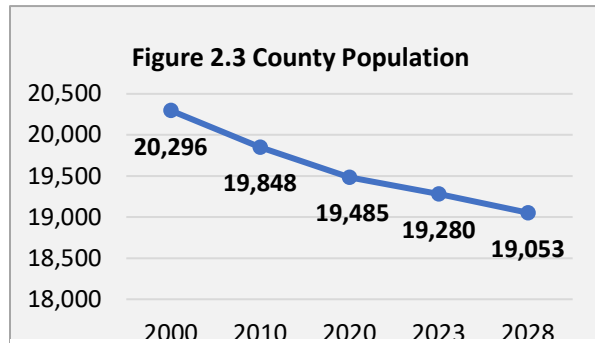
Figure 2.2 Map of Township Governments in Jackson County

Source: Jackson County Beacon GIS, 2023

2. JACKSON COUNTY SNAPSHOT

POPULATION SNAPSHOT

The population of Jackson County has been slowly declining since 2000 according to the U.S. Census Bureau. In 2023, the **estimated population** of Jackson County was 19,280. Estimated population for 2028 is 19,0053 (see Figure 2.3) according to the Jackson County Economic Alliance (JCEA) Community Profile.

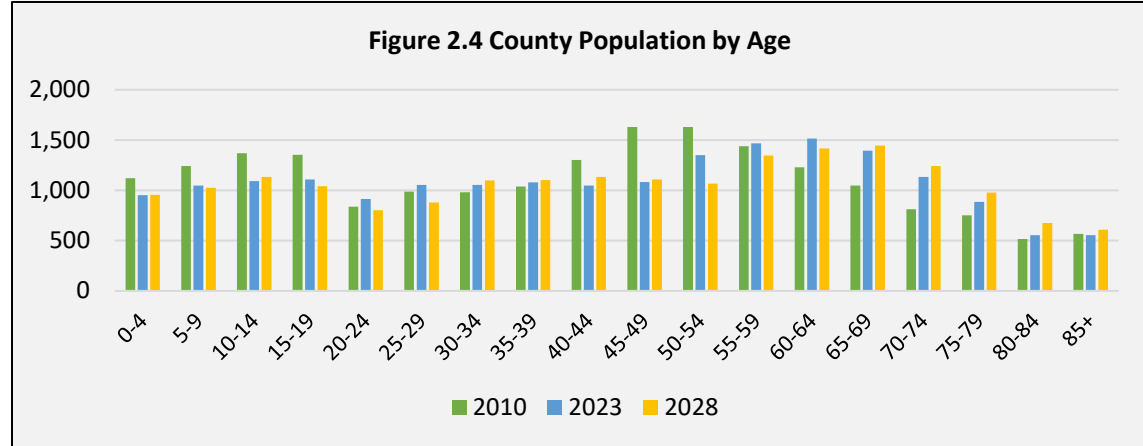


Source: JCEA, Feb. 2024

The **median age** is estimated to increase and the **population age 18+** is expected to decline by 2028 (see Table 2.3).

Year	Median Age	Population Age 18+
2010	44	15,243
2023	46	15,488
2028	47	15,276

Source: JCEA, Feb. 2024

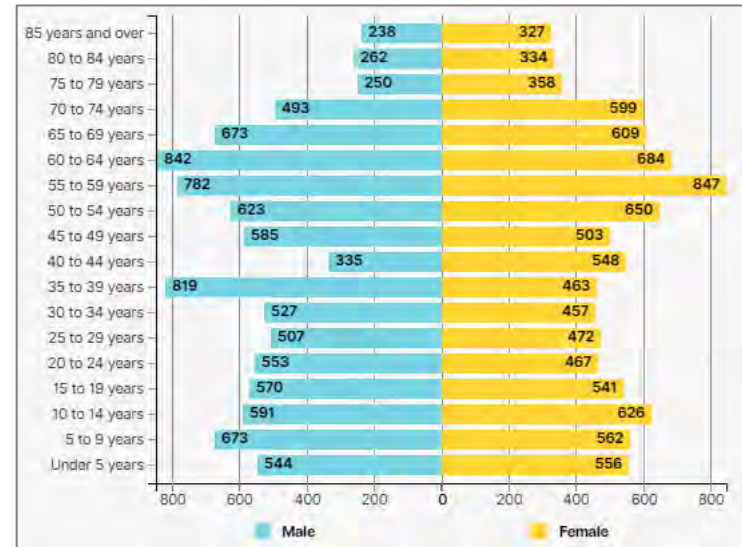


Source: JCEA, Feb. 2024

**Population age** in Jackson County is trending toward more people ages 30-39 and over the age of 60 by 2028 (see Figure 2.4).

Figure 2.5 is the county’s **population pyramid by age and gender**, based on the 2022 American Community Survey (ACS) 5-year estimates. In 2022, the county was 49.3% female and 50.7% male. The ACS is an ongoing survey by the U.S. Census Bureau of various characteristics of the U.S. population.

Figure 2.5 County Population Pyramid by Age and Gender



Source: 2022 ACS 5-Year Estimates

2. JACKSON COUNTY SNAPSHOT

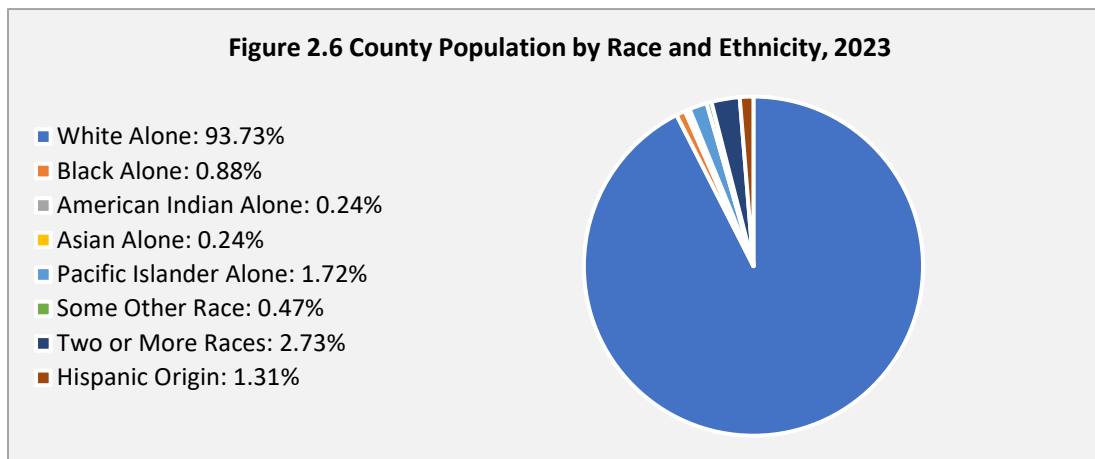
The **population race and ethnicity** in Jackson County in 2023 was 93.78% white race alone, 2.73% two or more races, and 1.31% Hispanic origin (see Figure 2.6). The Esri Diversity Index for Jackson County increased from 12.7 in 2022 to 14.3 in 2023.

Table 2.4 shows estimated **growth rates** for selected community characteristics of Jackson County from 2023 to 2028.

Population and the number of households and families are expected to decline slightly. Median household income and per capita income both are expected to increase by 3%. *Median household income* is the exact middle point in a list of incomes. *Per capita income* is the income earned by one person in a year.

Characteristic	Percent Change
Population	-0.24%
Households	-0.05%
Families	-0.15%
Median Household Income	3%
Per Capita Income	3%

Source: JCEA, Feb. 2024



Source: JCEA, Feb. 2024

“Esri’s definition of diversity is two-dimensional and combines racial diversity with ethnic diversity. This measure shows the likelihood that two persons, chosen at random from the same area, belong to different races or ethnic groups. If an area’s entire population belongs to one race group and one ethnic group, then an area has zero diversity. The Diversity Index is a continuum that ranges from 0 (no diversity) to 100 (complete diversity), where an area’s index tends toward 100 when the population is more evenly divided across race and ethnic groups. The 2012 US Diversity Index is 65.4.”

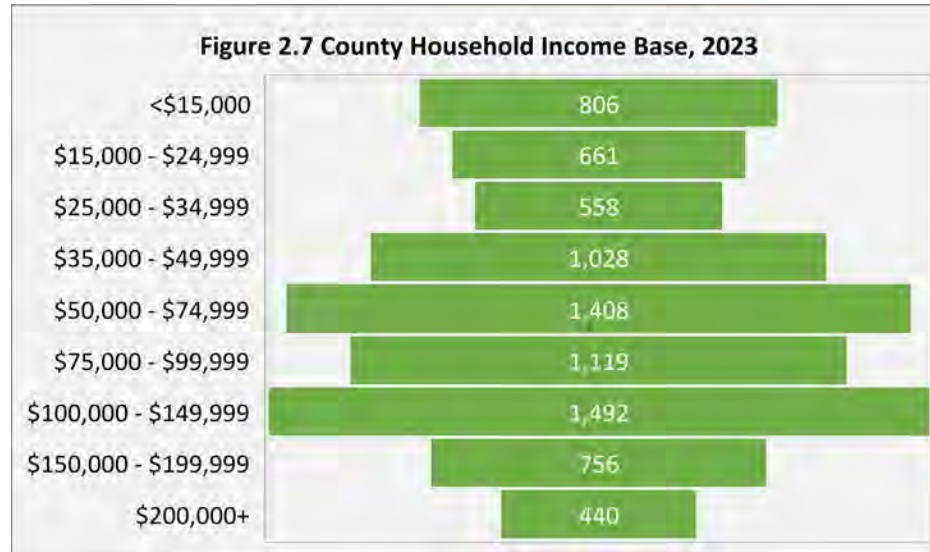
From **2021/2026 Esri Diversity Index**: Esri Methodology Statement, by Esri Data Development, June 2021.

2. JACKSON COUNTY SNAPSHOT

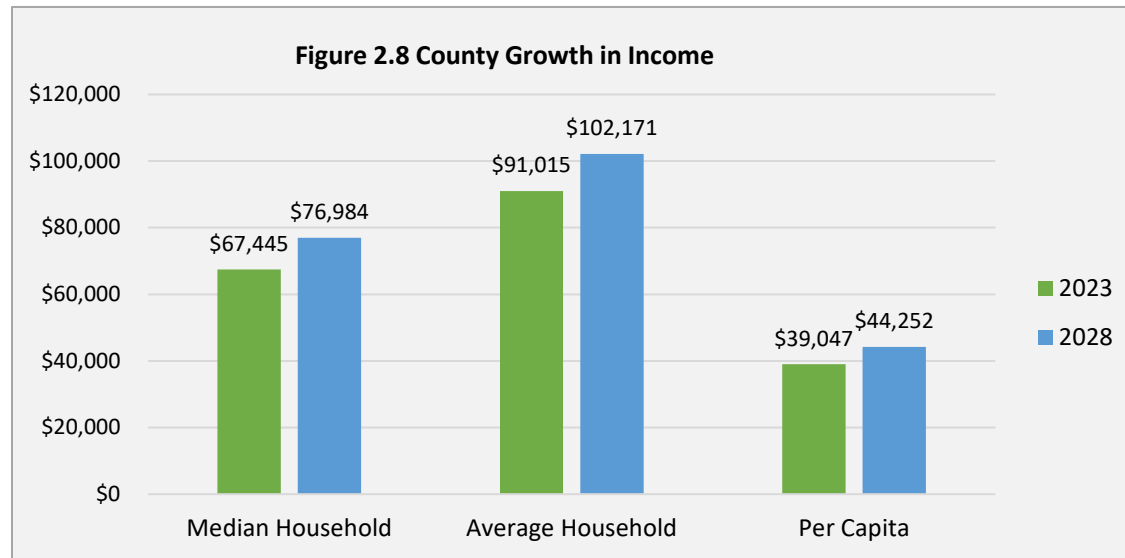
**INCOME SNAPSHOT**

For 2023, the estimated distribution of the county’s **household income base** is concentrated in the households with a base income between \$35,000 and \$149,999 (see Figure 2.7). These ranges represent 61% of households. Nearly 10% of households have a base income of less than \$15,000.

From 2023 to 2028, **growth in income** is expected for median household income, average household income, and per capita income in Jackson County (see Figure 2.8).



Source: JCEA, Feb. 2024



Source: JCEA, Feb. 2024

*Median household income* is the exact middle point in a list of incomes.

*Average household income* is the sum of all values in a list of incomes divided by the number of values.

*Per capita income* is the income earned by one person in a year.

2. JACKSON COUNTY SNAPSHOT

HOUSING SNAPSHOT

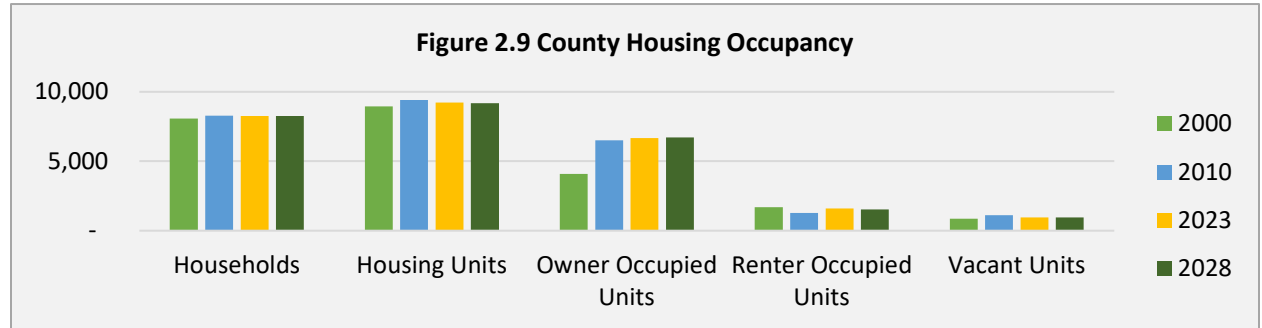
Figure 2.9 shows Jackson County **housing occupancy**. The 2023 housing estimates are 8,268 households and 9,230 housing units, with a slight decline to 8,249 households and 9,193 units by 2028. The 6,673 owner-occupied units in 2023 are estimated to increase to 6,711 in 2028. Renter occupied units are estimated to drop from 1,595 in 2023 to 1,538 in 2028. Vacant units are estimated to decrease from 962 in 2023 to 944 in 2028.

**Home values** in Jackson County are estimated to increase from 2023 to 2028 (see Table 2.5), with the median home value up by \$17,393 and average home value up by \$15,639.

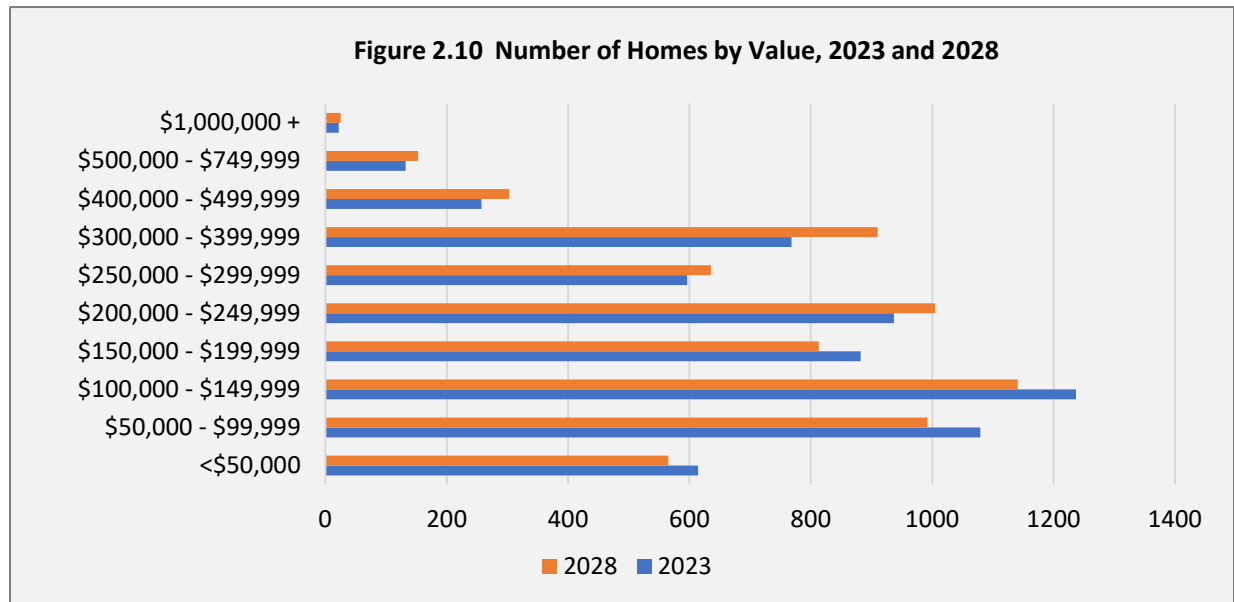
Home Value	2023	2028
Median	\$173,044	\$190,437
Average	\$227,641	\$243,280

Source: JCEA, Feb. 2024

Figure 2.10 shows homes with values of \$200,000 or more are estimated to increase in number from 2023 to 2028 in Jackson County. Homes valued under \$200,000 are estimated to decrease in number from 2023 to 2028.



Source: U.S. Census and JCEA, Feb. 2024



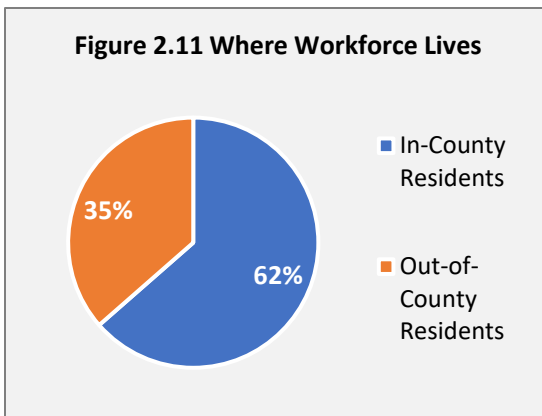
Source: JCEA, Feb. 2024



2. JACKSON COUNTY SNAPSHOT

**WORKFORCE SNAPSHOT**

The 2023 Jackson County workforce age 16 and older was estimated to be 9,255 people. **Where the workforce lives:** 62% are in-county residents and 35% are out-of-county residents (see Figure 2.11).



Source: JCEA, Feb. 2024

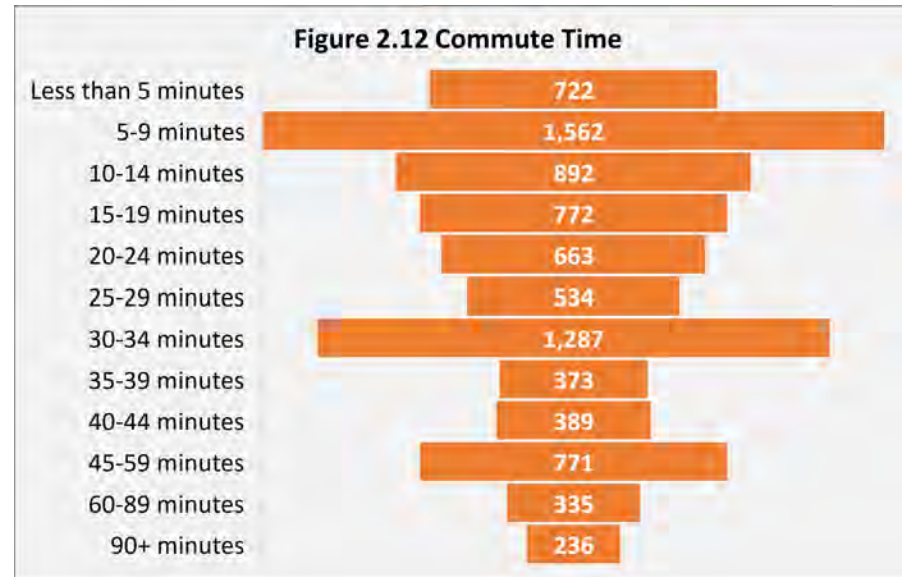
The **commute to work** is driving alone for most of the workforce (see Table 2.6).

Commute Mode	Number	Percent
Drive Alone	7,756	85.6%
Carpooled	561	6.2%
Public Transport	26	0.3%
Work at Home	719	7.9%

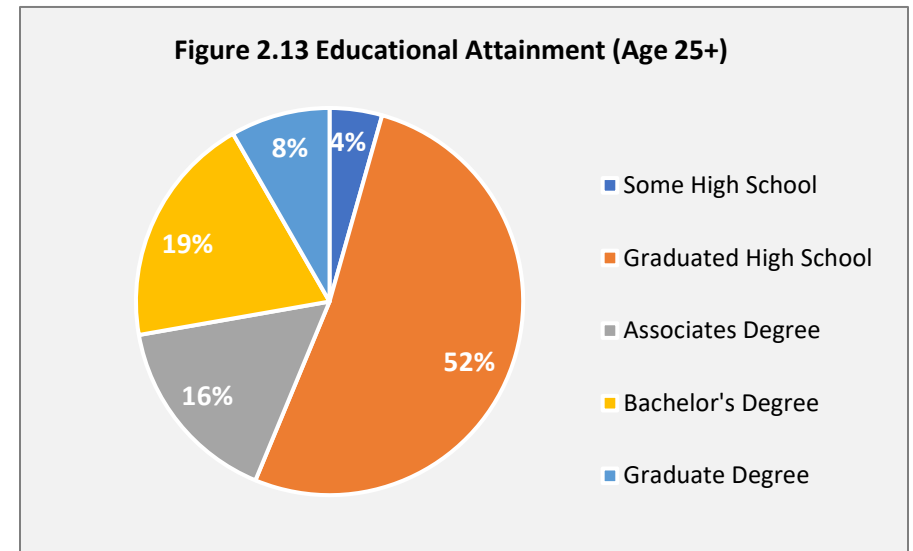
Source: JCEA, Feb. 2023

Figure 2.12 shows 54% of the workforce has a **commute time** that is under 25 minutes, and 75% commute in under 35 minutes. The average travel time is 25 minutes.

The **educational level attained** for 52% of people age 25 and older in Jackson County is graduation from high school (see Figure 2.13). Another 44% age 25+ have attained an advanced degree. Only 4% have not graduated high school.



Source: JCEA, Feb. 2024

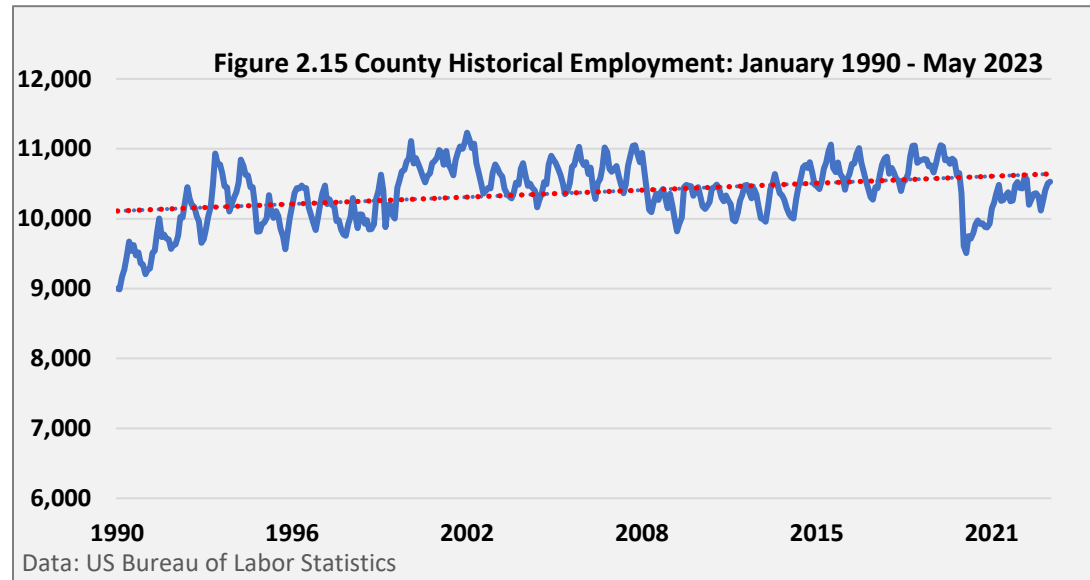
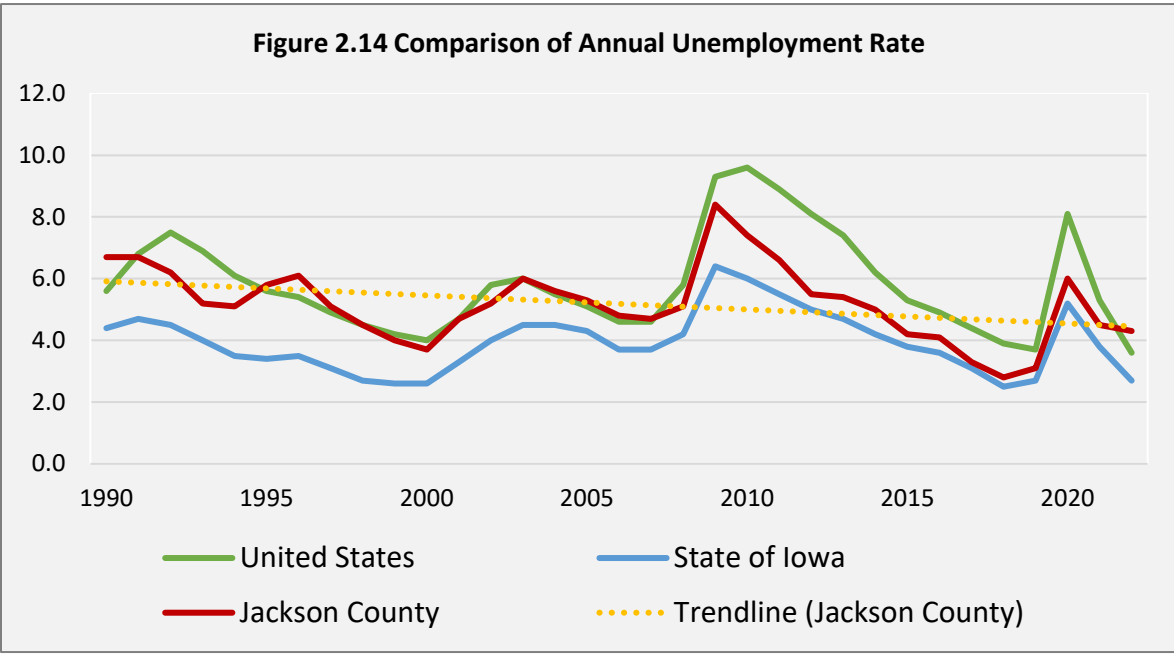


Source: JCEA, Feb. 2024

2. JACKSON COUNTY SNAPSHOT

The **annual unemployment rate** of Jackson County, the State of Iowa, and the United States from 1990 to 2020 is shown in Figure 2.14 using data from the U.S. Census Bureau. Jackson County’s rate usually was above the state rate but below the national rate. The trendline for Jackson County reflects a slight decline in the unemployment rate. The county’s average was 5.2% for this time frame.

According to the U.S. Bureau of Labor Statistics, **historical employment** for Jackson County has remained fairly steady from January 1990 to May 2023 as shown in Figure 2.15. (Note: this data was not seasonally adjusted.) The trendline shows a slight increase in employment. The county’s average was 10,375 workers for this time frame.



“Seasonal adjustment is a statistical technique that attempts to measure and remove the influences of predictable seasonal patterns to reveal how employment and unemployment change from month to month. Seasonally adjusted data are useful when comparing several months of data. Annual average estimates are calculated from the not seasonally adjusted data series.” Source: U.S. Bureau of Labor Statistics (BLS) at <https://www.bls.gov/cps/seasfaq.htm>

**BUSINESS ECONOMY SNAPSHOT**

According to the US Census Bureau, the North American Industry Classification System (NAICS, pronounced Nakes) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

Table 2.7 shows **County businesses and employment** in Jackson County in 2023.

Of the 879 businesses, the top three by number were: 1. Other Services, 2. Retail Trade, and 3. Public Administration. Together, these 320 businesses made up 36% of the total.

Of the 7,032 total employees, the top three categories by employment were: 1. Retail Trade, 2. Health Care and Social Assistance, and 3. Education Services. These three categories are 41% of the total with 2,905 employees.

For more information about NAICS, visit <https://www.census.gov/naics/>

<b>NAICS Business Category</b>	<b>Number</b>	<b>Employees</b>
Agriculture, Forestry, Fishing, and Hunting	36	69
Mining, Quarrying, and Oil and Gas Extraction	1	1
Utilities	4	42
Construction	64	211
Manufacturing	30	581
Wholesale Trade	40	489
Retail Trade	109	1,041
Transportation and Warehousing	27	138
Information	19	113
Finance and Insurance	46	393
Real Estate and Rental and Leasing	25	173
Professional, Scientific, and Technical Services	51	164
Legal Services	13	34
Management of Companies and Enterprises	1	30
Administrative, Support, Waste Management, Remediation	13	29
Educational Services	23	882
Health Care and Social Assistance	65	982
Arts, Entertainment, and Recreation	17	130
Accommodation and Food Services	56	475
Other Services (except Public Administration)	137	410
Auto Repair and Maintenance	28	73
Public Administration	74	572
<b>TOTAL</b>	<b>879</b>	<b>7,032</b>
Source: JCEA, Feb. 2024		

2. JACKSON COUNTY SNAPSHOT

**AGRICULTURAL ECONOMY SNAPSHOT**

The USDA’s National Agricultural Statistics Service, Upper Midwest Regional Office in Des Moines, Iowa collaborated with the Iowa Department of Agriculture and Land Stewardship and the Iowa Farm Bureau to produce the 2023 Iowa Agricultural Statistics in October 2023. It provides a statistical profile of Iowa agriculture at the state and county levels. Learn more at [https://www.nass.usda.gov/Statistics by State/index.php](https://www.nass.usda.gov/Statistics_by_State/index.php)

This 2023 USDA report provides recent updates to some data in the 2017 Census of Agriculture for Jackson County.

Table 2.8 shows the 2022 crops acreage, yield, and production of corn, soybeans, and oats in Jackson County. Also shown are the rankings for Jackson County and Iowa.

	Area planted (acres)	Area harvested (acres)	Yield per acre (bushels/acre)	Production (bushels)	County Rank in Iowa	Iowa’s Rank in USA
<b>Corn for grain</b>	114,500	111,300	219.2	24,397,000	56	1
<b>Soybeans</b>	59,000	58,600	66.3	3,887,000	81	2
<b>Oats</b>	2,700	460	64.8	29,800	17	7

Source: USDA 2023 Iowa Agricultural Statistics

Table 2.9 shows the number of head of cattle in Jackson County as of Jan. 1, 2023. Also shown are the rankings for Jackson County and Iowa.

	Number of head	County Rank in Iowa	Iowa’s Rank in USA
<b>All cattle and calves</b>	90,000	6	7
<b>Beef cows</b>	22,000	2	12
<b>Milk cows</b>	4,900	11	12

Source: USDA 2023 Iowa Agricultural Statistics

Table 2.10 shows cash rents per rented acre for non-irrigated cropland and pasture in 2022 and 2023 in Jackson County and Iowa.

	Non-irrigated cropland		Pasture	
	2022	2023	2022	2023
<b>Jackson County</b>	242.00	256.00	-	45.50
<b>Iowa</b>	256.00	269.00	59.50	60.50

Source: USDA 2023 Iowa Agricultural Statistics

Table 2.11 shows average dollar value per acre for farmland in Iowa and Jackson County based on U.S. Census of Agriculture estimates and 2022 and 2023 Iowa Land Value Surveys conducted by the Center for Agriculture and Rural Development, Iowa State University (ISU), and ISU Extension and Outreach.

	2022	2023	% Change
<b>Jackson County</b>	\$11,100	\$11,158	0.5%
<b>Iowa</b>	\$11,411	\$11,835	3.7%

Source: 2023 Iowa State Land Value Survey  
<https://www.card.iastate.edu/farmland/isu-survey/2023/>

# Chapter 3. Public Participation



**YOUR IDEAS**  
*are Important*

**SHAPE THE FUTURE OF JACKSON COUNTY**

- QUALITY OF LIFE**  
How do you rate your quality of life? How can it be improved?
- LIVE, WORK, PLAY**  
How do you rate the places where you live, work, play? How can they be improved?
- WHAT'S YOUR VISION?**  
Vision is not just seeing what's here, it's seeing what can be in the future.

**TAKE THE SURVEY!**



<https://www.surveymonkey.com/r/3DVXLLV>

The flyer features a background image of a rural landscape with rolling green hills and a small town. Three polaroid-style photos are overlaid: one showing a town by a lake, one showing a person hiking through a cave opening, and one showing a sunset over a field.

Marketing Flyer for Community Survey

Source: ECIA



**Jackson County Comprehensive Plan**

**Do You Share this Future Vision?**

Jackson County is an engaging community, enthusiastically creating opportunity, supporting growth, and enhancing quality of life for all who live, work, and visit.



**Let us know!**



[https://eciatrans.org/jackson\\_county\\_comprehensive\\_plan.php](https://eciatrans.org/jackson_county_comprehensive_plan.php)

The flyer features a background image of a rural landscape with rolling green hills and a small town. Three polaroid-style photos are overlaid: one showing a group of people sitting in a field, one showing a group of people sitting around a table, and one showing a person hiking through a cave opening.

Shared Vision Flyer for Community Outreach

Source: ECIA

**OVERVIEW**

One of the primary objectives of the Jackson County Comprehensive Plan is to bring people together to build a community consensus around a vision for the future. To achieve this objective, a

transparent and inclusive planning process was developed to provide diverse interests with the opportunity to create a shared vision for Jackson County and identify broad goals and future priorities.

This chapter outlines the comprehensive planning process, describes community outreach efforts, and analyzes community input collected through this process. Table 3.1 shows the planning process and project schedule.

<b>Table 3.1 Jackson County Comprehensive Plan: Planning Process and Project Schedule</b>		
<b>TASKS</b>	<b>FREQUENCY</b>	<b>TIMEFRAME</b>
<b>1. Project Management</b>		
a. County Zoning and ECIA Team Meetings: project planning	Monthly	July 2023 – June 2024
b. Zoning Commission public meetings: updates	Monthly	July 2023 – June 2024
c. Board of Supervisors public meetings: updates and direction	Monthly	July 2023 – June 2024
<b>2. Community Data Analysis</b>		
a. Review of existing county plans & policies	Ongoing	July 2023 – January 2024
b. ECIA Team: Analysis of Federal, state, regional, and county data	Ongoing	July 2023 – January 2024
<b>3. Draft Plan Chapters and Maps</b>		
a. County Zoning and ECIA Team: Develop draft chapters and maps	Ongoing	August 2023 – February 2024
b. Zoning Commission public meetings to review drafts	Monthly	July 2023 – January 2024
<b>4. Public Engagement</b>		
a. Project Website	Ongoing	July 2023 – December 2024
b. Community Survey: develop, distribute, analyze input	Ongoing	July 2023 – January 2024
c. Steering Committee public meetings	Three	October 2023, January and March 2024
d. Community Outreach	Ongoing	July 2023 – June 2024
<b>5. Finalize Draft Plan</b>		
a. Publish and post draft plan	30-60 days	February – March 2024
b. Public comment period (minimum 30 days)	30-60 days	February – March 2024
c. Zoning Commission public meeting: Finalize draft plan	30 days	April 2024
<b>6. Plan Adoption</b>		
a. Zoning Commission: Public Hearing and Recommendation	30 days	May 2024
b. Board of Supervisors: Public Hearing & Plan Adoption	30-60 days	May – June 2024

**PLANNING PROCESS: KEY PLAYERS**

Below is a summary of the roles of the key players in the planning process.

***Jackson County Zoning Department***

The Zoning Department served as the county’s Project Manager and primary point of contact with East Central Intergovernmental Association (ECIA). ECIA staff met with the Zoning Department throughout the planning process to plan and prepare for meetings, workshops, and public input; to review draft documents and survey results; and to provide direct input on the contents of the comprehensive plan.

***Comprehensive Plan Steering Committee***

The Board of Supervisors appointed a 17-member Comprehensive Plan Steering Committee representing a wide spectrum of stakeholder groups with a variety of skill sets and perspectives. The Steering Committee met three times with the Zoning Department and ECIA staff to identify the county’s strengths, challenges, issues, and opportunities; draft a vision for the future of Jackson county; and identify broad goals and future priorities to realize that vision.

***Jackson County Zoning Commission***

The Zoning Commission met with the Zoning Department and ECIA staff throughout the planning process to give direction on public participation efforts; to review draft documents, Steering Committee input, and survey results; and to provide direct input on the contents of the comprehensive plan. Under Iowa Code, the Zoning Commission’s role is to hold a public hearing on the final draft of the comprehensive plan, and then recommend the plan’s adoption to the Board of Supervisors.

***Jackson County Board of Supervisors***

The Board of Supervisors contracted with ECIA to prepare the comprehensive plan. During the planning process, the Zoning Department provided project updates and sought direction from the Board of Supervisors. Under Iowa Code, after receiving the Zoning Commission’s recommendation, the role of the Board of Supervisors is to hold a public hearing, and then adopt a final version of the comprehensive plan.



**Zoning Department and ECIA staff working with Steering Committee members**

*Photo Credit: Jackson County Zoning Department*

***East Central Intergovernmental Association (ECIA)***

ECIA is a regional council of governments that serves five counties in Northeast Iowa in six broad categories: Community Development, Economic Development, Housing Assistance, Special Programs, Transit, and Transportation and Planning.

**PLANNING PROCESS: PUBLIC OUTREACH**

The process of listening to the community is critical to identifying important issues and building consensus around plans for the future. Below are descriptions of the key outreach components of the planning process.

***Communitywide Outreach***

The planning process emphasized meeting people where they are, such as community events, and encouraging stakeholders, such as City Councils, Steering Committee members, and community groups, to help get the public engaged in the planning process, returning surveys, sharing ideas, etc.

The County Zoning Department made approximately 1,000 direct contacts and numerous indirect contacts through extensive community outreach from July-November 2023 in a variety of settings and formats:

- Shared information with Jackson County employees, cities, and local groups to post on their Facebook pages and websites.

- Shared information with service agencies, food banks, childcare centers, local businesses, high school students, non-profits, and community groups (300+/- contacts).
- Shared information at the Jackson County Fair’s parade, booths, and talent show (200+ contacts).
- Set up community survey stations at the County Courthouse and the Hurstville Interpretive Center.
- Attended City Council meetings in Andrew, Bellevue, LaMotte, Maquoketa, Miles, Preston, Sabula, Spragueville, and Springbrook (86 contacts).
- Shared information at local events, including Music on the Green in Maquoketa (200+/- contacts) and "Unwrap the Magic" vendor show in Bellevue (100+/- contacts).
- Shared information during KMAQ Radio’s “Just Talk” program in July, August, and October 2023.

- Shared media releases and project flyers in July and October 2023, and in March and May 2024.

***Public Meetings***

The Zoning Commission held work sessions on the comprehensive plan during their monthly meetings from July 2023 to April 2024 at the County Courthouse. Notices of these public meetings were posted on the Jackson County website and at the Courthouse. The meetings also were available via Zoom, offering video and audio connections for the general public.

Updates on the comprehensive planning process were provided by the Zoning Administrator to the Board of Supervisors at their public meetings at the County Courthouse. Board meetings have similar posting requirements, and also are available via Zoom.

Meetings of the Steering Committee were held as public meetings at the Courthouse, with the same posting of notices as for the Zoning Commission meetings. Committee meetings also were available via Zoom.



**ECIA Project Website**

In July 2023, ECIA began hosting a project website for transparent information sharing and to collect public input at [https://eciatrans.org/jackson\\_county\\_comprehensive\\_plan.php](https://eciatrans.org/jackson_county_comprehensive_plan.php). The project website describes what a comprehensive plan is, why everyone’s ideas are important, how to share ideas, and where to find out more. The project website has a **Your Ideas** page and a **Community Survey** link where people can share what they want the future of Jackson County to be. Figure 3.1 shows the project website’s home page.

By May 17, 2024, the project website had 510 views by 298 users with an average of 1.71 views per user and an average engagement time of 19 seconds. The project website will remain for six months after adoption of the plan.

**ECIA Facebook Page**

ECIA maintains a Facebook page to share information about regional events, plans, and programs. Information about the comprehensive plan was posted in December 2023 and March and May 2024.

**Public Open House**

A public open house was held on October 23, 2023 at the County Courthouse to share information about the comprehensive plan and survey; to gather input about Jackson County’s strengths, challenges, issues, and opportunities; and to gather ideas for a shared vision, broad goals, and future priorities. Only three county residents attended the public open house.

**Public Hearings**

Under Iowa Code, a public hearing must be held by the Zoning Commission to recommend a comprehensive plan to the Board of Supervisors. Upon receiving the Commission’s recommendation, the Board of Supervisors then holds a public hearing to consider adoption of the plan. Legal notices for both public hearings must be published in the local newspapers serving Jackson County.



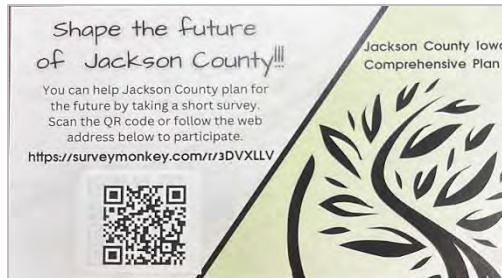
Figure 3.1 ECIA Project Website for Jackson County Comprehensive Plan

**Community Survey**

ECIA worked with the County Zoning staff to develop a community survey, create promotional items, generate weekly reports, provide monthly highlights, and prepare an analysis. The survey was available in July 2023 in hard copy and at <https://www.surveymonkey.com/r/3DVXLLV>. From July 24, 2023 to May 17, 2024, 463 surveys were submitted with an 81% completion rate. Figure 3.2 shows the survey responses by week (beginning on Sundays). A Community Survey Analysis is found later in this chapter.

**Community Survey Business Card**

In July 2023, the County Zoning staff created a business card to promote the community survey. By January 2024, they had distributed 840 cards.



**Community Survey Business Card**

Source: Jackson County Zoning Department

**Community Survey Highlights: Top Fives**

**Top 5 Qualities of Jackson County:**

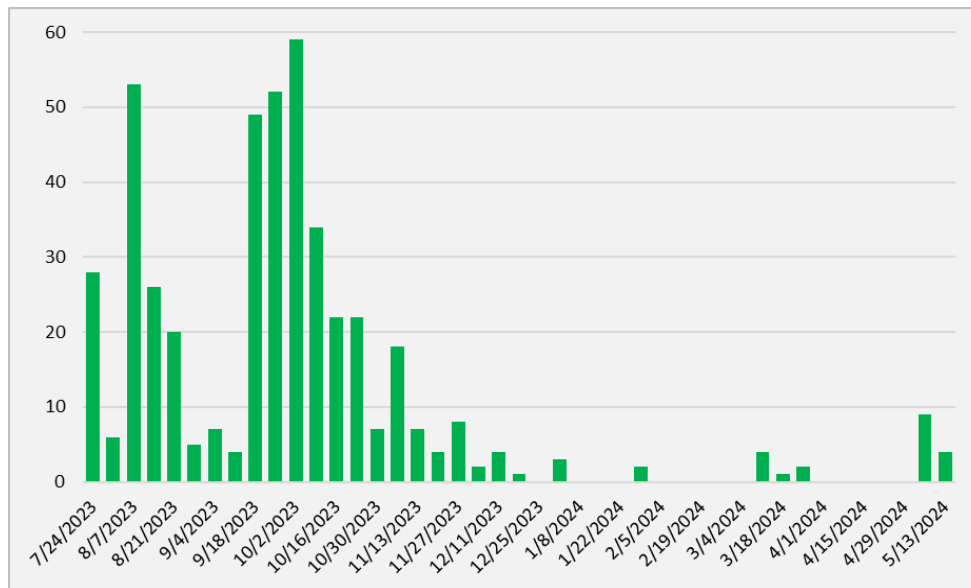
1. Convenient location – highway access
2. Recreation – state and county parks, trails, rivers, forests
3. Rural agricultural character
4. Safe place to live
5. Locally owned and operated shops and restaurants

**Top 5 Concerns for Jackson County:**

1. Employment opportunities
2. Properties are not attractive, clean, and well maintained
3. Housing is not affordable, safe, and decent
4. Does not welcome residents with racial and ethnic diversity
5. Healthy, affordable food is not easy to get everywhere

**Top 5 Growth & Development Priorities:**

1. Improve the quality of life for current and future residents
2. Promote economic development within and around cities
3. Preserve and protect viable land for agriculture
4. Encourage healthy, active living for all residents
5. Retain and expand local businesses and jobs



**VISION, BROAD GOALS, AND PRIORITIES**

A comprehensive plan presents a shared vision for the future, with long-range community goals. With a shared vision everyone has a common destination and common goals. People then can work together as a team, supporting and encouraging each other to reach community goals.

The role of the Comprehensive Plan Steering Committee was to focus on a shared vision with broad goals and priorities for the future of Jackson County.

The Steering Committee’s first public meeting was on October 10, 2023. After reviewing Jackson County data and early community survey results, Committee members identified Jackson County’s strengths, challenges, issues, and opportunities. Then, Committee members placed dots next to their top 3 to 5 items in each of the four categories.

Committee members who were not able to attend the meeting, and participants at the public open house, also voted with dots for their top 3 to 5 items in the four categories. The dots represented “votes” and helped identify the initial priorities.

At their second public meeting on January 30, 2024, Steering Committee members reviewed an analysis of the most important strengths, challenges, issues, and opportunities. Votes for the most important items in each category ranged from 15 to 0. The votes were divided into three levels: High (11-15), Medium (6-10), and Low (0-5).

In analyzing these votes in High, Medium, and Low levels, three major themes emerged: Business, Workforce; Housing; and Recreation, Resources, Amenities. Based on these themes, the Steering Committee recommended a shared vision with broad goals and priorities.



**ECIA staff working with Steering Committee to identify County’s strengths, challenges, issues, and opportunities** Photo Credit: Jackson County

**Shared Vision:** Jackson County is an engaging community, enthusiastically creating opportunity, supporting growth, and enhancing quality of life for all who live, work, and visit.

**Broad Goals and Priorities:**

- ✓ Rural quality of life and safe communities that compete well with larger cities
- ✓ Recreational opportunities, historic sites, natural resources, unique amenities, and river access points
- ✓ Business retention, expansion, and recruitment
- ✓ Available, trained workforce of professionals, skilled trades, and labor in general
- ✓ Locally owned and operated shops and restaurants engaged in their communities
- ✓ Quality, affordable, and accessible housing options and pathways, especially for underserved populations
- ✓ Affordable childcare available countywide
- ✓ Strong volunteerism

Figure 3.2 shows the analysis of the most important strengths, challenges, issues and opportunities, and the three major themes.

Votes for the items in each category ranged from 15 to 0. The votes were divided into three levels: High (11-15), Medium (6-10), and Low (0-5). The top-rated themes are as follows.

1. Business, Workforce (purple text) rated four High and four Low items, with 59 total votes.
2. Housing (red text) – rated two High, two Medium, and two Low items, with 45 total votes.

3. Recreation, Resources, Amenities (green text) – rated two High items and 1 Medium item, with 36 total votes.

The Steering Committee’s third public meeting was held on March 11, 2024. At

**Table 3.2 Analysis of Most Important Strengths, Challenges, Issues, and Opportunities**

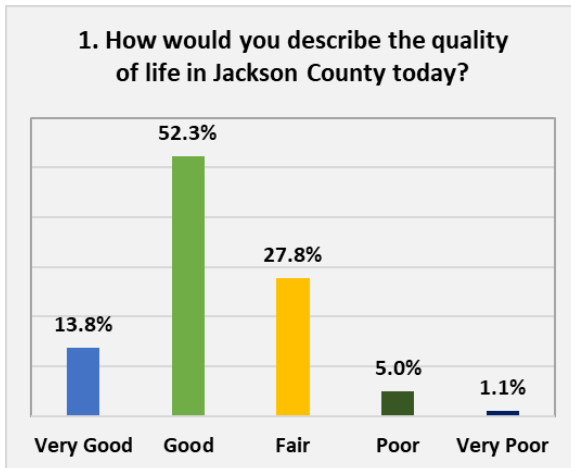
VOTES	STRENGTHS	CHALLENGES	ISSUES	OPPORTUNITIES
HIGH 11-15	Quality of life - 15	Harder to find professionals, skilled trades, and labor in general - 14	Lack of available, trained workforce - 14	Business retention, expansion, and recruitment - 13
	Recreation – Natural Resources - Unique Amenities – River Access - 15	Affordable childcare (county wide) - 13	Lack of affordable, quality housing for renters and young professionals (including buyers) - 14	Preservation of historic and natural resources - 12
	Safe place to live - 12	Quality affordable housing for all (Bellevue landlocked) - 11	Competition from larger cities (Dubuque, Quad Cities) - 11	
	Strong volunteerism - 11			
	Locally owned and operated shops and restaurants (community engagement) – 11			
MEDIUM 6-10	Strong school districts/education system – 7	Lack of development space to build - 9	Aging and decreasing population – 10	Marketing/growing recreational opportunities - 9
	Rural agricultural character – 6	Conditions of properties - 6	Operation and maintenance of roads and bridges - 8	Aggressive housing strategies – 8
			Public health and mental health issues – 8	Community cooperation - 7
			Awareness of/addressing low-income population – 6	Program to transition renters to buyers - 6
LOW 0-5	Low cost of living (competitive) – 3	Conditions of roads, streets, and bridges - 5	Business and Family Farm succession – 4	Public/private partnership – 5
	Convenient location – highway access – 2	Economic conditions – 4	Funding market-rate housing – 4	Non-profit organizations - 4 [Community Foundation]
	Low taxes (compared to metros) – 2	Growing class sizes/school consolidation – 2	Lack of programs created to keep/train workforce locally – 1	Federal, state, regional partnerships - 3
	Cooperation – 1	Lack of infrastructure capacity – 1	Lack of younger generations getting involved – 1	More senior housing – 2
	Smaller class sizes – 1	Quality of school buildings - 1	Focus on the arts as a destination - 1	Building improvement assistance (Bellevue businesses) – 1
	New healthcare facility with growing services - 1	Quality of schools - 1		Entrepreneurial opportunities with Innovate 120 - 1
	Open access to government - 0	Rising development costs – 0		Welcoming new residents – 1
				Growing the next generation of businesses/small business supports - 1
<b>Business, Workforce: 4 High, 4 Low (59) Housing: 2 High, 2 Medium, 2 Low (45) Recreation, Resources, Amenities: 2 High, 1 Medium (36)</b>				

this meeting, the Steering Committee finalized their recommendations for an Implementation Strategy for the Comprehensive Plan. This strategy is in Chapter 14. Implementation of this plan.

**COMMUNITY SURVEY ANALYSIS**

The community survey was 33 questions divided into nine major sections. There were eight open-ended questions for comments. The following charts reflect the question number. A total of 463 community surveys were submitted from July 24, 2023 to May 17, 2024. A total of 1,596 comments were received for the open-ended questions.

*(Where Jackson County demographic data is available to compare with the survey responses, it is shown in italics. Sources include: 2020 U.S. Census, 2022 American Community Survey 5-year estimates, and 2023 Jackson County Economic Alliance (JCEA) estimates.)*



**Quality of Life**

**Question 1.** Two-thirds rated quality of life as Very Good or Good.

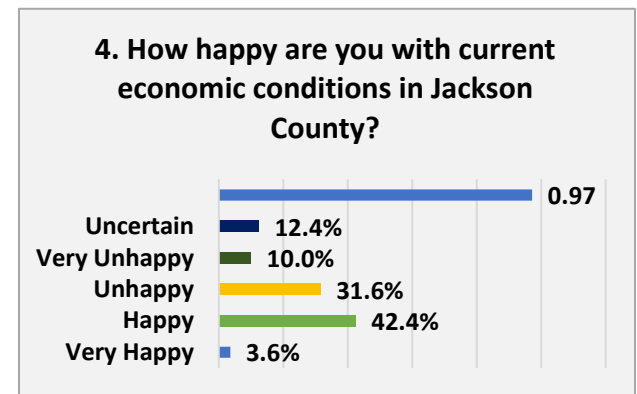
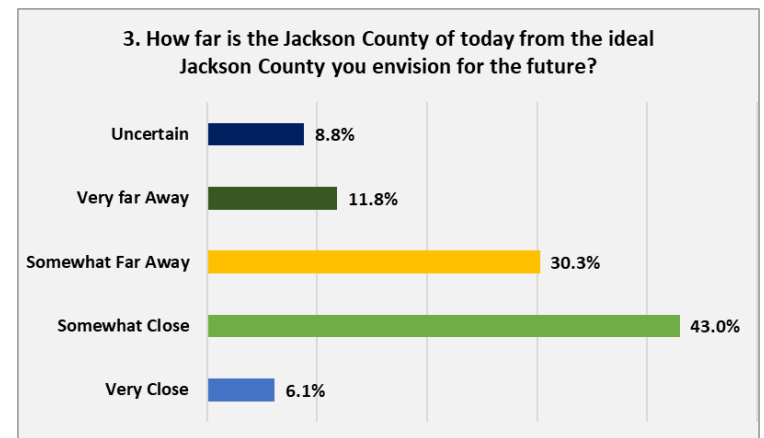
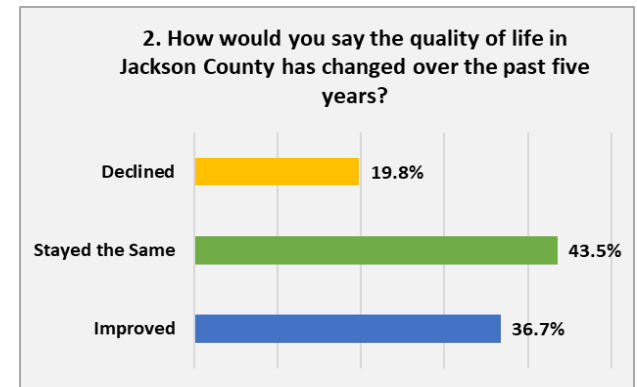
**Question 2.** While nearly 20% felt the quality of life has declined over the past five years, 37% felt it has improved.

**Question 3.** When asked how far Jackson County is from what respondents envision for the future: 49% felt it was Very Close or Somewhat Close, and 42% felt it was Somewhat Far Away or Very Far Away.

**Question 4.** When asked about current economic conditions, 46% Very Happy or Happy, and 41% Unhappy or Very Unhappy.

**Question 5** asked: “Please provide us with two or three ways the quality of life in Jackson County might be improved.” *The 365 comments received to this question are in the Appendix.*

**Question 6** asked: “Please provide us with two or three reasons you decided on Jackson County as a place to live.” *The 374 comments received to this question are in the Appendix.*



*Jackson County at Present*

**Question 7** asked people to indicate how much they agreed or disagreed with the following series of statements.

<b>7. Jackson County stands out when compared to other Iowa counties because.....</b>
properties are attractive, clean, and well maintained
it is a safe place to live
of its rural agricultural character
of its convenient location – highway access
of its recreation – state and county parks, trails, rivers, forests
it has good schools
it has access to community colleges and higher education
of its locally owned and operated shops and restaurants
it welcomes residents with racial and ethnic diversity
it has family/kid friendly activities
it has good health care and facilities
it is culturally vibrant—interpretive centers, museums, historic sites, art and music venues
of its employment opportunities
housing is affordable, safe, and decent
healthy, affordable food is easy to get everywhere

Respondents agreed or strongly agreed that Jackson County’s **top five qualities** were:

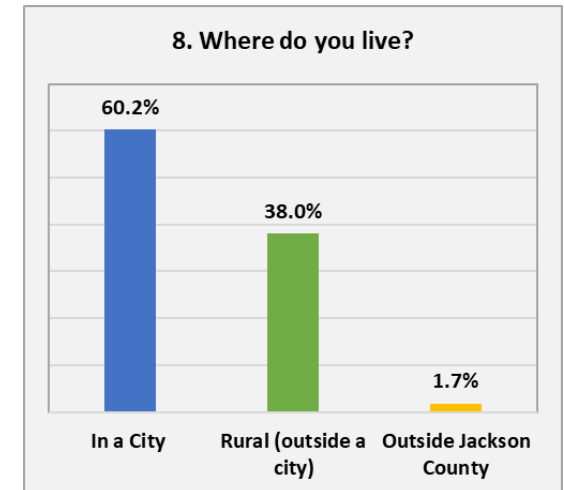
1. Convenient location – highway access (80.0%)
2. Recreation – state and county parks, trails, rivers, forests (74.1%)
3. Rural agricultural character (73.8%)
4. Safe place to live (71.6%)
5. Locally owned and operated shops and restaurants (66.8%)

Respondents disagreed or strongly disagreed with some statements. Based on the percentages, **top five concerns** for Jackson County were:

1. Employment opportunities (39.4%)
2. Properties are not attractive, clean, and well maintained (28.0%)
3. Housing is not affordable, safe, and decent (27.8%)
4. Does not welcome residents with racial and ethnic diversity (25.3%)
5. Healthy, affordable food is not easy to get everywhere (24.1%)

*Residential Development*

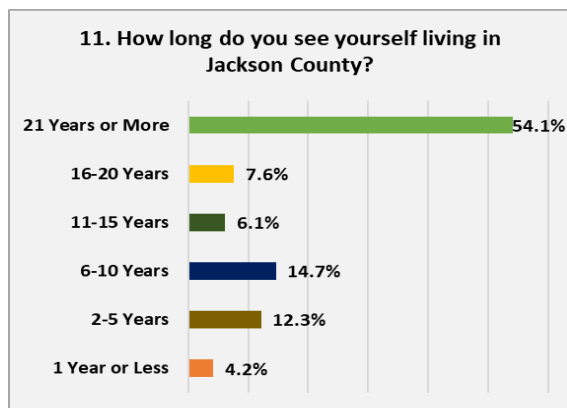
**Question 8.** About 60% of respondents live in a city, and 38% live in a rural area outside of a city. *(In 2020, 59.7% of county residents lived in a city.)*



**Question 9** asked people which city they call home. Surveys were received from residents of all 13 cities. Almost 41% of respondents live in Maquoketa, about 16% live in Bellevue, and nearly 26% live in a rural area outside a city. *(In 2020, about 31% of residents lived in Maquoketa and 12% in Bellevue.)*

**Question 10** asked how long people had lived in Jackson County. 79% had for 10 years or more, about 16% for 3 to 9 years, and nearly 4% for 2 years or less.

**Question 11.** When asked how long people planned to live in Jackson County, over half indicated “21 years or more”.



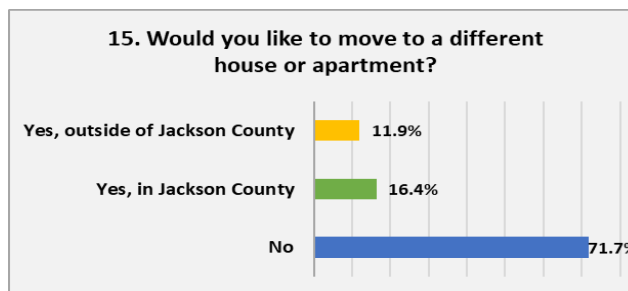
**Question 12.** Most respondents (92%) live in a single-family home.

**Question 13.** Most respondents (93%) own their current place of residence. (In 2023, about 72% of residents were owner-occupants.)

**Question 14.** Most respondents (86%) are satisfied with their current housing.

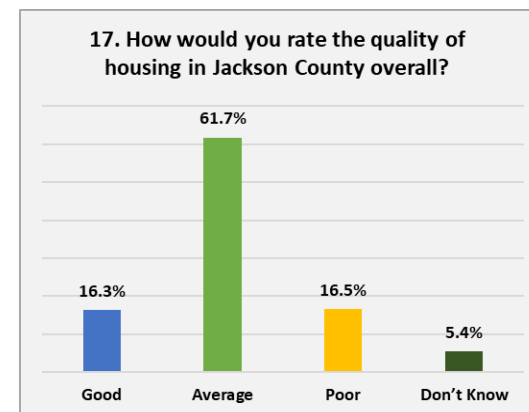
The follow-up to Question 14 was: “Are you satisfied with your current housing situation? Please tell us why.” The 213 comments received to this open-ended question are in the Appendix.

**Question 15.** Most respondents (72%) do not want to move to different housing, while 16% would move within Jackson County, and 12% would move outside of Jackson County. The follow-up to Question 15 was: “Would you like to move to a different house or apartment? Please tell us why.” The 147 comments received to this open-ended question are in the Appendix.

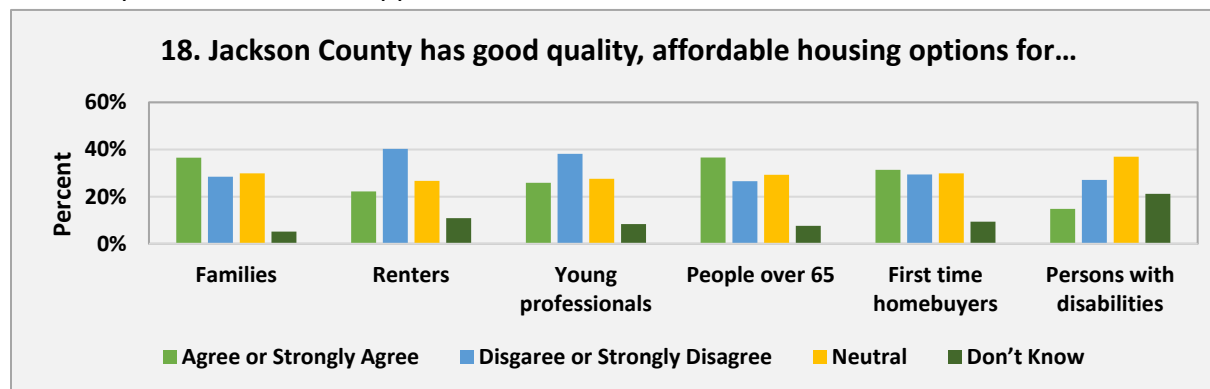


**Question 16** asked: “If you would like to move, but have not, please tell us why.” The 122 comments received to this open-ended question are in the Appendix.

**Question 17.** Most people rated overall housing quality as Good or Average.



**Question 18** asked: “Jackson County has good quality, affordable housing options for...”. Respondents rated housing options for renters, young professionals, and persons with disabilities slightly lower than for families, people over age 65, and first-time homebuyers.



**Growth and Development Priorities**

**Question 19** asked people to rank the following items from 1 to 12 based on their importance to the future growth and development, with 1 as the most important. The ranking is shown here.

Rank	19. Growth and Development Priorities
1	Improve the quality of life for current and future residents
2	Promote economic development within and around cities
3	Preserve and protect viable land for agriculture
4	Encourage healthy, active living for all residents
5	Retain and expand local businesses and jobs
6	Retain, recruit, and build a highly skilled workforce
7	Preserve and protect parks, open spaces, and natural resources
8	Maintain and expand the variety of housing types, costs, and locations
9	Provide, maintain, and improve the safety and efficiency of the transportation network
10	Maintain and expand attractions for tourists and residents
11	Provide an opportunity for solar energy facilities
12	Provide an opportunity for wind energy facilities

**Question 20** asked people to share what else they thought should be a growth and development priority. *The 146 comments received to this open-ended question are in the Appendix.*

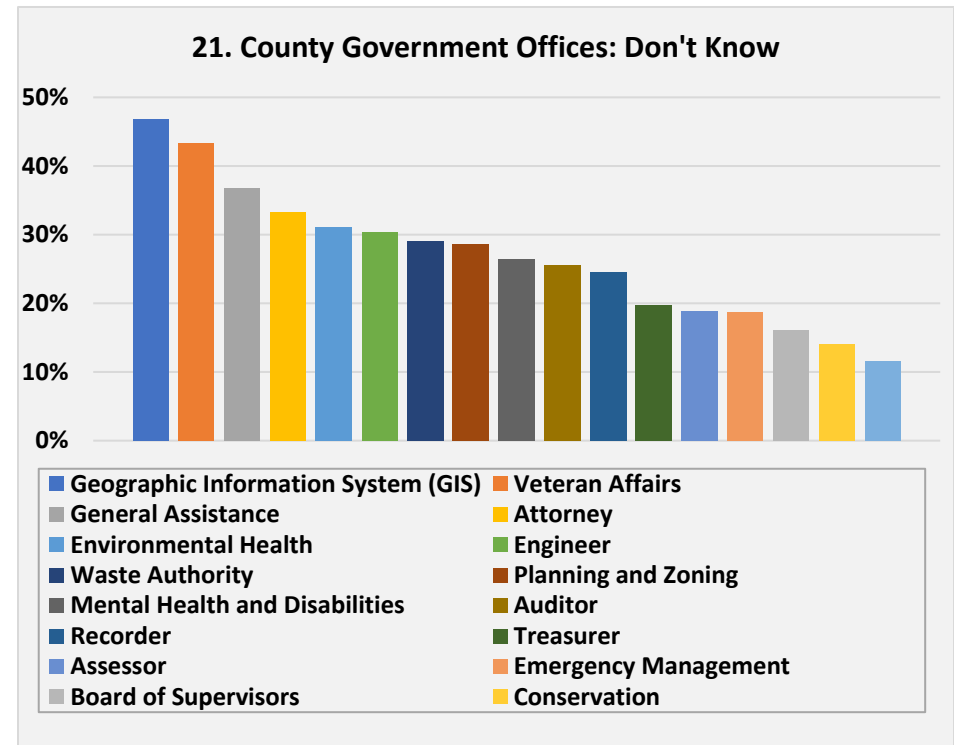
**Jackson County Government Offices**

**Question 21** asked people to indicate their level of satisfaction with the Jackson County government offices. At least 50% of respondents were satisfied with most county offices as shown here. The top five offices had over 70% level of satisfaction as shown here.

County offices with a higher percentage of respondents who chose “Don’t Know” tended to have lower satisfaction ratings (see chart). This data suggests that there are opportunities for Jackson County government to inform residents

about the services that their offices provide.

21. Satisfaction with County Government Offices: Top 5	Percent
Conservation	77.6%
Sheriff	76.0%
Treasurer	75.7%
Emergency Management	70.8%
Recorder	70.7%





*Countywide Conditions and Services*

County parks and trails, recreational areas, health care facilities, agricultural properties, and county facilities rated a 70% or higher level of satisfaction.

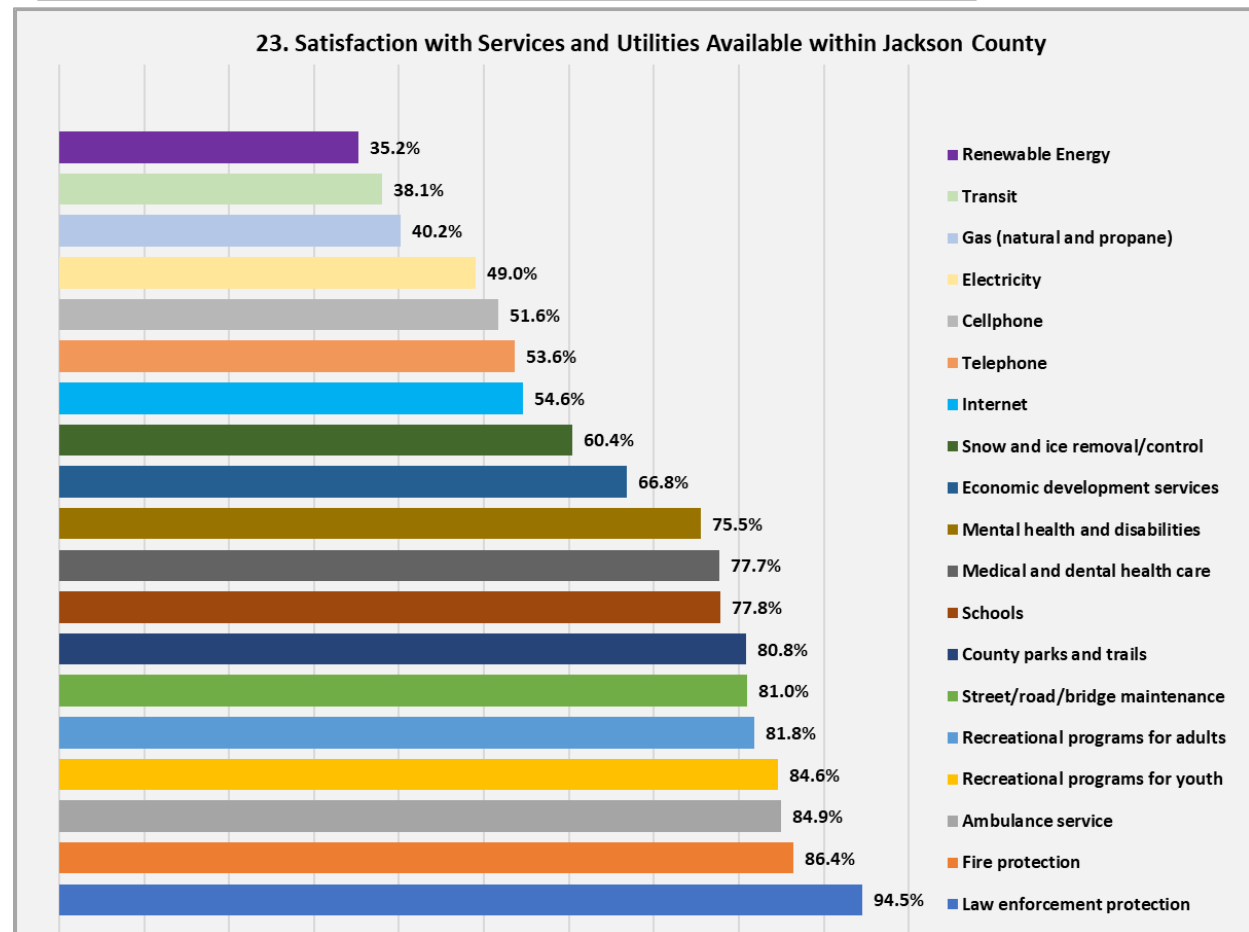
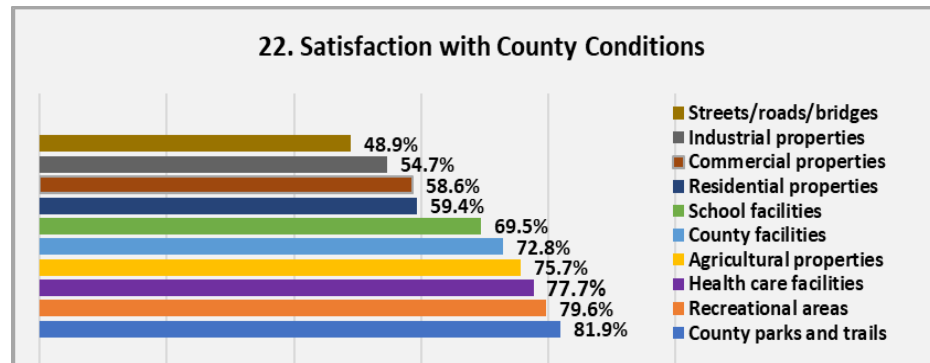
Nearly 50% of respondents were satisfied with the conditions of streets, roads, bridges, and non-agricultural properties.

**Question 23** asked people to indicate their level of satisfaction with the quality of services and utilities available within Jackson County. Fire protection rated nearly a 95% level of satisfaction. Many services and utilities rated 80% or higher. Only a few were below than 50%.

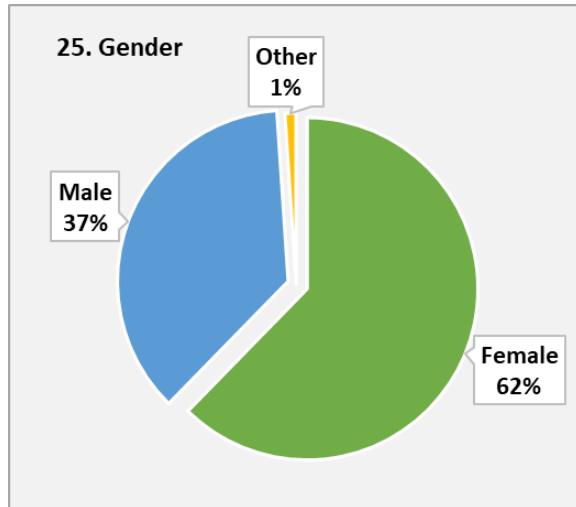
**Question 24** asked: “Please share two or three ways to improve Jackson County government offices, countywide conditions, and the quality of services and utilities available in Jackson County.” *The 150 comments received to this open-ended question are in the Appendix.*

*Demographic Information*

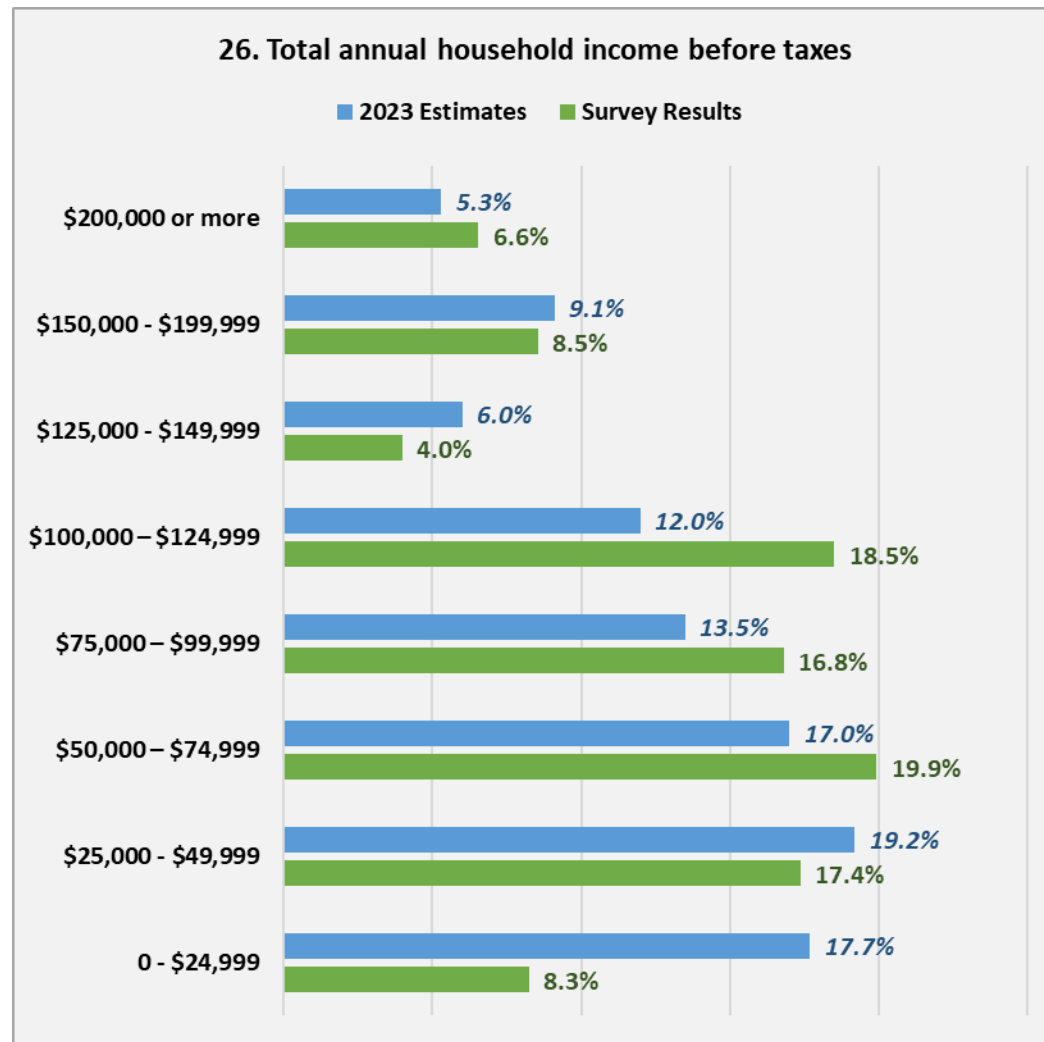
**Question 25.** About 62% of respondents identified their gender as female, 37% as male, and 1% as other as shown



here. (In 2022, Jackson County's population was 49.3% female and 50.7% male.)



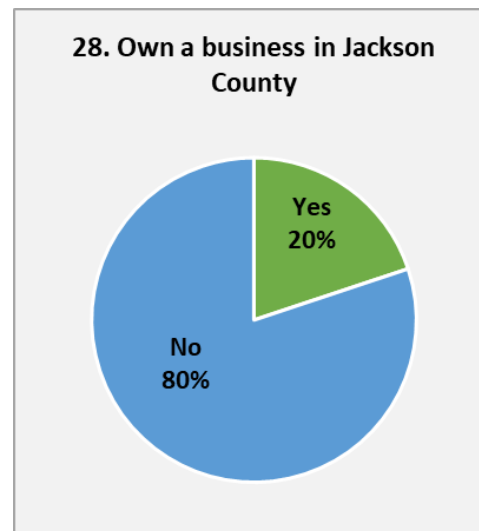
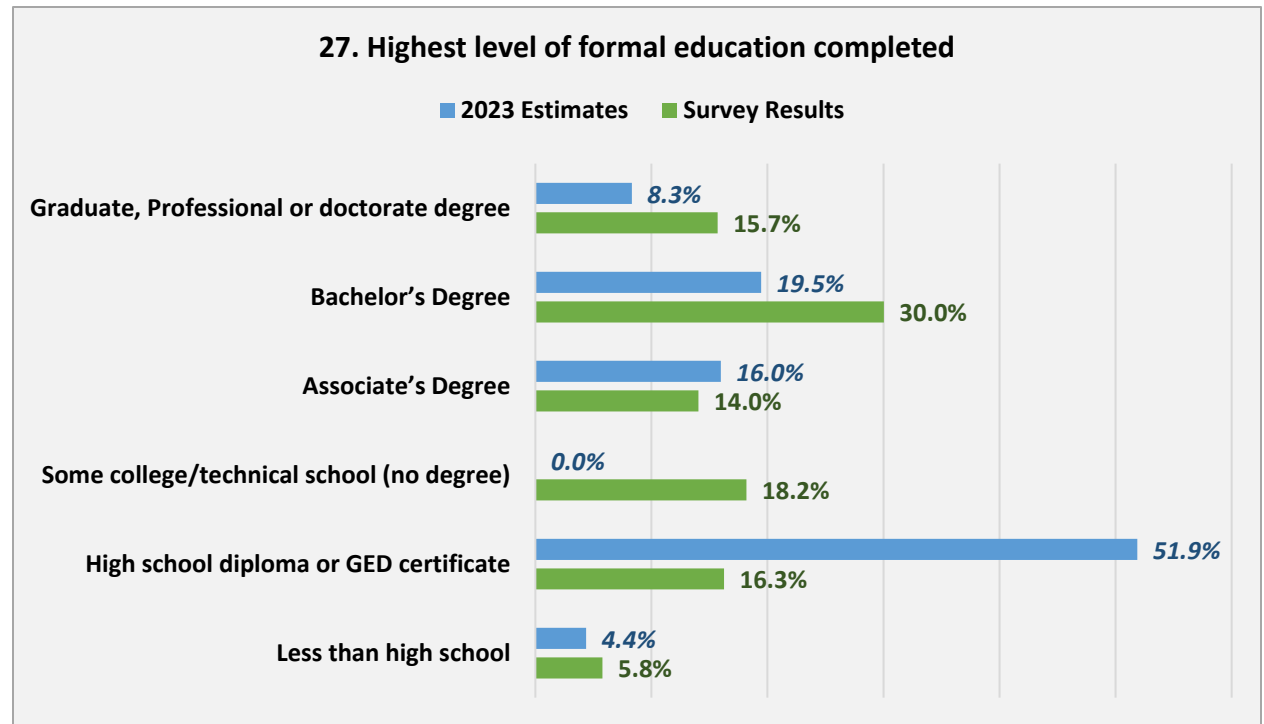
**Question 26.** There was a good range of total annual household levels among the survey respondents, with most between \$25,000 and \$125,000 as shown here with the green bars. (The 2023 County estimates for household base income are shown here with the blue bars and values in italics. The percentages are fairly consistent between the two data bases.)



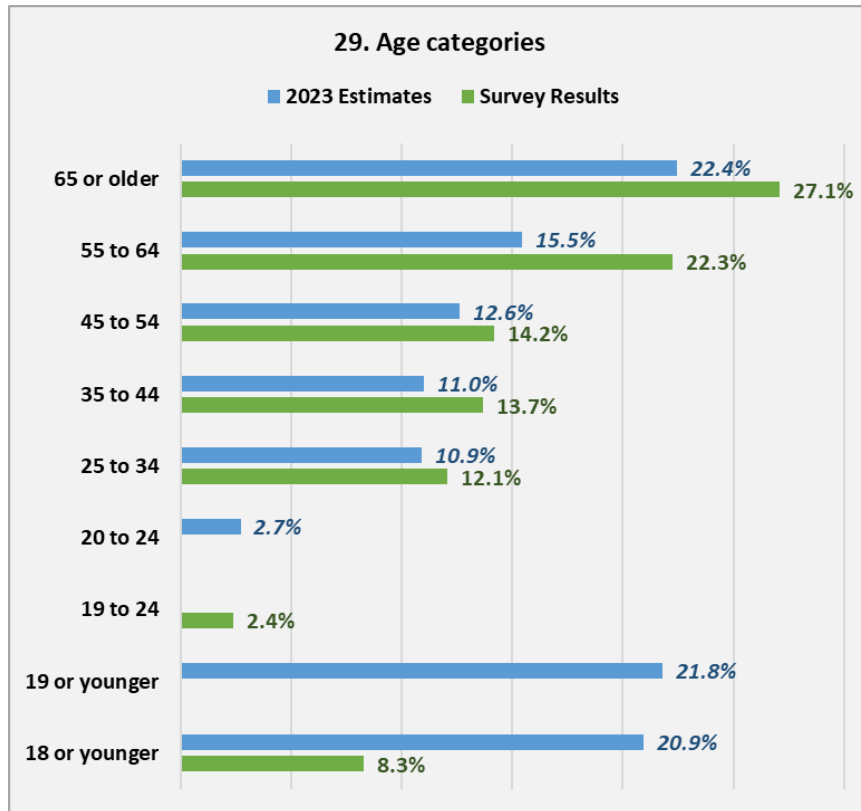
**Question 27.** With respect to highest level of formal education completed by survey respondents, nearly 6% haven't completed high school, 16% have a high school diploma or a GED (General Educational Development) certificate, and about 60% have an associate degree or higher as shown here with the green bars.

*(The 2023 County estimates for educational attainment are for residents age 25 years or older. The 2023 estimates are shown here with the blue bars and values in italics. About 4% haven't completed high school, nearly 52% have completed high school, and 44% have an associate degree or higher. The largest gap between the two databases is for residents with high school diploma or GED certificate as their highest level of completed education.)*

**Question 28.** Most respondents (80%) do not own a business in Jackson County as shown here.



**Question 29.** As shown here, 49.4% of respondents were over 55 years, and 40.0% were between 25 to 54 years. Only 2.4% were between 19-24 years, and 8.3% were age 18 or younger. *(The 2023 County estimates for age categories are shown here with the blue bars and values in italics. The percentages are fairly consistent for respondents age 19+.)*

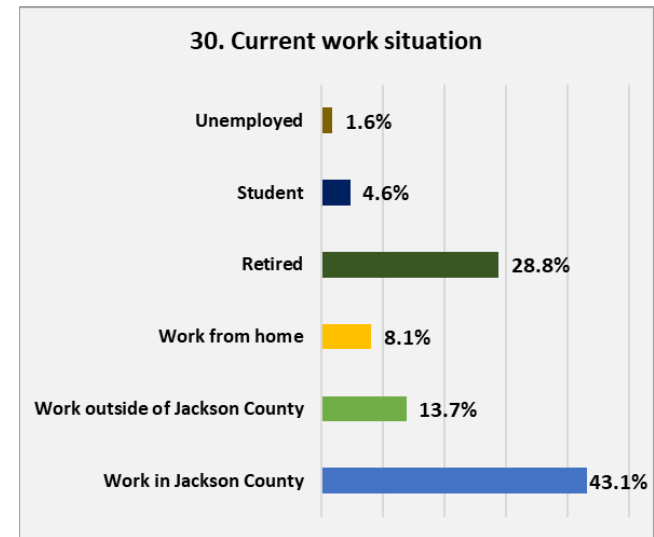


**Question 30.** As shown here, 43% of respondents work in Jackson County, and nearly 29% are retired.

**Question 31.** Nearly 98% of respondents identified their race/ethnicity as White. The other race or ethnicity identified by respondents were: Black/African American (0.27%), Hispanic/Latino (1.09%) and Another Race (0.82%). *(The 2023 estimates are shown in comparison.)*

**Question 32.** Most respondents (69.6%) don't have children under age 18 living at home.

**Question 33** asked for additional comments on Jackson County or the survey questions. *The 79 comments received to this open-ended question are in the Appendix.*



31. Race and Ethnicity	Survey Results	2023 Estimates
White or Caucasian	97.82%	93.73%
Black or African American	0.27%	0.88%
Hispanic or Latino	1.09%	1.31%
Asian or Asian American	0.00%	0.24%
American Indian or Alaska Native	0.00%	0.24%
Native Hawaiian or Pacific Islander	0.00%	1.72%
Another Race	0.82%	0.47%
Two or More Races	0.00%	2.73%

Project website content, media releases, project flyers, and the community survey report (with comments) are in the Appendix.

# Chapter 4. Community Facilities & Services



**Jackson County Courthouse**

Source: <https://jacksoncounty.iowa.gov/board-of-supervisors/>



**Jackson County Regional Health Center**

*Photo Credit: Jackson County Regional Health Center Facebook page*



**Sabula Fire Department apparatus**

*Photo Credit: Sabula Fire Department Facebook page*

**OVERVIEW**

The facilities a community provides are an important part of analyzing a community’s strengths. Education, childcare, health care, recreation, public safety, and cultural resources are all very important in determining a community’s viability for potential residents or businesses. In more rural counties many facilities are shared among communities, and they may also be public or private institutions. This means the role of intergovernmental cooperation is very important to sustaining and improving the quality of community facilities.

The goal of this chapter is to guide Jackson County in providing high quality facilities and services to current and potential residents. Focusing on how to maintain existing public-private and intergovernmental partnerships is important, and it is also crucial to establish new relationships. This chapter will provide an inventory of Jackson County’s facilities as they exist today as well as provide a list of goals and objectives to provide a guide on how the county can best use its existing facilities as well as develop new ones.

**COUNTY GOVERNMENT**

*Jackson County Courthouse*

The Jackson County Courthouse is located at 201 W Platt Street in Maquoketa. The Courthouse provides offices for many county departments.

The **Assessor’s Office** establishes property assessments for all real property in Jackson County, in accordance with the laws and codes of the State of Iowa.

<https://www.jacksoncountyassessor.org/>

The **Attorney’s Office** is responsible for prosecuting violations of the laws of the State of Iowa and of Jackson County Ordinances, and serves as the legal advisor for Jackson County government.

<https://jacksoncounty.iowa.gov/attorney>

/

Duties of the **Auditor’s Office** are: prepare the County Budget, compute and certify levies for taxing districts, prepare tax lists for collection by the Treasurer, administer payroll and benefits to all county employees, prepare claims and issue warrants for payment of invoices, and maintain records of all County, State, and Federal reports.

<https://jacksoncounty.iowa.gov/auditor/>

The **Board of Supervisors** consists of three District Representatives. Their duties are: approve budgets of county officials, establish and vacate public highways, allow claims against the county and order same paid, levy taxes to raise revenue for county expenses, fill vacancies in office of elected officials except their own board, and constitute a drainage board for the drainage district.

<https://jacksoncounty.iowa.gov/board-of-supervisors/>



Source: <https://jacksoncounty.iowa.gov/auditor/>

4. COMMUNITY FACILITIES & SERVICES



Source: <https://jacksoncounty.iowa.gov/engineer/>

The **County Engineer and the Secondary Roads Department** are responsible for construction and maintenance of the Secondary Road System in the county. <https://jacksoncounty.iowa.gov/engineer/>

The **General Assistance Department** provides emergency payments and/or vouchers to people in need of immediate assistance or people who cannot obtain assistance from any other source. <https://jacksoncounty.iowa.gov/general-assistance/>

The **Geographic Information System (GIS) Department** manages the county’s computer mapping system, provides technical assistance, and coordinates GIS activities of all departments. <https://jacksoncounty.iowa.gov/gis/>

The **Health Department**, governed by the Jackson County Board of Health, oversees the Environmental Health programs and contracts with Genesis Visiting Nurse Association (VNA) to provide Community Health services for Jackson County. <https://jacksoncounty.iowa.gov/health-department/>

The **Human Resources Department** is responsible for overall administration, coordination, and evaluation of human resource functions for Jackson County. <https://jacksoncounty.iowa.gov/human-resources/>

The **Information Technology Department** manages the use of county computers and software to convert, store, process, transmit, and retrieve information. <https://jacksoncounty.iowa.gov/information-technology/>

The **Maintenance Department** provides custodial services, courthouse property maintenance, and upkeep. <https://jacksoncounty.iowa.gov/maintenance/>

The **Planning and Zoning Department** administers and enforces the county’s nuisance ordinance, zoning ordinance, flood plain management ordinance, airport tall structure ordinance, and subdivision ordinance. <https://jacksoncounty.iowa.gov/planning-and-zoning-office/>

The **Recorder’s Office** is responsible for land and records management for various official documents affecting real estate and for marriage, birth, and death certificates. The office serves as agent for several departments of the State of Iowa. <https://jacksoncounty.iowa.gov/recorder/>

The **Treasurer’s Office** is responsible for the receipt, management, disbursement, financial reporting, bonds, and investment of all monies paid to the county. The office serves as agent for several departments of the State of Iowa. <https://jacksoncounty.iowa.gov/treasurer/>

**Jackson County Courthouse Annex**

The Jackson County Courthouse Annex, located at 311 W. Platt St., houses the county departments of Mental Health and Veteran’s Affairs.

The **Mental Health Department** partners with the Eastern Iowa Mental Health and Disabilities Services Region to provide services to adults and children.

<https://jacksoncounty.iowa.gov/mental-health/>

The **Veterans Affairs Commission** aids Jackson County veterans who were discharged under Honorable Conditions and/or their family members.

<https://jacksoncounty.iowa.gov/veterans-affairs/>

**Jackson County Law Enforcement Center**

The Jackson County Sheriff’s Office and the City of Maquoketa Police Department are both located at the Jackson County Law Enforcement Center, 104 S. Niagara Street in Maquoketa.

The **Sheriff’s Office** is responsible for enforcing state and county ordinances within Jackson County, among other duties and responsibilities related to law

enforcement and the court system.

<https://jacksoncounty.iowa.gov/sheriff/>

The **Emergency Management Agency** coordinates local efforts in partnership with the State of Iowa and other partners to prepare for, respond to, and recover from disasters.

<https://jacksoncounty.iowa.gov/emergency-management/>

**County Parks and Recreation Areas**

The **Jackson County Conservation Department** manages county parks, natural areas, timber preserves, historic sites, river accesses, and campgrounds.

<https://www.mycountyparks.com/county/jackson.aspx>



**South Sabula Lake Park**  
Photo Credit: Jackson County Conservation

**Solid Waste Disposal Facilities**

The Waste Authority of Jackson County operates a transfer station, where residents can bring waste material if they do not have local refuse collection at their home or business. The Waste Authority also operates a collection center for household hazardous waste. These facilities are located at 25146 184th Street in Maquoketa.

<https://www.wasteauthority.org/site/>

**City Halls**

Table 4.1 provides the street addresses of each city hall in Jackson County.

City	Location
Andrew	11 E. Benton St.
Baldwin	105 S. 5 <sup>th</sup> St.
Bellevue	106 N. 3 <sup>rd</sup> St.
La Motte	200 N. Main St.
Maquoketa	201 E. Pleasant St.
Miles	430 Ferry Rd.
Monmouth	501 N. Division
Preston	52 W. Gillet St.
Sabula	411 Broad St.
Springbrook	101 E. Main St.
Spragueville	108 S. Division St.
St. Donatus	100 E. 2 <sup>nd</sup> St.
Zwingle	80 Walnut St.



**Township Governments**

The 18 township governments within Jackson County are listed in Table 4.2. Their boundaries are shown in Figure 4.1. The primary duties of the township governments are to maintain cemeteries, provide fire protection, and mediate fence disputes. Each township government is composed of a clerk and three elected trustees.

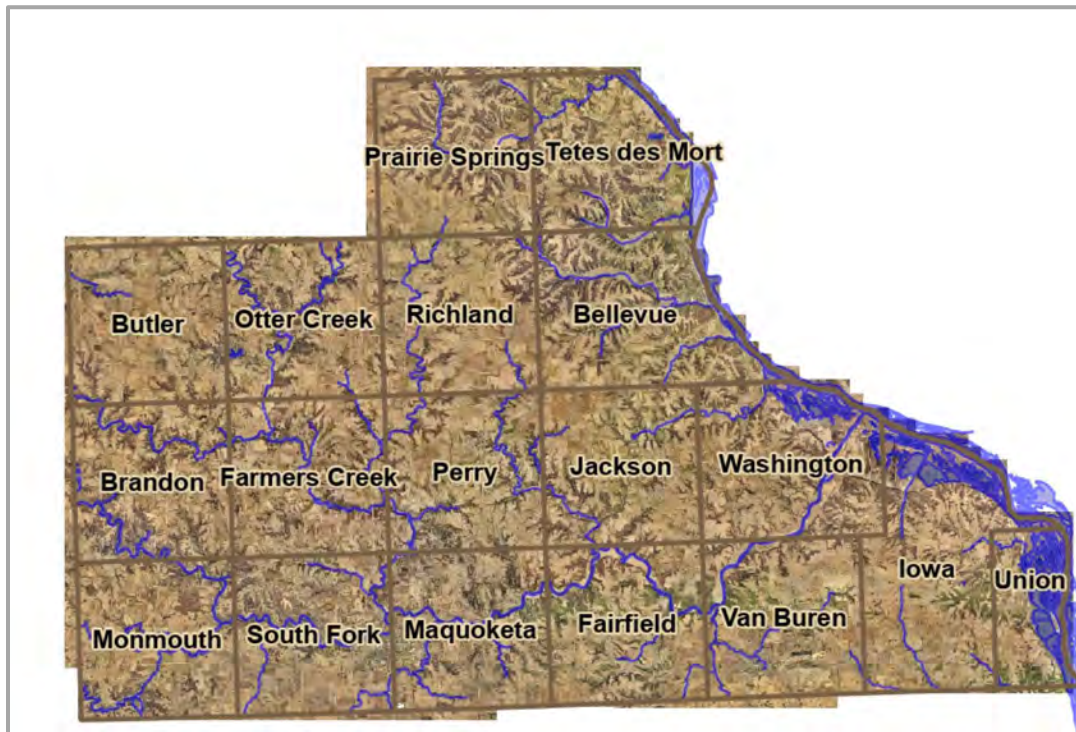
Bellevue	Otter Creek
Brandon	Perry
Butler	Prairie Springs
Fairfield	Richland
Farmers Creek	South Fork
Iowa	Tetes des Mort
Jackson	Union
Maquoketa	Van Buren
Monmouth	Washington

**Maquoketa Municipal Airport**

The Maquoketa Municipal Airport is the county’s only airport, located at 2115 134<sup>th</sup> Ave. The City of Maquoketa owns the airport under the supervision of the Maquoketa Airport Commission.

The airport has one runway that is 60 feet wide and 3,304 feet long as well as eight T-hangars available for rent and a community hangar with five spaces. The City of Maquoketa plans to expand the runway to 3,800 feet by December of 2025. This will improve safety for enthusiasts and local crop dusters.

The Federal Aviation Administration (FAA) recognizes the airport as part of the national airport system and includes it in the National Plan of Integrated Airport Systems (NPIAS) as a general aviation airport, making it eligible for federal funding.



**Figure 4.1 Map of Township Governments in Jackson County**

Source: Jackson County Beacon GIS

**EDUCATION**

Resources for education in Jackson County include public and private schools as well as a community college campus.

*Public Schools in Jackson County*

There are four publicly-funded community school districts based in Jackson County: Andrew, Bellevue, Easton Valley, and Maquoketa. Table 4.3 shows the number of school buildings and the 2022-2023 enrollment for these four districts.

School District	School Buildings	Number of Students
Andrew	1	147
Bellevue	2	805
Easton Valley	2	499
Maquoketa	4	1,313

Source: Iowa Department of Education

The **Andrew Community School District** is composed solely of Andrew Elementary School, which serves grades K-6. After sixth grade, students from the district go on to school in the Bellevue or Maquoketa school districts.

The **Bellevue Community School District** is composed of two school buildings, the K-5 Bellevue Elementary School, and the Bellevue Middle + High School which has grades 6-12. The district serves Bellevue as well as the towns of La Motte and Springbrook. The district oversees a pre-school program for children 3-4 years old at Little Starts Preschool in Bellevue Elementary School.

The **Easton Valley Community School District** is composed of an elementary school located in Miles that serves students in grades PreK-6 and a high school in Preston that serves grades 7-12. This district also covers the cities of Sabula and Spragueville.

The **Maquoketa Community School District** is composed of four school buildings, all located within Maquoketa. The district plans to close Cardinal Elementary to accommodate pre-k through second grade. Maquoketa Middle School has grades 6-8 and Maquoketa High School serves grades 9-12. In addition to serving Maquoketa, this district covers Baldwin, Zwingle, and the Leisure Lake area.

*Public Schools outside Jackson County*

In addition to these four community school districts within the county, three additional K-12 school districts based in other counties serve students living in Jackson County. Figure 4.2 shows all the school district areas serving the county.



**Figure 4.2. Public School Districts Serving Jackson County**

Source: Iowa Department of Education

The **Dubuque Community School District** based in Dubuque is composed of two high schools, three middle schools and 12 elementary schools with a combined enrollment of 10,064 students. The district covers the northeastern part of the county including St. Donatus and a portion of La Motte.

The **Western Dubuque Community School District** based in Epworth is composed of a high school, a combined junior-senior high school, a middle school and five elementary schools with a combined enrollment of 3,200 students. The district covers the northwestern part of Jackson County.

The **Midland Community School District** based in Wyoming is composed of an elementary school and a combined middle and high school serving 501 students. In Jackson County the district covers the southwestern area including Monmouth.

**Private Schools**

In addition to public schools, Jackson County is served by private schools.

In Bellevue, the **Marquette Catholic School System** serves Jackson and

Dubuque Counties, by offering a faith-based educational program for grades K-12. The school also operates a licensed childcare center.

Maquoketa is home to **Sacred Heart School** which offers a Catholic education to grades K-6, preschool for three and four-year olds, and childcare. It is located next to Sacred Heart Church.

**Aquin Catholic School** offers a Catholic education to grades K-8 and serves Cascade and the surrounding area. The school offers a three-year old preschool program and operates a childcare center. Aquin Catholic School and Western Dubuque Community School District offer a four-year-old preschool program.

**Clinton Community College**

Clinton Community College operates a 11,000 square foot facility adjacent to Maquoketa High School. The Maquoketa Center offers a wide array of credit courses, non-credit courses for all ages, dual enrollment classes for high school students, training for area businesses, adult classes including preparation for the High School Equivalency test, and summer programs for youth.

The facility includes two computer labs, a large meeting room, and four classrooms. There is also a 3,300 square foot Advanced Manufacturing Center that houses several mills, Computer Numerical Control (CNC) Machining simulators, a robotic plasma cutter and two robotic welders. A cooperative effort between Clinton Community College and the Maquoketa Community School District, the Advanced Manufacturing Center primarily is used for training new students and retaining existing employees.

Clinton Community College is part of the Eastern Iowa Community Colleges (EICC) District which also includes Muscatine and Scott Community Colleges.



CCC Maquoketa Campus Photo Credit: <https://eicc.edu/services-support/location/ccc/>

**CHILD CARE**

According to the Iowa Department of Health and Human Services (HHS), there are nine registered child care providers in Jackson County as shown in Table 4.4. This number does not account for the unregistered in-home child care facilities that exist throughout the county.

The three types of regulated child care in Iowa are: Licensed Centers, Child Development Homes, and Child Care Homes. Of the registered facilities in Jackson County, seven are fully licensed while two are registered as Child Development Homes.



Visit the HHS Child Care Website to find child care that meets your family’s needs <https://hhs.iowa.gov/programs/programs-and-services/child-care> Source: Iowa HHS

All child care providers must complete background checks and first aid, cardio-pulmonary resuscitation (CPR), and mandatory child abuse reporter training. All child care providers may apply for a Child Care Assistance (CCA) Provider Agreement with Iowa HHS. This allows these providers to care for children that qualify for public assistance with child care costs.

Iowa's Quality Rating System (QRS) is a voluntary child care rating system with five levels for child development homes, licensed child care centers, preschools,

and child care programs that are operated by school districts.

The Child Care Resource & Referral (CCR&R) Agency helps families to select child care providers who best meet their needs. Child Care Consultants provide on-site consultation to licensed preschools, centers, nonregistered home providers, and Child Development Home providers. Jackson County is served by CCR&R of Southeast Iowa in Davenport. For more information, visit Source: Iowa CCR&R at <https://iowaccrr.org/>

**Table 4.4 Registered Child Care Providers in Jackson County**

Community	Provider Type	Active CCA Provider	Provider Capacity	Provider QRS Level
Andrew	Licensed Center	Yes	51	0
Bellevue	Licensed Center	Yes	94	0
Maquoketa	Registered Child Development Home A	Yes	8	0
Maquoketa	Registered Child Development Home B	Yes	12	0
Maquoketa	Licensed Center	No	20	4
Maquoketa	Licensed Center	Yes	49	0
Maquoketa	Licensed Center	Yes	150	0
Maquoketa	Licensed Center	Yes	281	0
Miles	Licensed Center	Yes	71	0

Source: Child Care Client Portal, Iowa Department of Health and Human Services, accessed 09/26/2023.

**PUBLIC HEALTH**

Jackson County partners with non-profit agencies and health care providers to safeguard the health of residents.

*Community Health*

The Jackson County Board of Health contracts with the Genesis Visting Nurse Association (VNA) for these community health services:

- Disease prevention, surveillance, and follow-up (including Covid and Foodborne Illnesses)
- Immunization programs
- Emergency preparedness planning and prevention
- Child, Maternal & Senior Health
- Tuberculosis (TB) Control Program
- Community Health Needs Assessment

Source: <https://jacksoncounty.iowa.gov/health-department/>

The Jackson County Regional Health Center, Jackson County Health Department, and Genesis Health System partnered in 2020 to update the county’s

Community Health Needs Assessment (CHNA). The purpose of this assessment was to identify the major health and socioeconomic issues that affect the region, and develop a plan to address them proactively. According to the 2021 CHNA, Jackson County’s top three health priorities are: 1. Substance Abuse, 2. Mental Health, and 3. Obesity.

Source: <https://www.jcrhc.org/community-health/assessment/>

*Health Care*

Health care in Jackson County is provided by a regional hospital as well as medical and dental clinics.

The Jackson County Regional Health Center in Maquoketa is a 25-bed non-profit accredited critical access hospital that offers a wide range of inpatient, outpatient, emergency, and community health services. The health center also provides 24-hour paramedic services to Maquoketa and surrounding areas in Jackson, Clinton, and Jones counties.

Within Jackson County there are medical clinics, dental clinics, chiropractors, physical therapists, and a variety of other healthcare providers.

*Mental Health*

The Jackson County Mental Health Department is part of the Eastern Iowa Mental Health and Disability Services Region that serves Jackson, Clinton, Cedar, Scott, and Muscatine Counties. This community-based system serves adults and children. Foundation 2 Mobile Crisis Outreach is available to residents in a mental health crisis 24 hours a day, 7 days a week. For more information, visit: <https://easterniowamhds.org/>

*Environmental Health*

The Jackson County Health Department provides environmental health services:

- Private Water Supply Well Program and Water Testing,
- Private Onsite Wastewater Program,
- Animal Bite Investigations,
- Public Health Nuisance Investigations, and
- Radon Program.

**PUBLIC SAFETY**

Public safety in Jackson County is provided by county, city, and township governments as well as private, nonprofit, and volunteer entities. Often, these services are provided through 28E contracts.

**Iowa Code Chapter 28E** allows state and local governmental entities to have contracts with one another to provide joint services and facilities. Local governments also can have agreements with non-profit and private organizations in certain situations. The most common 28E agreements are for law enforcement services, fire protection and mutual aid, emergency response, joint dispatch and street maintenance.

*Source: Iowa League of Cities, Sept. 2023*

**Jackson County Law Enforcement Center**

The Jackson County Sheriff’s Office and the City of Maquoketa Police Department are both located at the Jackson County Law Enforcement Center, 104 S. Niagara Street in Maquoketa. The Jackson County Emergency Management Agency, which operates remotely, will be located in the Center when the new jail is completed.

**Jackson County Sheriff**

The Sheriff is an elected official serving a four-year term. The Sheriff’s Office is located in the Jackson County Law Enforcement Center, and is responsible for enforcing state laws and county ordinances within Jackson County.

The Sheriff’s Office patrols 648 square miles of the county and is the chief law enforcement for the cities of Andrew, Baldwin, La Motte, Monmouth, Springbrook, St. Donatus, and Zwingle. In these cities, the Sheriff’s Office also enforces city ordinances.

Duties of the office include but are not limited to the following: Reports of, and investigation of, thefts, vandalisms, assaults, illegal drug activity, reported child and/or domestic abuse, accidents and all other criminal allegations. Deputies are also responsible for the enforcement of traffic laws.



The Sheriff's Office is also required to carry out duties related with civil process including but not limited to: Original notices and petitions, garnishments, orders, sheriff sales, room and board reimbursements, evictions, protective orders and restraining orders, involuntary commitment of persons with mental illness and/or substance abuse, duties related to condemnation of private property, and the execution and return of all writs and other legal processes issued by lawful authority.

Source: <https://jacksoncounty.iowa.gov/sheriff/>

**City Police Departments**

The cities with their own police departments are Bellevue, Maquoketa, and Preston. Preston’s police department also serves Spragueville.

Source: <https://jacksoncounty.iowa.gov/sheriff/>

***Jackson County Jail***

In September 2021, Jackson County voters approved the construction of a new county jail to replace the existing facility. The new \$6.3 million facility will replace the existing facility which has several safety issues, such as a lack of proper ventilation and natural light for inmates, as well as lacking maximum security cells.

The existing jail does not meet state requirements and faced closure by state inspectors if standards were not met. The existing jail also lacks the space needed to house inmates, requiring the county to frequently transfer inmates to another county, paying the cost of transportation and housing.

The new jail will have 30 beds and improved safety for staff and inmates. The estimated completion date for construction of the new Jackson County Jail is February 2024.

<sup>1</sup><https://jacksoncounty.iowa.gov/emergency-management/>

***Emergency Management***

The Jackson County Emergency Management Agency (JCEMA) coordinates local efforts in partnership with the Iowa Department of Homeland Security and Emergency Management (HSEMD) to prepare for, respond to, and recover from disasters. The JCEMA's Emergency Management Commission and the Emergency Management Coordinator work with cities, school districts, and other partners.<sup>1</sup> For more information, see Chapter 11 Hazard Mitigation in this comprehensive plan.

***Fire and Emergency Response Services***

State law requires all cities and all townships to provide law enforcement and fire protection as Essential Services. Emergency medical services (EMS) and other emergency response (such as rescue and hazardous materials spill response) also may be provided, but are not required by State law.

<sup>2</sup> *Special Report: Fire and Emergency Response Services in Iowa*. Iowa League of Cities, 2018. p. 11

***Recruiting, Retaining, Training and Equipping Fire and EMS Volunteers***

In Jackson County, all of the Fire Departments and most of the EMS are staffed entirely with volunteers. Consequently, it is important to find ways to recruit new volunteers, retain current members, and ensure all firefighters and emergency responders receive adequate training.

Providing fire protection and EMS services also requires a variety of special equipment, gear, vehicles and apparatus. Local governments must understand the need to maintain the required equipment and work together with department volunteers to budget and fund future upgrades.<sup>2</sup>

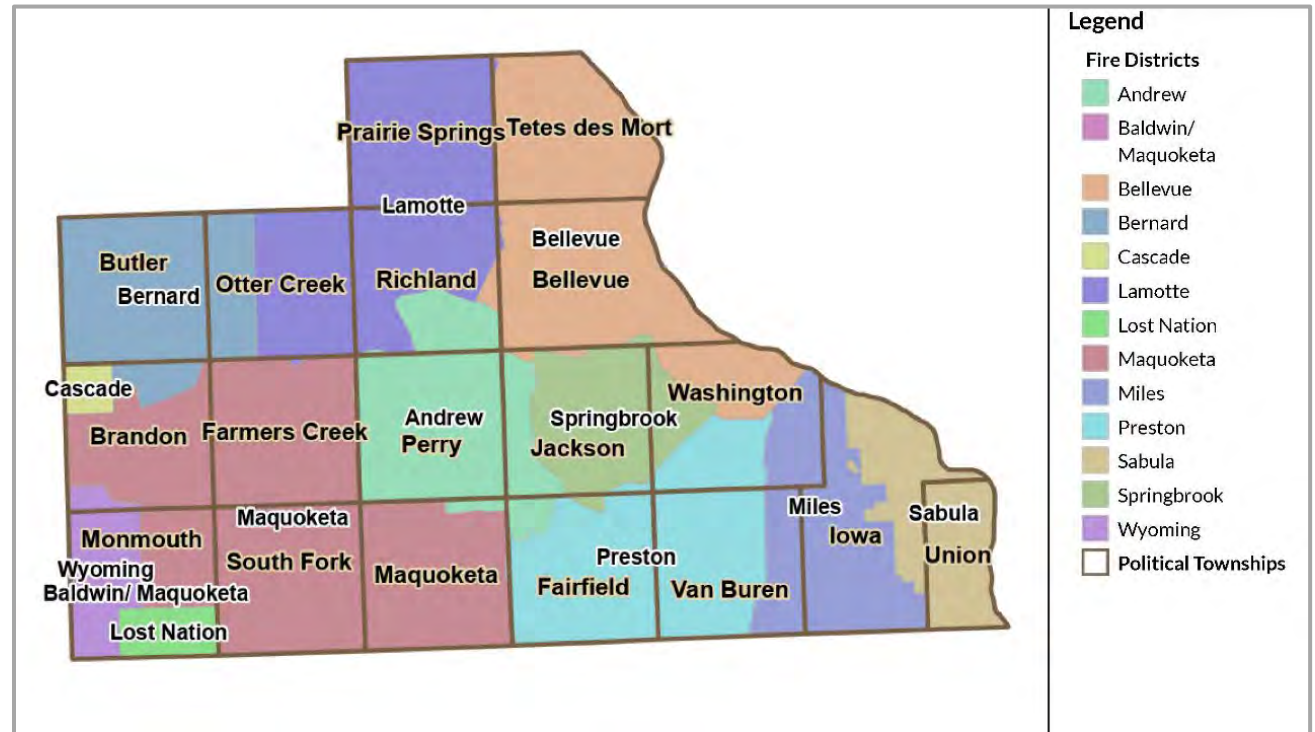
There are 10 ways fire protection and EMS services can be provided in Iowa: City, Township, or Contracted Service; Corporation; Benefitted Fire District; City or County Emergency Medical Services District; 28E Agency; Mutual Aid Agreement; or County Resolution.<sup>3</sup>

<sup>3</sup> *Ibid*, p. 2

**Fire Departments**

Table 4.5 lists the location of the 13 all-volunteer fire departments serving Jackson County. Figure 4.3 is a map of the county’s fire districts.

City/District	Fire Station
Andrew	17 N. Marion St.
Baldwin	4658 Baldwin St.
Bellevue	106 N. 3 <sup>rd</sup> St.
Bernard	547 Rolus St.
Cascade	807 1 <sup>st</sup> Ave. E.
La Motte	609 Water St.
Lost Nation	600 Main St.
Maquoketa	106 S. Niagara St.
Miles	18-28 Orson St.
Preston	14 N. Mitchell St.
Sabula	201 Vulcan St.
Springbrook	101 E. Main St.
Wyoming	501 E. Main St.



**Figure 4.3 Map of Jackson County Fire Districts and Townships** Source: Jackson County GIS, Oct. 2023



**Controlled burn training exercise with Preston, Miles, and Sabula Fire Departments.**

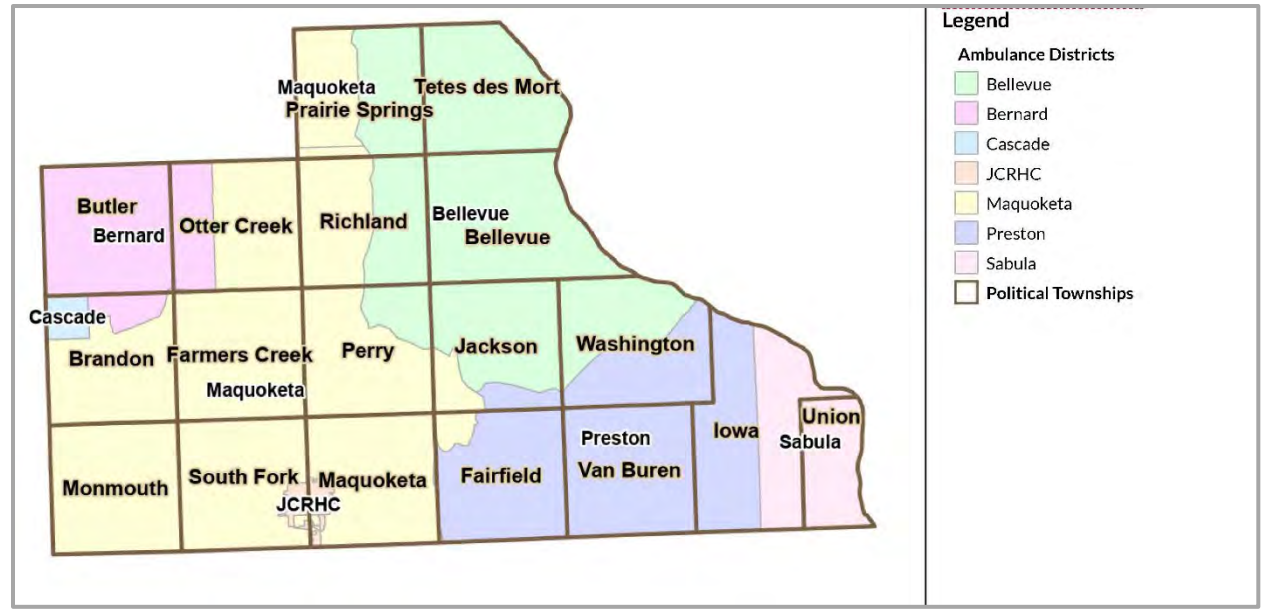
*Photo Credit: Preston Fire Department Facebook page*



**Emergency Medical Services (EMS)**

Jackson County has emergency medical services (EMS) provided by public, private, and volunteer agencies. For EMS to become an Essential Service in a county, like law enforcement and fire protection, it requires a vote by the tax payers. When 911 was established in 1991, Jackson County’s EMS District was formed by transporting agencies and first responder services.

Table 4.5 lists the types of EMS providers in Jackson County. Figure 4.4 is a map of the county’s seven ambulance districts: Bellevue, Bernard, Cascade, Jackson County Regional Health Center (JCRHC), Maquoketa, Preston, and Sabula.



**Figure 4.4 Map of Jackson County Ambulance Districts and Townships**

Source: Jackson County GIS, Oct. 2023

EMS Provider -- Service Name	Service Type	Personnel	Service Owner
Andrew Fire & First Responders	Non-Transport	Volunteer	Benefitted Fire District
Baldwin-Monmouth First Responders	Non-Transport	Volunteer	Private
Bellevue Emergency Medical Services	Ambulance	Volunteer	City
Bellevue Fire & Rescue	Non-Transport	Volunteer	City
Bernard Rescue Unit, Inc.	Ambulance	Volunteer	Nonprofit
Cascade Emergency Medical Services	Ambulance	Volunteer	City
Community Ambulance Service of Preston	Ambulance	Volunteer	Township
Jackson County Regional Health Center (JCRHC) Ambulance Service	Ambulance	Paid	County
La Motte Fire and Rescue	Non-Transport	Volunteer	Township
Maquoketa Fire & Rescue	Non-Transport	Volunteer	City
Sabula Ambulance Service	Ambulance	Volunteer	Private

**PARKS AND RECREATION**

Jackson County offers a wide range of parks and recreational opportunities for residents and attracts people from all over the region through its driftless landscape. For more information, see Chapter 10 Parks, Recreation, and Cultural Resources in this plan.

**County Parks**

Jackson County Conservation oversees 38 parks and outdoor recreation sites encompassing 2,200 acres throughout the county. These parks offer many different opportunities for recreation, including paddling, hunting, fishing, and hiking. Jackson County Conservation is located at the Hurstville Interpretive Center just north of Maquoketa.



Hurstville Interpretive Center Photo Credit: ECIA

**State Parks**

The Iowa Department of Natural Resources (DNR) operates two state parks in Jackson County. Bellevue State Park is split into two units south of Bellevue. The Nelson Unit provides beautiful overlooks of the Mississippi River and the Dyas Unit offers camping.



Bellevue State Park – Nelson Unit  
Photo Credit: Iowa DNR

The Maquoketa Caves State Park is located west of Maquoketa. The park features a six-mile trail system through caves, geological formations, and forests.

The Iowa DNR also operates the Green Island Wildlife Management Area, a 4,064-acre complex of wetlands, uplands, and timber located between Bellevue and Sabula along the Mississippi River.

**City Parks**

Many cities in Jackson County have city parks that provide a variety of recreational opportunities for local and regional residents. Table 4.7 shows the number of city parks in Jackson County.

City	Number of Parks
Andrew	1
Bellevue	5
La Motte	2
Maquoketa	9
Miles	2
Monmouth	1
Preston	3
Sabula	1
Springbrook	1

**Maquoketa YMCA**

The Maquoketa YMCA is a non-profit organization that provides members with access to a full-size gym, weight training and cardio areas, a multi-purpose room, an aquatic center with zero depth entry, a kids splash area, and lap lanes. The facility is located at 500 E. Summit Street and opened in 2007 after years of fundraising and planning.

**CULTURAL RESOURCES**

Jackson County is rich in cultural resources, as highlighted below. For more information, see Chapter 10 Parks, Recreation, and Cultural Resources in this plan.

*Public Libraries*

Bellevue, Maquoketa, Preston, and Sabula all have public libraries that serve their communities with a collection of digital and printed materials, as well as computer access, wi-fi, and public meeting space among other amenities. These libraries also hold a wide range of activities for both children and adults.

*Arts and Entertainment*

Arts and entertainment can be a key factor in establishing a unique and culturally active place, and can be used by communities to gain cultural, social and economic value. Bellevue and Maquoketa have a number of public art installations. Throughout the year, many cities in Jackson County host events and festivals that provide entertainment and bring the community together.

There are also venues such as the Ohnward Fine Arts Center, Maquoketa Art Experience, and Codfish Hollow that provide live music and theater performances for residents and attract tourists from all over the country.



**Codfish Hollow**

*Photo Credit: ECIA*

The Jackson County Fairgrounds hosts the county fair each summer. The fair showcases the talents of the county’s youth, highlights the county’s heritage, and provides a wide range of entertainment. The fairgrounds host a variety of events year-round including truck and tractor pulls.

The Bellevue Horseman’s Club hosts the annual Jackson County Pro Rodeo and truck and tractor pulls.

*Museums and Historic Sites*

There are several museums and many historic sites throughout Jackson County. For more information, see Chapter 7 Economic Development and Chapter 10 Parks, Recreation, and Cultural Resources in this plan.

*Grant Wood Loop*

The Grant Wood Loop provides an online guide to the natural resources and thriving arts and culture in Dubuque, Jackson, and Jones Counties. Residents and visitors can choose or create a loop, an activity, or an experience to connect with these regional opportunities:

- Dramatic, timeless landscapes,
- Inspiring parks and pathways,
- Rivers, creeks and lakes,
- Arts, culture and history,
- Historic communities and places,
- Local food and agriculture,
- Interpretive, educational and recreational programs for all ages.

For more information, visit <https://gwloop.com>

**LOCAL, STATE, & FEDERAL PROGRAMS**

Programs are arranged by category.

*All Categories*

The **Community Facilities Direct Loan and Grant Program** from the U.S. Department of Agriculture (USDA) provides funding to develop essential community facilities in rural areas. Examples include: health care facilities, public facilities (town halls, courthouses, etc.), community support services, public safety services, and educational facilities.

The USDA's **Community Facilities Guaranteed Loan Program** provides loan guarantees to eligible lenders to develop essential community facilities in rural areas. For more USDA programs, visit: <https://www.rd.usda.gov/programs-services>

The **Community Foundation of Jackson County** awards grants in the priority areas of community development, diversity, education, environment, health and human services, children, youth, families and senior citizens, arts and culture including historic preservation, and wellness projects. Visit

<https://dbqfoundation.org/grants> and select Jackson County.

The **Hawkeye Area Community Action Program (HACAP)** serves nine counties in Eastern Iowa in the areas of health and nutrition, energy conservation, children, affordable housing, veteran support, and homelessness. The Outreach Office for Jackson County is located in Maquoketa. <https://www.hacap.org/our-initiatives>

*Education*

The **Physical Plant and Equipment Levy (PPEL)** and the **Secure an Advanced Vision for Education (SAVE)** provides funding for school infrastructure needs or school district property tax relief. <https://educateiowa.gov/pk-12/school-facilities/funding/>

The **Qualified Zone Academy Bonds (QZAB)** program provides financial instruments to provide low or no interest bonds (loans) subsidized by the federal government in the form of tax credits. <https://www.lisc.org/charter-schools/funding-options/us-department-treasury/qualified-zone-academy-bond-program>

*Child Care*

The **Child Care Business Incentive Grant** from Future Ready Iowa helps employers offer or expand child care options as an employee benefit. Funds support local infrastructure investments to build or expand child care capacity or support arrangements between employers and child care facilities to expand or reserve child care slots.

<https://www.futurereadyiowa.gov/child-care-grants>

The **Rural Child Care Market Study Grant** from the Iowa Economic Development Authority (IEDA) provides up to \$100,000 to support use of data and analysis to determine the specific needs and solutions for an area.

<https://www.iowaeda.com/center-for-rural-revitalization/child-care-study/>

*Public Health*

The **Rural Health Network Development Program** provides grants from the U.S. Health Resources and Services Administration (HRSA) that help rural health networks to improve health care access, expand capacity and services, enhance outcomes, and increase

sustainability of health programs.

<https://www.hrsa.gov/grants/find-funding/HRSA-23-030>

### *Public Safety*

The **Rural and Small Department Violent Crime Reduction Program** from the Bureau of Justice Assistance of the U.S. Department of Justice supports small and rural agencies to combat violent crime and improve their capacity for effective crime prevention.

<https://bja.ojp.gov/funding/opportunities/o-bja-2023-171729>

The **Assistance to Firefighters Grant Program** from the Federal Emergency Management Agency (FEMA) seeks to enhance a department's ability to protect the public and fire service personnel from fire and related hazards. Four types of grants are available: Assistance to Firefighters Grants (AFG), Staffing for Adequate Fire and Emergency Response Grants (SAFER), Fire Prevention and Safety Grants (FP&S), and Fire Station Construction Grants (SCG). This program also offers resources to help fire departments prepare and submit successful grant applications.

<https://www.fema.gov/grants/preparedness/firefighters>

The U.S. Fire Administration (USFA) **Funding Alternatives for Fire and Emergency Services Manual** includes financing alternatives for all types of fire and EMS departments.

[https://www.usfa.fema.gov/downloads/pdf/publications/fa\\_331.pdf](https://www.usfa.fema.gov/downloads/pdf/publications/fa_331.pdf)

The U.S. Department of Agriculture (USDA) has **Rural Fire Department Resources for Local Officials** which includes grants and low interest loans aimed towards first responders.

<https://www.nal.usda.gov/rural-development-communities/rural-fire-department-resources-local-officials>

### *Parks, Recreation & Cultural Resources*

See Chapter 10 Parks, Recreation and Cultural Resources in this plan.

## ISSUES AND OPPORTUNITIES

*Community Health*

**Issues:** The 2021 Community Health Needs Assessment (CHNA) identifies the top three health priorities for Jackson County as: substance abuse, mental health, and obesity.

**Opportunities:** The 2021 CHNA includes an implementation plan to address these priorities with community partners.

To address substance abuse, the plan identifies Area Substance Abuse Council (ASAC) services for substance abuse treatment as well as the Opioid Awareness Program.

To address mental health, the plan identifies the Jackson County Regional Health Center Telehealth Mental Health Services and Regional Mobile Crisis Services.

The plan recommends addressing obesity through nutrition and physical activity. Local resources are Maquoketa YMCA programs, Jackson County Regional Health Center Diabetic Education and Nutritional Consult services, and Jackson County Farmers Market vouchers.

*Child Care*

**Issues:** The 2018 Jackson County Tomorrow Strategic Plan identifies activities and planning efforts to retain and attract young families. The Tomorrow Plan notes that capacity and affordability are challenges for families seeking child care in Jackson County.

The 2022-2027 Comprehensive Economic Development Strategy (CEDS) for Delaware, Dubuque, Jackson, Clinton, and Cedar Counties charts the course for economic growth of the region. The CEDS notes that access to quality child care is one of the factors impacting employers' ability to attract and retain workforce in the region.

**Opportunities:** The Jackson County Tomorrow Plan identifies as an opportunity, the need to ensure that high-quality child care opportunities are available and affordable to all residents.

The CEDS recommends developing public private partnerships to create affordable day care options.

*Education*

**Issues:** Reading proficiency by the end of third grade is one of the key predictors of high school graduation. However, 41% of third-graders across all four Jackson County school districts do not meet this benchmark, and children from low-income families are even further behind. Nearly 48% of Jackson County students are considered low-income, as they qualify for free and reduced-price lunch.

**Opportunities:** Hosted by the Community Foundation of Jackson County, the Jackson County Campaign for Grade-Level Reading focuses on four areas that serve as the foundation of academic achievement: school attendance, school readiness, summer learning, and access to books. By analyzing local data, the Community Foundation's network of partners can identify the needs of children and families and develop a plan and goals to address them.

Source:

<https://dbqfoundation.org/pages/jackson-county-campaign-for-grade-level-reading>

**GOALS AND OBJECTIVES**

**Community Health**

4.1 Address the top three health priorities for Jackson County through community partnerships.

- Substance Abuse: Access to substance abuse prevention and treatment.
- Mental Health: Access to mental health services and treatment.
- Obesity: Integrated health, wellness, nutrition, physical activity, and weight status.

**Child Care**

4.2 Ensure that high-quality child care opportunities are available and affordable to all residents.

- Increase overall capacity for child care in Jackson County.
- Strengthen relationships with county teachers and child care workers.

4.3 Support efforts to attract, maintain, and expand child care services in the region.

- Work with partners to identify/expand affordable/multi-shift day care.
- Assist in implementing and working with communities toward improving available child care options.
- Promote and assist with access to child care issues due to barriers such as transportation, distance, hours, openings.



**Jackson County Campaign for Grade-Level Reading**  
 Photo Credit: Community Foundation of Jackson County  
 Facebook page

**Education**

4.4 Continue to support the Jackson County Campaign for Grade-Level Reading in the four areas supporting academic achievement: School attendance, School readiness, Summer learning, and Access to books.

- Build community awareness of children’s academic and social-emotional needs.
- Provide a unified vision and strategy to improve academic success and child well-being inside and outside the classroom.
- Fund child- and family-focused initiatives by utilizing existing financial resources and offering a way for generous community members to give in support of children’s well-being.
- Analyze local data to identify needs and inform plans to address them.

# Chapter 5. Infrastructure and Utilities



**Leisure Lake community near Bernard**

*Source: Iowa Geographic Map Server – Iowa State University*



**OVERVIEW**

Public and private infrastructure and utilities are key components of quality of life within Jackson County. Access to infrastructure and utilities also has a profound impact on land development. Land that has access to municipal utilities has greater development potential and has a higher value than land that does not have access.

The primary public infrastructure owned and maintained by Jackson County is the secondary road system. In areas where municipal water and wastewater systems are not available, residents rely on private wells and septic systems. In addition to private utilities providing services in the county, some cities provide electricity, natural gas, and/or telecommunication services.

This chapter describes public and private infrastructure and utilities in the county, and explores how these necessary items impact land use, environmental quality, and economic development. This chapter also explores strategies for the county to transition from non-renewable to renewable energy sources.

<sup>1</sup> <https://www.iowacountyroads.org/about-secondary-roads>

**PUBLIC ROADS AND BRIDGES**

Iowa has three classes of public roads and their associated bridges: the state primary highways, secondary (county) roads, and city streets. Jackson County roads and bridges serve rural transportation needs in two capacities:

- **Local Access roads and bridges** provide a public road connection for every parcel of land;
- **Farm to Market roads and bridges** provide access to parcels of land and serve as conduits that collect the flow of people and farm commodities, channeling them to and from towns and terminals.<sup>1</sup>

The Jackson County Engineer and the Secondary Roads Department are responsible for construction and maintenance of the secondary road system in the county.

Jackson County’s 2023 secondary road system has 841 miles of roadway and 225 bridges and large culverts. The mileage by road surface is shown in Table 5.1.

<sup>2</sup> <https://jacksoncounty.iowa.gov/engineer/>

<b>Secondary Road Surface</b>	<b>Miles</b>
<b>Paved</b>	188
<b>Gravel</b>	608
<b>Seal Coat</b>	6
<b>Dirt</b>	38

The Jackson County Engineer and the Secondary Roads Department have the following duties:

- Accounting functions for secondary roads.
- Response to petitions, requests, or concerns regarding roadway condition and drainage, temporary road closures, and obstructions in the right of way.
- Assigning all rural addresses.
- Subdivision roadway review and approval.
- Entrance permit review and approval.<sup>2</sup>

- Permitting of utility or other work within the county road right of way.
- Oversize/overweight vehicle permit issuance for county roads.
- Section corner information, aerial photo information and bench mark information is available for public viewing.
- Right-of-way information on Jackson County roads and construction projects.
- Permits for dust control on county roads.
- Mark right-of-way for new fence locations.

The Jackson County Engineer and the Secondary Roads Department also are responsible for surface repairs and maintenance, including:

- Rocking the county's gravel roads.
- Patching paved roads.
- Pothole repairs.
- Shoulder rocking.

- Mowing shoulders and brush cutting.
- County bridge and culvert repairs.
- Ditch cleaning for proper drainage.
- Snow removal on county roads.
- Roadway sign installation and maintenance.<sup>3</sup>



Rural road paving. Photo Credit: Jackson County Engineer

Chapter 6. Transportation provides more information about public roads, bridges, and transportation-related infrastructure.

Figure 5.1 is the enlarged legend for Figure 5.2, a map of the transportation infrastructure in Jackson County.

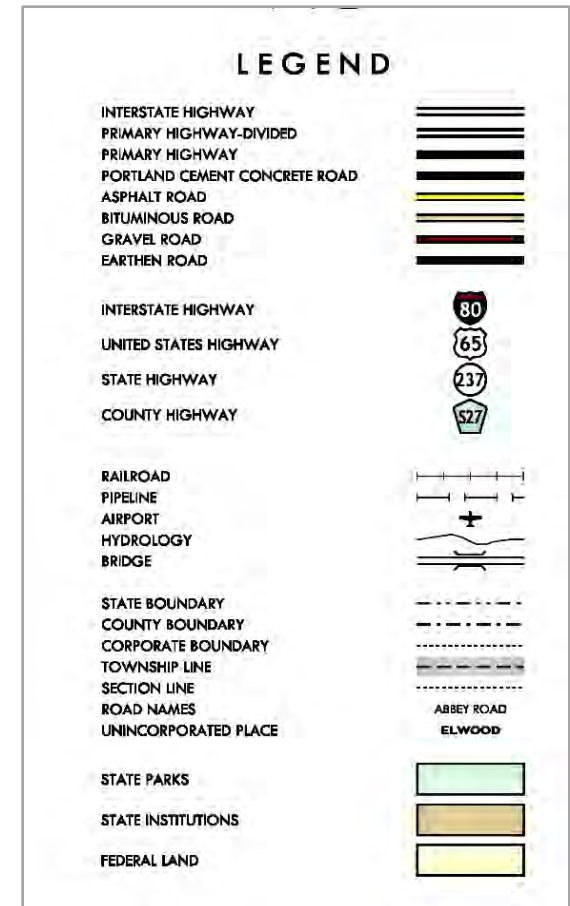


Figure 5.1 Enlarged Legend for Figure 5.2

<sup>3</sup> Ibid

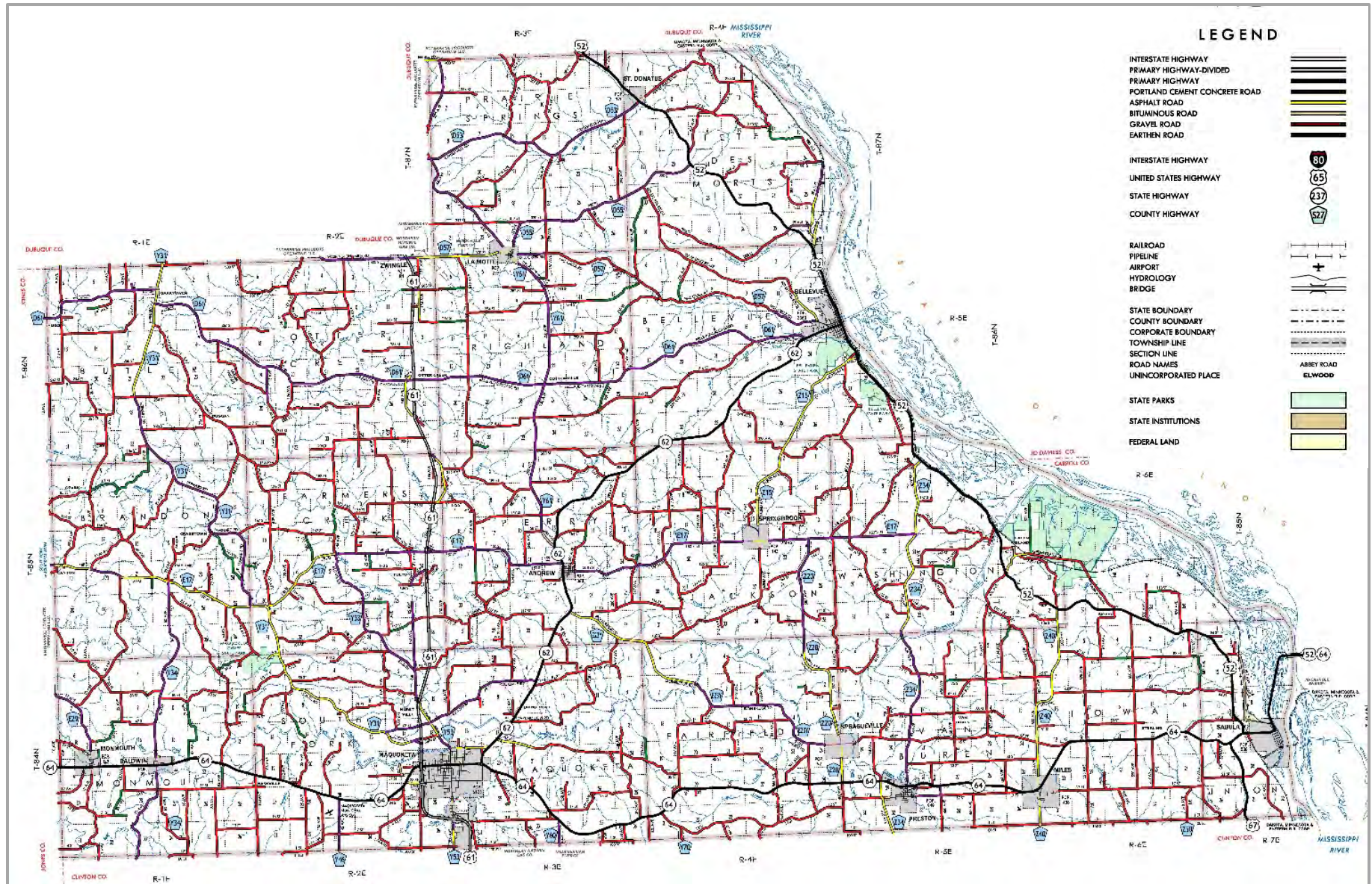


Figure 5.2 Map of Transportation Infrastructure in Jackson County

Source: Iowa Department of Transportation

**WATER SUPPLY**

In Iowa, water supplies fall into two categories: a private water supply or a public water supply.

**Private Water Supply**

All parts of a private water supply are managed by the water user: the water supply well, the water distribution system, and all water treatment systems or devices. A private water supply connects to fewer than 15 individual connections (like homes, apartments, camp spaces, etc.) and provides water for less than 25 individuals a day. Private supplies do not have a central administrator making decisions for the water users.

For private water supplies, well construction and reconstruction activities are issued permits by the Jackson County Health Department, who issues both the county and state construction permits. Private well users also are responsible for testing their own water supply to confirm that water is safe to drink.<sup>4</sup>



Private water supply well. Photo Credit: Iowa Department of Natural Resources (DNR)



Image Source: Iowa DNR

The Jackson County Health Department is responsible for the private water supply well program and water testing, including the following duties:

- Permits and inspections of new private water supply wells and their systems.
- Private well abandonment and rehabilitation.
- Regulating the construction and installation of all private water wells.
- Collecting water samples from new and existing wells for water testing for nitrates, e. Coli, arsenic, and total coliform.

The Jackson County Health Department provides free well water testing up to three times per home annually upon request.<sup>5</sup>

<sup>4</sup> <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Private-Well-Program/Water-Supply-Wells>

<sup>5</sup> <https://jacksoncounty.iowa.gov/health-department/>

**Public Water Supply**

According to the Iowa Department of Natural Resources (DNR), a public water supply is defined as a system that provides water for human consumption that has at least 15 service connections or serves at least 25 people at least 60 days during the year. Public water supply wells and systems can only be permitted through the Iowa DNR.

Public water supplies undergo periodic testing to ensure the safety of the water, provide notice to water users when the water isn't safe to consume, and provide reports to Iowa DNR to verify and document the safety of the water system. The three types of public water supplies are based on population served:

- **Community public water supplies (C)** serve year-round residents, such as in a city, subdivision, mobile home park, or unincorporated area.
- **Non-transient non-community public water supplies (NTNC)** regularly serve at least 25 of the

same people, four or more hours per day, four or more days per week, for at least six months during the year. Examples are a factory, daycare center, school, or office.

- **Transient non-community public water supplies (NC)** serve at least 25 people for at least 60 days during the year. Examples include a park, golf course, camp, bar, restaurant, or highway rest area.<sup>6</sup>

Table 5.2 lists the 27 active public water supplies by type -- C or NC -- in Jackson County as of November, 2023.

The **Iowa Drinking Water Data Portal** provides information about the public water supply systems that serve drinking water throughout Iowa and the results of samples required by the Safe Drinking Water Act. This portal also is a tool for public water supply systems to renew their operation permits online. Visit <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Drinking-Water-Compliance>

<b>Water System Name</b>	<b>Type</b>
Alfred’s Bar and Grill	NC
Andrew Water Supply	C
Baldwin Water Supply	C
Bellevue Golf Club	NC
Bellevue Municipal Utilities	C
Bellevue State Park North-Nelson Unit	NC
Bellevue State Park South-Dyas Unit	NC
Bluff Lake Catfish Farm	NC
Camp Shalom	NC
Eden Valley Refuge	NC
Hurstville Interpretive Center	NC
Kalmes Store	NC
La Motte Water Supply	C
Maquoketa Caves State Park #3	NC
Maquoketa Municipal Water	C
Miles Water Department	C
Monmouth Water Supply	C
Nita Ho Valley Association	NC
Obie’s	NC
Peteschs Mobile Home Park	NC
Pleasant Creek Public Area #2	NC
Preston Municipal Water Supply	C
Preston Valley Golf	NC
Sabula Water Supply	C
SNK Gas And Food LLC	NC
Springbrook Water Dept	C
Spruce Creek Park #5	NC

Source: Iowa Drinking Water Data Portal, 11/02/2023

<sup>6</sup> <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Drinking-Water-Compliance>

**Source Water Protection**

Drinking water sources can be surface water (rivers, streams, reservoirs, lakes) or groundwater (aquifers); see Figure 5.3. Groundwater is the source for all public water supplies in Jackson County.

The quality of groundwater can be affected by natural and human activities. Groundwater quality can be protected by managing the areas through which water

travels and the activities that occur on the land.

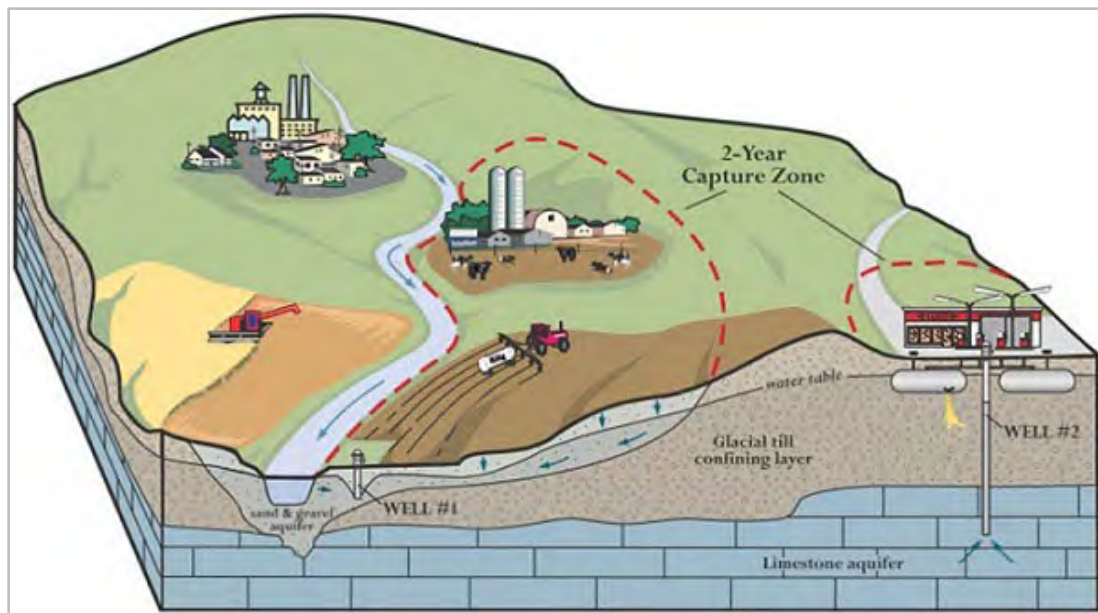
Protecting groundwater quality from contamination means less money for treatment, longer use of a well, and less risk of replacing a contaminated well.

Groundwater is much less susceptible to contamination than surface water, but natural recovery is very slow.<sup>7</sup>

**Karst Conditions and Water Wells**

There are special considerations for drinking water wells located in karst bedrock conditions, which occur in Jackson County. "Karst" refers to terrain characterized by the presence of easily dissolved bedrock (limestone and dolomite) near the surface.

The prevalence of agriculture and livestock in karst areas may cause localized contamination of karst aquifers with nutrients, pesticides, and bacteria. Contaminated aquifers should not be used for drinking water purposes unless proper water treatment is used and maintained.<sup>8</sup>



**Figure 5.3 Diagram of two different source water aquifers and associated surface areas (2-year capture zone) from two wells.**

Source: Iowa DNR



**Karst conditions: Water wells in stream sinkhole.** Photo Credit: Iowa DNR

<sup>7</sup><https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Source-Water-Protection>

<sup>8</sup><https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Private-Well-Program/Water-Supply-Wells>

**WASTEWATER TREATMENT**

In Iowa, wastewater is treated in two ways: onsite by a private wastewater treatment system or offsite by a public wastewater treatment system.

**Private Onsite Wastewater Systems**

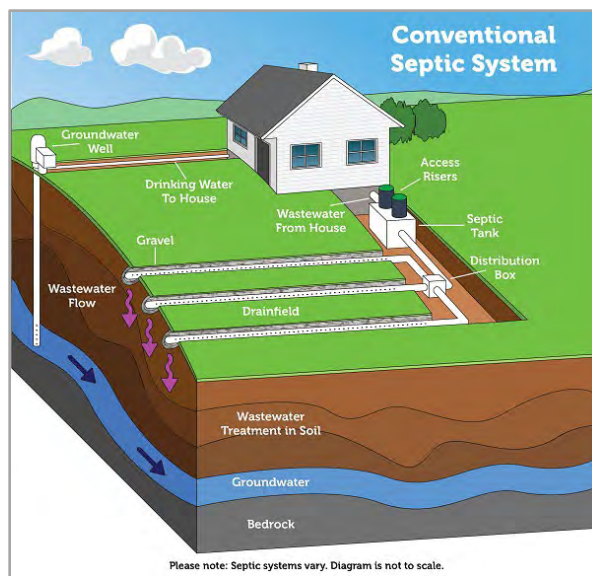
An onsite wastewater treatment system (also called a private sewage disposal system or septic system) serves up to four homes or less than 15 people. The county boards of health have primary responsibility for regulation of private onsite wastewater treatment system in the unincorporated areas in accordance with the minimum state standards.

The Iowa Department of Natural Resources (DNR) provides design criteria for different types of private onsite wastewater treatment systems. Counties have the authority to allow alternative or innovative performance-based systems.<sup>9</sup>

The Jackson County Health Department is responsible for the private onsite wastewater program, including:

- Permits and regulating the design, construction, and installation of all private onsite treatment systems.
- Aiding with complaints relating to sewage treatment and disposal system.

In Jackson County, the most common private septic systems are: conventional (Figure 5.4), sand filter, and coco filter.



**Figure 5.4 Diagram of a conventional septic system.** Source: U.S. Environmental Protection Agency (USEPA)

**Rural Community Sewer Systems**

The Iowa DNR also regulates rural community sewer systems. This type of system typically is under common ownership, collects wastewater from multiple dwellings or buildings, and conveys the wastewater to a treatment and dispersal system. In Jackson County a rural community sewer serves the Leisure Lake community located near Bernard.

**Unsewered Communities**

Despite state standards set in the 1960s, raw sewage continues to flow directly to streams without treatment due to outdated or poorly functioning septic tanks in "unsewered communities". An unsewered community is a group of 10 or more homes with one or more houses per acre. It's "unsewered" if it lacks a central sewage treatment system or if most of its septic systems don't meet state standards.<sup>10</sup> In 2022, Jackson County's unsewered communities were eligible for free septic systems. The only applicant received a new septic system.<sup>11</sup>

<sup>11</sup> Jackson County Health Department

<sup>9</sup> <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Private-Septic-Systems>

<sup>10</sup> <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Rural-Community-Sewers>

<b>NPDES Permit Holder</b>	<b>Facility Type</b>
City of Maquoketa	Municipal
City of Bellevue	Municipal
City of Preston	Municipal
City of Sabula	Municipal
City of Miles	Municipal
City of Andrew	Municipal
City of La Motte	Municipal
City of Springbrook	Municipal
City of St. Donatus	Municipal
Baldwin-Monmouth Wastewater Treatment Agency	Municipal
City of Spragueville	Municipal
City of Zwingle	Municipal
Iowa DNR - Bellevue State Park	Semi-public
Iowa DNR - Maquoketa Caves State Park	Semi-public

Source: Permit Listing Spreadsheet (9/1/2023) at <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/NPDES-Wastewater-Permitting/Current-NPDES-Permits>

**Public Wastewater Treatment Systems**

The Iowa DNR regulates larger, offsite public wastewater treatment systems serving cities as well as agricultural, industrial, and semi-public facilities.

The Iowa DNR issues discharge permits under delegation of a federal program known as the National Pollutant Discharge Elimination System (NPDES) permit program. The NPDES program regulates the direct discharge of wastewater to surface waters.

Under Iowa's NPDES program, all facilities that discharge pollutants into surface waters are required to obtain an NPDES or operation permit. The permits require compliance with all federal and state standards and may require additional controls based on local conditions.<sup>12</sup>

Table 5.3 lists the 12 individual NPDES permits and two state operation permits for facilities in Jackson County authorized to discharge wastewater to surface waters in Iowa in 2023.

**Regional Utility Management**

A regional utility management organization provides technical and financial assistance to communities for water supply and wastewater treatment.

The Eastern Iowa Regional Utility Service Systems (EIRUSS) is such an organization created by Cedar, Clinton, Delaware, Jackson, and Jones Counties. EIRUSS plans, designs, develops, finances, constructs, owns, operates and maintains water supply and wastewater treatment systems for these counties as well as their cities and unincorporated areas.

EIRUSS helped the Leisure Lake community plan for a wastewater system to replace private septic systems. EIRUSS received State and Federal funds to construct the new system, which was completed in 2013. In 2020, EIRUSS received Federal funds to hookup an additional 26 users. The project was completed in April 2022. Federal funds provided financial assistance for connection to the sewer system.<sup>13</sup>

<sup>12</sup> <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/NPDES-Wastewater-Permitting>

<sup>13</sup> [https://www.ecia.org/programs/eastern\\_iowa\\_rural\\_utility\\_service\\_systems/current\\_projects.php](https://www.ecia.org/programs/eastern_iowa_rural_utility_service_systems/current_projects.php)



**SOLID WASTE DISPOSAL AND RECYCLING**

Properly managing solid waste disposal is critical to protecting Iowa's land, water, and air resources. To protect the environment, the Iowa Department of Natural Resources (DNR) regulates solid waste facilities such as landfills, transfer stations, and regional collection centers, which are usually managed by cities and counties.

*Solid Waste Disposal*

The Waste Authority of Jackson County is comprised of the incorporated cities and unincorporated area of Jackson County.

The Waste Authority operates a solid waste transfer station constructed in 1994 at 25146 184th Street, Maquoketa. The transfer station is where residents can bring waste material if they do not have local refuse collection at their home or business. Disposal rates are based on the weight of the material and vary according to the type of waste.

The transfer station accepts all types of garbage including construction and

demolition waste. It also accepts scrap metal and waste oil. All municipal solid waste (garbage and trash) is transferred to a landfill in Illinois. Other materials go to various recycling facilities for proper processing.

Appliances and electronic waste have components that cannot be landfilled with regular garbage. The Waste Authority pays to have these items hauled to special recyclers for processing and recovery.<sup>14</sup>

Residents of Jackson County may bring household hazardous waste to the transfer station. It serves as a satellite collection center for the Clinton County Regional Collection Center. Businesses must take their waste to the Clinton County Regional Collection Center by appointment only.

Common household hazardous materials include: household cleaners, home improvement and automotive products, pesticides, and miscellaneous chemicals.<sup>15</sup>

*Garbage and Recycling Collection*

Garbage and recycling collection in Jackson County is provided by municipal or private companies in several cities, as shown in Table 5.4.

City	Garbage	Recyclables
Bellevue	Municipal	Municipal
Maquoketa	Municipal	Municipal
Miles	Private	Private
Preston	Municipal	Municipal
Sabula	Private	Private

<sup>14</sup> <https://www.wasteauthority.org/site/>

<sup>15</sup> <https://www.wasteauthority.org/site/hazardous/>

**TELECOMMUNICATIONS SERVICE**

Telecommunications infrastructure is an increasingly important issue for economic development and quality of life in Jackson County and the region. High-speed internet and mobile/cell phone service is a necessity for most residents and businesses, including farmers.

Many people now rely on the internet for shopping, banking, entertainment, job applications, applying for government services, work from home, and much more. Expanding internet use has increased demand for internet bandwidth and has required expansion of telecommunications infrastructure.

***Broadband/High-Speed Internet***

The Federal Communications Commission (FCC) regulates interstate and international communications by radio, television, wire, satellite, and cable. The FCC notes that broadband commonly refers to high-speed internet access that is always on and faster than the older dial-up access.<sup>16</sup>

The FCC focuses on broadband access and internet adoption in addition to rural access and speed to get a more complete understanding of broadband connectivity in a community. Mbps (Megabits per second) refers to the speed with which

information packets are downloaded from, or uploaded to, the internet. Data for Jackson County is in Table 5.5 below. Internet providers serving Jackson County are listed with online resources like <https://broadbandnow.com/>.

<b>Table 5.5 Broadband Access and Internet Adoption in Jackson County (2023)</b>		
<b>Measures</b>	<b>Description</b>	<b>County Data</b>
<b>Fixed Broadband</b>	Percentage of the population living in census blocks with access to fixed broadband service at 25 download/3 upload Mbps or higher advertised speeds.	89.9%
<b>Rural Access</b>	Percentage of the population living in rural census blocks with access to fixed broadband service at 25/3 Mbps or higher advertised speeds.	82.9%
<b>Fixed Download</b>	Percentage of population living in census blocks with access to fixed broadband service at 25 Mbps or higher advertised download speeds.	89.9%
<b>Fixed Upload</b>	Percentage of population living in census blocks with access to fixed broadband service at 3 Mbps or higher advertised upload speeds.	92.6%
<b>Number of Providers</b>	Number of fixed broadband providers offering service to consumers at 25/3 Mbps of higher advertised speeds.	15
<b>Most Common Download</b>	Most commonly advertised download speed tier in an area.	>1,000 Mbps
<b>Most Common Upload</b>	Most commonly advertised upload speed tier in an area.	50-100 Mbps
<b>Internet Adoption</b>	The number of residential (consumer) connections per 100 households.	75

Source: <https://www.fcc.gov/reports-research/maps/connect2health/data.html> accessed Oct. 2023

<sup>16</sup> <https://www.fcc.gov/general/types-broadband-connections>

**Wireline and Wireless Providers**

Many people refer to traditional telephone service provided to homes and businesses as "landline" service. The FCC often refers to telephone service provided over copper wires or fiber cables as "wireline" service. Thus, "wireline" is a broad term that includes both traditional telephone service and wireline Voice over Internet Protocol (VoIP) service.<sup>17</sup>

"Wireless" communication is the transmission of voice and data without cable or wires. In place of a physical connection, data travels through electromagnetic signals broadcast from sending facilities to intermediate and end-user devices.<sup>18</sup>

The Iowa Dual Party Relay Service law requires wireless carriers and wireline local exchange carriers that provide telecommunications service in Iowa to pay three cents (\$0.03) per month for each telecommunications service phone number provided in Iowa.<sup>19</sup>

<sup>17</sup><https://www.fcc.gov/consumers/guides/hearing-aid-compatibility-wireline-and-wireless-telephones>

The following information was accessed in November, 2023 from the Iowa Utility Board (IUB) Incumbent Local Telephone Exchange Area Map available online at <https://iub.iowa.gov/regulated-industries/telecommunicationsdual-party-relay/incumbent-local-telephone-exchange-area-map> (see Figure 5.5).

Service territories are defined by the IUB based on data for a defined geographic territory submitted by each incumbent local telephone exchange carrier. A carrier may adopt the exchange boundary map filed by another carrier serving that exchange. This data is submitted and certified to the FCC by the carriers through the IUB.

Table 5.6 provides a list of the local telephone exchange carriers that serve the exchange areas in Jackson County.

According to the IUB, Mediacom provides telephone service over its cable network so it is not included in Figure 5.5 (map) or Table 5.6.

<sup>18</sup><https://www.techtarget.com/searchmobilecomputing/definition/wireless>

**Table 5.6 Local Telephone Companies by Exchange Area in Jackson County (2023)**

Name of Exchange Area	Incumbent Local Telephone Exchange Carrier
Andrew	Andrew Telephone Company
Baldwin	Baldwin-Nashville Telephone Co. Inc.
Bellevue	Windstream Holdings, Inc.
Bernard	Bernard Telephone Company
Cascade	Cascade Communications Company
La Motte	La Motte Telephone Company
Maquoketa	Qwest Corp-IA/ CenturyLink, Inc.
Miles	Miles Cooperative Telephone Association
Preston	Preston Telephone Company
Otter Creek	Cascade Communications Company
Sabula	Windstream Holdings, Inc.

<sup>19</sup> <https://iub.iowa.gov/regulated-industries/telecommunicationsdual-party-relay>

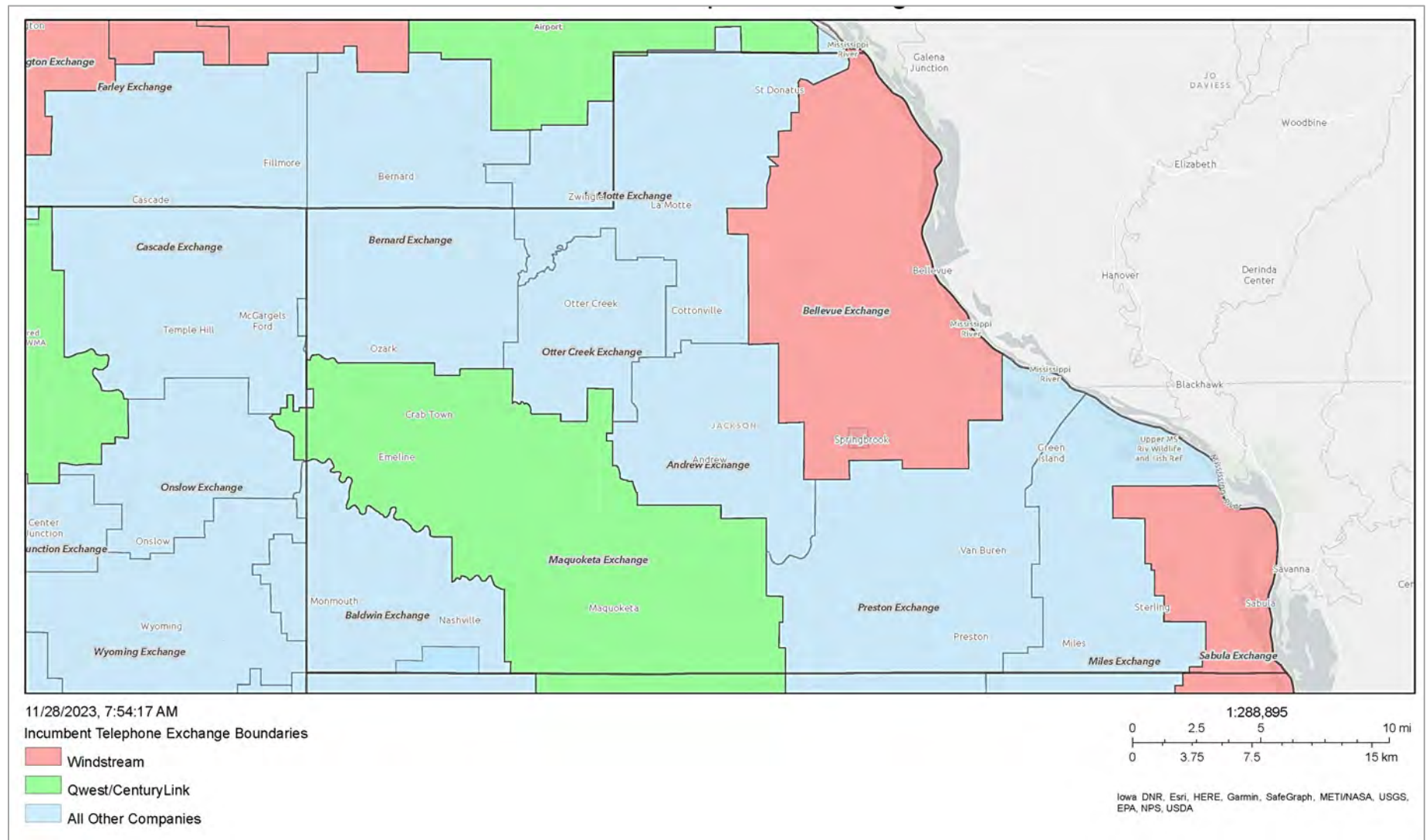


Figure 5.5 Map of Incumbent Local Telephone Exchange Areas in Jackson County (2023)

Source: Iowa Utility Board, <https://iowa.maps.arcgis.com/apps/webappviewer/index.html?id=eb8ba6d91f91465991c6144f95dcf952>

**ELECTRIC SERVICE**

This section discusses production, emissions, providers, consumption, and costs of electricity in Jackson County.

*Electrical Energy Production*

There is one active electric power generating plant in Jackson County. It is located at the Lakehurst Dam on the Maquoketa River west of Maquoketa. Iowa Hydro, LLC owns the 700-foot-long dam where Renewable World Energies, LLC operates a conventional hydroelectric plant. The plant’s two generators have a maximum generating capacity of 1,200 kilowatts and can generate up to 6,355 megawatt hours (MWh) annually.<sup>21</sup> Table 5.7 compares annual electrical energy production for Jackson County and Iowa.

Megawatt Hours	Jackson County	Iowa
<b>Total Production</b>	4,899	71,768,705
<b>Total Production Per Capita</b>	0.25	22.42

<sup>20</sup> <https://findenergy.com/ia/jackson-county-electricity> Published: 2023-11-09

<sup>21</sup> <http://www.renewableworldenergies.com/hydro-plant-dam/maquoketa>

Renewable energy is produced from sources like sun, wind, and water that are replenished naturally and do not run out. Hydroelectric power is renewable energy.

With total production of 4,899 MWh from hydroelectric power in 2022, Jackson County ranked 39<sup>th</sup> in Iowa for total MWh generated from renewable energy.<sup>23</sup>

*Greenhouse Gas Emissions*

Carbon dioxide (CO<sub>2</sub>) made up 66% of greenhouse gas emissions in Iowa, followed by nitrous oxide (18%), methane (15%), and fluorinated gases (1%) according to the 2021 Iowa Greenhouse Gas (GHG) Inventory.

“The 2021 GHG Inventory is a ‘top-down’ inventory based on a statewide activity data from agriculture, fossil fuel combustion, industrial processes, natural gas transmission and distribution, transportation, solid waste, and wastewater treatment. It also includes carbon sequestered or emitted from land

<sup>22</sup> <https://www.iowadnr.gov/environmental-protection/air-quality/greenhouse-gas-emissions>

<sup>23</sup> <https://findenergy.com/ia/jackson-county-electricity> Published: 2023-11-09

use, land use change, and forestry.”<sup>24</sup> Table 5.8 shows 2021 total Iowa GHG emissions by economic sector. The Agriculture sector was the largest at 29%, followed closely by the Residential, Commercial and Industrial sector at 27%.

Economic Sector	Percentage
<b>Agriculture</b>	29%
<b>Residential, Commercial, and Industrial</b>	27%
<b>Electricity Generation</b>	19%
<b>Transportation</b>	16%
<b>Industrial Processes</b>	6%
<b>Waste</b>	2%
<b>Natural Gas Transmission and Distribution</b>	1%

On average, Jackson County produced 5,098 kilograms of CO<sub>2</sub> emissions per capita from electricity use in 2022. This rate was below the Iowa average of 5,174 per person, but higher than the U.S. average emissions of 4,159 per capita.<sup>25</sup>

<sup>24</sup> <https://www.iowadnr.gov/environmental-protection/air-quality/greenhouse-gas-emissions>

<sup>25</sup> <https://findenergy.com/ia/jackson-county-electricity> Published: 2023-11-09

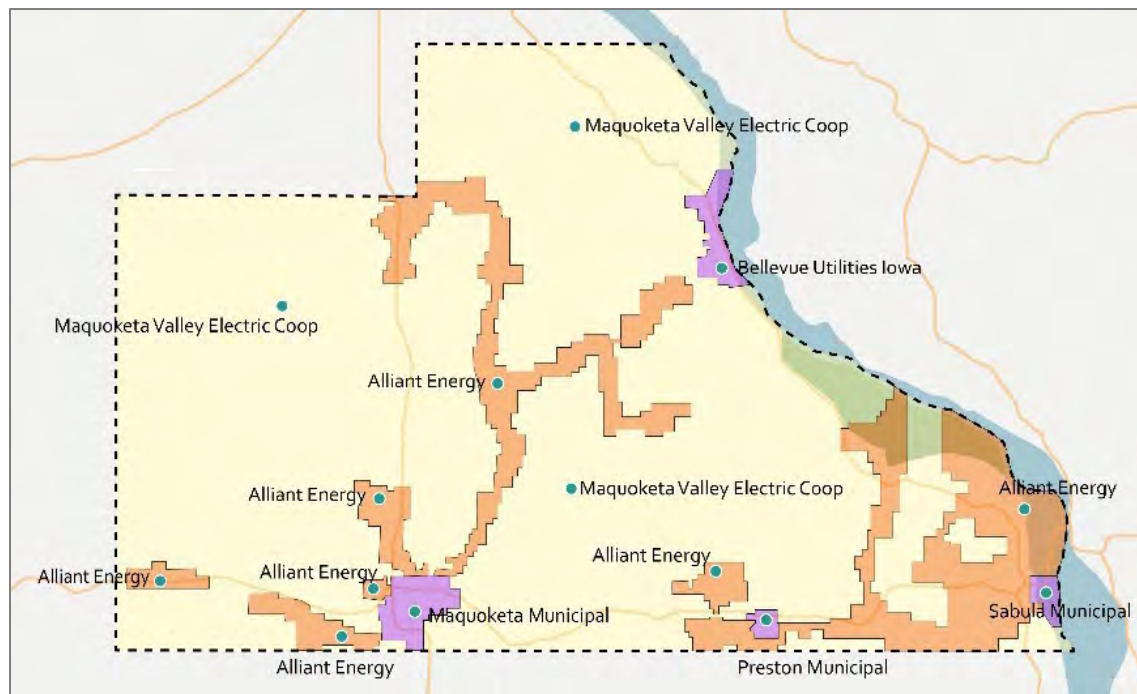
**Electrical Energy Consumption**

The total electrical energy consumption in Jackson County was 333,466 megawatt hours (MWh) and energy consumption per capita was 17.1 MWh in 2022 as shown in Table 5.9 below. Jackson County’s total consumption per capita matched Iowa’s total consumption per capita.

Megawatt Hours	Jackson County	State of Iowa
<b>Total Consumption</b>	333,466	53,734,304
<b>Total Consumption Per Capita</b>	17.1	17.1

**Electric Utility Service Providers**

Both geographically and in terms of sales, Jackson County is primarily powered by Alliant Energy and Maquoketa Valley Electric Cooperative (MVEC). Other service providers to municipalities are Maquoketa Municipal Electric Utility,



**Figure 5.6 Map of Electric Service Area Boundaries in Jackson County (2023)**

Source: Iowa Utilities Board, as modified in 2022 Jackson County Clean Energy Plan and verified in 2023

Bellevue Utilities, Preston Electric Utility, and Sabula Electric Utility. MVEC services the rural areas outside of Alliant Energy and the municipal utility territories.<sup>27</sup>

The Iowa Utility Board provides an online map of electric service boundaries at <https://iub.iowa.gov/regulated-industries/electric/electric-service-area-boundary-map>.

[boundary-map](#). Figure 5.6 is a map of electric service area boundaries for Jackson County. This map is from the *2022 Jackson County Clean Energy Plan* and is a modification of the online map. Figure 5.6 was verified with the Iowa Utility Board’s online map of electric service boundaries in November, 2023.

<sup>26</sup><https://findenergy.com/ia/jackson-county-electricity> Published: 2023-11-09

<sup>27</sup> 2022 Jackson County Clean Energy Plan, p. 11

**Cost of Electricity**

“Electricity prices reflect the cost of building, maintaining, and operating power plants and the electrical grid. The energy rate, measured as cost per kilowatt-hour (kWh), varies based on the demand, weather, availability of energy sources, and fuel costs. Rural households face the highest energy burdens and spend a larger percentage of their income on energy bills than the average household (ACEEE, 2018). Lower population over larger areas causes the cost and efficiency of delivering the energy to rural areas to be higher than delivering energy to urban areas (NRDC, 2018). Compared to the national average, Iowa’s average electricity rate is lower with an average of 12.75 cents per kWh compared to the U.S. rate of 13.8 cents.

Jackson County has the fifth most expensive residential electricity rate in Iowa (Table 5.10) which is about 21% higher than the state’s average.

The residential average monthly electricity bill in Jackson County is ranked

as the 64th most expensive average in the state out of the 99 counties. The county’s average is more expensive than the state’s average.”<sup>28</sup>

**Net Metering (Avoided Cost)**

All electricity providers in Jackson County offer net metering (avoided cost), which is an advantage for their customers.

“With avoided cost net metering, excess energy is valued at something called the avoided cost rate. The avoided cost rate is lower than the retail rate of electricity and represents the amount of money the utility saved by not having to provide you with the electricity.”<sup>29</sup>

“Net metering allows customers who have solar panels to receive a credit for any excess energy produced compared to what their home consumes. The excess energy is sent back to the grid as a credit to be used by the customer in times of lower energy production.”<sup>30</sup>

**Table 5.10 Top Five Iowa Counties Ranking by Residential Electricity Rate per kWh (2021)**

Rank	County	Population	Residential Rate per kWh	Residential Average Monthly Electricity Bill
1	Hancock	10,795	\$0.1753	\$172.05
2	Winnebago	20,070	\$0.1616	\$144.70
3	Howard	9,469	\$0.1616	\$144.70
4	Allamakee	14,061	\$0.1582	\$147.53
5	<b>Jackson</b>	<b>19,485</b>	<b>\$0.1536</b>	<b>\$117.24</b>
<b>State of Iowa</b>		<b>3,190,369</b>	<b>\$0.1275</b>	<b>\$110.82</b>

<sup>28</sup> 2022 Jackson County Clean Energy Plan, p. 11

<sup>29</sup> <https://www.solarreviews.com/blog/do-you-save-more-money-with-net-metering-or-solar-batteries> in section 3. Avoided-cost net metering

<sup>30</sup> 2022 Jackson County Clean Energy Plan, p. 23

**Electricity Rates**

The residential electricity rate breakdown by electric utility provider for Jackson County in 2021 is shown in Table 5.11. Alliant Energy serviced the majority of residential households with 95.3% of the residential sales by MWh in the county.

Maquoketa Valley Electric Cooperative had the second-lowest residential electricity rate at 12.11 cents per kWh, but the highest average bill for residential households at \$133.33 per month.

Alliant Energy had the third-highest residential rate at 15.14 cents per kWh and the second-highest average bill at \$111.76 per month.

Alliant Energy services most of the incorporated jurisdictions, which brings the service cost down, but the higher cost per kWh raises the monthly bill.

“The breakdown of residential, commercial, and industrial electricity costs in Jackson County in 2022 was only available for the three largest cities: Maquoketa, Bellevue, and Preston (Table 5.12).

**Table 5.11 Jackson County Residential Electrical Providers by Residential Rate (2022)**

Rank	Provider	Residential Rate	Residential Average Bill	County Residential Sales by MWh
1	Sabula Electric Utility	\$0.1735	\$101.25	0.1%
2	Preston Electric Utility	\$0.1515	\$108.37	0.1%
3	Alliant Energy	\$0.1514	\$111.76	95.3%
4	Maquoketa Municipal Electric Utility	\$0.1214	\$85.82	0.6%
5	Maquoketa Valley Electric Cooperative	\$0.1211	\$133.33	3.6%
6	Bellevue Utilities	\$0.1011	\$60.33	0.3%

Source: 2022 Jackson County Clean Energy Plan

The average monthly bill for residential buildings was consistent with the state's costs. These cities are primarily serviced by their own public utility and do not include Alliant Energy’s rate for service. Monthly electric bills for commercial buildings were significantly cheaper than

the state’s average, even though the average rate per kWh was slightly higher. Industrial buildings’ monthly electric bills and the average rate per kWh were higher than the state in the three cities.”<sup>31</sup>

**Table 5.12 Jackson County Average Monthly Bills and Rates per kWh (May 2022)**

	Residential		Commercial		Industrial	
	Average Bill	Average Rate	Average Bill	Average Rate	Average Bill	Average Rate
<b>State of Iowa</b>	\$110.82	\$0.1275	\$417.22	\$0.1017	\$17,086.77	\$0.0667
<b>Maquoketa</b>	\$94.10	\$0.1230	\$450.72	\$0.1105	\$48,299.06	\$0.0871
<b>Bellevue</b>	\$61.80	\$0.1015	\$414.33	\$0.0811	n/a	n/a
<b>Preston</b>	\$111.88	\$0.1503	\$260.39	\$0.1258	\$29,837.80	\$0.0768

Source: 2022 Jackson County Clean Energy Plan

<sup>31</sup> Ibid, pp. 13-14



**GAS SERVICE**

In Jackson County, gas service primarily is provided via underground utility service lines for natural gas or via above-ground private tanks for propane.

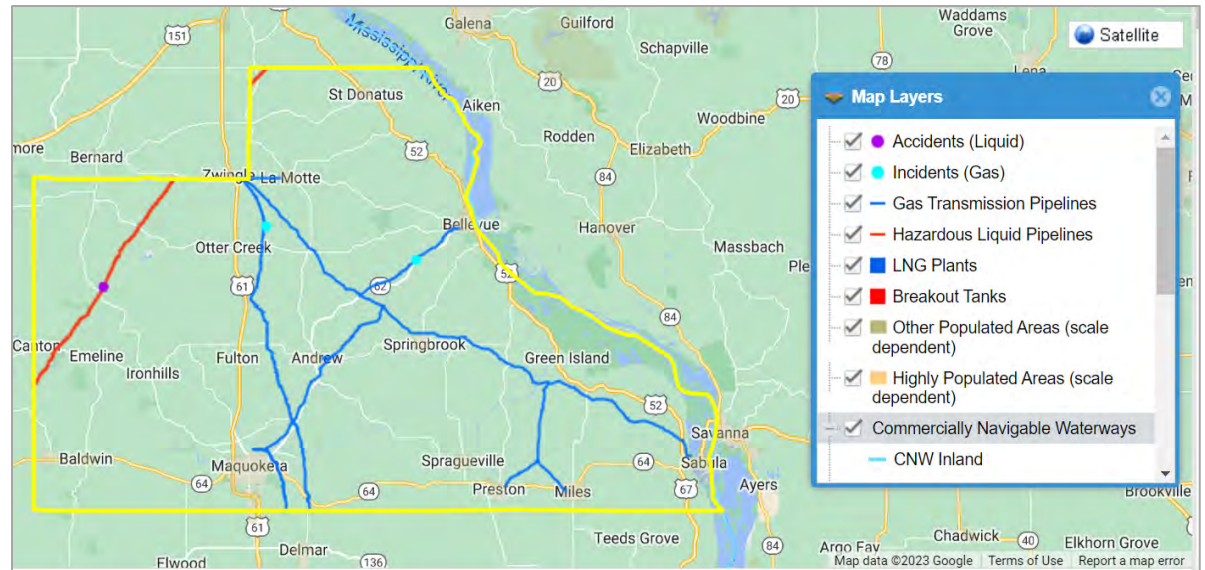
**Natural Gas**

Iowa does not have any natural gas reserves or production, but the state is crossed by several interstate natural gas pipeline systems. Figure 5.7 shows the gas pipelines that cross Jackson County.

“Natural gas accounts for about 25% of the total energy consumed in Iowa, as 6 out of 10 households use natural gas as their primary heating fuel. The industrial sector consumed 58% in 2022.”<sup>33</sup> Table 5.13 shows average natural gas prices and monthly bills by sector in Iowa.

Sector	Price/100 cubic feet	Monthly Bill
Industrial	\$7.12	\$86,853.40
Commercial	\$10.76	\$458.30
Residential	\$15.26	\$71.80

<sup>32</sup> <https://findenergy.com/ia/natural-gas/>  
Published: 2022-03-03



**Figure 5.7 Map of Gas Pipelines in Jackson County, 2023**

Source: <https://pvnpm.phmsa.dot.gov/PublicViewer/>

In Jackson County, Black Hills Energy provides natural gas for most areas, while Alliant Energy supplies Springbrook, Preston Municipal supplies Preston, and Sabula Municipal supplies Sabula.

**Propane**

“Iowa is the only non-crude oil-producing state among the top five states in total energy consumption per capita. Iowa’s

<sup>33</sup> US Energy Information Administration (EIA) Iowa State Energy Profile updated 8/17/2023 at <https://www.eia.gov/state/analysis.php?sid=IA>

petroleum consumption includes hydrocarbon gas liquids (HGL), mostly propane. Iowa ranks fourth among the states in HGL consumption. The industrial sector consumes over 66% of the HGLs, where farmers use propane to dry their harvested corn crop. About one in eight Iowa households heats with propane, almost triple the national rate.”<sup>34</sup>

<sup>34</sup> Ibid.

County propane suppliers are located in Maquoketa, La Motte, and Bellevue.

## RENEWABLE ENERGY

Renewable energy is energy produced from sources like biomass, geothermal resources, sunlight, water, and wind, that are replenished naturally and do not run out. In contrast, non-renewable energy comes from finite sources that could get used up, such as fossil fuels like coal and oil.<sup>35</sup>

“The transition to clean energy can lead to long-term energy independence and positive economic outcomes for residents. The practical applicability of renewable energy can reduce pollution, improve community resiliency, and become a long-term cost savings tool for local jurisdictions and individual households.”<sup>36</sup>

<sup>35</sup> <https://www.energy.gov/eere>

<sup>36</sup> 2022 Jackson County Clean Energy Plan, p. 1

<sup>37</sup> Ibid, p. 18

## Biomass

A biomass system uses products derived from plant, animal, or organic material to produce heat and to generate electricity.

“Biomass is not considered a viable option for Jackson County due to increased carbon emissions when burned for electricity.”<sup>37</sup>

## Geothermal Energy

A geothermal energy system works by exchanging heat between the air and the ground. Ground source heat pumps and direct use geothermal technologies typically are used for space heating, space cooling (air conditioning), and water heating applications in buildings.<sup>38</sup>

“Jackson County is in a moderately favorable area for the use of geothermal.”<sup>39</sup> “The Midwest and the State of Iowa have not made investments in geothermal generation that would warrant its current consideration.”<sup>40</sup>

<sup>38</sup> <https://www.iowadnr.gov/environmental-protection/water-quality/private-well-program/ghex-borehole-construction>

## Hydroelectric Power

Hydroelectric power, or hydropower, alters the natural flow of a river or other body of water to generate electricity. The Maquoketa hydroelectric power plant went online in 1923. Located on the Maquoketa River west of Maquoketa, it has a maximum generating capacity of 1,200 kilowatts.<sup>41</sup>



**Maquoketa hydroelectric power plant.** Photo Credit: <http://renewableworldenergies.com>

*An Assessment of Energy Potential at Non-Powered Dams in the United States* completed for the U.S. Department of Energy in 2012 found untapped potential hydropower on existing dams. Of the top 100 dam sites, Lock and Dam #12 in Bellevue ranked 42<sup>nd</sup> with an estimated potential capacity of 52 megawatts.

<sup>39</sup> 2022 Jackson County Clean Energy Plan, p. 18

<sup>40</sup> Ibid, p. 72

<sup>41</sup> <http://renewableworldenergies.com>

**Wind Energy**

A wind energy system is any device that converts wind energy to a form of usable energy, including windmills and wind turbines. There are four main types.

**Utility-scale wind systems** are usually defined as turbines that exceed 100 kilowatts in size. Utility-scale wind turbines are typically installed in large wind farms connected to the nation's electric transmission system.<sup>42</sup>



**Utility-scale wind turbines.** Photo Credit: WINDEXchange, U.S. Department of Energy

<sup>42</sup><https://windexchange.energy.gov/markets/utility-scale>

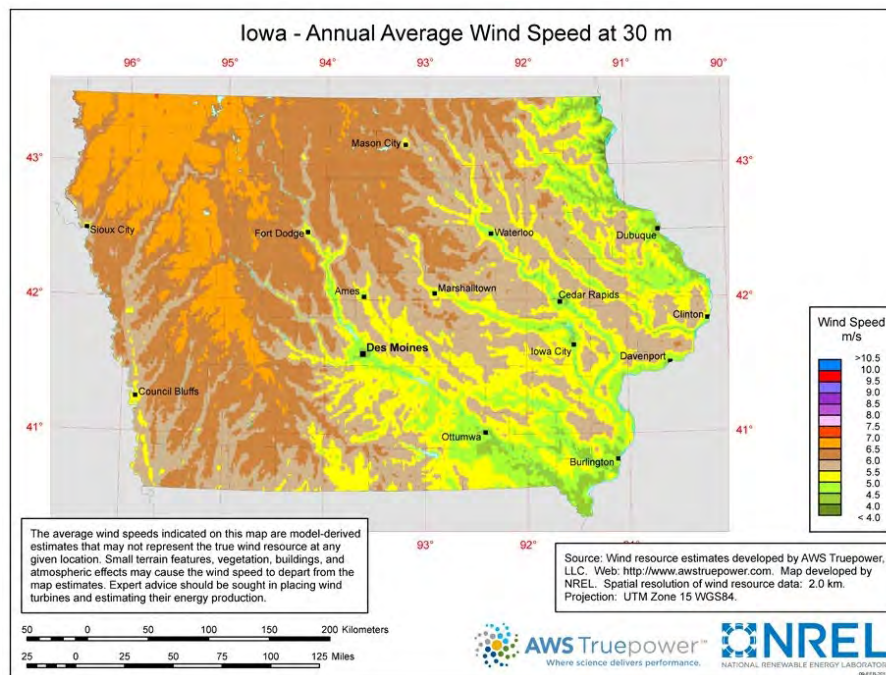
**Distributed wind systems** range from small wind turbines on private land to multi-megawatt wind farms that power campuses or large facilities. Distributed wind turbines can provide all or part of the power used at a location.

**Community wind systems** provide electricity to a local community but not to the main utility transmission grid.

**Residential wind systems** allow landowners to harness wind energy to power their home, farm, business, and other buildings on their property.<sup>43</sup>

Jackson County is located in a low-speed wind zone (Figure 5.8), so other energy sources may be more efficient or effective. “The annual average wind speed in Jackson County above ground is

less than 5 meters per second (m/s). An annual wind speed average of 5.8 m/s is preferred for utility-scale turbines (EIA, 2016).”<sup>44</sup>



**Figure 5.8 Iowa 30-Meter Residential-Scale Wind Resource Map**

Source: <https://windexchange.energy.gov/maps-data/267>

<sup>43</sup><https://windexchange.energy.gov/markets/distributed>

<sup>44</sup> 2022 Jackson County Clean Energy Plan, p. 18

**Solar Energy**

A solar energy system is any solar collector, solar device or structural design feature of a building whose primary purpose is to provide for the collection, storage and distribution of solar energy. Typical uses include attached and freestanding solar panels, solar energy devices integrated as part of the structure, and passive energy systems. Figure 5.9 shows examples of building-mounted solar systems.

There are three main types of solar energy systems according to the 2020 *Iowa Solar Siting Resource Guide: A Roadmap for Counties*.

**Utility-scale solar energy system:** A solar energy system above a certain capacity that is intended to produce electricity to sell into the market, not to directly supply end-use customers.

**Community solar energy system:** A solar energy system developed by a city, county, utility, or other third party that typically allows community members to subscribe to the project. In Iowa,

development of community solar projects is limited to utilities at this time.

**Residential/small-scale solar energy system:** A solar energy system that is installed at a residence, farm, or business to produce electricity for usage on-site.

As part of the *Grow Solar Jackson County* program, the small-scale solar array at the Hurstville Interpretive Center was installed in 2021. This solar array produces 124,956 kilowatt hours per year,<sup>45</sup> and supplies 100% of the electricity for the center.<sup>46</sup>



**Solar array at Hurstville Interpretive Center.** Photo Credit: Jackson County Energy District website



**Figure 5.9 Examples of Building-Mounted Solar Systems** Source: US Department of Energy

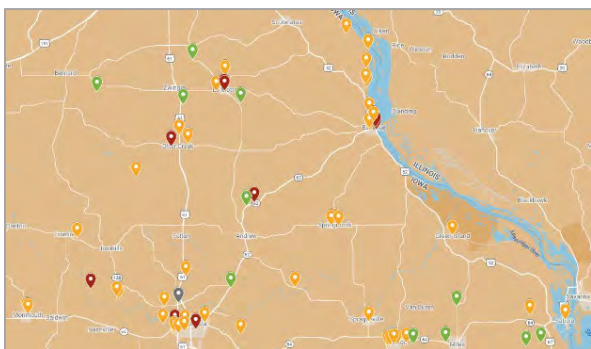
<sup>45</sup> Jackson County Clean Energy District website

<sup>46</sup><https://www.mycountyparks.com/County/Jackson/Park/Hurstville-Interpretive-Center.aspx>

**Jackson County Energy District**

The mission of the nonprofit Jackson County Energy District is: to positively affect the local economy by retaining energy dollars in Jackson County, to slow climate change by promoting wise energy use, and to facilitate fair access to clean and local energy.

The Jackson County Energy District has an interactive Solar Energy Map of solar energy installations in Jackson County. The pins represent Residential (Orange), Agricultural (Green), Commercial (Red), Non-Profit (Purple), and Public (Gray) installations. Visit <https://jacksoncounty.energydistrict.org/solar-energy-map/>



**Jackson County Solar Energy Map, 2023**

Source: Jackson County Energy District website

**Jackson County Clean Energy Plan**

The 2022 Jackson County Clean Energy Plan is a strategic plan for transitioning from non-renewable to renewable energy sources, providing decision support for local leaders, and establishing locally owned, diverse, and equitable energy.

The plan focuses on solar power generation using photovoltaic (PV) panels as the best renewable energy option for Jackson County. The plan also includes analysis of a clean energy pilot project for the city of Springbrook.

As part of the plan a **solar feasibility study** was conducted for 13 sites owned by Jackson County. The Jackson County Board of Supervisors prioritized the South Sabula Lake Campground, the new County Jail in Maquoketa, the county’s secondary roads maintenance shops, and other county administration buildings.

The estimated generation by an individual PV solar system for each of the 13 county-owned sites was calculated using utility data for the sites. The amount of money retained through solar

panel installation, payback period, and total costs diverted over a PV solar panel project’s 25-year lifetime were calculated for each site.

The study’s three priority sites were the County Courthouse, new County Jail, and Lake Sabula Campground.

Analysis for the new jail at was based on utility data and roof size for the Delaware County Jail in Manchester, Iowa.

The Sabula Campground presents some challenges due to floodplain location, shade and tree cover, and seasonal operation from April to October. These challenges could be addressed by locating the PV solar system off-site, perhaps in partnership with Sabula Municipal Utility.

“The primary objective of this study is to confirm that PV solar systems on county buildings should be an endeavor that the Jackson County Clean Energy District and the Jackson County Board of Supervisors explore further.”<sup>47</sup>

<sup>47</sup> 2022 Jackson County Clean Energy Plan, p. 43

As shown in Table 5.14, all 13 County sites had a positive return on investment with installation of PV solar panels. Each row of the table represents a different

price per watt, using \$2.53 per watt and \$1.80 per watt. Total system cost ranged from \$671,400 to \$943,700. Payback period averaged 7 to 10 years. Lifetime

avoided cost was \$1.7 million. Average return for installing PV solar panels on the 13 sites was between \$30,500 to \$41,400 per year.

**Table 5.14 Solar Feasibility Analysis for 13 Jackson County-Owned Sites (2022)**

Source: 2022 Jackson County Clean Energy Plan, p. 30

Name	System Size (kilowatt DC)	Price (Per Watt)	System Cost	Payback Period (Years)	Lifetime Avoided Cost	Return (per Year)
Penrose Annex		\$2.53	\$18,064.20	0.3	\$36,422.81	\$734.34
		\$1.80	\$12,852.00	0.2		\$942.83
Sheriff Office	29.24	\$2.53	\$73,977.20	8.7	\$148,899.64	\$2,996.90
		\$1.80	\$52,632.00	6.2		\$3,850.71
Courthouse	86.02	\$2.53	\$217,630.60	8.7	\$437,948.68	\$8,812.72
		\$1.80	\$154,836.00	6.2		\$11,324.51
County Jail	109.48	\$2.53	\$276,984.40	8.7	\$557,279.86	\$11,211.82
		\$1.80	\$197,064.00	6.2		\$14,408.63
Campground	109.48	\$2.53	\$276,984.40	13.0	\$371,410.53	\$3,777.05
		\$1.80	\$197,064.00	9.2		\$6,973.86
Secondary Roads HQ	11.22	\$2.53	\$28,386.60	8.9	\$55,636.84	\$1,090.01
		\$1.80	\$20,196.00	6.3		\$1,417.63
La Motte Shop	4.08	\$2.53	\$10,322.40	8.8	\$20,417.19	\$403.79
		\$1.80	\$7,344.00	6.3		\$522.93
Prairie Creek Shelter	1.36	\$2.53	\$3,440.80	8.6	\$6,927.26	\$139.46
		\$1.80	\$2,448.00	6.2		\$179.17
Baldwin shop	5.10	\$2.53	\$12,903.00	8.5	\$26,432.97	\$541.20
		\$1.80	\$9,180.00	6.0		\$690.12
Preston Shop	5.78	\$2.53	\$14,623.40	8.7	\$29,130.95	\$580.30
		\$1.80	\$10,404.00	6.2		\$749.08
Springbrook Shop	1.36	\$2.53	\$3,440.80	16.0	\$3,755.30	\$12.58
		\$1.80	\$2,448.00	11.4		\$52.29
Butler shop	1.02	\$2.53	\$2,580.60	14.8	\$3,026.12	\$17.82
		\$1.80	\$1,836.00	10.6		\$47.60
Bellevue Shop	1.70	\$2.53	\$4,301.00	8.9	\$8,385.63	\$163.39
		\$1.80	\$3,060.00	6.4		\$213.03
Overview Table (Table 5.0)	Total	\$2.53	\$943,639.40	9.63	\$1,705,673.76	\$30,481.37
		\$1.80	\$671,364.00	6.85		\$41,372.39

**ENERGY BURDEN**

According to the U.S. Department of Energy (DOE), low-income households face an energy burden three times higher than other households. **Energy burden** is defined as the percentage of gross household income spent on energy costs. DOE notes that high energy burden can be due to higher-cost fuels, such as propane or other bottled fuels, and energy-inefficient homes and appliances.

Low income can be defined using the area median income (AMI) – the point where half the households are above and half are below. The U.S. Department of Housing and Urban Development (HUD) considers households earning less than 80% of the AMI to be low-income.<sup>48</sup>

The **Low-Income Energy Affordability Data (LEAD) Tool** was created to help stakeholders understand housing and energy characteristics for low- and moderate-income households. Data comes from the U.S. Census Bureau's American Community Survey 2020 Public Use Microdata Samples.<sup>49</sup>

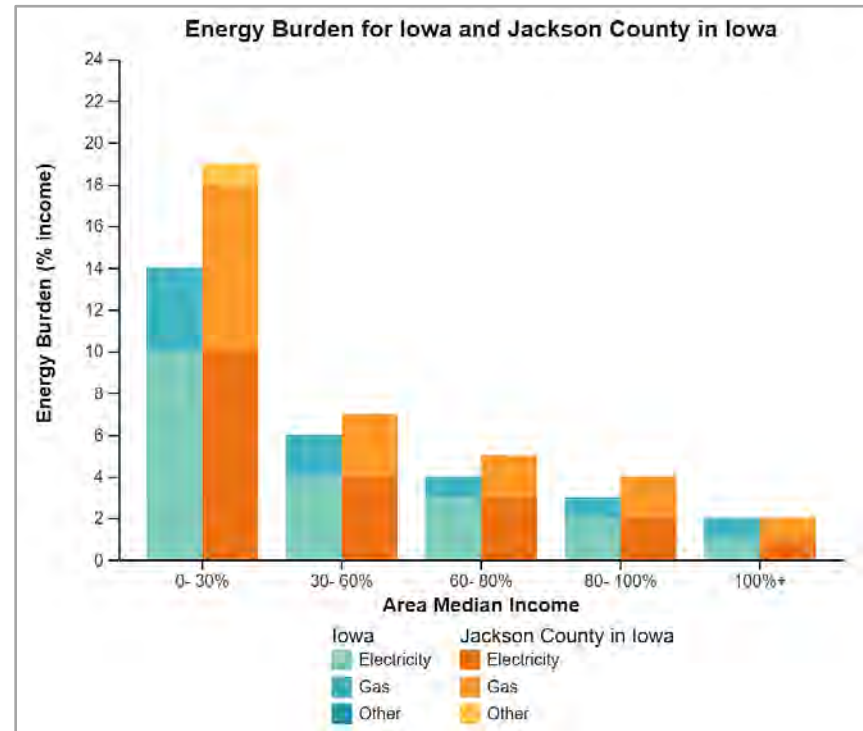
<sup>48</sup><https://www.energy.gov/scep/slsc/low-income-community-energy-solutions>

Figure 5.10 was created using the LEAD Tool to compare the energy burden in Iowa and Jackson County based on income and fuel type.

The U.S. Department of Health & Human Services (HHS) **Low-Income Home Energy Assistance Program (LIHEAP)** helps low-income families with home heating costs, year-round crisis assistance, and weatherization. Hawkeye Area

Community Action Program, Inc. (HACAP) distributes the funds to families in need. By November 2023, HACAP had received about 6,000 applications. That number is what HACAP typically sees in November, and includes applications from all nine of the counties HACAP serves (including Jackson County).

<sup>49</sup><https://www.energy.gov/scep/slsc/low-income-energy-affordability-data-lead-tool>



**Figure 5.10 Energy Burden for Iowa and Jackson County (2020)**  
Source: U.S. DOE Low-Income Energy Affordability Data (LEAD) Tool

Applications for assistance are accepted from November through April annually. (Source: Bond, Maia. "Officials anticipate steady demand for help with winter heating bills." *Telegraph Herald, Dubuque, IA; December 2, 2023.*)

## LOCAL, STATE, & FEDERAL PROGRAMS

Local, state, and federal programs are grouped by categories.

### *Public Roads and Bridges*

Information about programs for public roads and bridges is available in Chapter 6. Transportation of this plan.

### *All Categories*

The U.S. Department of Agriculture (USDA) **Rural Utilities Service (RUS)** provides loans, grants, loan guarantees, and technical assistance for various infrastructure improvements for rural communities. These include drinking water, sanitary sewer, wastewater treatment, storm drainage, and solid waste facilities, as well as telecommunications and electric power infrastructure.

<https://www.rd.usda.gov/about-rd/agencies/rural-utilities-service>

Iowa's **State Revolving Fund (SRF) for Communities** provides low-cost funds for drinking water, wastewater treatment, sewer rehabilitation, and stormwater quality improvements; replacement of inadequate or failing septic systems; and

addressing nonpoint source pollutants for landowners, farmers, and communities.

<https://www.iowasrf.com/about-srf/>

### *Water Supply Wells*

The Jackson County Health Department provides **free well water testing** for Nitrates, Total Coliform, E.coli, and Arsenic up to three times per home annually upon request.

The **Grants to Counties (GTC) Water Well Program** provides grants to local county health departments to provide financial assistance to their residents for private water well construction and plugging.

<https://jacksoncounty.iowa.gov/health-department/>

### *Solid Waste and Recycling*

The Iowa DNR's **Financial and Business Assistance (FABA)** team offers a variety of financial and technical assistance programs for solid waste planning and recycling. For more information about FABA, visit the Iowa DNR webpage at

<https://www.iowadnr.gov/Environmental-Protection/Land-Quality/Waste-Planning-Recycling>

## *Telecommunications*

The Iowa Utility Board (IUB) runs **Relay Iowa** and **Telecommunications Access Iowa**. The programs provide assistive telephone services to Iowans who are deaf, hard of hearing, deaf-blind, or have difficulty speaking.

<https://iub.iowa.gov/customer-assistance/telephone-accessibility>

The **Iowa Deaf-Blind Equipment Distribution Program** is promoted by iCanConnect, which provides free equipment and training for people with both significant hearing and vision loss who meet the program's disability and income eligibility guidelines.

<https://www.icanconnect.org/>

**Iowa State University's Center for Wireless, Communities and Innovation (WiCi)** provides research, education, innovation, and community empowerment for rural-focused broadband.

<https://wici.iastate.edu/mission/#>

**Lifeline** is a federal program dedicated to making phone and internet service more affordable for low-income households.

<https://www.lifelinesupport.org/>



The Federal Communications Commission (FCC) offers:

- **Household Broadband Guide**  
<https://www.fcc.gov/consumers/guides/household-broadband-guide>
- **Affordable Connectivity Program**  
<https://www.fcc.gov/acp>
- **National Broadband Map**  
<https://broadbandmap.fcc.gov/home>
- **Mobile LTE Coverage Map**  
<https://www.fcc.gov/BroadbandData/MobileMaps/mobile-map>

***Electric, Gas and Renewable Energy***

The **Iowa Energy Office** manages a diverse mix of state, federal and utility-funded programs and initiatives for technology-based energy research and development, energy workforce development, support for rural and underserved areas, biomass conversion, natural gas expansion, electric grid modernization, alternative fuel vehicles, and the Energy Infrastructure Revolving Loan Program.  
<https://www.iowaeda.com/iowa-energy-office/>

The **Iowa Renewable Fuels Infrastructure Program** of the Iowa Department of Agriculture and Land Stewardship (IDALS) helps retail operators of motor fuel dispensing sites or fueling stations to convert their equipment to allow the expanded use of renewable fuels in Iowa. <https://iowaagriculture.gov/IRFIP>

The Hammond Climate Solutions Foundation’s **Solar Moonshot Program** provides grants up to \$25,000 to nonprofits for solar projects.  
<https://www.hcs.foundation/solar-moonshot-program>

***Renewable Energy Resources***

Federal, state, and local offices and non-profit resources on renewable energy:

- **Jackson County Energy District**  
<https://jacksoncounty.energydistrict.org/>
- **Clean Energy Group**  
<https://www.cleanegroup.org/>
- **Clean Grid Alliance**  
<https://cleangridalliance.org/>
- **Iowa Environmental Council**  
<https://www.iaenvironment.org/>

- **Iowa Renewable Energy Association (I-Renew)** <https://www.irenew.org/>
- **U.S. Department of Energy’s Office of Energy Efficiency & Renewable Energy (EERE)**  
<https://www.energy.gov/eere>
- **U.S. Energy Information Administration (EIA)**  
<https://www.eia.gov/about/>
- **U.S. Environmental Protection Agency (USEPA)**  
<https://www.epa.gov/statelocalenergy>

***Energy Burden Assistance***

The U.S. Department of Health & Human Services (HHS) **Low-Income Home Energy Assistance Program (LIHEAP)** is designed to assist low-income families with home heating costs, year-round crisis assistance, and weatherization. Renters and homeowners are eligible, within the federal poverty guidelines. Applications are accepted November 1 - April 30 of each year. For more information, visit <https://hhs.iowa.gov/programs/program-s-and-services/liheap>

Jackson County residents can apply locally for LIHEAP assistance online from **Hawkeye Area Community Action Program, Inc. (HACAP)**. Applications also are available from Jackson County Outreach & Head Start at 904 E. Quarry Street in Maquoketa. In addition, Alliant Energy and Black Hills Energy offer their own energy assistance programs. Alliant's Hometown Care Energy Fund and the Black Hills Cares program funnel money to HACAP, which distributes the funds to their customers in need. Visit <https://www.hacap.org/energyconservation>

#### ***Low Income Community Energy Resources***

The U.S. Department of Energy (DOE) offers the following resources to highlight issues and solutions for low-income households in accessing energy efficiency measures and renewable energy. These resources can be used by state and local governments and low-income stakeholders to support program planning and inform existing initiatives.

- **Low-Income Energy Affordability Data (LEAD) Tool**

- **Clean Energy For Low-Income Communities Accelerator (CELICA) Toolkit**
- **Low-Income Energy Library: Federal Resources And Tools**
- **Low-Income Energy Affordability: Conclusions From A Literature Review And Annotated Bibliography**
- **National Community Solar Partnership**
- **Solar In Your Community Challenge**  
<https://www.energy.gov/scep/slsc/low-income-community-energy-solutions>

**ISSUES AND OPPORTUNITIES**

*Public Infrastructure*

**Issues:** The 2022-2027 Comprehensive Economic Development Strategy (CEDS) for Delaware, Dubuque, Jackson, Clinton, and Cedar Counties charts the course for economic growth of the region. The CEDS notes these regional challenges:

- Public infrastructure such as water, sewer, wastewater, stormwater, and roadways are aging and funding resources for public improvements is lacking.
- The lack of transportation funding to maintain the roadways, rail lines, and river port areas is an issue for future expansion and development and can restrict growth.
- Cities and counties are finding it necessary to bond and/or take-out long-term loans to improve basic health and safety infrastructure.

**Opportunities:** The 2022-2027 CEDS notes these regional opportunities:

- Adequate capacity and condition of infrastructure assets contributes to overall economic competitiveness.

Strategic investments must be made to ensure that these assets are maintained and expanded. The region will remain competitive and have a competitive advantage when businesses, entrepreneurs, and residents are able to make use of robust infrastructure for water, sewer, gas, and storm sewer; broadband and fiber; and road, rail, air, and water transportation systems.

- Continued planning and coordination with the Iowa Department of Transportation and working through the Regional Planning Affiliation (RPA) is critical to furthering the water, rail, air, and transportation priorities. Identifying these priorities through the RPA Long-Range Transportation Planning process is critical to securing funding through federal and state grants for priority projects.
- Partnering with economic development entities, Chambers of Commerce, and private businesses is also important in furthering public-private partnerships and

securing funding for regional priority transportation related projects.

- Continued advocacy is necessary for programs to assist with public infrastructure improvements. Cities and counties must be proactive through their planning efforts. They must develop capital improvement programs that plan and budget in five- to ten-year increments for these necessary improvements.

*Renewable Energy*

**Issues:** The 2022 Jackson County Clean Energy Plan identified these issues:

- *Lack of energy provider options.* Historically, communities had little influence on how the energy they consumed was sourced and distributed. Franchise agreements locked communities into decades of contract service for coal and natural gas distribution with large utility providers, which only in recent years have actively considered transitioning to renewable energy. The primary concerns of residents were

expensive and rising energy bills, energy efficiency, and dependency on their utility provider.

- *Economies of scale and funding assistance limitations.* While some grant funding is available for government entities, the 26% federal tax credit available to private solar installers provides larger and more reliable financial assistance.
- *Variability in small versus large community solar options.* The size of the community influences its access to financial resources to afford the upfront cost, and the demand threshold must meet a certain standard to make the return on investment profitable enough.
- *Impact of state policy and incentives.* The expired Iowa Solar Energy System Tax Credit made installing solar panels more affordable and accessible for

many homeowners and businesses.

- *Virtual net metering.* If permitted by the Iowa legislature, it would expand the opportunities for small towns.

**Opportunities:** The 2022 Jackson County Clean Energy Plan identified these opportunities:

- *Solar power generation brings opportunity.* As the cost of energy continues to rise and the cost of solar panels declines, transitioning to solar brings opportunities for substantial cost savings and revenue.
- *Feasibility of solar energy in Jackson County.* The financial benefits of transitioning to distributed solar generation have been made clear and offer tangible benefits to Jackson County residents beyond offsetting metric tons of carbon dioxide (CO<sub>2</sub>).

- *Importance of clean energy goals and initiatives in local plans.* Integrating clean energy goals within the comprehensive plan, capital improvement plan, or other local plans prepares local governments more effectively transitioning to cleaner energy sources.
- *Community solar ownership opportunities.* If a community owns and maintains its energy production and distribution, there is legal power to install solar.
- *Federal policy and incentives.* The 2022 Inflation Reduction Act (IRA) provides tax credit opportunities for public and private entities to develop renewable and clean energy systems. The most notable opportunities are tax credits for clean energy projects that cover up to 30% of the cost of the project.

**GOALS AND OBJECTIVES**

**Public Infrastructure**

Maintain and modernize critical infrastructure for transportation, broadband, water, sewer, downtowns, and community facilities for a more competitive region.

Enhance community and public facility infrastructure and increase access to community services and amenities to meet the demands of regional employers and their employees.

**Renewable Energy**

The following goals and objectives are from the 2022 Jackson County Clean Energy Plan.

Install photovoltaic (PV) solar panels on County-owned buildings.

- Utilize the feasibility study in the Jackson County Clean Energy Plan.
- Partner with professional solar installers for cost estimates.

Create solar-ready zoning and building codes.

- Partner with Jackson County jurisdictions to develop zoning and development standards to support solar panel adoption across the county.
- Incorporate building codes that make the process for solar easier.

Expand data collection for the Jackson County Energy District’s solar installation map.

- Adopt Jackson County permits or registration requirements for roof mounted PV solar installations.
- Partner with municipalities to record their PV solar installations.

Advocate for clean energy policy by the Iowa Legislature and Iowa Utilities Board.

- Encourage involvement with the Jackson County Energy District and legislature representatives to support stronger clean energy policies for greater accessibility and affordability within the county.

Encourage involvement in the *Grow Solar Jackson County Program* through the Jackson County Energy District.

- Make solar power in the county affordable and accessible to residents and businesses.
- Increase civic engagement among residents to actively participate in the future of energy in their communities.
- Encourage municipalities to pursue conversations with utility providers about transitioning to renewable energy.

# Chapter 6. Transportation



Roads, railroads, and river transportation in Jackson County

*Photo Credit: ECIA*

**INTRODUCTION**

Jackson County’s transportation network is vital to everyday life within the region. Locally, the transportation system facilitates the movement of people and goods within the region. The system allows residents to get from their homes to employment, education, medical care, and shopping. The transportation system also allows people and goods to move in and out of the region. Businesses import products and raw materials from outside the region, and export goods and commodities to other regions. Connections to regional transportation networks allow businesses to conduct these transactions quickly and efficiently, and allow the region to compete in the global market place.

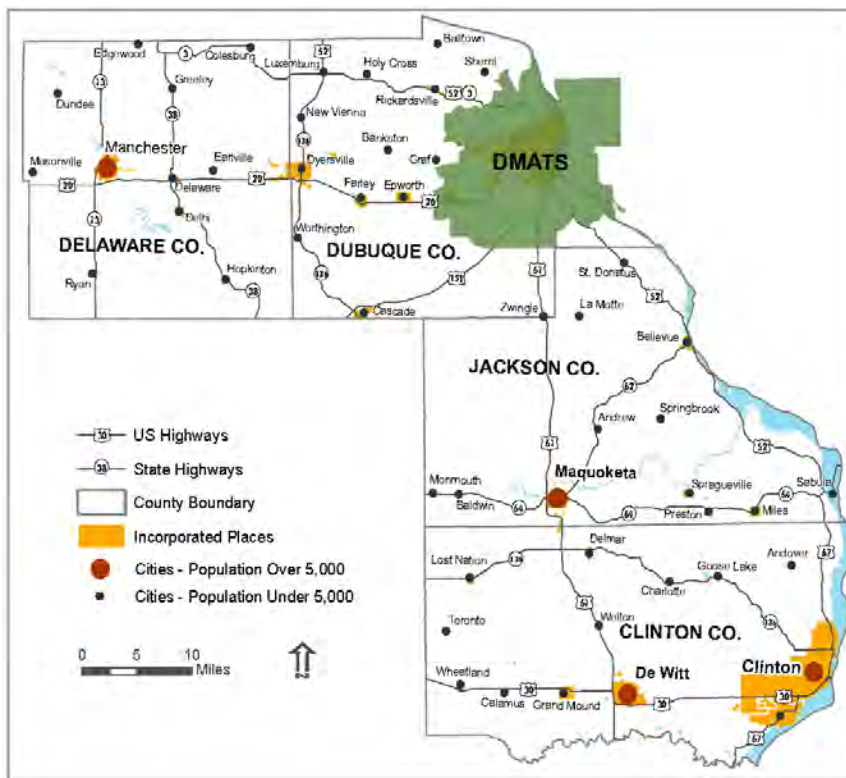
Along with the benefits from transportation, come unintended negative impacts. If left unchecked, pollution, noise, congestion, safety, and high maintenance costs can diminish quality of life for local residents. In addition, some segments of the population such as the elderly and persons with disabilities or low incomes are not able to access the system.

**TRANSPORTATION PLANNING**

Since 1994, Jackson County has been part of the Regional Planning Affiliation (RPA) along with Clinton, Delaware, and Dubuque counties in Eastern Iowa. The RPA identifies improvements and prepares plans for all parts of the transportation system (roads, trails, transit, rail, air, and river) in the rural areas. RPA advisors are the Iowa Department of Transportation (DOT),

Federal Transit Administration (FTA), and Federal Highway Administration (FHWA). The RPA planning area includes 52 cities and four counties, but not the Dubuque Metropolitan Area Transportation Study (DMATS) as shown in Figure 6.1 below.

Adopted in 2022, the RPA *2045 Long Range Transportation Plan* (LRTP) is the main information source for this chapter: [https://www.eciatrans.org/rpa8/organizational\\_information/planning\\_documents.php](https://www.eciatrans.org/rpa8/organizational_information/planning_documents.php)



**Figure 6.1 RPA Transportation Planning Area Map (2022)**

Source: RPA 2045 LRTP

**TRANSPORTATION SAFETY**

The RPA has identified improving safety by reducing transportation-related injuries and deaths as a key goal the 2045 Long-Range Transportation Plan (LRTP).

The RPA uses crash data to help identify locations with safety issues where transportation officials can implement specific countermeasures to reduce the number of crashes, injures, and deaths.

The RPA also expands focus beyond specific locations with a region-wide analysis of crashes that compares RPA data to state and national averages and studies the underlying causes of crashes.

The RPA provides a collection of regional strategies that can be implemented to address the safety issues identified by the analysis.

The **RPA transportation safety analysis** yielded several findings related to transportation safety in the RPA area. Key findings of the analysis are summarized in the list below. The RPA has used these findings to target its future safety efforts.

- People under the age of 25 and over the age of 65 represented over 35% of the drivers involved in crashes. However, these two demographics have drastically different driving behaviors and transportation safety needs.
- Even though more travel occurs on the primary highway system, more fatalities and serious injuries occur on county and municipal systems.
- Even though there are more miles of rural roads, they have less vehicles miles traveled and fewer crashes compared to the urban system.
- Male drivers are over-represented in crashes when compared to female drivers in the RPA area.
- Most of the accidents happened due to loss of control, animal, ran stop signs, failure to yield the right-of-way: from stop sign, making left turn, ran off road - right, made improper turns, etc.
- Half of the accidents happened at non-junction/no special feature locations, followed by intersections.

The RPA has implemented a number of safety efforts intended to address these key safety analysis findings.

These efforts include establishing a **Multi-Disciplinary Safety Team (MDST)** to take the lead on each county’s safety efforts, adopting safety goals and supporting strategies to guide regional safety efforts, and installing roundabouts to reduce crashes at unsignalized intersections. MSDTs were formed for Dubuque County in 2002 and Clinton County in 2005.

It is the goal of the region’s MDSTs to collaborate and cooperate with other agencies to improve safety in the region. The five areas the groups focus on to improve safety are:

- Education,
- Engineering,
- Enforcement,
- Emergency Services, and
- Everyone.

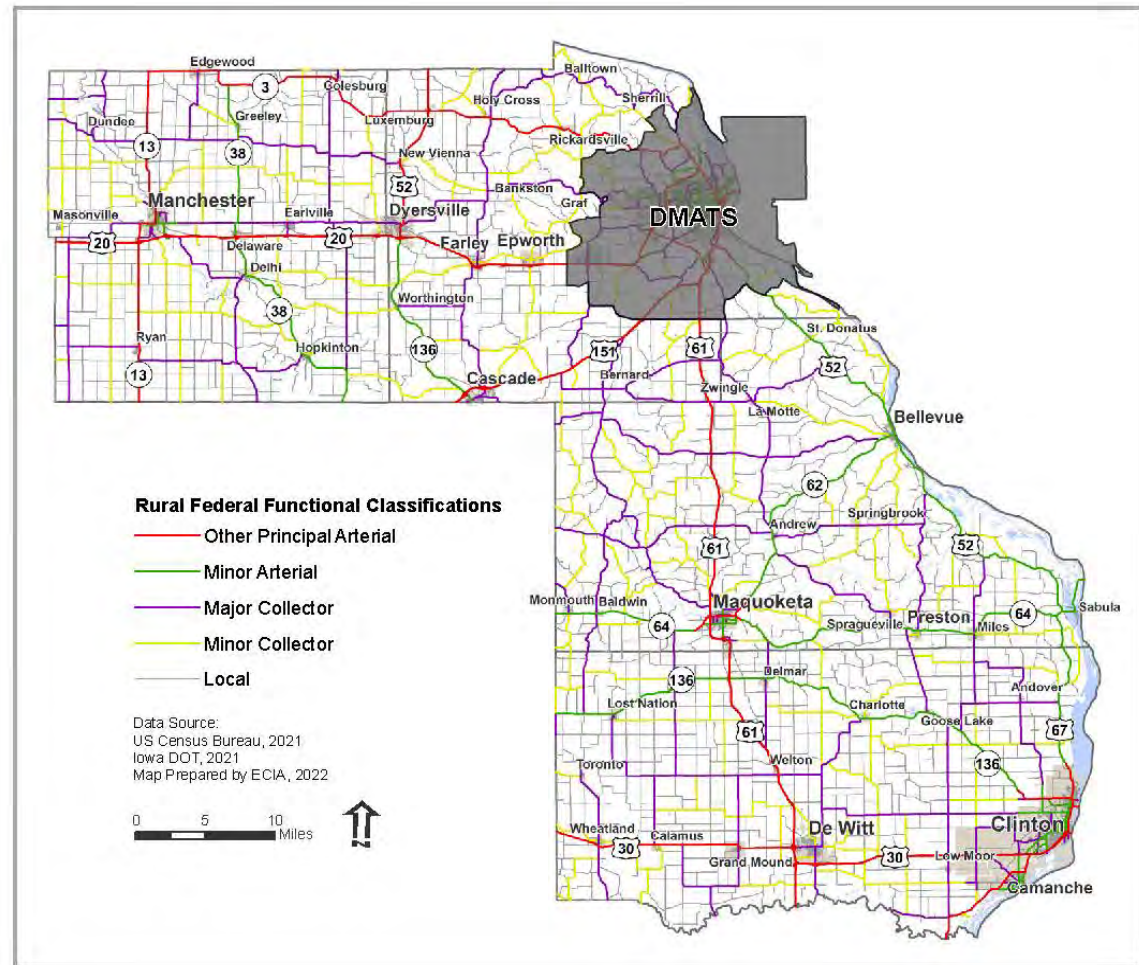


**ROADS AND BRIDGES**

Jackson County is part of a regional transportation system of state, county, and local roads. Each road has a **federal functional classification** based on its setting (urban or rural) and whether its main role is providing connectivity, mobility, or accessibility. The functional classification categories are described below and shown in Figure 6.2.

- *Principal Arterials* primarily are for mobility with minimal land access for rapid movement of people and goods for extended distances.
- *Minor Arterials* interconnect with and augment principal arterials within urban areas to serve inter-community trips.
- *Major Collectors* and *Minor Collectors* channel trips between the local street system and the arterials.
- *Local Streets* primarily provide local land access and offer the lowest level of mobility.

Monitoring **traffic congestion** is an essential part of the transportation planning process. RPA roadways will continue to have sufficient capacity to accommodate future traffic out to the



**Figure 6.2 RPA Federal Functional Classification Map (2022)**

Source: RPA 2045 LRTP

year 2040. Most RPA roadways do not see much difference between peak and off-peak travel times. With little growth in future congestion levels, the majority of available road and bridge funding can

be used to maintain existing facilities rather than adding additional capacity. However, targeted improvements may be necessary to improve safety or address a traffic bottleneck.

A good network of bridges is essential in facilitating access to activities, goods, and services. In the RPA area, half the bridges are on local roads, and 93% are located over waterways.

The Federal Highway Administration (FHWA) requires all public bridge owners (state, city, and county) to inspect and report information on their **bridge operational status** for inclusion in the National Bridge Inventory.

The FHWA uses a bridge sufficiency rating based 55% on structural evaluation, 30% on design obsolescence, and 15% on public importance to determine the bridge should remain in service. A rating of 100 represents an entirely sufficient bridge and zero represents an entirely insufficient or deficient bridge. Bridges with a rating less than 80 are eligible for repair funding. Bridges with a rating less than 50 are eligible for replacement funding.

If the condition is poor enough that a bridge can no longer carry its intended traffic loads, it may be weight-restricted or closed. The map in Figure 6.3 shows the RPA bridge operational status.

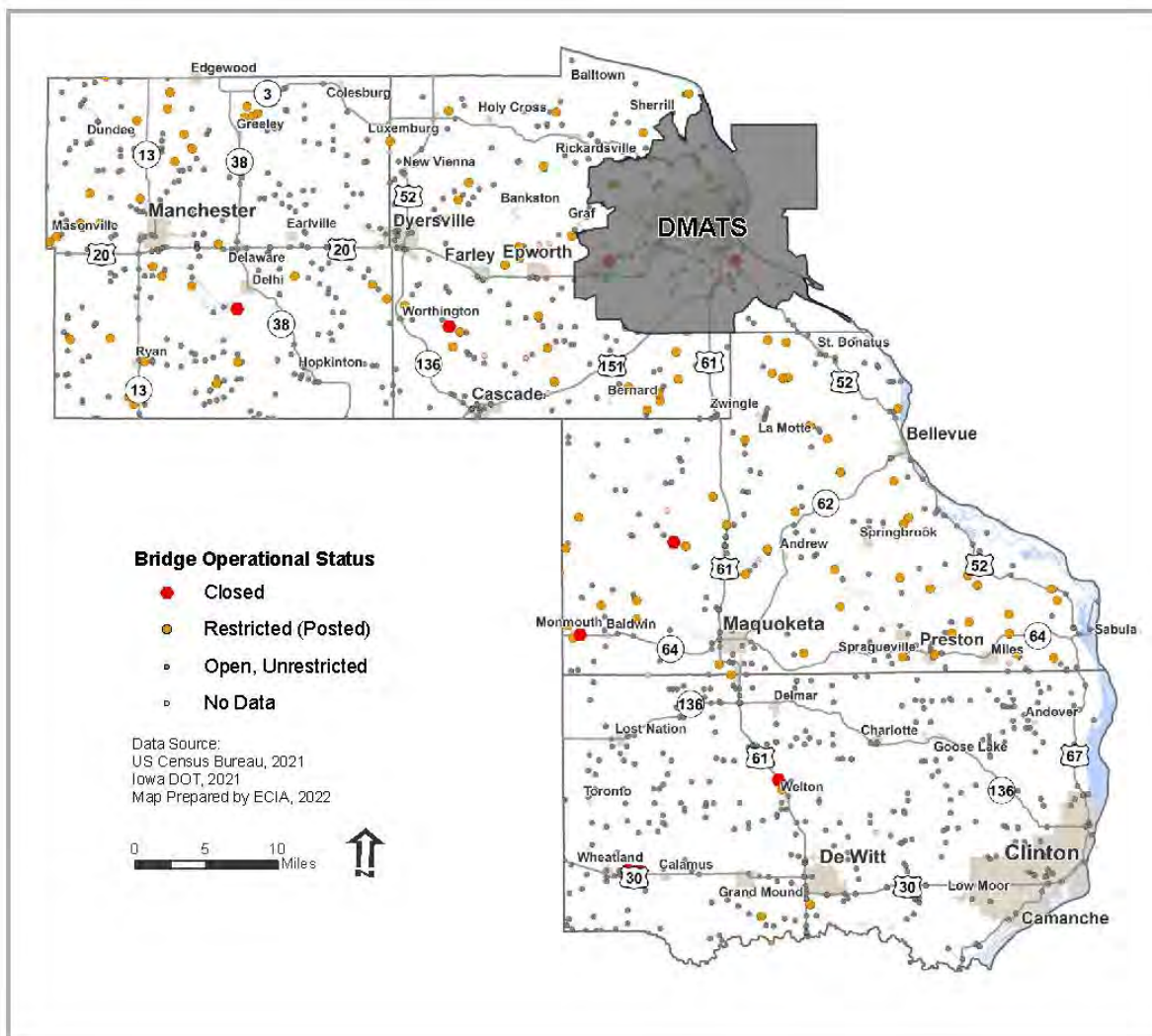


Figure 6.3 RPA Bridge Operational Status Map (2022)

Source: RPA 2045 LRTP

**TRANSIT**

Public transit is an important component in the transportation network. Public transit providers within the RPA area provide access to many opportunities for residents. The economic and social links provided by transit allows access to work, school, medical care, and leisure activities. It provides many individuals the mobility that allows them to continue their self-improvement, independence, and quality of life. Transit not only provides an alternative mode of transportation, but also provides the only available means of transportation to many youths, elderly, and persons with disabilities or limited incomes.

The **Regional Transit Authority (RTA)** provides accessible, safe, convenient, and efficient transportation for all residents in the cities, communities, and rural areas of Delaware, Dubuque, and Jackson Counties. RTA vehicles are ADA<sup>1</sup> accessible and equipped to accommodate the general public, including children, the elderly, and people with disabilities.

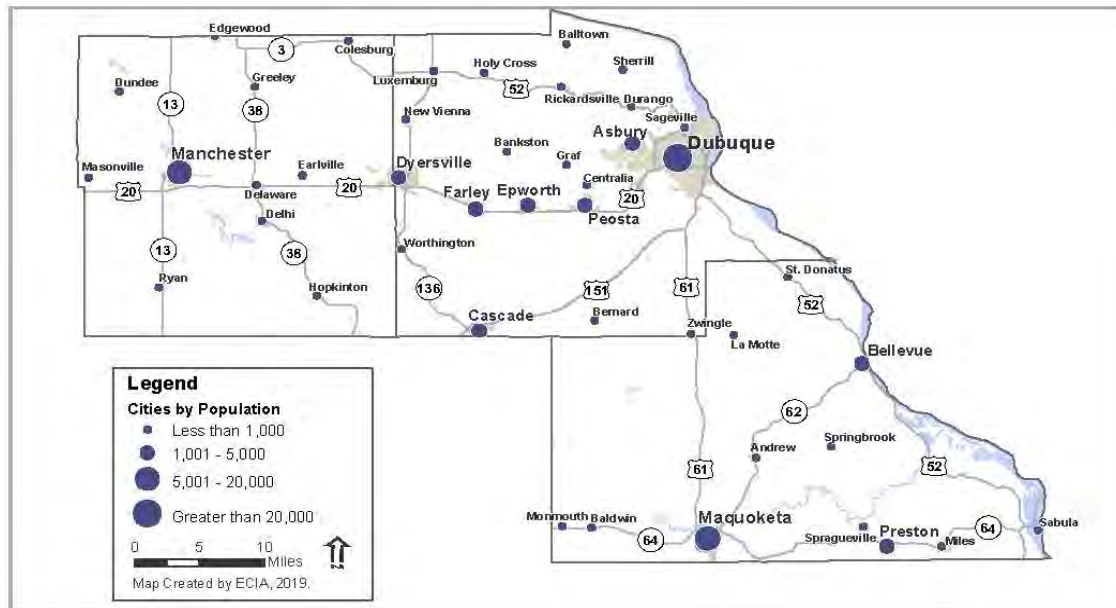


Figure 6.4 RTA Transit Service Map (2022)

Source: RPA 2045 LRTP

Figure 6.4 illustrates the RTA’s **transit service area**. The RTA does not operate fixed routes. All services are based on the demand of clients and are open to everyone. Most RTA routes are door to door unless specified. Reservations for service are required 24 hours in advance, and dispatch hours are 5:00 a.m.-5:00 p.m. Table 6.1 lists RTA’s 2024 fares for Jackson County.

LOCATION	FARES
<b>City of Maquoketa</b>	
In town	\$1.00
15 years and under	Free
<b>Jackson County</b>	
Within the county	\$2.00
15 years and under	Free

Source: ECIA RTA website

<sup>1</sup> Americans with Disabilities Act (ADA) of 1990

### BICYCLE AND PEDESTRIAN FACILITIES

Walking and biking instead of driving can reduce traffic congestion, improve air quality, and improve physical health.

Walking and biking currently account for a small share of all trips in the RPA area. While data is not available for all trips, the US Census provides data for **commute to work** trips. Table 6.2 shows the means of transportation to work.

Means of Transportation	Percent
Drove alone	84.31%
Carpool	5.88%
Transit	0.20%
Motorcycle	0.13%
Bicycle	0.22%
Walked	2.07%
Other means	0.37%
Worked from home	6.82%

Source: 2020 American Community Survey 5-Year Estimates, US Census Bureau

Existing and planned future bicycle and pedestrian facilities for Jackson County fall into three main categories: multi-use trails, on-road bike routes, and pedestrian walkways as shown on the map in Figure 6.5.

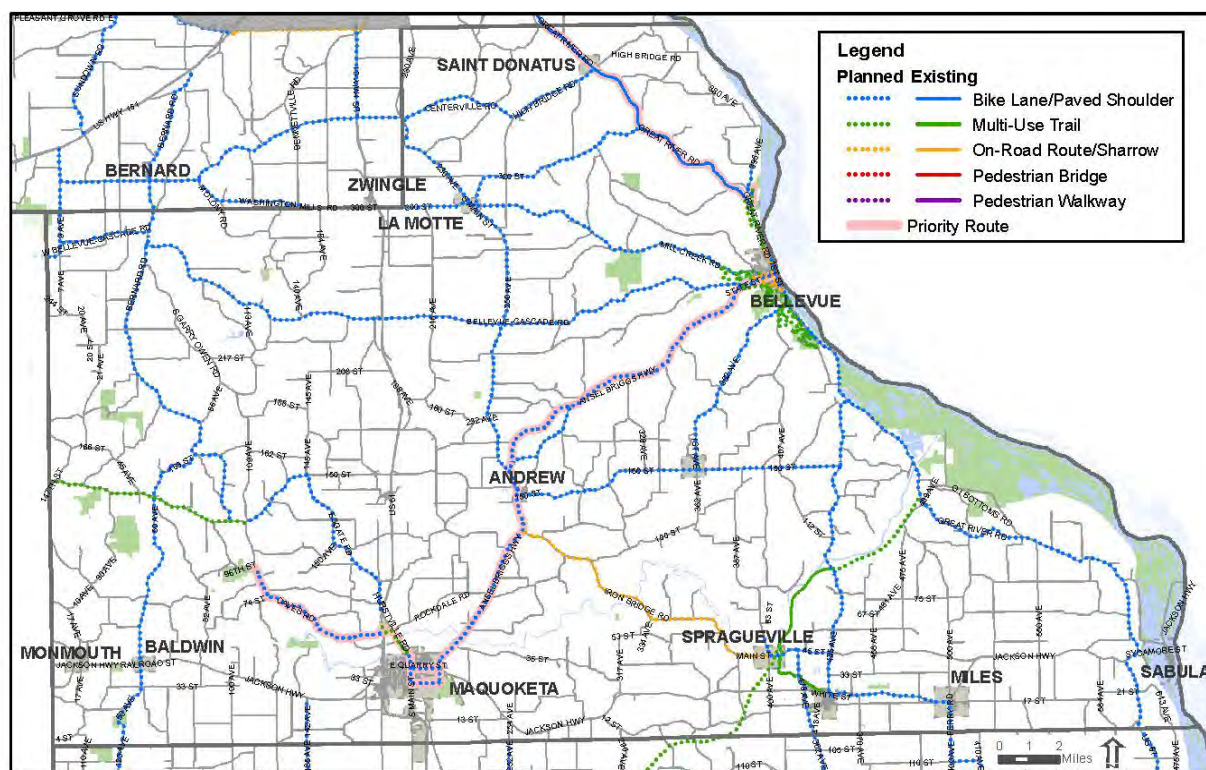


Figure 6.5 Existing and Future Bicycle and Pedestrian Facilities Map

Source: RPA 2045 LRTP

**Multi-use trails** are physically separated from motorized traffic by an open space or barrier and can be in an independent right-of-way or within a highway right-of-way. Multi-use trails accommodate both bicyclists and pedestrians and usually are suitable for most age groups and abilities.

With **on-road bike routes**, bicyclists share the roadway with vehicle traffic. Design improvements include signage, sharrow,

bike lanes, and paved shoulders. The design element used depends on vehicle speed, vehicle traffic volume, and space available in the right-of-way.

**Pedestrian walkways** provide safe connections to homes, businesses, transit services, and other activities. Many cities in the county have sidewalks. Providing pedestrian walkways along rural roads is difficult due to restricted right-of-way.

## FREIGHT

The efficient movement of goods is one of the keys to effective competition in the global economy. In 2018, the RPA worked with surrounding counties in Iowa and Illinois to prepare the **Eight County Freight Plan**.

The eight-county region is at the heart of major US manufacturing and agricultural activity, and is made up of the counties of Carroll, Jo Daviess, Stephenson, and Whiteside counties in Illinois, as well as Clinton, Delaware, Dubuque, and Jackson counties in Iowa. This region, shown in Figure 6.6, relies on the multimodal transportation system of roads, rails, air and water ports to both supply the inputs needed for production and to transport goods to consumers inside and outside of the region – driving the local economies.

According to the study, the region has good access to freight but is very dependent on connections outside the region to distribute goods within the Midwest and beyond. Local companies that ship goods outside the region may need to first send goods to regional freight facilities in Davenport, Cedar Rapids, Rochelle, Rockford, and Chicago.



Figure 6.6 Freight Plan: Eight-County Region Map

Source: RPA 2045 LRTP

### Trucking

The region's road network is made up of different sub-networks including interstate highways, national highways, state highways, and county roads. The study notes that trucks carry the greatest share of the region's freight by both tonnage and value. The share of freight value carried by truck (82%) is greater than the share of freight tonnage (73%), suggesting that trucks are being used to carry the region's higher-value, lower weight manufactured goods.

### Railroads

The study notes that four Class I railroads serve the region, providing access to a wide range of locations throughout the western and southern US. Rail carries 23% of the region's tonnage, but only 7% of its value, suggesting rail shipments are being used for relatively high-weight, low-value commodities like ag products. In Jackson County, Canadian Pacific (doing business as Dakota, Minnesota, and Eastern) connects to the Twin Cities, Chicago, and Kansas City.

**Barges**

The study notes that the Mississippi River flows for 93 miles through the center of the region, providing a direct waterways connection to the Gulf of Mexico and international markets. The river’s flow is controlled by three locks and dams in the region, including Lock and Dam No. 12 in Bellevue. The river carries 1% of the region’s freight volume and value.

**Airports**

The nearest commercial service airport to Jackson County is the Dubuque Regional Airport. The Maquoketa Municipal Airport provides general aviation services in Jackson County for business, agriculture, personal recreation, air medical transport, and law enforcement. Currently, freight transportation through the region’s airports is limited, as Cedar Rapids and Rockford are located within reasonable driving distance and both serve as major air freight hubs for the surrounding area. However, airports could provide an opportunity for future freight expansion through projects such as the Clinton Railport.

**Commodities**

Freight transportation is extremely important; the study found 49% of the region’s workers were employed by firms that rely on the movement of freight to support their operations. Key freight-related industries for the region are agriculture and manufacturing.

The charts in Figure 6.7 provide a visual of the top ten commodities by tonnage and value based on the study.

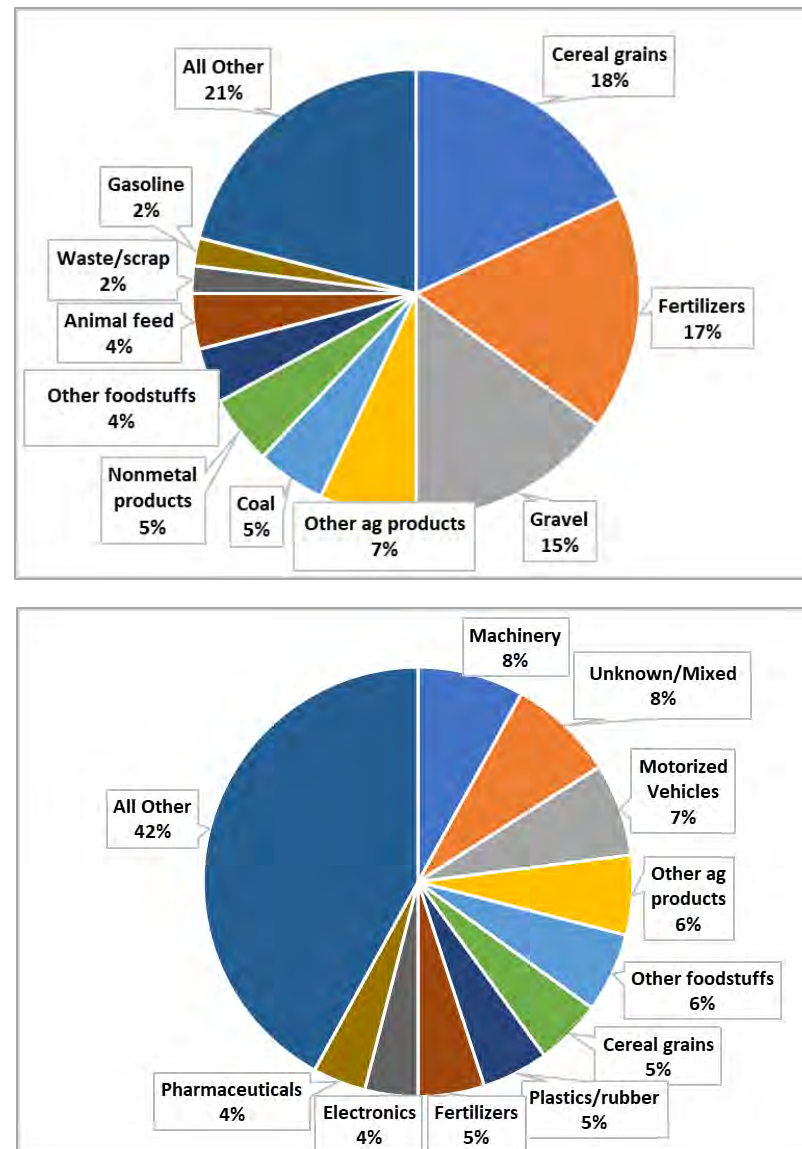


Figure 6.7 Freight System Tonnage (upper) and Value (lower) by Commodity (2014)

Source: RPA 2045 LRTP

**ENVIRONMENTAL ANALYSIS**

The RPA 2045 Long Range Transportation Plan (LRTP) is an initial step in identifying impacted areas and adjusting project alignments to minimize negative impacts on natural resources and the human environment.

The **National Environmental Policy Act (NEPA)** is the project development process for federally funded projects and must balance transportation decision making with the potential impacts on the human and natural environment and the public’s need for safe transportation.

Interagency consultation provides an opportunity to compare transportation plans with community and environmental resource plans and develop a discussion on potential mitigation activities, areas to provide the mitigation, and activities that may have the greatest potential to restore and maintain the human and natural environments.

Detailed environmental analysis of individual transportation projects occurs later in the NEPA project development process as the improvement approaches the preliminary engineering stage.

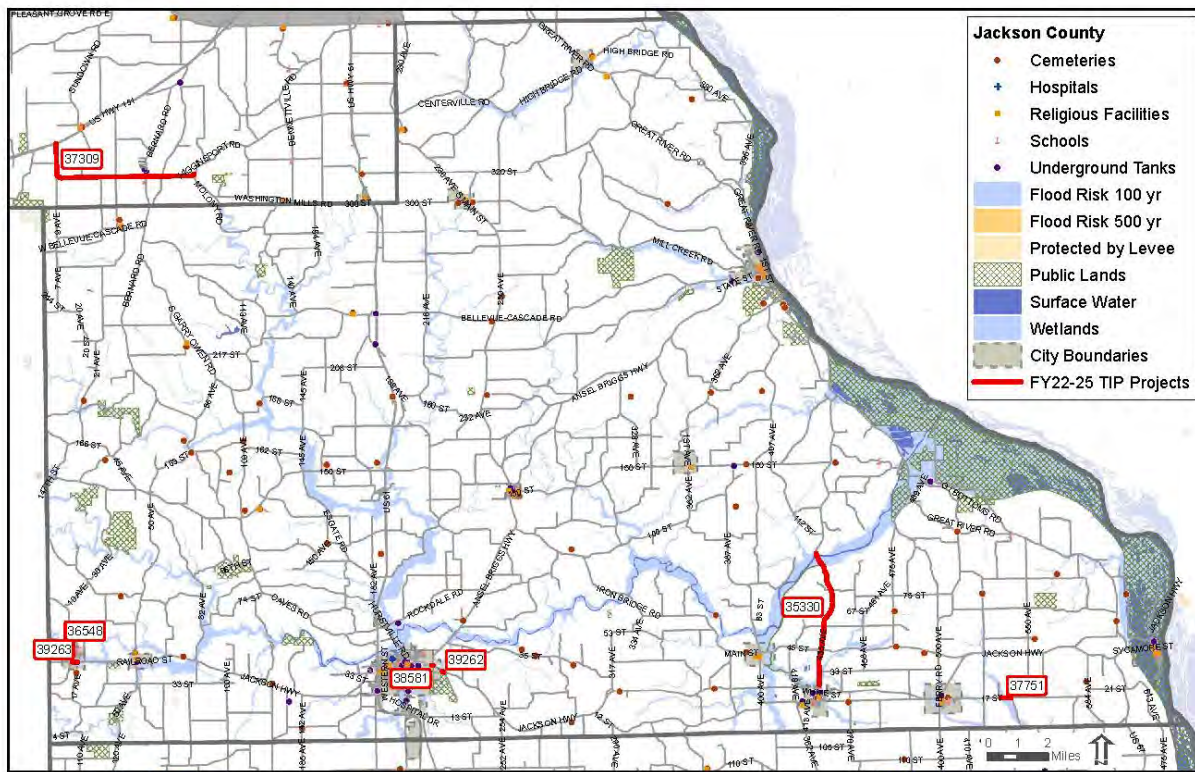


Figure 6.8 Jackson County Environmental Analysis Map

Source: RPA 2045 LRTP

Figure 6.8 shows the environmental analysis for federally funded transportation projects included in the RPA 2045 LRTP for Jackson County in relationship to floodplain hazard areas, environmentally sensitive areas (public lands, wetlands, and underground storage tanks), and social facilities (schools, cemeteries, hospitals, and religious facilities).

**Environmental Justice** is a concept intended to avoid the use of federal funds for projects, programs, or other activities that generate disproportionate or discriminatory adverse impacts on minority or low-income populations. The environmental analysis also considers the location of households of low income, minority populations, and limited English proficiency in relation to these projects.

**LOCAL, STATE, & FEDERAL PROGRAMS**

The RPA’s transportation improvements are funded through a combination of federal, state, and local funds. Federal funding for streets, highways, bicycle facilities, and pedestrian facilities flow through the RPA. Below are the federal and state funding sources that RPA members receive every year or that are based on an application process. Some programs require a 20% non-federal match.

***Federal Funding Sources***

***Surface Transportation Block Grant Program (STBG)*** is for road or bridge projects, transit capital improvements, bicycle and pedestrian facilities, and transportation planning.

***STBG Swap Funds Program*** allows the RPA to swap targeted federal STBG funding for Iowa DOT Primary Road Fund dollars. Counties can swap funds for county bridge projects.

***Highway Bridge Program (STP-HBP)*** is for replacement or rehabilitation of structurally deficient or functionally obsolete public roadway bridges.

***Transportation Alternatives Program (TAP)*** funds on- and off-road pedestrian and bicycle facilities; recreational trail projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways.

***Highway Safety Improvement Program (HSIP)*** funds projects achieving a significant reduction in traffic fatalities and serious injuries on public roads.

***Congestion Mitigation and Air Quality Improvement Program (CMAQ)*** is for projects and programs that reduce congestion and improve air quality.

***Demonstration Funding (DEMO)*** is a combination of different programs and sources.

***National Highway Performance Program (NHPP)*** is for projects that improve the condition and performance of the National Highway System including some state and US highways and interstates.

***Federal Lands and Tribal Transportation Programs (FLHP)*** is for projects that improve access within, and to, federal lands.

***STBG-TAP-FLEX*** are additional STBG funds from the Iowa DOT. The RPA decided to use these funds for projects in the small city STBG program.

***State of Iowa Funding Sources***

***City Bridge Program*** is for structurally deficient or functionally obsolete bridge projects within cities.

***Iowa Highway Safety Improvement Program – Secondary (HSIP Secondary)*** funds safety projects on rural roadways.

***Iowa Clean Air Attainment Program (ICAAP)*** is to maximize emission reductions through traffic flow improvements, reduced vehicle miles of travel, and reduced single occupancy vehicle trips.

***Recreational Trail Program*** is for both motorized and non-motorized trail projects.

***Iowa’s Transportation Alternatives Program*** is for locally sponsored projects that expand travel choices and improve the motorized and non-motorized transportation experience.

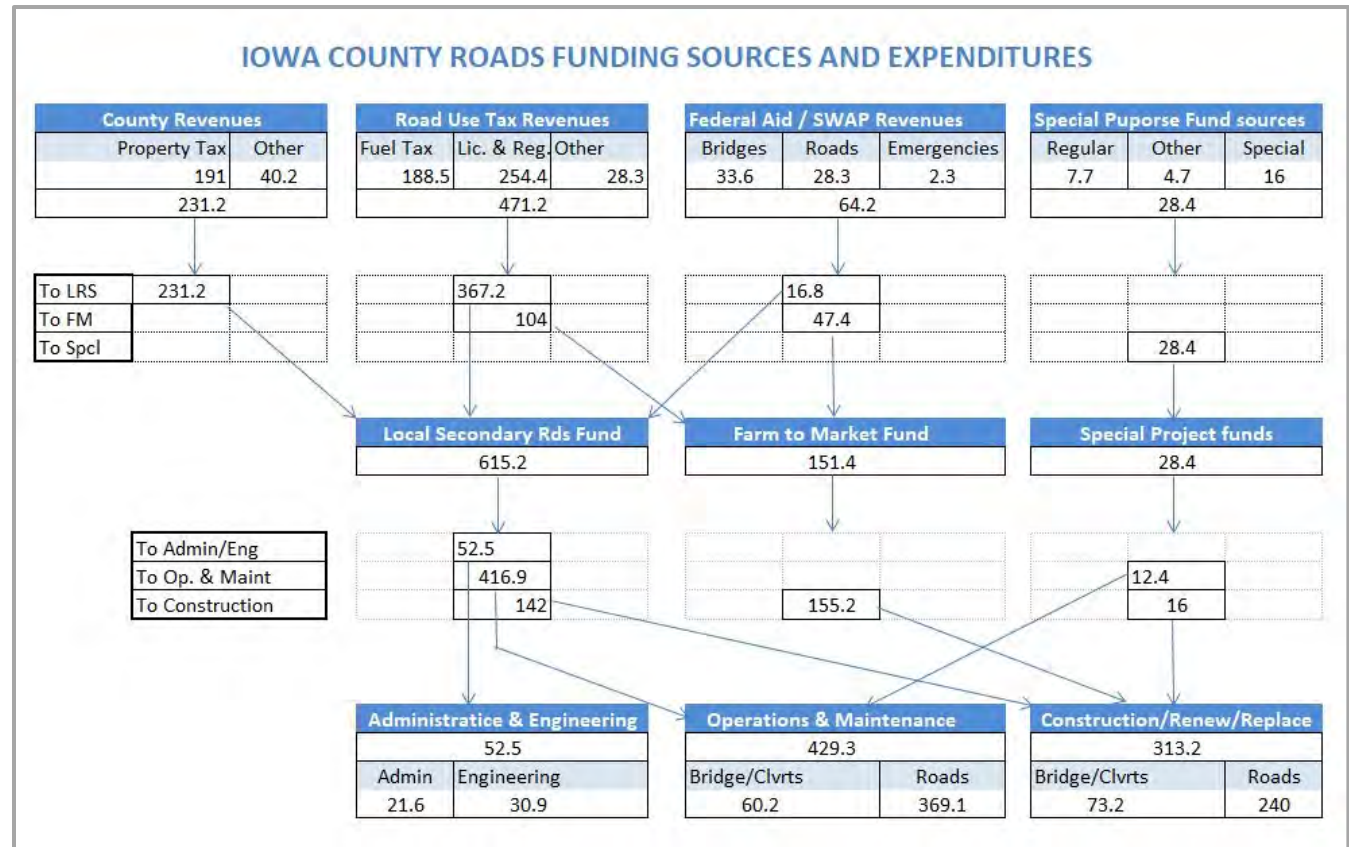


**County Roads Funding Sources**

“Iowa has three classes of public roads: the state primary highways, secondary (county) roads, and city streets. County roads serve rural Iowa transport needs in two capacities:

- **Local Access roads** assure a public road connection for every parcel of land;
- **Farm to Market roads** also provide access and, in addition, serve as conduits that collect the flow of people and commodities, channeling them to and from towns and terminals.”<sup>2</sup>

Figure 6.9 shows the revenue sources for Iowa secondary roads, where these dollars are deposited, and what the expenditures are. Table 6.3 compares calendar, fiscal, and federal fiscal years.



**Figure 6.9 Iowa County Roads Funding Sources and Expenditures**

Source: <https://www.iowacountyroads.org/about-secondary-roads>

Type of Budget Year	Timeframe	Who uses it?
<b>Calendar Year (CY)</b>	January 1 to December 31	Most individuals for income taxes
<b>Fiscal Year (FY)</b>	July 1 to June 30	State of Iowa, cities, and counties
<b>Federal Fiscal Year (FFY)</b>	October 1 to September 30	Federal government

<sup>2</sup> <https://www.iowacountyroads.org/about-secondary-roads>

**ISSUES AND OPPORTUNITIES**

This section provides a description of issues and opportunities related to the regional transportation system.

*Safety*

**Issues:** The RPA used the findings of its transportation safety analysis to target its future safety strategies that have the greatest potential to reduce fatalities, major injuries, minor injuries, and unknown injuries on public roadways.

**Opportunities:**

1. Provide programs, training and education geared to help people under the age of 25 and over the age of 65.
2. Reduce fatalities and serious injuries on county and municipal system.
3. Reduce accidents due to loss of control, ran traffic signals and ran stop signs.
4. Reduce accidents for ran off road – right, made improper turns.
5. Reduce accidents at intersections.

*Roads and Bridges*

**Issues:** Operation and maintenance of roads and bridges is crucial for safety and future development in the region. The RPA needs \$719 million by 2045 to meet the requirements of the existing system, but the projection is only \$485,829,000 in federal and local funds. Lack of funding is one of the RPA’s top concerns. Using federal funding on small scale projects is not deemed viable by communities because of the increased project costs due to federal regulation.

**Opportunities:**

- Operation and maintenance of roads and bridges is a priority.
- Apply context-sensitive design to reduce community impacts.
- Promote street connectivity.
- Continue to partner with Iowa DOT to construct projects identified in the LRTP to meet current and future travel demand.
- Continue to partner with Iowa DOT in the early development of environmental documents for projects identified in the LRTP.

*Transit*

**Issues:** The three RPA transit systems provide critical transportation services for people in the region. Operation and maintenance through 2045 will require \$139 million, but the RPA is projecting \$137 million in federal and local funds. Lack of funding is a top concern.

**Opportunities for RTA:**

- Explore coordination opportunities between the Jule and RTA.
- Encourage employers to utilize current public transit systems.
- Provide services on an on-call basis.
- Collaboration with human service agencies, dialysis, and Medicaid brokers.
- Expand hours to include late afternoons, evenings, weekends and holidays for all three counties.
- Recruitment and retention of drivers.
- Expand Travel Training Program.
- Expand Mobility Management services.

***Bicycle and Pedestrian Facilities***

**Issues:** Improving bicycle and pedestrian transportation is important to many residents of the area, and the RPA is working to create more opportunities for walking and biking by improving its bicycle and pedestrian network. Through the LRTP the RPA is working reach its goal of developing an integrated bicycle and pedestrian network.

**Opportunities:**

- Provide paved shoulders on roads with moderate to high traffic volumes and speeds.
- Continue to expand the regional trails network.
- Improve pedestrian safety.
- Improve on-street bicycle safety.
- Expand bicycle route system to connect with surrounding counties.
- Cooperate with local partners (counties, cities and surrounding towns) to expand the use of shared use paths throughout the system.

***Freight***

**Issues:** The freight system (including the transportation network, shippers, carriers, etc.) operates within a dynamic environment that is continually changing and adapting to best meet current market demands. This study does not focus on predicting how the system will change, as much as it considers how to make the eight-county region’s freight transportation system resilient and adaptable to an unknown future.

**Opportunities:** Opportunities identified in the Eight County Freight Study include:

- Build on core strengths in established commodity groups (cereal grains, fertilizers, gravel, other agricultural products, machinery, mixed goods, motorized vehicles, and other foodstuffs) and prepare to accommodate growing transportation needs associated with these commodities.
- Look to capture emerging fast-growing commodity groups (pharmaceuticals, precision instruments, plastics/rubber, and other known economic develop-

ment targets) by providing sufficient and attractive (safe, reliable, cost-effective) freight transportation options and services.

- Focus – first and foremost – on truck corridors and connections linking the Eight County Region to the remainder of Iowa and Illinois. These are critical for today’s most important commodities, and for the commodities that are expected to see the most growth in the future.
- Maintain and enhance other modal options – including rail, water, and airport connections – and evaluate the potential for intermodal service improvements to best serve the region.

**Environmental Analysis**

**Issues:** The RPA is committed to avoiding and mitigating negative transportation impacts on the natural environment. The goals objectives, and analysis included in the LRTP will help RPA communities ensure that future generations are able to enjoy the region’s abundant environmental resources.

**Opportunities:**

- Coordinate with resource agencies throughout the development of transportation plans and documents.
- Minimize impacts to environmental resources and minority and low-income populations through systems-level analysis.
- Work with statewide partners to support and develop a statewide data system.

**Financial Analysis**

**Issues:** Combined federal, state and local funds comprise the vast majority of revenues available to maintain and operate the federal-aid transportation system in the region.

Developing future projections for federal, state, and local funding over a 30-year period requires a conservative approach in anticipating gross-level forecasts needed to demonstrate fiscal constraint.

Transportation revenues rely on taxes and generally reflect the circumstances of the regional economy, and therefore fluctuate from year to year.

The RPA prefers a conservative approach for projecting future revenues and uses an annual growth rate of 3% for future years.

The RPA LRTP financial estimates are derived from an economic climate that is neither stable nor predictable. Revenues for the LRTP are estimated at a planning level, not the programmatic level.

This analysis is subject to a number of inherent limitations.

**Opportunities:**

- Continue to monitor transportation funding needs.
- Identify shortfalls in funding sources and strategies to fill gaps.
- Seek alternatives and innovative ways to fund transportation improvements.
- Support efforts to increase federal and state revenues for the RPA’s transportation projects.
- Continue to support local match funding programs sufficient to obtain state and federal full-funding grants for planned projects.



Photo Credit:  
<https://jacksoncounty.iowa.gov/engineer/>

**GOALS AND OBJECTIVES**

*Maintain and Improve the Existing Transportation Network*

6.1 Strategically preserve existing infrastructure and focus future investment in areas that are already served by significant public infrastructure investments.

- Preserve and maintain road surfaces.
- Preserve and maintain bridges.

6.2 Increase the safety, security, and resiliency of the transportation system.

- Reduce serious injuries and fatalities from vehicle crashes.
- Reduce pedestrian and bicycle fatalities and serious injuries.

*Prioritize Transportation Improvements and Projects*

6.3 Support transportation improvements and projects that promote existing and future economic development.

- Identify potential connections to support existing and future business operations within and outside the region.
- Improve access to jobs for both residents and employers in the region.

6.4 Provide a high degree of multimodal accessibility and mobility for individuals, and better integration and connectivity between modes of travel.

- Provide more on-road bicycle facilities throughout the community.
- Provide more trails to connect destinations throughout the community, including the completion of existing regional and local trail systems.
- Improve access to basic services and important destinations with transit.

6.5 Support efficient freight system in the region.

- Maintain adequate infrastructure conditions on primary freight corridors.
- Reduce delay on primary freight corridors.

**TRANSPORTATION PROJECTS**

By investing in transportation projects that support the objectives of this LRTP, the RPA region will offer residents additional means to travel within and beyond their neighborhoods by embracing options to walk, bike, ride, and drive. The infrastructure investment decisions made by the RPA will further strengthen the existing communities. Transportation infrastructure enhancements for all modes of travel will have a positive impact on quality of life and the character of the communities within the RPA region.

The public input process and projects programmed in the RPA Transportation Improvements Program (TIP) shows that the RPA is more inclined to strategically preserve our existing infrastructure and focus future investment in maintaining areas that are already served by significant public infrastructure investments.

*Transportation Improvement Program*

“The Federal Fiscal Year (FFY) 2024-2027 Transportation Improvement Program (TIP) for the Regional Planning Affiliation (RPA) is a four-year listing of federal aid eligible transportation projects selected by the various governmental agencies and by the RPA Policy Board for implementation. All transportation projects in the RPA Region using federal funds are to be included in the TIP. The TIP is prepared annually for the RPA Policy Board with input from the RPA Technical Advisory Committee, Iowa Department of Transportation, and the general public. Prioritization of projects within a project year is determined by the implementing agencies. Prioritization of LRTP projects on a year-to-year basis will be done by the RPA Policy Board in

cooperation with the implementing agency.”<sup>3</sup>

*Jackson County RPA TIP Projects*

Table 6.4 lists the two RPA TIP transit projects in Federal Fiscal Year (FFY) 2024 for the RTA.

Table 6.5 page lists the seven RPA TIP road and bridge projects planned for Jackson County in FFY 2024-2027. The primary federal-aid funding sources are the Highway Bridge Program (HBP) and the Surface Transportation Block Grant (STBG).

Figure 6.12 is a map of the RPA TIP projects for FFY 2024-2027. The TPMS numbers on the map correspond with the TPMS numbers in the spreadsheet.

Table 6.4 RPA Transportation Improvement Program (TIP) Transit Projects					Source: RPA 2045 LRTP	
Project ID /Sponsor	Approval	Project Type	Project Description	Funding Sources	FFY 2024	
10265 / RTA	Submitted	Capital	Replacing Light Duty Bus #486	<b>Total</b>	<b>\$173,890</b>	
				Federal Aid	\$129,390	
10427 /RTA	Submitted	Operations	Operations	<b>Total</b>	<b>\$812,404</b>	
				Federal Aid	\$399,586	
				Iowa DOT	\$412,818	

<sup>3</sup> RPA Transportation Improvement Program for FFY 2024-2027

Table 6.5 RPA Transportation Improvement Program (TIP) Road & Bridge Projects for Federal Fiscal Years 2024 -2027								Source: RPA 2045 LRTP
TPMS Number	Project Number	Approval	Funding					
Sponsor	Location	Letting Date	Sources	FFY 2024	FFY 2025	FFY 2026	FFY 2027	Totals
Fund	Work Codes							
45062	BROS-C049(90)--8J-49	TIP Approved	<b>Total</b>	<b>\$650,000</b>				<b>\$650,000</b>
Jackson County	On 184 <sup>th</sup> Ave, Over Prairie Creek, S36 T84 R02E	12/19/2023	Federal Aid	\$650,000				\$650,000
HBP	Bridge Replacement		Regional					
53213	BROS-5160(601)--8J-49	TIP Approved	<b>Total</b>		<b>\$550,000</b>			<b>\$550,000</b>
Jackson County	In the city of Monmouth, Beers Creek, S20 T84 R1	8/20/2024	Federal Aid		\$550,000			\$550,000
HBP	Bridge Replacement		Regional					
39021	BROS-C049(--5F-49	TIP Approved	<b>Total</b>		<b>\$650,000</b>			<b>\$650,000</b>
Jackson County	On 362nd Ave (Z15), Over Duck creek, S25 T86 R4E		Federal Aid		\$650,000			\$650,000
HBP	Bridge Replacement		Regional					
37751	BROS-C049(--5F-49	TIP Approved	<b>Total</b>			<b>\$350,000</b>		<b>\$350,000</b>
Jackson County	On 17th St, Over Elk Creek, S33 T84N R6E		Federal Aid			\$350,000		\$350,000
HBP	Bridge Replacement		Regional					
50950	BROS-C049(--5F-49	TIP Approved	<b>Total</b>			<b>\$2,124,000</b>		<b>\$2,124,000</b>
Jackson County	On 74th St, Over S Fork Maquoketa River, S13T 84 R01E		Federal Aid			\$2,124,000		\$2,124,000
HBP	Bridge Replacement		Regional					
35330	STP-S-C049(--5E-49	TIP Approved	<b>Total</b>		<b>\$1,700,000</b>			<b>\$1,700,000</b>
Jackson County	On Z 34, from Preston N 4.6 miles to Maquoketa River		Federal Aid		\$1,350,000			\$1,350,000
STBG	HMA Pavement - Replace		Regional		\$1,350,000			\$1,350,000
49727	STP-U-PA08(--70-49	TIP Approved	<b>Total</b>	<b>\$12,500</b>				<b>\$12,500</b>
RPA	On Platt St, from US 61 E 1.7 miles to HWY 64		Federal Aid	\$10,000				\$10,000
STBG	Transportation Planning		Regional	\$10,000				\$10,000

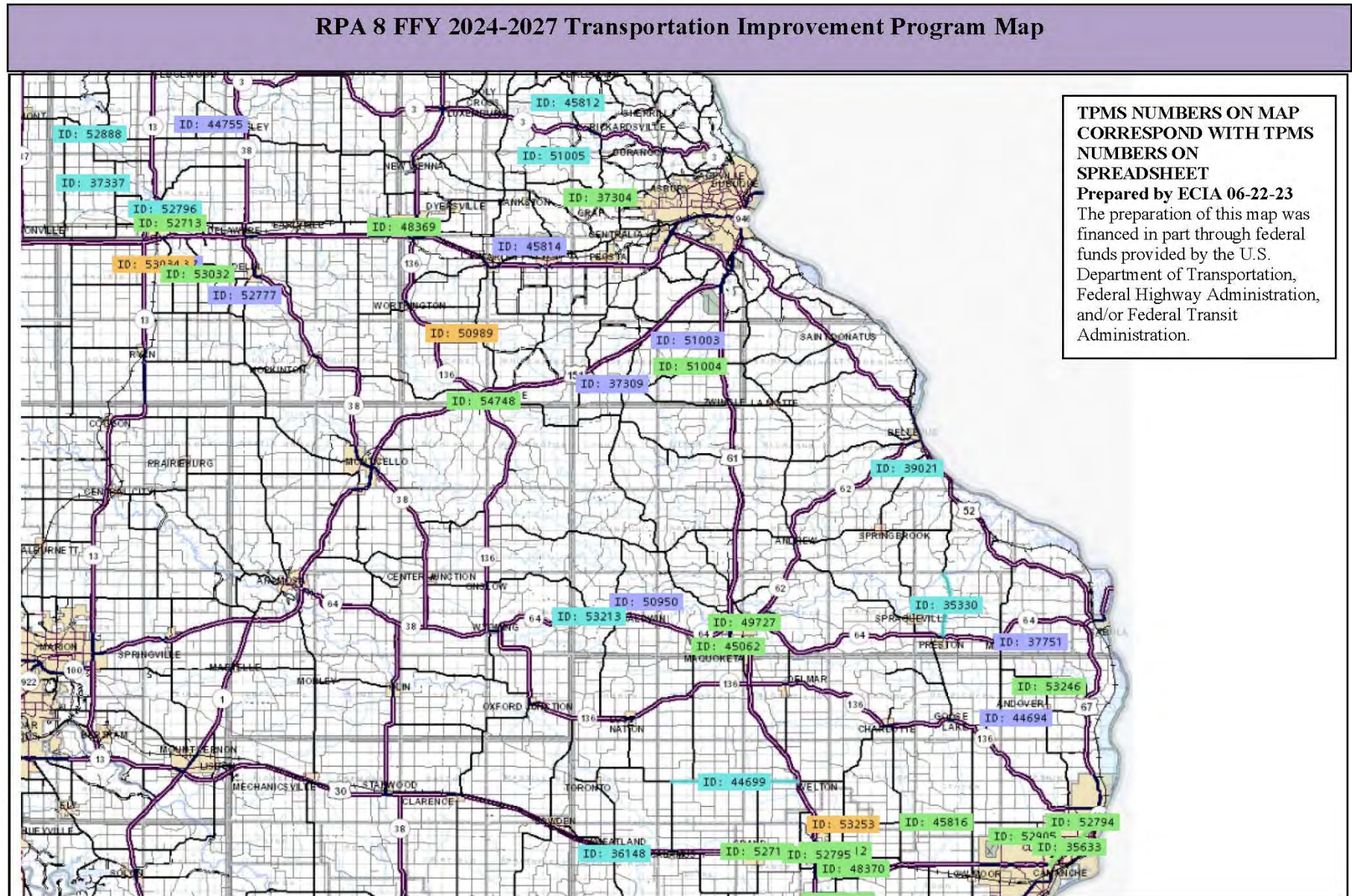


Figure 6.12 Map of RPA TIP projects for FFY 2024-2027

Source: RPA Transportation Improvement Program for FFY 2024-2027



Jackson County 5 Year Road Plan

The County Engineer (Secondary Roads Department) is responsible for design, construction, inspection, contract administration, and maintenance of the Secondary Road System in Jackson County. The County’s road system includes 225 bridges and large culverts and 841 miles of roads. Figure 6.3 shows the miles of roads by surface type.

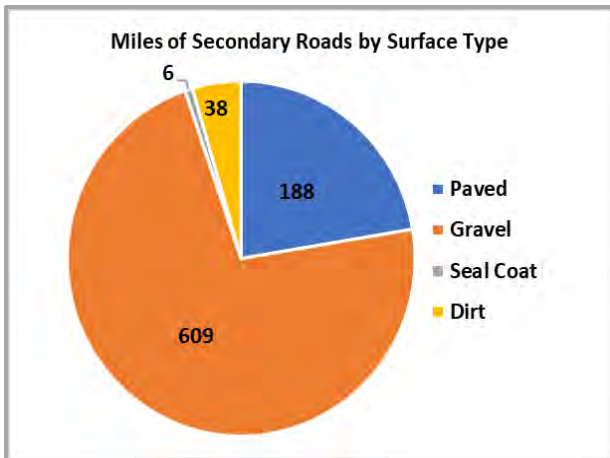


Figure 6.13 Secondary Roads by Surface Type

Source: Jackson County Engineer

The County Engineer is responsible for the operating budget and construction program development of road and bridge projects. The County Engineer’s 5 Year Road Plan is shown in Table 6.6 and the 5 Year Construction Program is shown in Figure 6.14.

Table 6.6 Jackson County Engineer’s 5-year Road Plan

FEDERAL FUNDING - BRS, BROS, STP STATE FUNDING - FM JACKSON COUNTY FUNDED - LOCAL		5 YEAR ROAD PLAN FY 2024 to FY 2028				
ACC PAVE - ASPHALT PAVING PCG PAVE - CONCRETE PAVING		TYPE OF WORK	FISCAL YEAR	CONST. YEAR	FUNDING TYPE	PROJECTED COUNTY COST
Y-61 (250th Ave) IA-62 to Bell, Cascade Rd	PavT Rehab	2024 (4QR)	2024	FM	\$1,855,000	
SF-3603 (184th Ave)	Bridge	2024 (4QR)	2024	BROS-8J	\$650,000	
OC-3565 (208th St)	Bridge	2024 (2QR)	2023	Local	\$130,000	
IA-1750 (64th St)	Bridge	2024 (2QR)	2023	Local	\$110,000	
PE-2154 (242nd Ave)	Bridge	2024 (2QR)	2023	Local	\$110,000	
VB-2838 (21st St)	Bridge	2024 (2QR)	2023	Local	\$110,000	
OC-2945 (221st Ave)	Bridge	2024 (2QR)	2023	Local	\$110,000	
VB-2887 (446th Ave)	Bridge	2024 (2QR)	2023	Local	\$110,000	
F-0540 (100th St/1st St) w/Clinton Co.	Bridge	2024 (2QR)	2023	Local	\$85,000	
Z-34 (435th Ave) Maquoketa River to Preston	PavT Rehab	2025 (4QR)	2025	STP	\$1,700,000	
BEL-2555 (362nd Ave)	Bridge	2025 (4QR)	2025	STP	\$650,000	
East Line St (City of Monmouth)	Bridge	2025 (2QR)	2024	STP	\$120,000	
OC-0985 (275th St)	Bridge	2025 (2QR)	2024	Local	\$120,000	
BU-3490 (224th St)	Bridge	2025 (2QR)	2024	Local	\$120,000	
FC-2746 (2QR)	Bridge	2025 (2QR)	2024	Local	\$120,000	
Y-31 (Bernard Rd) 150th St to Crabtown	PavT Rehab	2026 (4QR)	2026	FM	\$1,000,000	
IA-3320 (17th St)	Bridge	2026 (4QR)	2026	BRS-8J	\$400,000	
MON-1331 (74th St) Morehead Bridge	Bridge	2026 (4QR)	2027	BRS	\$2,124,000	
PS-1699 (248th Ave)	Bridge	2026 (2QR)	2025	Local	\$120,000	
RIC-0806 (216th Ave)	Bridge	2026 (2QR)	2025	Local	\$120,000	
MON-1984 (12th Ave/West St)	Bridge	2026 (2QR)	2025	Local	\$120,000	
MA-2515 (24th St)	Bridge	2026 (2QR)	2025	Local	\$120,000	
IA-3561 (578th Ave)	Bridge	2026 (2QR)	2025	Local	\$120,000	
Y-31 (Bernard Rd) Crabtown to 234th St	PavT Rehab	2027 (4QR)	2027	FM	\$2,093,000	
VB-2253 (525th Ave)	Bridge	2027 (2QR)	2026	Local	\$120,000	
OC-0699 (287th ST)	Bridge	2027 (2QR)	2026	Local	\$120,000	
IA-2053 (525th Ave)	Bridge	2027 (2QR)	2026	Local	\$120,000	
WASH-0725 (374th Ave)	Bridge	2027 (2QR)	2026	Local	\$120,000	
E-17 (150th St) US 61 to IA 62	PavT Rehab	2028 (4QR)	2028	FM	\$1,575,000	
PE-2963 (234th Ave)	Bridge	2028 (2QR)	2027	Local	\$120,000	
UN-1900 (50th Ave)	Bridge	2028 (2QR)	2027	Local	\$120,000	
WASH-0575 (193rd St)	Bridge	2028 (2QR)	2027	Local	\$120,000	
					Total	\$14,732,000



# Chapter 7. Economic Development



Jackson County landscape

*Photo Credit: <https://www.jacksoncountyassessor.org>*

**ECONOMIC OVERVIEW**

Having a strong regional economy is an important foundation of a resilient community. The prevalence of quality jobs and access to goods and services are important factors when determining the overall quality of a community. Economic development planning is a process where a community organizes, analyzes, creates plans, and then acts to improve its economic well-being.

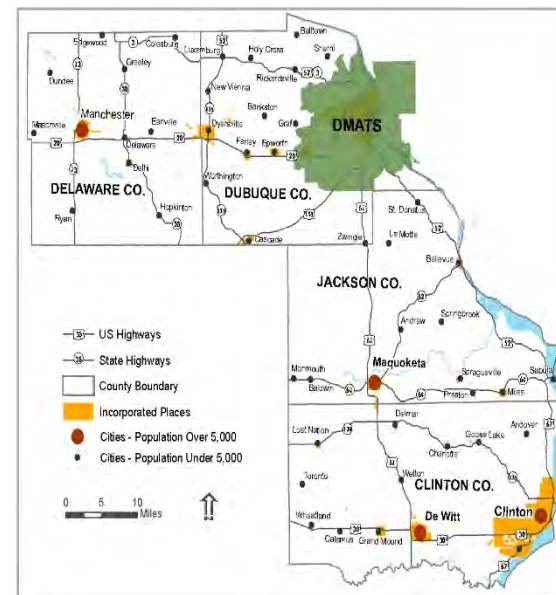
Economic development is a broad term for anything that can improve economic quality in a community. The policies in this comprehensive plan, whether directly or indirectly, will influence the nature of economic development and how it impacts a community.

This chapter will go over economic indicators, agricultural economy, tourism and attractions, and economic development partners as well as local, state, and federal programs to help guide Jackson County to improve its economic sustainability. The Regional Planning Affiliation (RPA) of Jackson, Delaware, Dubuque, and Clinton Counties is another important resource for economic development (see Figure 7.1 for map).

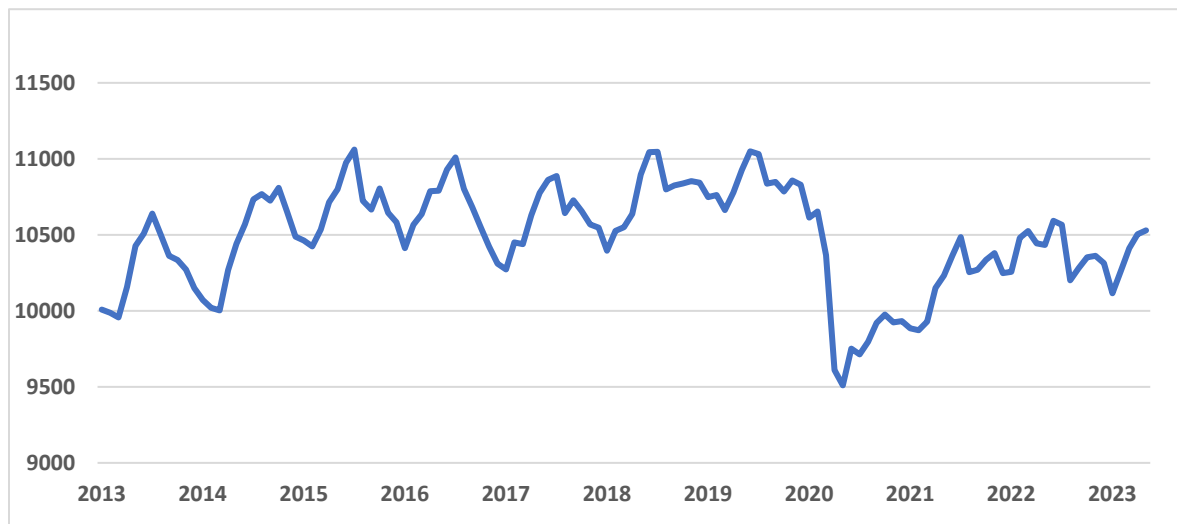
**ECONOMIC INDICATORS**

*Employment*

Since 2013, Jackson County has seen some fluctuations in total employment. Starting in January 2013 with 10,008 jobs, the number stayed consistent with a peak in June 2019 with 11,049 jobs. However, the COVID-19 pandemic followed in 2020 with employment hitting a low in May 2020 with 9,510 jobs. The county has since rebounded and recorded 10,529 jobs as of May 2023. Figure 7.2 shows the overall change in employment from 2013-2023.



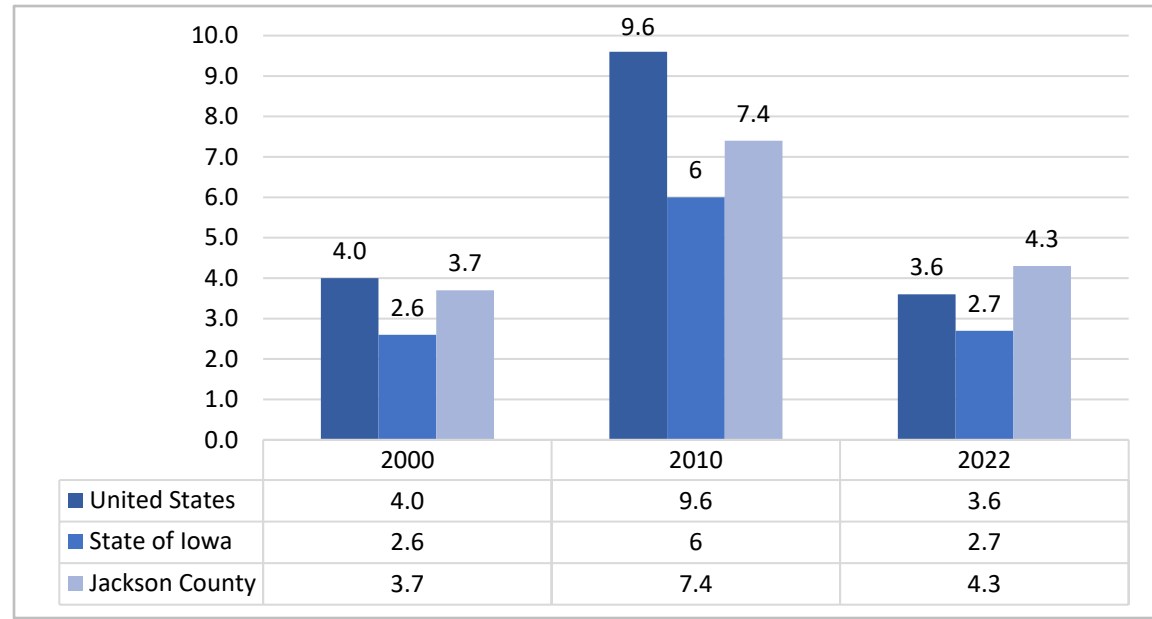
**Figure 7.1 Regional Planning Affiliation Map**  
Source: 2022 RPA Long Range Transportation Plan



**Figure 7.2 Annual Employment in Jackson County, Iowa** Source: US Bureau of Labor Statistics, 2023 at <https://beta.bls.gov/dataViewer/view/timeseries/LAUCN190970000000005>

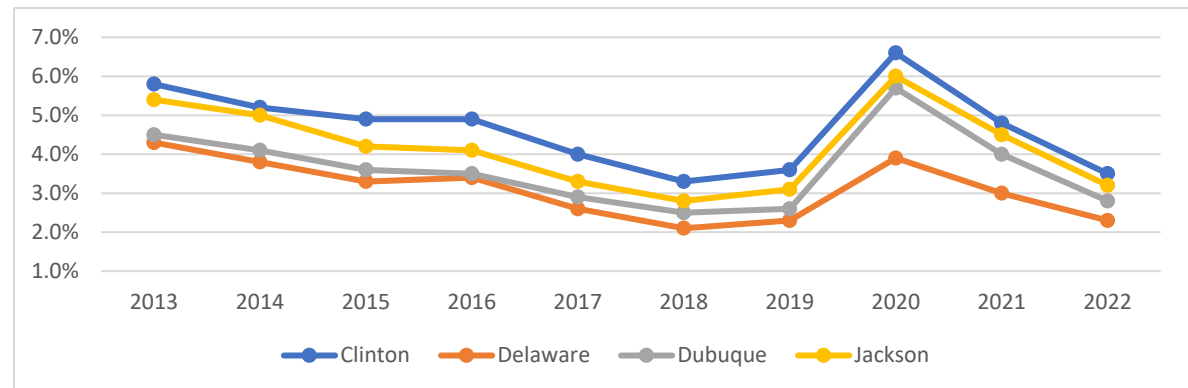
**Unemployment**

Similarly, there have been fluctuations in terms of unemployment over the years. Jackson County’s unemployment has been slightly higher than the state’s but has also remained lower than the rest of the country. Unemployment peaked in 2009 during the Great Recession and had another spike during the COVID-19 pandemic in 2020 but has remained low and was recorded at 4.3% in 2022. Figure 7.3 shows unemployment rates for the United States, State of Iowa, and Jackson County in 2000, 2010 and 2022.



**Figure 7.3 Comparison of Unemployment Rates** Source: US Bureau of Labor Statistics, 2023

Compared to fellow Regional Planning Association (RPA) counties, Jackson County has traditionally had the 2<sup>nd</sup> highest unemployment numbers behind Clinton County. All 4 counties have followed similar trends in their unemployment numbers, mostly trending downwards except for a spike during the COVID-19 pandemic in 2020. Figure 7.4 shows the average annual unemployment for RPA counties from 2013 to 2022.



**Figure 7.4 Annual Average Unemployment in RPA Counties** Source: Iowa Workforce Development, 2023 at <https://www.iowaworkforcedevelopment.gov/local-area-unemployment-statistics>

**Labor Force**

The labor force in Jackson County has shifted in the last 10 years. During this time the labor force peaked in 2015 and declined rapidly during the COVID-19 pandemic. Since then, the labor force has bounced back to about 11,000 workers, down from its peak in 2015 but a rebound from the pandemic overall.

Figure 7.5 shows the labor force number from 2013 to 2023.

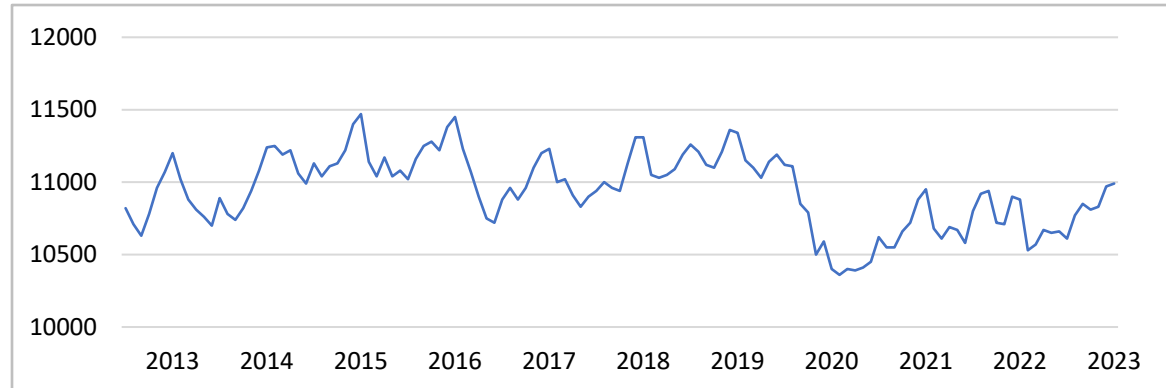


Figure 7.5 Jackson County Labor Force

Source: Iowa Workforce Development, 2023

**Median Household Income**

Evaluating a community’s median household income is important for establishing economic health. A population with a greater median income has more money to spend within the community which then brings in more development for the area. Table 7.1 shows the median household income by 2021 inflation-adjusted dollars for Jackson County as well as for the state of Iowa and RPA counties as a comparison. Jackson County’s estimated median household income was in line with state averages and third within the RPA counties.

**Table 7.1 Median Household Income for RPA Counties and the State of Iowa, 2021 Inflation-Adjusted Dollars**

Year	Clinton	Delaware	Dubuque	Jackson	State of Iowa
2000	\$57,993	\$57,598	\$61,338	\$53,508	\$61,163
2010	\$55,736	\$56,832	\$58,637	\$51,292	\$58,998
2017	\$54,177	\$65,206	\$63,715	\$55,805	\$60,936
2021	\$56,345	\$69,319	\$68,198	\$65,541	\$65,429

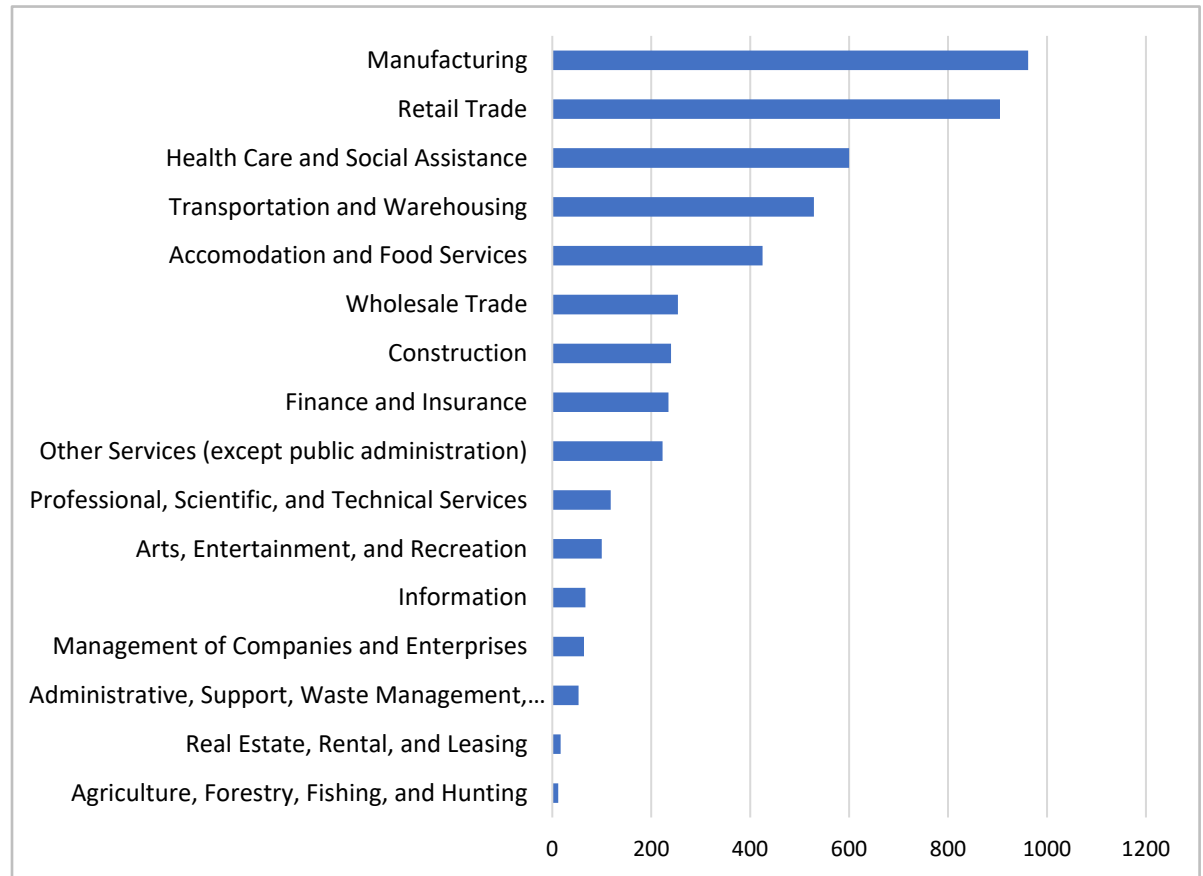
Source: US Census Bureau, 2000 Decennial Census and 2010, 2017 and 2021 ACS 5-Year Estimates at data.census.gov

Using the 2021 ACS 5-Year Estimates for median household income, Jackson County ranked 27<sup>th</sup> highest out of Iowa’s 99 counties. In comparison, Clinton County ranked 76<sup>th</sup>, Delaware County ranked 17<sup>th</sup>, and Dubuque County ranked 19<sup>th</sup>.

**Employment by Sector**

Having a diverse economy is important to establishing economic well-being within a region. One way to determine economic diversity is by looking at employment by industrial sector.

Employment by industrial sector is available through the US Census Bureau’s County Business Patterns (CBP) dataset. The CBP is an annual dataset that provides economic data by industry in each county. Figure 7.6 shows the most recent data. The top employment sectors are manufacturing, retail trade, health care and social assistance, and transportation and warehousing. These sectors make up 61.7% of non-public employment within the county; however, these sectors only make up 39.8% of the total annual payroll for all sectors.



**Figure 7.6 Employment by Sector in Jackson County**

Source: US Census Bureau County Business Patterns, 2020 at <https://data.census.gov/table?q=employment+by+sector+in+Jackson+County,+Iowa+in+2020&tid=CBP2020.CB2000CBP>

**Employment by City**

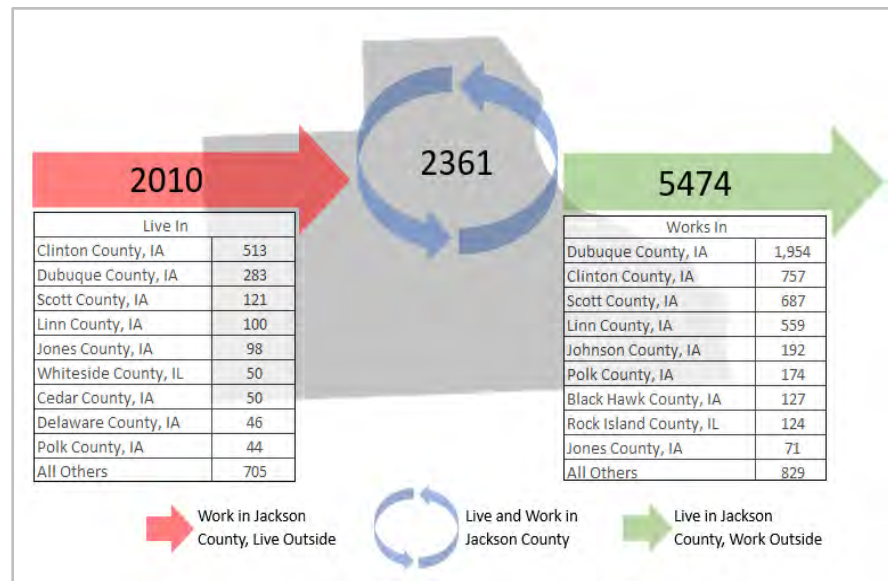
Figure 7.7 shows total employment by city in Jackson County. The cities with the highest amount of employment are the ones with the highest population: Maquoketa, Bellevue, and Preston.

**Worker Inflow and Outflow**

Worker inflow and outflow data has been mapped by the US Census Bureau to show the distribution of employment across Jackson County. As shown on Figure 7.8, there are 2,361 people who both live and work within Jackson County. Another 5,474 people live in Jackson County but work outside the county, with Dubuque, Clinton and Scott counties being the most common workplace locations. In contrast, 2,010 people work in Jackson County but live outside the county, with these workers most commonly living in Clinton, Dubuque, and Scott counties.



**Figure 7.7 Employment by City in Jackson County, IA**  
Source: ECIA, 2023



**Figure 7.8 Worker Inflow/Outflow**  
Source: US Census Bureau On The Map, 2020 at [onthemap.ces.census.gov](http://onthemap.ces.census.gov)



**Retail Analysis**

Retail sales are important indicators when determining a community’s economic well-being. According to Iowa State University’s Retail Trade Analysis report from the 2021 fiscal year, Jackson County’s actual sales have been consistently lower than the expected sales based on comparable peer counties in Iowa. These sales have led to a trade leakage of -\$112.8 million, which is calculated by a breakeven sales target based on population. This indicates that Jackson County’s retail sector is not serving its current residents completely, with its residents often choosing to spend their money elsewhere, losing revenue for Jackson County. See Figure 7.9.



**Figure 7.9 Expected and Actual Sales Per Capita**

Source: Iowa State University Extension and Outreach FY21 Retail Analysis at <https://indicators.extension.iastate.edu/Indicators/Retail/>



**Maquoketa Main Street**

Source: Jackson County Economic Alliance (JCEA)

**Living Wage Calculation for Jackson County, Iowa**

“A **living wage** is what one full-time worker must earn on an hourly basis to help cover the cost of their family’s minimum basic needs where they live while still being self-sufficient.

The Living Wage Calculator’s estimate of living wage includes **eight typical expenses or basic needs** – food, childcare, health care, housing, transportation, civic engagement, broadband, and other necessities. In addition to these basic needs, the calculator also accounts for the additional cost to families associated with income and payroll taxes.”

Source: <https://livingwage.mit.edu/pages/faqs>

“The living wage shown is the hourly rate that an individual in a household must earn to support his or herself and their

family. The assumption is the sole provider is working full-time (2080 hours per year). The tool provides information for individuals, and households with one or two working adults and zero to three children. In the case of households with two working adults, all values are per working adult, single or in a family unless otherwise noted.

The state minimum wage is the same for all individuals, regardless of how many dependents they may have. Data are updated annually, in the first quarter of the new year. State minimum wages are determined based on the posted value of the minimum wage as of January one of the coming year (National Conference of State Legislatures, 2019). The poverty rate reflects a person's gross annual income. We have converted it to an hourly wage for the sake of comparison.

For further detail, please reference the technical documentation here <https://livingwage.mit.edu/resources/Living-Wage-Users-Guide-Technical-Documentation-2023-02-01.pdf>.”

Source: Living Wage Calculator at <https://livingwage.mit.edu/counties/19097>

Table 7.2 reflects the Living Wage Calculation for Jackson County, Iowa. The data is from the Glasmeier, Amy K. Living Wage Calculator. 2023. Massachusetts Institute of Technology. <https://livingwage.mit.edu>

Number of Adults	1 ADULT				2 ADULTS (1 WORKING)				2 ADULTS (BOTH WORKING)			
	0	1	2	3	0	1	2	3	0	1	2	3
Living Wage	\$15.25	\$31.90	\$41.51	\$55.00	\$24.62	\$30.91	\$35.92	\$40.18	\$12.21	\$17.91	\$22.98	\$27.67
Poverty Wage	\$6.53	\$8.80	\$11.07	\$13.34	\$8.80	\$11.07	\$13.34	\$15.61	\$4.40	\$5.54	\$6.67	\$7.81
Minimum Wage	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25

**BUSINESS DEVELOPMENT**

Business development is the core function of community economic development efforts. Business development efforts are divided into two broad categories, business retention and expansion and business attraction.

*Business Retention and Expansion*

Business retention and expansion programs are designed to support existing businesses and prevent them from leaving the community or going out of business. It is estimated that 85% of new employment within a community is generated by the existing businesses. Existing businesses form the foundation of the community’s employment opportunities and stabilize the tax base. The Jackson County Economic Alliance (JCEA) uses the Synchronist survey program to gather information from businesses and respond to their needs. This program assists existing businesses as they encounter challenges or opportunities.

*Business Attraction*

Business attraction activities are designed to encourage businesses that are expanding or planning to relocate, to choose your community. New businesses enhance and diversify the economic base and improve the quality of life. While business attraction efforts have historically targeted manufacturing businesses, today communities also seek to attract retail, tourism, technology, service sector, and entertainment venues to diversify and expand their business

clusters and community. JCEA manages the county’s Location One profile to market available buildings and sites.

Figure 7.10 below is the JCEA’s 2021-2022 Annual Report on business development results.



Figure 7.10 JCEA 2021-2022 Annual Report

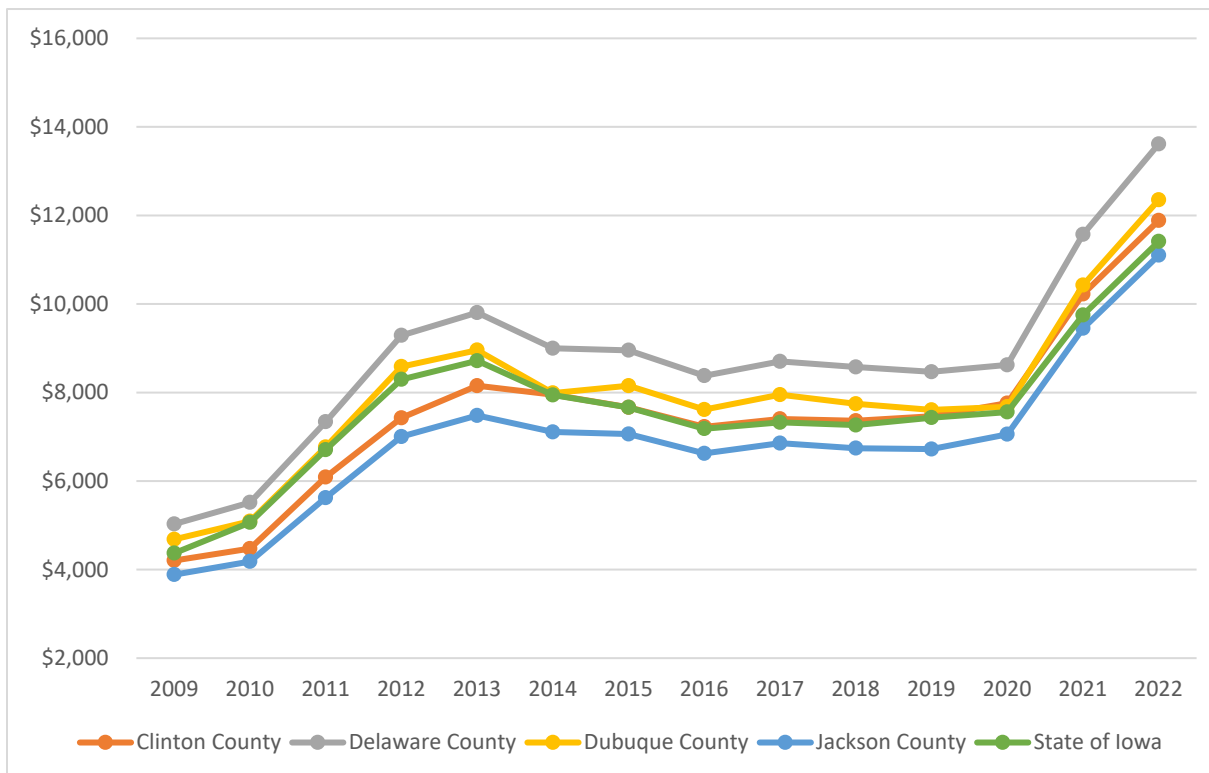
Source: Jackson County Economic Alliance

**AGRICULTURAL ECONOMY**

According to the **2022 Census of Agriculture**, there are 1,131 farms totaling 292,239 acres of land in Jackson County. The county’s average farm size of 258 acres, while the statewide average farm size is 345 acres. The county’s median farm size of 128 acres is comparable to the statewide median farm size of 130 acres

The average market value of agricultural products sold per farm is \$288,959 for Jackson County. This is lower than the statewide average of \$505,523; however, this may be because of the presence of much larger farms throughout the state.

The average dollar value per acre of Jackson County farmland based on Iowa State University estimates was \$11,100 as of November 1, 2022, compared to the statewide value of \$11,411. This was an increase of 17.47% from the previous year’s value per acre of \$9,499. Comparatively, the state had an overall increase of 17.02% from the previous year’s value of \$9,751. Figure 7.11 shows the change in value per acre in the four RPA counties and the state of Iowa from 2009 to 2022.



**Figure 7.11 Dollars per Acre in RPA Counties and the State of Iowa**

Source: Iowa State University Farmland Survey at <https://www.card.iastate.edu/farmland/isu-survey/archive/>

“The Census of Agriculture is a complete count of U.S. farms and ranches and the people who operate them.

The Census of Agriculture, taken only once every five years, looks at land use and ownership, operator characteristics, production practices, income and expenditures. For America’s farmers and

ranchers, the Census of Agriculture is their voice, their future, and their opportunity.” The 2022 Census of Agriculture for Jackson County, Iowa, is shown in Figure 7.12.

Source: U.S. Department of Agriculture (USDA) at <https://www.nass.usda.gov/AqCensus/>

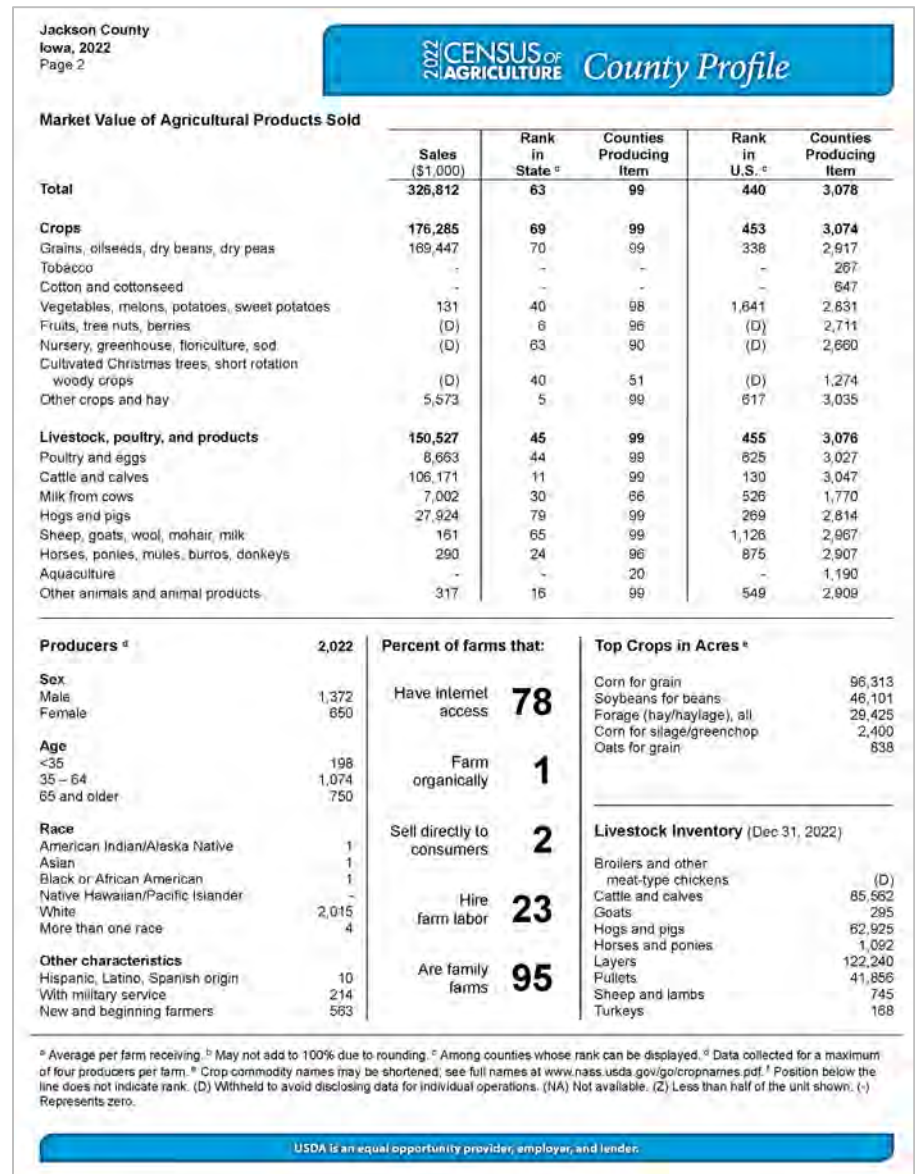
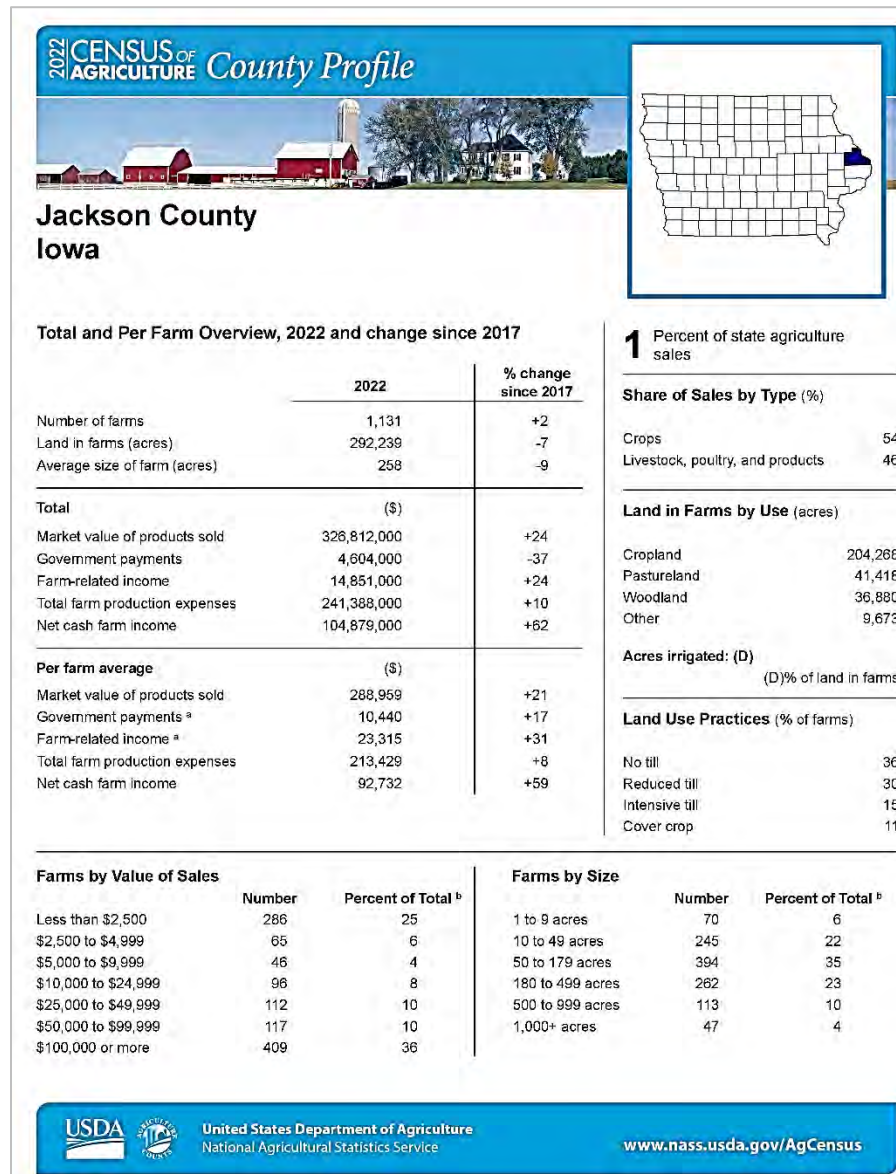


Figure 7.12 2022 Census of Agriculture for Jackson County, Iowa

Source: U.S. Department of Agriculture (USDA) at [https://www.nass.usda.gov/Publications/AqCensus/2022/Online\\_Resources/County\\_Profiles/Iowa/cp19097.pdf](https://www.nass.usda.gov/Publications/AqCensus/2022/Online_Resources/County_Profiles/Iowa/cp19097.pdf)

**TOURISM AND ATTRACTIONS**

Jackson County has many regional attractions that interest tourists. These tourists spend money in Jackson County which generates revenue that can be used for further development. This section highlights some of the attractions in Jackson County.

*Parks and Recreation*

Some of Jackson County’s most popular attractions are its many parks and opportunities for outdoor recreation. For a more comprehensive overview of Jackson County’s parks see Chapter 4. Community Facilities and Services and Chapter 10. Parks, Recreation and Cultural Resources.

Outside of the public parks in Jackson County there are also privately-owned recreational opportunities such as resorts, golf courses, and bowling alleys.

*Restaurants and Shopping*

Jackson County offers many opportunities for dining and shopping to attract tourists from across the region. According to the Jackson County Economic Alliance’s Community Profile,

in 2022 there were 117 retail businesses and 58 accommodation/food service businesses located in the county. These businesses include restaurants, boutiques, breweries, and other unique establishments which bring visitors from across the region to Jackson County.

*Museums and Historic Sites*

Jackson County has historical sites that also bring in tourists. The Jackson County Historical Society operates three sites: the Jackson County Museum, Clinton Engines Museum, and the Hurstville Lime Kilns.

The Jackson County Museum is located inside the Pearson Memorial Center on the County Fairgrounds in Maquoketa. The museum is 22,000 square feet and has two floors of facts, photos and artifacts detailing the history of the county. There is also a Hall of Fame Wall with the likenesses of men and women who have made a significant impact on the area. The Penningrath Machine Shed shows the history of agriculture in the county.

The Clinton Engines Museum located at 607 E Maple Street in Maquoketa is an

interactive museum dedicated to telling the story of one of the biggest manufacturing companies in Iowa’s history. The La Motte Depot was relocated to the site in 2015, letting people tour a historic train depot. Additionally, there are plans to complete the Agricultural Heritage Building to further tell the story of agriculture in Jackson County.

The Hurstville Lime Kilns located at 7301 Hurstville Road in Maquoketa were used to help build masonry buildings across the state. The four kilns on the site were restored by the Historical Society In 1985 to allow visitors to explore their history.

For more information, see Chapter 10. Parks, Recreation and Cultural Resources.

**ECONOMIC DEVELOPMENT PARTNERS**

Several public and private organizations work with Jackson County to help develop the local economy. These organizations help small businesses develop, administer state programs, and create and implement effective local policies to foster economic growth and development.

*Chambers of Commerce*

The Bellevue Chamber of Commerce, Maquoketa Chamber of Commerce, and Preston Growth and Development are organizations of businesses that further the needs of each other and promote tourism activities. They bring businesses together to build networks and create pro-business initiatives.

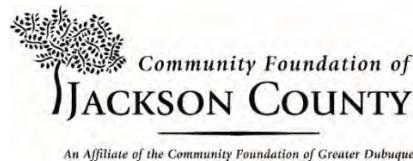
*Innovate 120*

Innovate 120 in Maquoketa offers coworking space, innovation services, meeting space, and team-building activities to foster entrepreneurship in Jackson County and help businesses launch, grow, and remain competitive.



*Jackson County Economic Alliance*

The Jackson County Economic Alliance (JCEA) is an organization of community governments and private entities that has the goal of facilitating, leading, and promoting organized economic growth to improve the quality of life and to protect and create jobs through innovative and conventional programs within the county. JCEA is also responsible for developing and implementing an overall economic development plan for Jackson County.



*Community Foundation of Jackson County*

The Community Foundation of Jackson County is a part of the Community Foundation of Greater Dubuque. It was established to make a positive impact, nurture charitable giving, enrich quality of life, and promote a sense of community now and in the future.

*East Central Intergovernmental Association*



The East Central Intergovernmental Association (ECIA) manages several economic development programs. ECIA Business Growth was founded in 1982 and covers Jackson for revolving loan funds including **Small Business Association (SBA) 504 programs** and the **Jackson County Revolving Loan Fund**. They also develop and update the Comprehensive Economic Development Strategy (CEDS), utilized to monitor and evaluate long term economic goals and strategies to coordinate economic development activities in the region.



*Prosperity Eastern Iowa*

Another ECIA program, Prosperity Eastern Iowa is a partnership of economic development stakeholders that leverage financial and human resources to achieve efficiencies, utilizing assets to attain economic prosperity for its region, including Jackson County.

## LOCAL, STATE, & FEDERAL PROGRAMS

As cities in Jackson County attempt to encourage business growth in their communities, they often can utilize local, state, and federal programs to assist in economic development activities. Some examples of programs that communities can use include the following:

### *Tax-Increment Financing (TIF)*

An incentive program that captures increased property taxes a business pays for improving their property. The incentive can be used for infrastructure improvements or to provide grants/rebates to the business. To receive the funding, the businesses must commit to job creation in the community or must have an extraordinary positive impact.

### *Low Interest Loans*

Loans for improving buildings are available for qualified projects within selected areas in the cities and county.

### *Land Discount*

Communities can provide a discount on land if the business contributes to significant job creation in the community.

### *State of Iowa Programs*

High Quality Jobs, Certified Sites, Revitalize Iowa's Sound Economy (RISE), and the Economic Development Set-Aside (EDSA) programs are available from the State of Iowa for qualifying projects.

### *Jobs Training*

The State of Iowa's 260E and 260F programs provide employee training through Iowa's 15 community colleges. 260E is available for businesses looking to expand their Iowa workforces, while 260F is available for existing Iowa businesses.

### *Industrial Property Tax Exemption*

This program provides a five-year property tax exemption for new or expanding industrial construction.

### *Jackson County Economic Alliance*

The Jackson County Economic Alliance provides an **Incentives Directory** at <https://www.theicea.org/resources/incentives-directory> as well as information on **Business and Community Resources** at <https://www.theicea.org/resources>.

### *USDA Rural Development*

The United States Department of Agriculture (USDA) Rural Development invests in rural America with loan, grant, and loan guarantee programs to help drive economic security and prosperity. USDA Rural Development programs expand access to high-speed internet, electric, and transportation infrastructure, and support business growth, healthcare, education, housing, and other community essentials.

A quick overview of USDA program areas along with a list of state office contacts in the USDA Rural Development At-a-Glance flyer is available online at

<https://www.rd.usda.gov/media/file/download/usdard-ataglance-final508.pdf>

Source: USDA Rural Development at <https://www.rd.usda.gov/about-rd>



**ISSUES AND OPPORTUNITIES**

*Business Literacy*

**Issue:** According to interviews with bankers in the Jackson County Tomorrow Plan developed in 2018, successful businesses in the area have traditionally thrived due to excellent customer service, but owners have often lacked financial knowledge that can maximize their businesses’ capabilities, with many businesses closing due to a lack of financial literacy.

**Opportunities:** Economic development partners such as the Jackson County Economic Alliance or Innovate 120 can help provide resources to business owners that can help local businesses attain financial and business literacy to help them stay active. These organizations also could facilitate knowledge sharing between businesses to expand community knowledge and create a stronger business community in the area.

Hosting business education classes are another strategy to connect businesses to each other so they can exchange knowledge and improve their financial

literacy. Advance Iowa, a consulting program through the University of Northern Iowa, provides seminars, trainings, and workshops to allow businesses to develop skills to help them maximize their potential.

*Business Succession Planning*

**Issue:** Businesses also struggle with succession, as many businesses in the area lack processes to facilitate business transitions. The impact of a local business closing can have huge ramifications on a community. Analysis done in the Tomorrow Plan indicates that the loss of a retail store would be projected to be the loss of industrial output totaling \$1.06 million, while the loss of a mid-size manufacturing firm would result in a projected loss of industrial output totaling \$30.4 million.

**Opportunities:** Economic development partners could connect businesses with resources related to succession planning to help businesses transition.

One strategy for business succession mentioned in the Jackson County Tomorrow Plan was to utilize cooperative business structures, allowing employees

to have a stake in the business’s future and providing financial assets and incentives to their current employees.

Advance Iowa, a consulting program through the University of Northern Iowa, can help businesses with seeking business valuations. This allows for owners to track progress towards financial goals, gives owners a measure of how much value they add to their business to meet exit goals, establishes timelines for reaching exit goals, and provides a foundation for analyzing exit options and minimizing tax consequences.

Small Business Development Centers (SBDCs) also offer additional workshops, counseling, and programming for businesses that are beginning the succession planning process.

*Business Development*

**Issue:** Jackson County struggles with a lack of economic diversification. There are few large businesses, meaning one of those businesses closing or downsizing would have dramatic effects on the community.

**Opportunities:** The Jackson County Tomorrow Plan suggested establishing a community investment club for people wanting to pool money and make investments in local projects of their choosing. Creating this organization would allow community stakeholders to spend their money strategically and collaboratively with others to create a focused strategy in Jackson County. Economic development partners such as the Community Foundation of Jackson County and ECIA can help provide funding for community investment as well.

The 2022-2027 Comprehensive Economic Development Strategy (CEDS) calls for the support and increased creation of entrepreneurial centers. Continuing to support hubs such as Innovate 120 will be key in the future as well to provide potential entrepreneurs with resources to build their business in the county.

#### *Workforce Retention*

**Issue:** Jackson County struggles with retaining a lot of its youth. According to the Tomorrow Plan, many high school students would like to stay in Jackson County. A lack of higher educational

opportunities in the area means that many students leave the county to pursue an education. This trend contributes to population decline as there are a lack of incentives for individuals to return once they graduate. There are very few high paying jobs available to young people as well, which deters them from staying in Jackson County.

**Opportunities:** The Jackson County Tomorrow Plan recommended distributing surveys to high school seniors to get contact information as well as post-graduation plans. This would allow the county to send job opportunities to local alumni as well as gather information on what opportunities graduates are looking for when wanting to come back to the area.

#### *Workforce Training*

**Issue:** Jackson County experiences a skills and education gap. Many of the jobs available in the region are “middle-skilled”, which require education in-between a high school diploma and a bachelor’s degree. However, not enough residents of Jackson County currently possess these skills.

**Opportunities:** Working with institutions such as Clinton Community College for job training classes would be a good way to educate current residents who may be looking to learn new skills for a career. This will provide a resource for helping overcome the existing skill gap.

The CEDS also recommends partnering with organizations such as IowaWorks to track and analyze workforce data that can help communities understand where they stand in their skill gaps and what skills may need to be focused on.

Creating a more inclusive environment would be crucial for bringing in a more diverse workforce. The CEDS recommends promoting diversity, equity and inclusivity training and programming to businesses in the region.

#### *Tourism/Community Character*

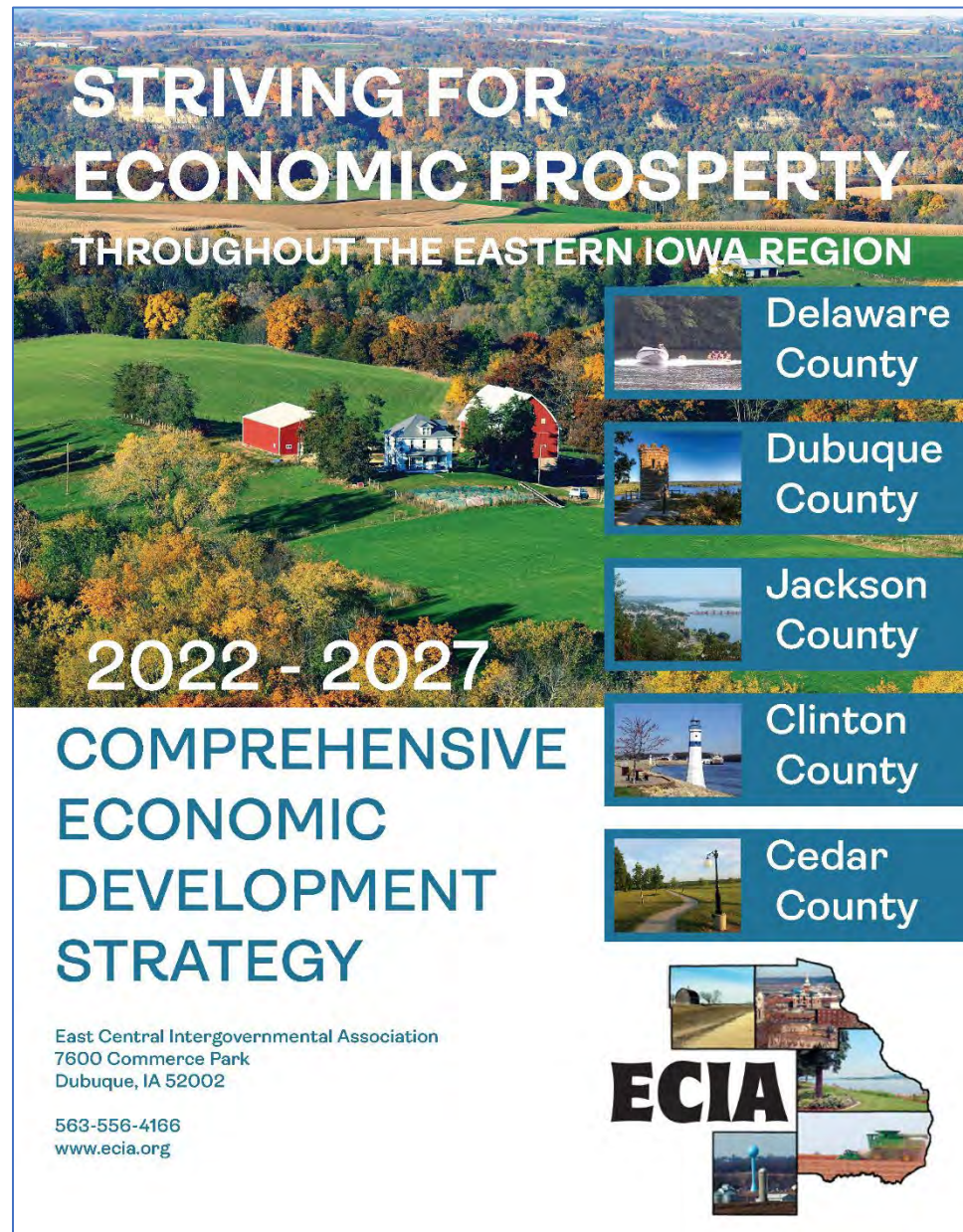
**Issue:** Jackson County has a lack of varied events, restaurants, and “night life” that could help increase livability and tourism.

**Opportunity:** Jackson County has a wealth of natural beauty, outdoor recreation, and artistic culture that has a lot of potential to be developed on. The CEDS calls for further supporting artistic

endeavors through investing in events, organizations, and institutions that would show that the county is focusing towards building community character.

Marketing will be key in informing potential tourists and residents about opportunities in Jackson County. Continuing to promote local events and online sites such as Grant Wood Loop (gwloop.com) to show that Jackson County supports its recreational, cultural, and art opportunities and will increase interest in expanding those opportunities in the area.

The CEDS also mentions the importance of strong downtowns for building communities. Promoting and encouraging partnerships that pursue downtown revitalization and supporting entrepreneurial investment in those areas will build strong downtown areas that can bring in a wide array of businesses.



Cover of CEDS 2022 – 2027 report

Source: ECIA

**GOALS AND OBJECTIVES**

*Workforce Development*

7.1 Attract and maintain a diverse population and workforce that can meet the needs of regional employers.

- Partner with existing workforce agencies to analyze workforce skills and trends.
- Research best practices for attracting high demand workers to the region.
- Partner with institutions such as Clinton Community College for job training programs.
- Attract a diverse workforce by creating a more inclusive environment.

*Business Attraction and Retention*

7.2 Continue to support business retention and expansion through capital investments and entrepreneurial centers.

- Support efforts that attract, maintain, promote, and expand regional industries.
- Support and promote the efforts of educational institutions and their business programs.
- Identify entrepreneurial resources that are lacking and collaborate with community partners to improve.
- Encourage an economic development environment that supports entrepreneurship and existing businesses while attracting new businesses.
- Partner with institutions that provide resources to help businesses increase their knowledge.
- Develop and maintain a Small Business Committee and a business directory to promote awareness of and support for local businesses in Jackson County.

*Tourism*

7.3 Improve the region’s desirability by enhancing and expanding access to the arts and recreational opportunities.

- Invest in cultural/arts events, organizations, and institutions.
- Spread awareness of community events and resources such as gwloop.com.
- Develop and maintain a data base of Jackson County businesses, venues, attractions, and other resources to promote tourism in Jackson County.

# Chapter 8. Housing



Bear River Cottages, a “pocket neighborhood” housing development in Maquoketa, Iowa.

*Photo Credit: ECIA*

**HOUSING OVERVIEW**

Housing is a key concern in Jackson County for several reasons. First, housing is important for individuals and families because it fulfills their basic need for shelter, and in many cases, housing costs can be a household’s largest expense. In addition, housing can be a typical homeowner’s largest financial asset and an important tool for building wealth.

Second, housing is a key industry in the local economy. Construction and maintenance of houses, apartment buildings, and other related structures generates economic activity, supports local businesses, and employs workers. Housing-related economic activity also supports the financial institutions that provide the loans for the construction and purchase of homes and the real estate professionals that assist with the buying and selling of residential properties.

Finally, housing is a key part of Jackson County’s plans for future development. Having a supply of good-quality, affordable housing available in a variety of shapes, sizes, and price points will ensure that the people that want to live

in Jackson County can find a home that meets their individual needs. Housing plays a key role in the county’s economic development efforts by housing the workforce required to staff area businesses.

This chapter looks at the existing housing situation in Jackson County, identifies key housing related issues, and recommends actions that the county and its partners can take to achieve its vision for the future.

**HOUSING STOCK**

This section provides an overview of the current condition of housing in Jackson County. The section looks at physical characteristics of housing structures such as building type and age. The section also looks at how the county’s existing structures are currently occupied.

*Housing Type*

According to the 2016-2021 5-year American Community Survey (ACS) Estimates, 82.5% of Jackson County’s occupied housing units are single-family detached homes. Apartment units in total make up 8.5% of the housing stock. See Table 8.1 for the comparison.

The American Community Survey (ACS) 5-Year Estimates from the U.S. Census Bureau annually provide the current information that communities need to plan investments and services. The ACS covers a broad range of topics about social, economic, housing, and demographic characteristics of the U.S. population.

The ACS 5-year estimates represent data collected over a period of time. This means increased statistical reliability of the data for less populated areas and small population subgroups. Learn more at: <https://www.census.gov/data/developers/data-sets/acs-5year.html>

Units in Structure	Amount	Percent
<b>1, detached</b>	6,619	82.5%
<b>1, attached</b>	77	1.0%
<b>2 apartments</b>	147	1.8%
<b>3 or 4 apartments</b>	226	2.8%
<b>5 to 9 apartments</b>	54	0.7%
<b>10 or more apartments</b>	258	3.2%
<b>Mobile home or any other type of housing</b>	639	8.0%

Source: 2016-2021 5-Year ACS Estimates

**Housing Tenure**

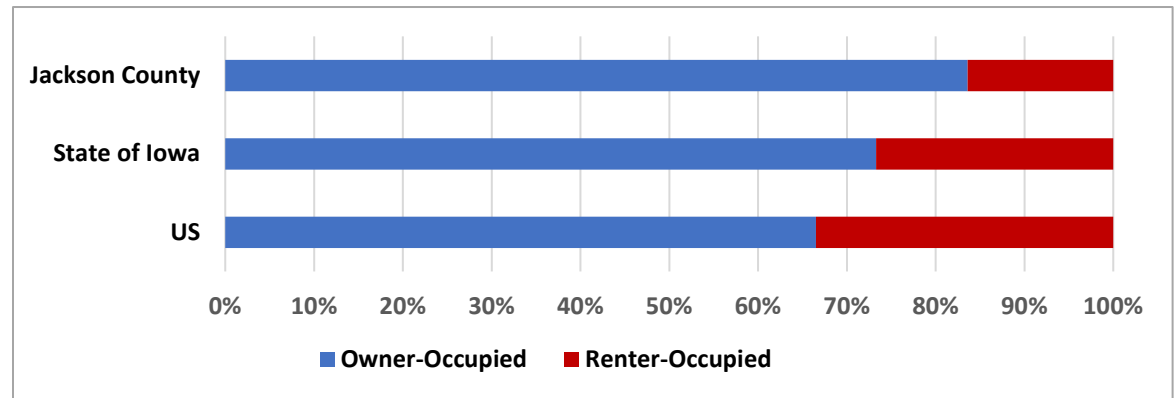
Housing tenure is the financial arrangement under which a household occupies their housing unit. The two common types of tenure are owner-occupied or renter-occupied.

According to the 2016-2021 5-year American Community Survey (ACS) Estimates, Jackson County had a total of 9,266 housing units, of which 8,020 were occupied and 1,246 were vacant. Of the occupied units, 6,515 were owner-occupied and 1,505 were renter-occupied. This translates to over 80% of occupied housing units being occupied by their owner.

Figure 8.1 compares the housing tenure rates in Jackson County to statewide and national figures, showing that Jackson County has a higher rate of homeownership.

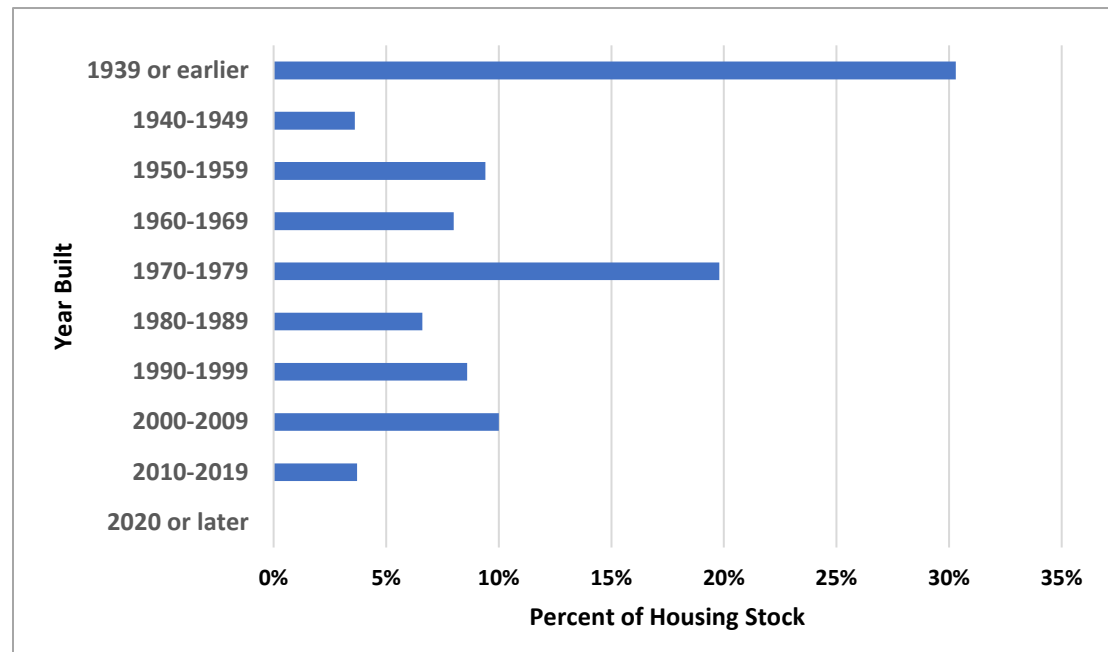
**Housing Age**

Jackson County’s housing stock is primarily older homes. More than 50% of homes were constructed before 1979, and 30.3% constructed in 1939 or earlier. Figure 8.2 charts the year of construction for Jackson County housing units.



**Figure 8.1 Housing Tenure Comparison**

Source: 2016-2021 5-year ACS Estimates



**Figure 8.2 Age of Housing Stock in Jackson County**

Source: 2016-2021 5-Year ACS Estimates

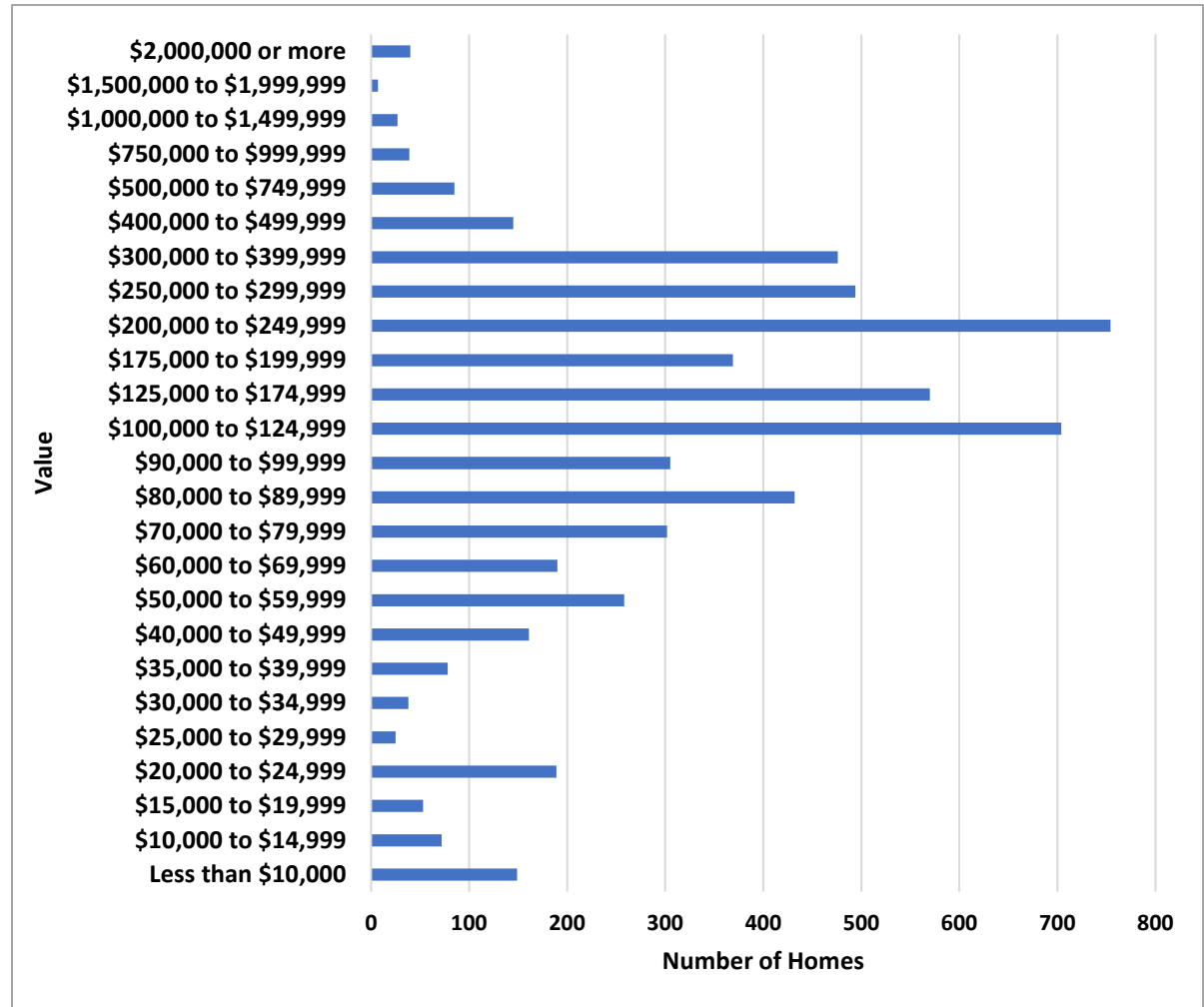
**HOUSING MARKET**

This section looks at the current housing market conditions in Jackson County. The section uses a number of measures to evaluate the current financial conditions in the Jackson County housing market.

*Home Values*

According to estimates created by the software firm ESRI for the Jackson County Economic Alliance, the median home value for 2023 in Jackson County was \$173,044 while the average home value was \$227,641. ESRI projects these values to increase to increase to \$190,437 and \$243,280 respectively, by 2028.<sup>1</sup>

Figure 8.3 shows the distribution of owner-occupied housing values in the county according to the 2016-2021 5-year American Community Survey (ACS) Estimates. Based on these estimates, about 37% of homes within the county are valued within the range of \$100,000 to \$250,000.



**Figure 8.3 Distribution of Owner-Occupied Housing Values in Jackson County**

Source: 2016-2021 5-Year ACS Estimates

<sup>1</sup> <https://www.thejcea.org/community-profile/p/v/data/item/874/jackson-county-ia#housing>



**Home Sales**

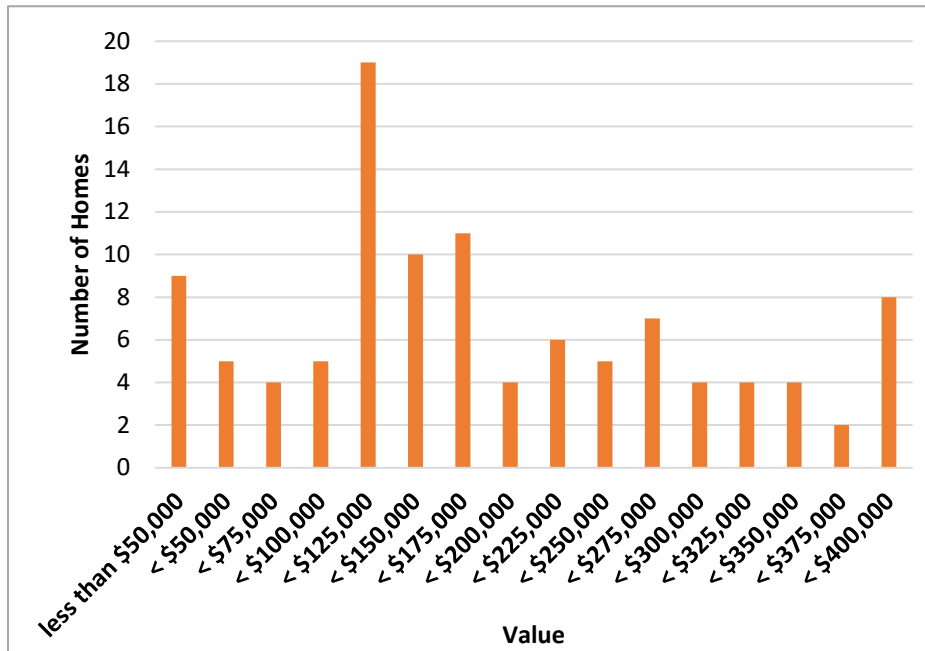
Home sales data provides useful insights into recent housing market trends, providing a picture of the number of homes being sold in the area as well as sale prices. Table 8.2 shows the number of homes sold in Jackson County between 2020-2022.

From 2020 to 2022 median sale prices increased by 3.8%. During the same period the number of listings decreased by 11.4% and the average days on the

market decreased from 44 in 2020 to 31 in 2022.

Increasing average and median sale prices and decreasing days on the market are indicators of increasing demand and generally positive trends for the residential market Jackson County. For context, for its Distressed Workforce Housing Designation, the state of Iowa uses 90 days or less on the market as an indicator of high demand for housing.

Data from the real estate website Zillow, charted in Figure 8.5, shows sale prices for homes sold in Jackson County between January 2023 to the end of September 2023. Most of the homes sold in Jackson County during that timeframe were within the range of \$125,000 to \$200,000.



**Figure 8.5 Values of Home Sales in Jackson County, January – September 2023** Source: Zillow

Year	Number of listings	Average Days on Market	Average Sale Price	Median Sale Price
<b>2020</b>	137	44	\$176,612	\$154,950
<b>2021</b>	144	46	\$184,434	\$149,700
<b>2022</b>	123	31	\$228,019	\$160,950

Source: East Central Iowa Association of Realtors

**HOUSING AFFORDABILITY**

This section looks at housing costs in Jackson County and assesses how affordable those costs are for people at different income levels. The chapter examines both rental costs and costs as a percentage of income.

Rental costs are broken down by contract and gross rent. Contract rent is the monthly rent agreed or contracted for between the tenant and the landlord, regardless of furnishings, utilities, fees, meals or other services that may be included. Gross rent is the monthly rent with an estimated cost of utilities included. Gross rent is used to eliminate any differences from different practices with regards to including utilities as a part of rental payments.

The U.S. Department of Housing and Urban Development (HUD) calculates 50<sup>th</sup> percentile rent values that estimate how much an average unit may rent for in each county for each fiscal year (FY). The 50<sup>th</sup> percentile rents show the median standard unit that would be rented in the Jackson County market and include estimated utilities.

When looking at housing affordability the federal government looks at housing costs as a percentage of income. The benchmark for affordability is housing costs that do not exceed 30% of a household's income. This is a good rule of thumb; however, there are many other factors that affect affordability that the rule does not consider.

**Rent Costs**

Table 8.3 shows the median gross and contract rent values for the four counties in the Regional Planning Affiliation (RPA).

Jackson County has the lowest median gross rent of the four counties. Low rent may be a result of an excess supply of units, older rental housing stock, or poor-quality units. In many cases, lower rent is a result of a combination of these factors.

Table 8.4 shows the Fiscal Year 2024 HUD estimates of 50<sup>th</sup> percentile rents for Jackson County and the other RPA counties. 50<sup>th</sup> percentile rents in Delaware and Jackson counties are comparable, with 3- and 4-bedroom apartment rents being slightly higher in Jackson County.

**Table 8.3 Median and Gross Rents in RPA Counties**

County	Median Gross Rent	Median Contract Rent
Clinton	\$703	\$548
Delaware	\$702	\$485
Dubuque	\$836	\$692
Jackson	\$648	\$485

Source: 2016-2021 5-Year ACS Estimates

**Table 8.4 50th Percentile Rents in RPA Counties (Fiscal Year 2024)**

County	Efficiency	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom
Clinton	\$ 687	\$ 732	\$ 962	\$ 1,189	\$ 1,281
Delaware	\$ 630	\$ 726	\$ 862	\$ 1,042	\$ 1,148
Dubuque	\$ 695	\$ 761	\$ 1,000	\$ 1,345	\$ 1,697
Jackson	\$ 630	\$ 656	\$ 862	\$ 1,156	\$ 1,191

Source: U.S. Department of Housing and Urban Development (HUD) FY2024 50<sup>th</sup> Percentile Rents: Data by County at <https://www.huduser.gov/portal/datasets/50per.html>

**Housing Costs**

Most households in Jackson County are spending less than 30% of their income on housing. Table 8.5 shows the total number of people in Jackson County who spend 30% or more of their income on housing costs according to 2022 estimates from the Housing and Transportation (H+T) Affordability Index from the Center for Neighborhood Technology.

The H+T Affordability Index provides a comprehensive view of affordability that includes both housing and transportation costs at the neighborhood level. Learn more at <https://htaindex.cnt.org/>

**Housing + Transportation Costs**

Transportation can be a large cost for households. Many of Jackson County’s residents work outside the county and travel farther than residents in more urban areas. Table 8.6 looks at the breakdown of residents who spend 45% or more of their income on housing and transportation. While most Jackson County residents spend under 30% of household income on housing alone, when paired with transportation costs.

housing is still a large burden on many in the community.

**Housing Costs by Income Level**

The 30% rule can be limited in other ways. Households that can afford to spend 30% of their income on housing often choose to spend less. Income is one variable in choosing appropriate housing. Other variables include credit score, job stability, and number of children. If the local housing market includes a large number of homes, households will be able to acquire housing at lower rates than in a market with tighter supply.

Table 8.7 shows housing costs as a percentage of household income for units with a mortgage in Jackson

County. The data supports that households with larger incomes tend to proportionally spend less on housing than individuals with lower incomes.

**Table 8.5 Housing Costs as a Percent of Income**

Criteria	Pop.	% of Pop.
Less than 30%	17,988	92.72%
30% and Greater	1,413	7.28%

Source: H+T Affordability Index

**Table 8.6 Housing and Transportation Costs**

Criteria	Pop.	% of Pop.
Less than 45%	5,309	27.30%
45% and Greater	14,092	72.60%

Source: H+T Affordability Index

**Table 8.7. Percentage of Household Income for Units with a Mortgage**

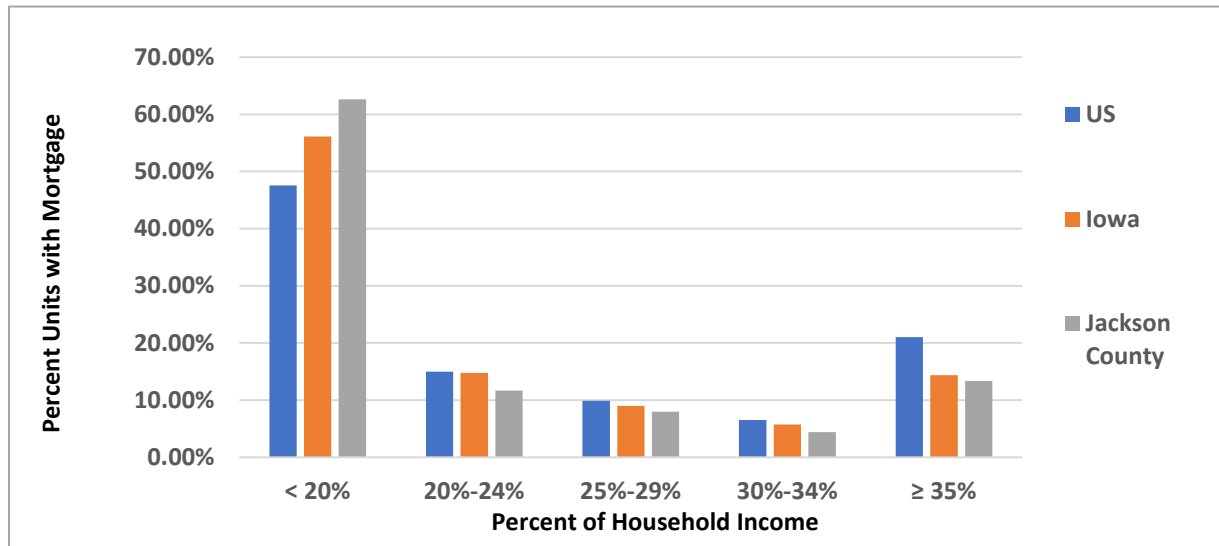
Household Income	Number of Households	Less than 20% of Income	20 to 29% of Income	30% or more of Income
Less than \$20,000	135	0%	0%	100%
\$20,000 to \$34,999	212	0%	20.8%	79.2%
\$35,000 to \$49,999	333	5.7%	41.1%	53.2%
\$50,000 to \$74,999	585	43.9%	44.8%	11.3%
\$75,000 or more	2,111	87%	10.5%	2.5%

Source: 2016-2021 5-Year ACS Estimates

**Housing Costs by Tenure**

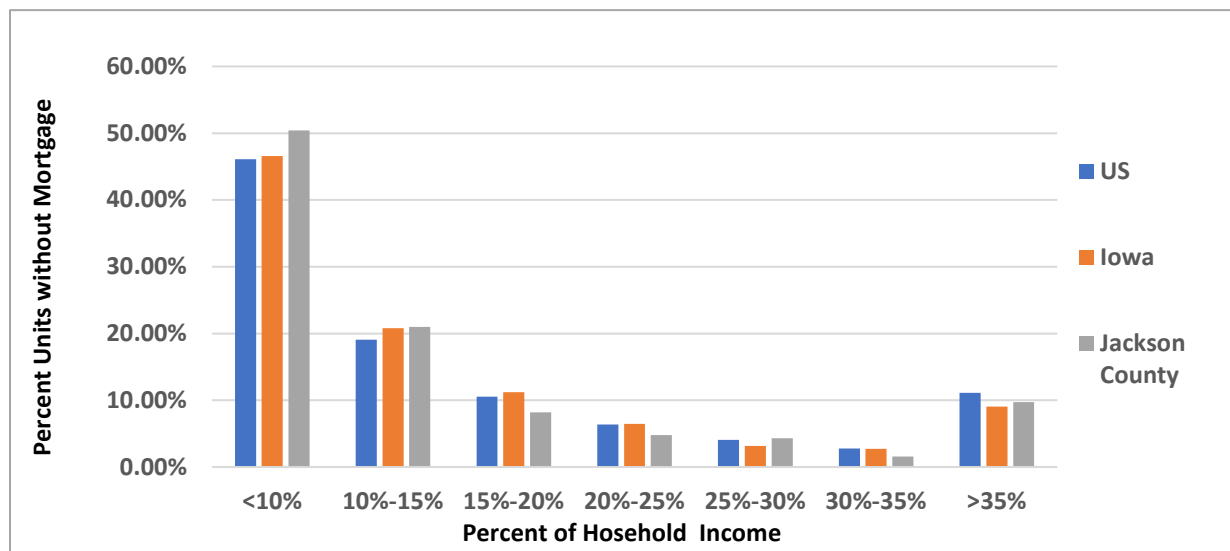
Figures 8.6, 8.7, and 8.8 show the distribution of housing costs by percentage to income for owner-occupied units with a mortgage, owner-occupied units without a mortgage and renter-occupied units for Jackson County, the state of Iowa and the rest of the country.

Homeowners without a mortgage tend to spend the least on housing costs while homeowners with a mortgage spend more. Many homeowners are still well below 20% of household income. Jackson County’s renters are more likely to spend less than 15% of their income on rent than the rest of the country; however, a large portion still are above the 30% threshold.



**Figure 8.6 Housing Costs for Units with a Mortgage**

Source: 2016-2021 5-Year ACS Estimates



**Figure 8.7 Housing Costs for Units without a Mortgage**

Source: 2016-2021 5-Year ACS Estimates

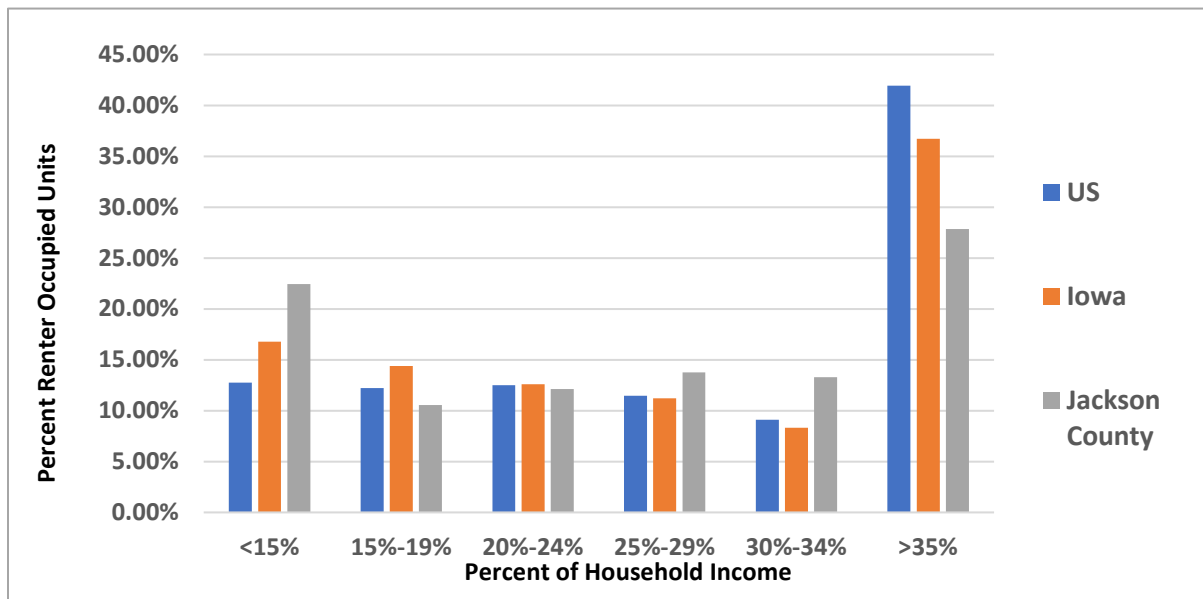


Figure 8.8 Housing Costs for Rental Units

Source: 2016-2021 5-Year ACS Estimates

**Housing Affordability Analysis**

The housing affordability analysis presented in Table 8.8 is a 2023 update to a housing affordability analysis prepared for the 2015 Jackson County Housing Needs Assessment. It provides an estimate of the minimum household income required to afford a home at different price levels for both 30% and 20% of income. The monthly payment was calculated assuming a good credit score, a 30-year mortgage with a 5.5% annual interest rate, and 10% down. The

analysis also considers additional housing costs including 1% for property tax, an annual 0.5% private mortgage insurance, and \$250 per month for utilities.

According to the analysis, more than half of Jackson County residents can afford an entry level home if they are able to use 30% of their income on housing. However, with only 20% of household income available, the number drops to 42% who can afford an entry level home.

<b>Table 8.8. Jackson County Housing Affordability Analysis based on Household Income, updated in 2023</b>				
<b>Purchase Costs</b>	<b>Entry Level</b>	<b>Move Up</b>	<b>High End</b>	<b>Jackson County Median</b>
Home Value	\$150,000	\$200,000	\$300,000	\$159,781
Down Payment 10%	\$15,000	\$20,000	\$30,000	\$15,978
Loan Amount	\$135,000	\$180,000	\$270,000	\$143,803
Interest rate	5.50%	5.50%	5.50%	5.50%
Number of Payments	360	360	360	360
<b>Monthly Costs</b>				
Monthly Payment	(\$851.68)	(\$1,135.58)	(\$1,703.37)	(\$907.22)
Property Tax Estimate	(\$125.00)	(\$166.67)	(\$250.00)	(\$133.15)
Monthly Utility Estimate	(\$250.00)	(\$250.00)	(\$250.00)	(\$250.00)
PMI Estimate	(\$50.00)	(\$66.67)	(\$100.00)	(\$53.26)
<b>Subtotal Monthly Costs</b>	<b>(\$1,276.68)</b>	<b>(\$1,618.91)</b>	<b>(\$2,303.37)</b>	<b>(\$1,343.63)</b>
<b>Affordability</b>				
Housing Cost as % of Income	30%	30%	30%	30%
Minimum Income Required	\$51,067	\$64,756	\$92,135	\$53,745
<b>Affordable to Percent of Jackson County Households</b>	<b>59%</b>	<b>42%</b>	<b>28%</b>	<b>42%</b>
Housing Cost as % of Income	20%	20%	20%	20%
Minimum Income Required	\$76,601	\$97,135	\$138,202	\$80,618
<b>Affordable to Percent of Jackson County Households</b>	<b>42%</b>	<b>28%</b>	<b>12%</b>	<b>28%</b>
Sources for the 2023 update included current data from local Jackson County Realtors.				

**LOCAL, STATE, & FEDERAL PROGRAMS**

Local, state, and federal programs as well as partner agencies are described below.

***Federal Low-Income Housing Tax Credit***

This program acts as an incentive for property owners to invest in the development of rental housing for individuals and families with fixed or limited incomes. The housing tax credit provides a dollar-for-dollar reduction (or credit) to offset an owner’s federal tax liability on ordinary income for a 10-year period.

***Iowa Workforce Housing Tax Incentives***

This program assists the development of workforce housing in Iowa communities by providing incentives for housing projects targeted at middle-income households and focuses on the redevelopment of existing structures.

***Iowa Housing Tax Credit Program***

This program addresses the housing needs for the lowest-income Iowans. The program is expected to assist in the development of approximately 375 new homes each year for a total of 3,750 new homes by 2030.

***Eastern Iowa Regional Housing Authority (EIRHA)***

The Eastern Iowa Regional Housing Authority (EIRHA) is a division of the East Central Intergovernmental Association (ECIA), which provides staff and administrative support.

EIRHA was created as a regional Housing Authority for Cedar, Clinton, Delaware, Dubuque, Jackson, Jones, and Scott Counties, excluding the cities of Clinton, Camanche, Davenport, and Dubuque.

The goal of EIRHA is to provide decent, safe, and affordable housing to eligible households; to provide opportunities and promote self-sufficiency; create economic independence; and to provide homeownership opportunities for Housing Choice Voucher and Public Housing Program participants.

***Eastern Iowa Regional Housing Corporation (EIRHC)***

The Eastern Iowa Regional Housing Corporation (EIRHC) exists to promote the general social welfare of eligible occupants with rental housing. Programs related to U.S. Department of Agriculture, Tax Credit, Tenant-based

Rent Assistance and Housing Trust Fund exist under this entity.

The mission of the EIRHC is to acquire, construct, provide and operate rental housing and related facilities suited to special needs and living requirements of eligible occupants.

***EIRHC Housing Trust Fund***

EIRHC became a Housing Trust Fund (HTF) designee in 2014. In accordance with Iowa Code Section 16.181, a HTF is held within the Iowa Finance Authority (IFA). The intended use of the funds is for development and preservation of affordable housing for households with low income in Iowa.

The mission of the EIRHC HTF is to assist in the provision of decent, safe, and affordable housing, as well as access to the resources for creating housing opportunities for the families served in eastern Iowa. The emphasis is to provide economic assistance to benefit the moderate, very low, and extremely low-income residents of Dubuque, Delaware, Jackson, Cedar, and Clinton Counties for a variety of housing needs.

***Eastern Iowa Development Corporation***

Eastern Iowa Development Corporation (EIDC) is a for-profit entity and wholly owned subsidiary of EIRHC. The EIDC was formed to be a general partner in all Low-Income Housing Tax Credits projects.

***East Central Development Corporation***

East Central Development Corporation (ECDC) is a non-profit focused on revitalizing Dubuque, Delaware, Jackson, Cedar, and Clinton Counties by serving low to moderate income communities and households and working with underserved neighborhoods that have experienced significant disinvestment.

ECDC projects include affordable housing development and rehabilitation, economic and community development related projects, neighborhood planning projects, and downtown revitalization.

***ECIA Home Repair Programs***

ECIA Home Repair Programs serve residents of Delaware, Dubuque, Cedar, Clinton, and Jackson counties.

Homes or rental properties built before 1978 are eligible for the **Lead Paint and Healthy Homes (LPHH) program**.

Homeowners or tenants are eligible to apply, especially those with children age 5 or younger that live in or visit the home. If lead is found, the home will be made lead safe. There is additional money available to make improvements to the home to make it safer and healthier for children. Some homes and rental properties receive new windows, siding, and other improvements.

With the **Older Adults Home Modification Program (OAHMP)**, older adult homeowners can remain in their homes, thus “aging in place” rather than moving into an assisted living facility. The OAHMP provides low-cost, high-impact modifications to the home to help reduce the risk of falling, such as installation of hand railings or non-slip strips on stairs or in showers/tubs.

The **Healthy Homes (HH) Program** makes the region’s housing stock safer by addressing commonly seen deficiencies. The focus is on water infiltration/indoor air quality, but any issues that fall within HUD’s Eight Principles of a Healthy Home can be addressed. The eight principles are: Keep it dry, clean, safe, well-ventilated, pest-free, contaminant free,

well maintained, and thermally controlled.

***Tax-Increment Financing***

Tax-Increment Financing is one way that cities within the county can help incentivize developers to build more housing in their communities. For more information on Tax-Increment Financing, see Chapter 7. Economic Development.

***Voluntary Assessment Agreement***

Chapter 384 of the Iowa Code allows property owners to petition their city to levy a special assessment to pay for public improvements. Developers can enter into a voluntary assessment agreement with their city to assist in the development of new subdivisions. This agreement would authorize a city to issue bonds that can pay for upfront costs of public improvements while in turn the cost of each property’s improvement is assessed to that property within the subdivision. The developer is then allowed 10 years to repay the city for improvement costs, but a lien is placed on each property that prohibits the sale until the improvement costs are repaid in full.



**ISSUES AND OPPORTUNITIES**

This section highlights some of the most important housing-related issues facing Jackson County. For each issue the section identifies opportunities that the county and its partners have for addressing the issue.

*Housing Stock*

**Issue:** Jackson County has an older housing stock. While many of these homes are in good condition, according to the Jackson County Tomorrow Plan many younger households struggled to find “move-in ready” housing in Jackson County.

**Opportunities:** Implementing a code enforcement program would ensure that all existing units are up to standard and increase the quality of housing in the county.

Implementing a property tax abatement program would allow homeowners to make improvements more affordably to their properties by exempting all or a portion of the resulting increase in property valuation from the homeowner’s property taxes. This would

improve the existing housing stock in Jackson County

*Housing Supply*

**Issue:** Jackson County has a limited supply of homes. According to the Jackson County Tomorrow Plan, both young families and small-scale developers cannot afford to build new homes without assistance.

**Opportunities:** Cities within the county can implement a variety of incentives to encourage development within their incorporated area. Jackson County can work with the cities to allow them to pursue whichever incentives they feel may best assist them. Some examples of incentives that cities can adopt are:

- Tax-Increment Financing
- Voluntary Assessment Agreement

*Housing Options*

**Issue:** The overwhelming dominance of single-family detached homes limits options available to younger residents and families. The housing stock is often on the extreme ends of the spectrum when it comes to size, quantity, and price. As average household size

decreases, it is even more important to provide a variety of options for those who would prefer to downsize.

**Opportunities:** Establishing a rental housing rehabilitation program administered by the Iowa Finance Authority (IFA) where Iowa cities or counties can provide financial assistance or assistance for new construction of rental workforce housing or affordable multifamily housing.

IFA would make loans to a city or county to be re-loaned to either property owners or developers to either make improvements to existing rental stock or build new multifamily units. Once funds are loaned the municipality may structure their loan program in the way it best fits their needs.

*Workforce Housing*

**Issue:** The 2022-2027 CEDS stressed the importance of affordable workforce housing for the region. As home prices continue to increase while wages stagnate, it will become a lot more difficult to purchase a home and therefore attract workforce talent to the region.

**Opportunities:** In 2022, ECIA and ECDC completed the Bear River Cottages, a “pocket neighborhood” housing development in Maquoketa. The homes were constructed to provide an affordable alternative for first time homebuyers and households wanting to downsize. Each home was sold for \$150,000, with grant funding and partners assisting in bringing down construction costs. Buyers were also provided down payment assistance.

This development was created to help alleviate the housing shortfall in the area. Development of more of this type of housing could provide both young workers and older households with an affordable housing option.

Supporting a down payment assistance program through local banks can help residents looking to transition into homeownership and establish new and young residents in the community.

**What is a Pocket Neighborhood?**

- Planned community consisting of smaller residences with around 10 homes
- Moderately priced homes for workforce housing
- Simple, more affordable building templates with smaller footprints
- Designed to promote close knit sense of community
- Increased sense of ownership and connectivity among residents
- Bungalow or craftsman style home
- Incorporates sustainability and green building concepts
- Clustering homes around common amenities
- Common courtyard area and a shared community garden
- Community space such as a gazebo
- Thrives on the spirit of community

Source:

[https://www.ecia.org/programs/pocket\\_neighborhood/index.php](https://www.ecia.org/programs/pocket_neighborhood/index.php)

**Age-Friendly Housing**

**Issue:** Jackson County’s population is getting older. With baby boomers, who make up a large portion of the population, nearing retirement age, it is important for Jackson County to prioritize age-friendly housing to retain their older residents.

**Opportunities:** In the absence of private development activity, Jackson County communities could consider developing a housing cooperative. A housing cooperative is a not-for-profit organization allowing its members to collectively own the development and govern the organization.

Housing cooperatives for senior residents are common throughout the state and have been established in both larger cities and rural areas. These developments allow seniors to remain in their home communities with maintenance-free, independent, and affordable living with a supportive sense of community. Seniors maintain the ability to contribute socially, spiritually, and economically to their communities.

**GOALS AND OBJECTIVES**

*Workforce Housing*

8.1 Provide affordable housing to make Jackson County attractive for young workers.

- Support new pocket neighborhood development.
- Support transition to homeownership by seeking partnerships for down payment assistance.

*Housing Options*

8.2 Increase and diversify housing options throughout Jackson County.

- Explore federal and state grant opportunities to diversify housing options.
- Partner with regional public and private housing developers to research and develop housing opportunities.

- Promote housing needs assessment and housing implementation plans in the county to support the development of new housing opportunities.
- Follow state construction codes to ensure quality housing stock.
- Establish programs that help make improvements to existing housing stock.
- Allow cities within the county to pursue incentives to encourage private development of housing within their incorporated areas.

*Age-Friendly Housing*

8.3 Provide more housing options for seniors.

- Develop new senior housing through private development or through establishing a housing cooperative.



An aerial view of Preston’s south side, including the city’s most recent residential development, City of Preston Subdivision No. 1, and a future development area, Harvest Heights subdivision. Photo by the City of Preston.

# Chapter 9. Agriculture and Natural Resources



**Farm in Jackson County**

*Photo Credit: ECIA*



**Grassed waterway in Jackson County**

*Photo Credit: ECIA*



**Buzzard Ridge Wildlife Area (left), Blackhawk Wildlife Area (center), and Pine Valley Nature Area (right)**

*Photo Credits (all): Jackson County Conservation Department*

**OVERVIEW**

Jackson County is located in a unique region of the country. “The Driftless Area covers 24,000 square miles in the heart of the Upper Mississippi River Basin spanning four states and forming the largest contiguous area of fish and wildlife habitat remaining in the Central United States.”<sup>1</sup> The name “Driftless Area” refers to the lack of glacial drift, the silt, clay, sand, gravel, and boulders left behind by continental glaciers. The lack of glacial drift followed by thousands of years of weathering and erosion have resulted in a region of diverse soils, topography, and ecosystems. Figure 9.1 is a map of the Driftless Area with Jackson County circled in red.

According to the U.S. Census Bureau, the county has a total area of 650 square miles, of which 636 square miles are land and 14 square miles are water. Its eastern border is formed by the Mississippi River. The Maquoketa River and North Fork of the Maquoketa River are the county’s next largest rivers.

Agriculture is the primary land use and a key part of the economy. The majority of the county’s agricultural land is planted in corn and soybeans. In areas with steeper slopes, especially along rivers and streams, land cover consists of a mixture of forests and grasslands. Grasslands are primarily used for livestock grazing or are in the conservation reserve program.

The prairies and forests that once covered Jackson County have changed with the spread of agriculture and the development of communities. This chapter will review the quality of land, soil, air, water, and other natural resources in Jackson County.

Information about county, state, and federal public lands managed for their

natural resources is provided in Chapter 10. Parks, Recreation, and Cultural Resources of this comprehensive plan.



**Figure 9.1 Map of the Driftless Area**

Source: Driftless Area Landscape Conservation Initiative at <https://elpc.org/resources/driftless-area-landscape-conservation-initiative/> accessed Jan. 2024

<sup>1</sup> <https://elpc.org/resources/driftless-area-landscape-conservation-initiative/>

**AGRICULTURE**

Jackson County likely has been farmed by Native Americans since the late 1700s and by European settlers since the 1830s.

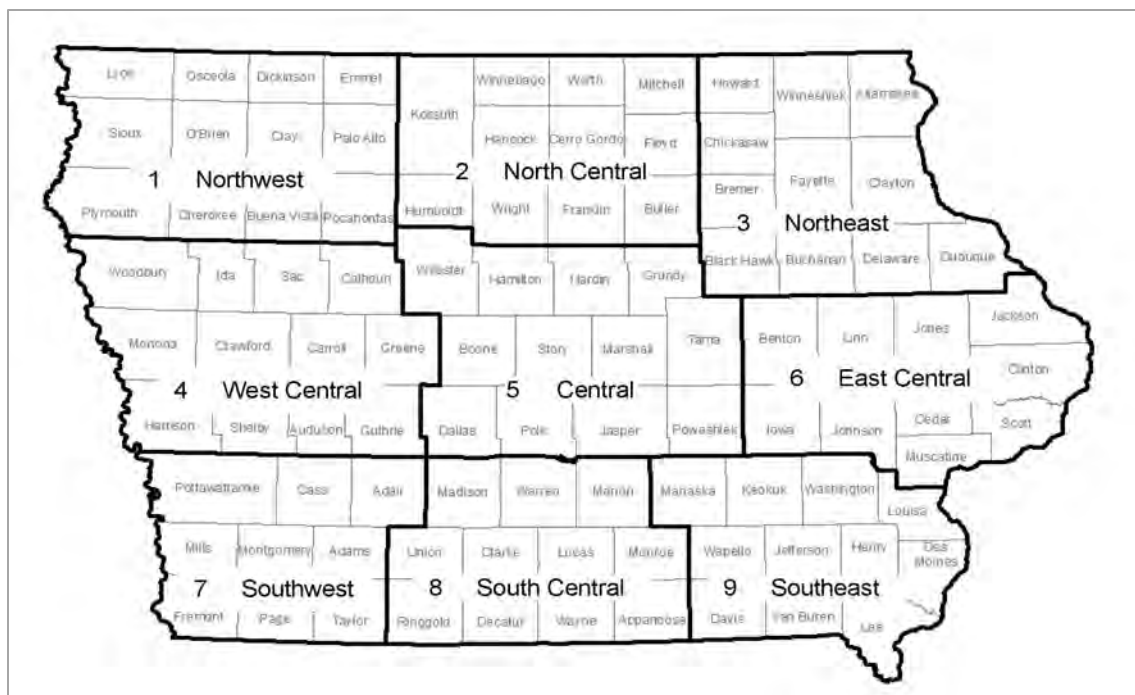
*Century and Heritage Farms*

In Jackson County, there are 232 Century Farms recognizing consecutive ownership of at least 40 acres of farmland for 100 years or more, and 51 Heritage Farms recognizing consecutive ownership of at least 40 acres of farmland for 150 years or more. For more information, visit <https://iowaagriculture.gov/century-and-heritage-farm-program>

*Census of Agriculture*

The U.S. Department of Agriculture (USDA) divides Iowa into nine agricultural statistics districts for convenience in compiling and presenting statistical information on crops and livestock. Jackson County is in USDA District 6, the East Central District, as shown on the map in Figure 9.2.

The USDA provides data at the national state, and county levels through the Census of Agriculture. “The Census of



**Figure 9.2 Map of USDA Agricultural Statistics Districts in Iowa**

Source: USDA 2023 Iowa Agricultural Statistics

Agriculture is a complete count of U.S. farms and ranches and the people who operate them. Even small plots of land -- whether rural or urban -- growing fruit, vegetables or some food animals count if \$1,000 or more of such products were raised and sold, or normally would have been sold, during the Census year. The Census of Agriculture, taken only once every five years, looks at land use and

ownership, operator characteristics, production practices, income and expenditures. For America’s farmers and ranchers, the Census of Agriculture is their voice, their future, and their opportunity.”<sup>2</sup> The 2022 Census of Agriculture for Jackson County, Iowa, is shown in Figure 9.3.

<sup>2</sup> <https://www.nass.usda.gov/AgCensus/>

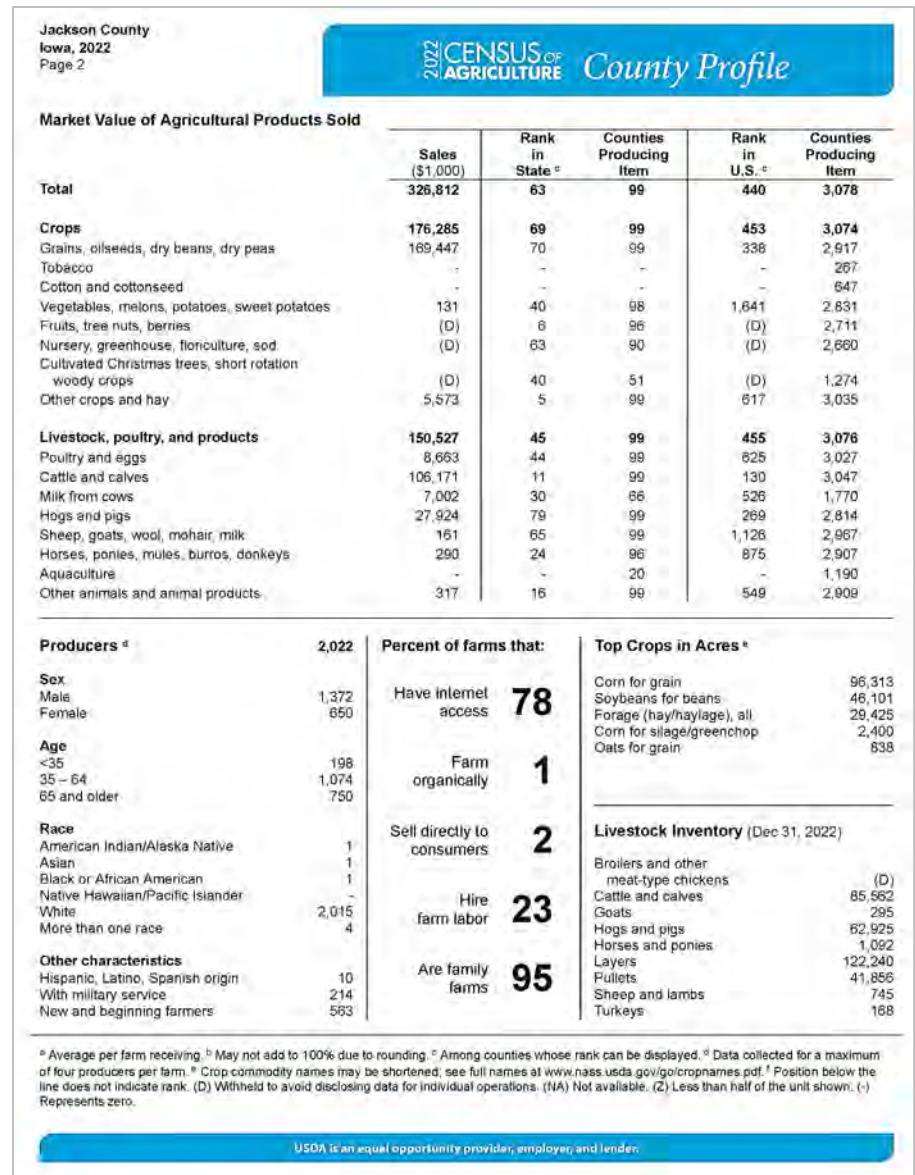
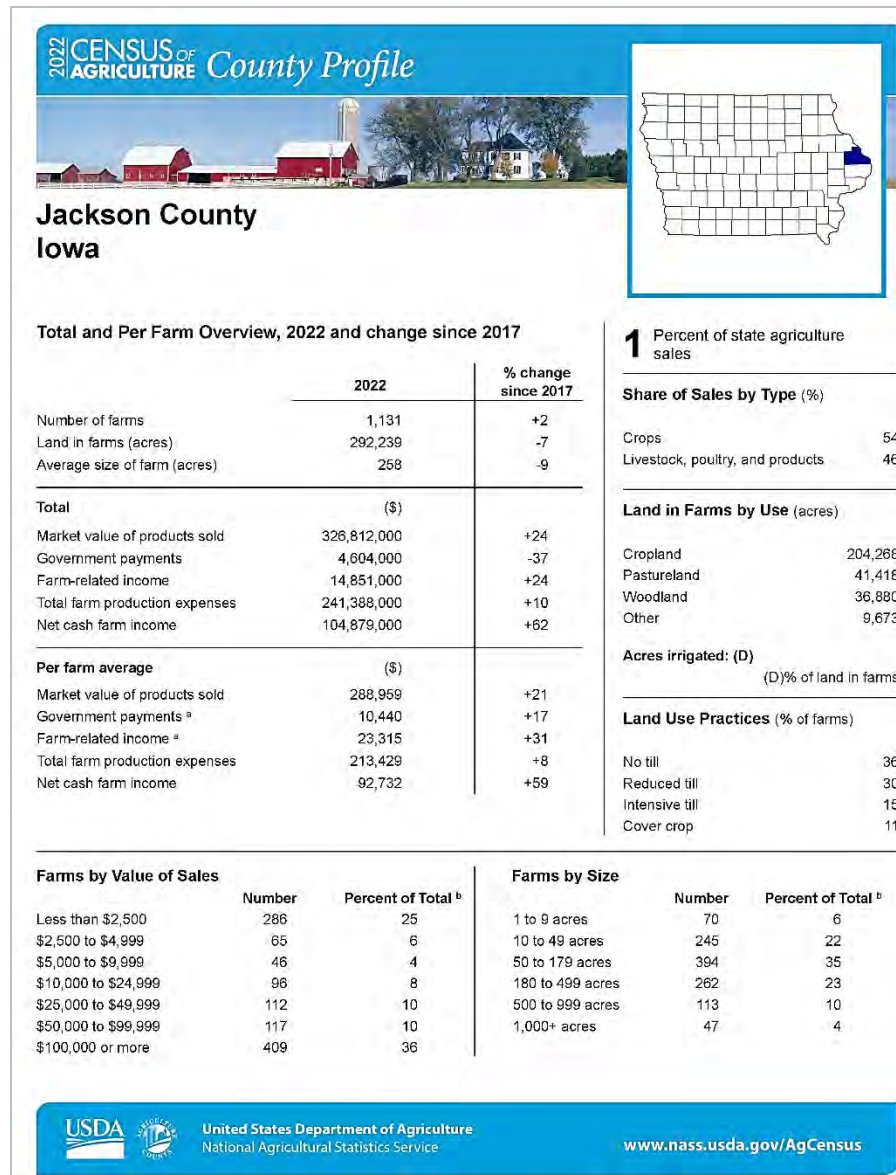


Figure 9.3 2022 Census of Agriculture for Jackson County, Iowa

Source: U.S. Department of Agriculture (USDA) at [https://www.nass.usda.gov/Publications/AqCensus/2022/Online\\_Resources/County\\_Profiles/Iowa/cp19097.pdf](https://www.nass.usda.gov/Publications/AqCensus/2022/Online_Resources/County_Profiles/Iowa/cp19097.pdf)

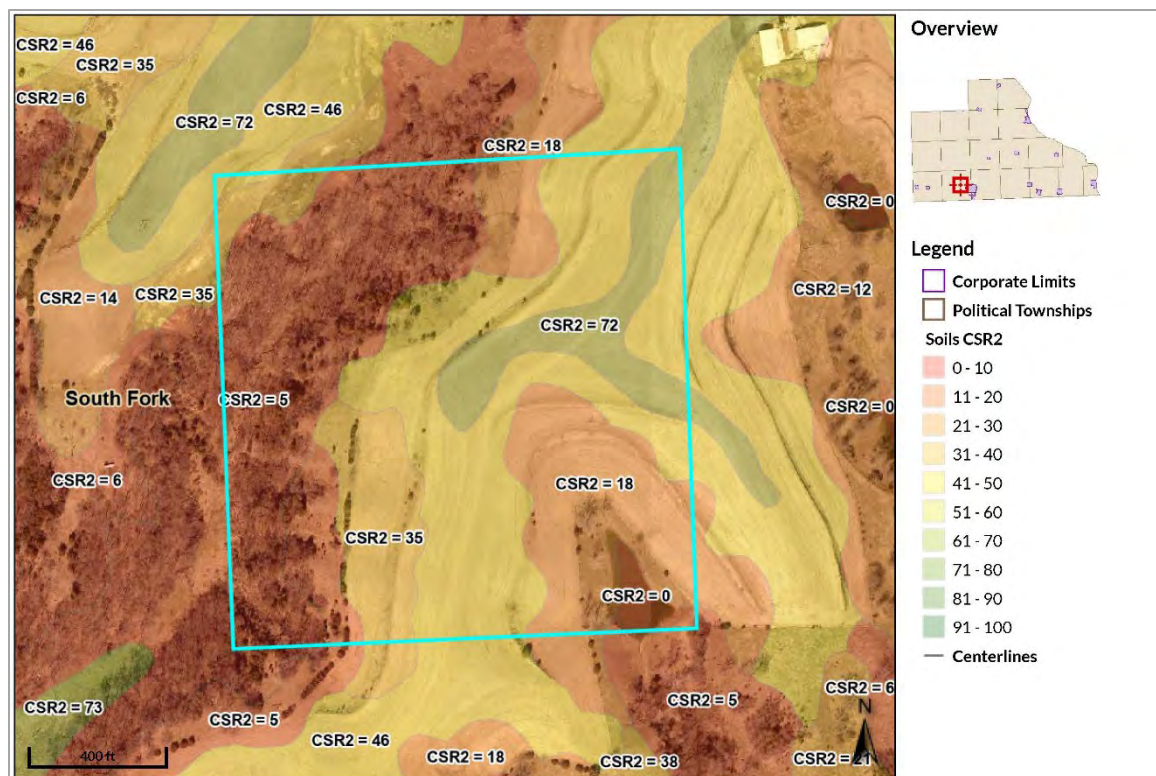
**Iowa's Corn Suitability Rating Index**

Iowa's Corn Suitability Rating Index (CSR2) provides important information about a parcel's potential productivity. It was created to equalize tax assessments on agricultural land based on soil types and their inherent properties. A CSR2 rating is one factor used in setting cash rental rates and calculating a farm's value in addition to long-term yield and historical management practices.<sup>3</sup>

The CSR2 rating is calculated using six parameters. The "perfect corn producing" soil gets a rating of 100. A soil having nearly no potential to grow corn receives a rating of 5. Learn more at <https://www.agron.iastate.edu/glsi/2022/12/03/csr2-equation-and-component-values/>

A weighted mean (average) of CSR2 ratings for counties in Iowa calculated by Iowa State University in May 2017 is still referenced in 2024. Values ranged from 91.4 to 40.4. The State CSR2 weighted mean was 68.4. Jackson County's CSR2 weighted mean was 44.

<sup>3</sup><https://www.extension.iastate.edu/agdm/wholefarm/html/c2-87.html>



**Figure 9.4 Sample CSR2 Soil Map - Jackson County**

Source: Jackson County GIS, Jan. 2024

"The estimated average CSR2 values statewide for high-, medium-, and low-quality land are 83, 70, and 56 points, respectively. The estimated percent of land area for high-, medium-, and low-quality land is 35%, 40%, and 25%, respectively."<sup>4</sup>

The Jackson County Geographic Information System (GIS) can provide a soil report soil types and CSR2 points for each agricultural parcel as well as a soil map (see Figure 9.4). Access via the Beacon GIS link on the GIS webpage at <https://jacksoncounty.iowa.gov/gis/>

<sup>4</sup> 2023 Farmland Value Survey, Iowa State University



***Iowa Agricultural Statistics***

The USDA’s National Agricultural Statistics Service, Upper Midwest Regional Office in Des Moines, Iowa collaborated with the Iowa Department of Agriculture and Land Stewardship and the Iowa Farm Bureau to produce the 2023 Iowa Agricultural Statistics in October 2023. It provides a statistical profile of Iowa agriculture at the state and county levels. Learn more at [https://www.nass.usda.gov/Statistics by State/index.php](https://www.nass.usda.gov/Statistics_by_State/index.php)

This 2023 USDA report provides recent updates to some data in the 2017 Census of Agriculture for Jackson County.

Table 9.1 shows the 2022 crops acreage, yield, and production of corn, soybeans, and oats in Jackson County. Also shown are the rankings for Jackson County and Iowa.

	Area planted (acres)	Area harvested (acres)	Yield per acre (bushels/acre)	Production (bushels)	County Rank in Iowa	Iowa’s Rank in USA
<b>Corn for grain</b>	114,500	111,300	219.2	24,397,000	56	1
<b>Soybeans</b>	59,000	58,600	66.3	3,887,000	81	2
<b>Oats</b>	2,700	460	64.8	29,800	17	7

Source: USDA 2023 Iowa Agricultural Statistics

Table 9.2 shows the number of head of cattle in Jackson County as of Jan. 1, 2023. Also shown are the rankings for Jackson County and Iowa.

	Number of head	County Rank in Iowa	Iowa’s Rank in USA
<b>All cattle and calves</b>	90,000	6	7
<b>Beef cows</b>	22,000	2	12
<b>Milk cows</b>	4,900	11	12

Source: USDA 2023 Iowa Agricultural Statistics

Table 9.3 shows cash rents per rented acre for non-irrigated cropland and pasture in 2022 and 2023 in Jackson County and Iowa.

	Non-irrigated cropland		Pasture	
	2022	2023	2022	2023
<b>Jackson County</b>	242.00	256.00	-	45.50
<b>Iowa</b>	256.00	269.00	59.50	60.50

Source: USDA 2023 Iowa Agricultural Statistics

***Iowa Farmland Values***

Table 9.4 shows average dollar value per acre for farmland in Iowa and Jackson County based on U.S. Census of Agriculture estimates and 2022 and 2023 Iowa Land Value Surveys conducted by the Center for Agriculture and Rural Development, Iowa State University (ISU), and ISU Extension and Outreach.

	2022	2023	% Change
<b>Jackson County</b>	\$11,100	\$11,158	0.5%
<b>Iowa</b>	\$11,411	\$11,835	3.7%

Source: 2023 Iowa State Land Value Survey <https://www.card.iastate.edu/farmland/isu-survey/2023/>

**Cropland Data**

The USDA’s National Agricultural Statistics Service and Agricultural Research Service provide the Cropland Data Layer (CDL) online annually with CropScape. Table 9.5 lists the top ten CDLs by acreage in 2023 for Jackson County according to CropScape.

Land Cover Category	Percent
Grass/Pasture	27%
Corn	25%
Deciduous Forest	18%
Soybeans	12%
Mixed Forest	4%
Open Water	2%
Alfalfa	2%
Developed/Open Space	2%
Developed/Low Intensity	2%
Woody Wetlands	2%

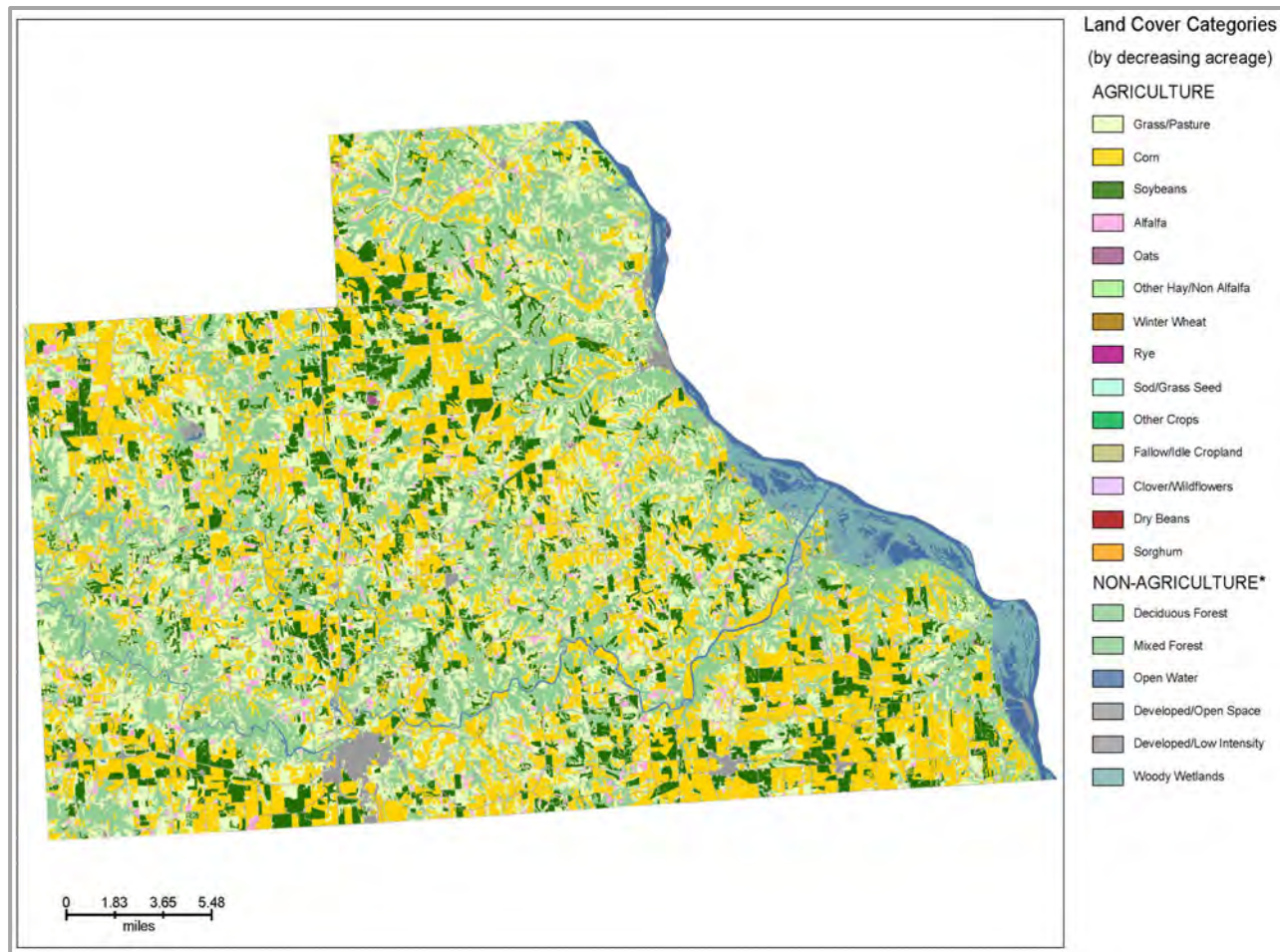
Per 2022 USDA Agriculture Handbook:

*Developed, Open Space* is large lot single-family homes, parks, golf courses, and landscaped areas with less than 20% impervious surfaces.

*Developed, Low Intensity* is single-family homes with 20-49% impervious surfaces.

Figure 9.5 is a map of the 2023 Cropland Data Layer for Jackson County. Agriculture and Non-Agriculture categories are listed in the legend by decreasing acreage. Only the top six Non-

Agriculture categories are listed. Additional data and maps can be downloaded from CropScape at <https://nassgeodata.gmu.edu/CropScape/>



**Figure 9.5 Map of 2023 Cropland Data Layer for Jackson County**

Source: <https://nassgeodata.gmu.edu/CropScape/> accessed Jan. 2024

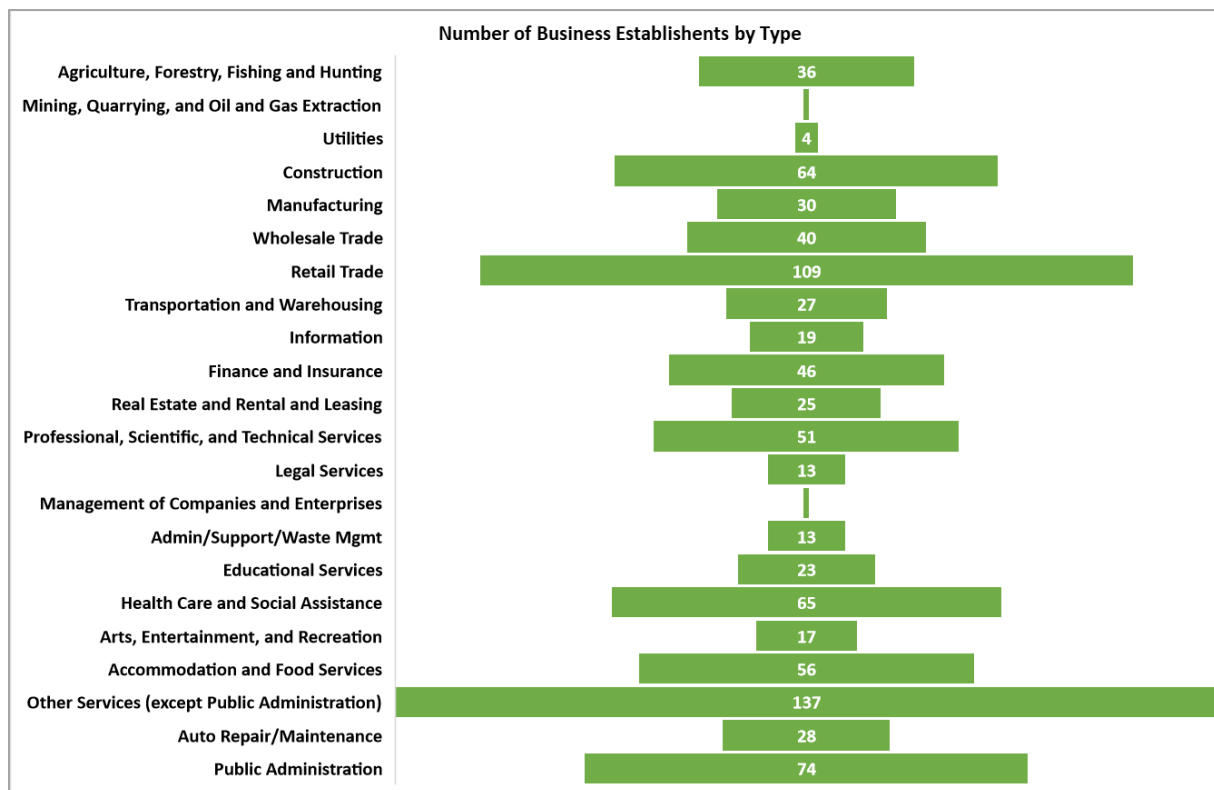
**AGRICULTURAL ECONOMY**

According to the US Census Bureau, the North American Industry Classification System (NAICS, pronounced Nakes) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

Figure 9.6 shows the estimated number of businesses by NAICS type in Jackson County in 2023. Of the 879 businesses, the top three by number were: 1. Other Services, 2. Retail Trade, and 3. Public Administration. Together, these 320 businesses made up 36.4% of the total.

***Agricultural Businesses***

The 36 business establishments identified as Agriculture, Forestry, Fishing and Hunting in Figure 9.5 are classified under NACIS Sector 11. This sector is for establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, dairy, greenhouse, nursery, orchard, hatchery, or their natural habitats.



**Figure 9.6 Number of Business Establishments in Jackson County by NAICS Type (2023)**

Source: Jackson County Economic Alliance using source data from Esri 10-17-2023

This sector has two basic activities:

1. Agricultural production includes the complete farm or ranch operation, such as farm owner-operators and tenant farm operators.
2. Agricultural support includes activities associated with farm

operation, such as soil preparation, planting, harvesting, and management, on a contract or fee basis.

For more information, visit <https://www.naics.com/six-digit-naics/?code=11>

*Where are other ag-related businesses?*

In the NACIS system, agriculture-related businesses are found in sectors other than agriculture, such as wholesale trade; retail trade; transportation and warehousing; and professional, scientific, and technical services.

Table 9.6 shows the potential for agriculture-related businesses in Jackson County in 2023 by NAICS type, number of businesses, and total employees.

Sector 42 Wholesale Trade businesses buy goods for resale, but usually not to the general public. They purchase, sell, and deliver merchandise in larger quantities. Ag-related examples are: dealers of farm and garden machinery, equipment, and supplies; wholesalers of grocery and related food products; and farm product raw material merchants.

Sector 44 - 45 Retail Trade is the buying of goods for resale to the general public. Ag-related examples are: nursery, garden center, and farm supply retailers; and grocery, convenience, and specialty food retailers.

For more information about NAICS, visit <https://www.census.gov/naics/>

<b>NACIS Type of Business</b>	<b>Number of Businesses</b>	<b>Total Employees</b>
<b>Agriculture, Forestry, Fishing and Hunting</b>	36	69
<b>Wholesale Trade</b>	40	489
<b>Retail Trade</b>	109	1,041
<b>Transportation and Warehousing</b>	27	138
<b>Professional, Scientific, and Technical Services</b>	51	164
<b>TOTALS</b>	<b>263</b>	<b>1,901</b>

Source: Jackson County Economic Alliance using source data from Esri 10-17-2023



Fall harvest in Jackson County

Photo Credit: ECIA

### ANIMAL FEEDING OPERATIONS

Iowa has two types of DNR-regulated animal feeding operations (AFOs): confinements and open feedlots. Both types are confined (kept and fed for 45 days or more per year) in a lot, yard, corral, building, or other area. Both types include manure storage structures, but do not include livestock markets.

#### Definitions

##### A confinement feeding operation

confines animals to areas that are totally roofed. Confinement feeding operations in Iowa must retain all manure.

An **open feedlot** is unroofed or partially roofed with no vegetation or residue ground cover while the animals are confined. Large open feedlots with a National Pollutant Discharge Elimination System (NPDES) permit are allowed to discharge to a water of the state under certain conditions listed in the permit, such as during a storm event larger than the 25-year, 24-hour storm.

A **combined operation** has some animals in a confinement and some in an open feedlot.

Unlike livestock on pasture, animals in AFOs are kept in small areas where feed and manure become more concentrated. Animal manure and urine contain nitrogen (nitrate and ammonia), phosphorus, organic matter, sediments, pathogens, and heavy metals — all of which are potential pollutants if they are concentrated in a small area. Some of these substances can pose threats to human health or impair drinking water. When excess nutrients reach our waters, they can cause low levels of dissolved oxygen, algal blooms and, in extreme cases, fish kills.

#### Regulations

Iowa regulates AFOs to protect surface and groundwater resources. All AFOs must follow some regulations when land applying manure or when building a new structure or expanding an existing operation. Generally, regulations differentiate between the type and size

of operation, and the type of manure storage that is used. When constructing a confinement, the operations must also meet separation distances from neighboring businesses, residences, churches, schools, and public use areas. These distances help protect neighbors from potentially offensive odors and air emissions. Environmentally sensitive areas such as wells, sinkholes and water sources are also protected by setbacks from construction and manure application.”<sup>5</sup>

#### Master Matrix

The Master Matrix is an Iowa DNR scoring system that can be used to evaluate the siting of permitted confinement feeding operations by counties that have adopted a construction evaluation resolution annually between January 1 to 31.<sup>6</sup>

In January 2024, Jackson County had 45 AFOs in the DNR’s AFO database; visit <https://www.iowadnr.gov/Environmental-Protection/Animal-Feeding-Operations/AFO-Online-Services>

<sup>5</sup> AFO – General Overview, Iowa DNR: Jan. 2021; visit <https://www.iowadnr.gov/Environmental-Protection/Animal-Feeding-Operations/>

<sup>6</sup> <https://www.iowadnr.gov/Environmental-Protection/Animal-Feeding-Operations/AFO-Construction-Permits#Master-Matrix-364>

**LAND QUALITY**

Land quality refers to the extent that land is free from contamination and therefore suitable for a particular use.

*Measuring Land Quality*

Existing measures of land quality are often used to monitor the use of land or the capability or suitability of land for an agricultural purpose such as growing crops or grazing animals, or for nonagricultural land development.

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) uses two measures.

The Land Capability Class (LCC) shows, in a general way, the suitability of soils for most kinds of field crops.

The Prime Farmland designation denotes farmland that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses.

For nonagricultural development, the Land Suitability Analysis uses a Geographic Information System (GIS) overlay analysis to identify appropriate



LAND CAPABILITY CLASSES			
Suitable for Cultivation		No Cultivation Practice, Hay, Woodland, and Wildlife	
I	Requires good soil management practices only	V	No restrictions in use
II	Moderate conservation practices necessary	VI	Moderate restrictions in use
III	Intensive conservation practices necessary	VII	Severe restrictions in use
IV	Perennial vegetation, infrequent cultivation	VIII	Best suited for wildlife and recreation

**Figure 9.7 Land Capability Class, adapted from NRCS by Iowa State University**

Source: <https://iastate.pressbooks.pub/soiljudgingiowa/chapter/land-capability-class/> accessed Jan. 2024

areas for new development. For more information, see Chapter 12. Land Use in this comprehensive plan.

Classes V through VIII are not suitable for cultivation; however, they are suitable for pasture, hay, woodland, and wildlife.

Figure 9.7 depicts the Land Capability Class graphically as a landscape. Classes I through IV are suitable for cultivation.

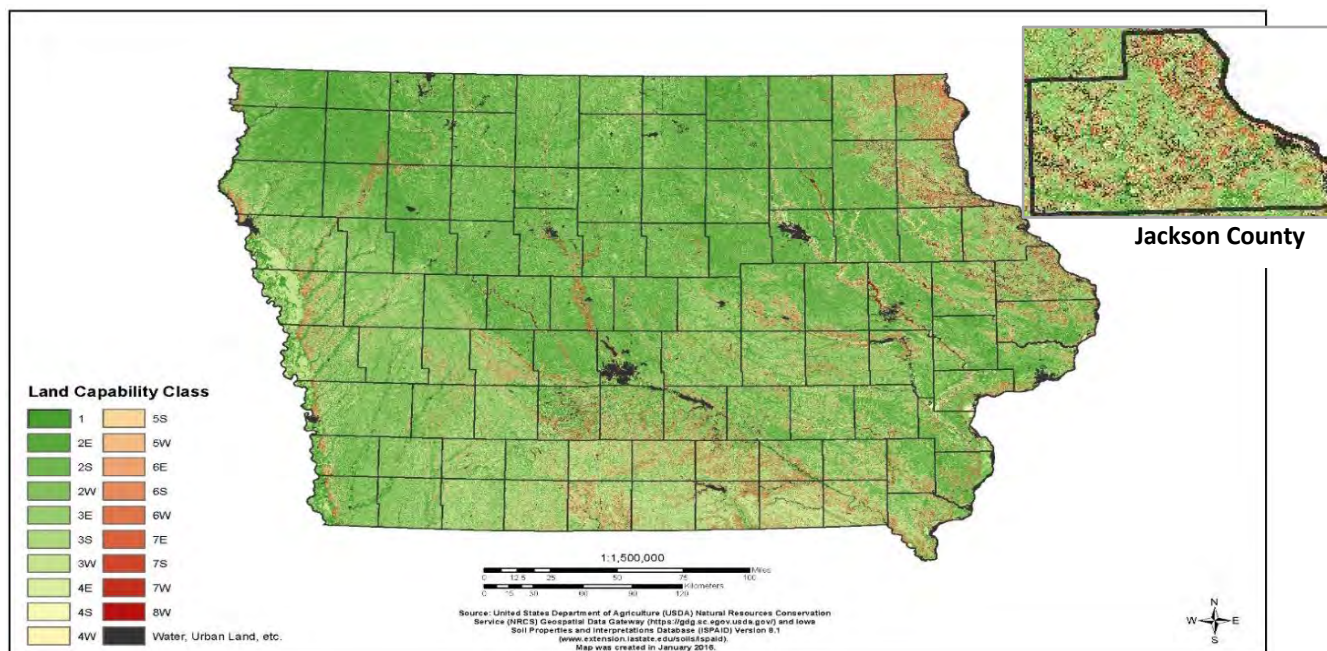
Classes II through VII are assigned subclasses on the basis of the type of hazard or limitation restricting their use. Four LLC subclass symbols are used to designate the problem as erosion (E), wetness (W), soil (S), or climate (C).<sup>7</sup> Figure 9.8 is a 2016 map of the LLC distribution across Iowa and Jackson County.

**NRCS Iowa Land Uses**

Iowa NRCS provides technical assistance to agricultural producers and non-industrial forest managers to help address natural resource concerns while strengthening their operations for four types of Iowa land uses. All four are found in Jackson County.

**Cropland** includes areas used for the production of adapted crops for harvest. There are two subcategories:

- *Cultivated cropland* includes row crops or close-grown crops, and hay or pasture land that is in a rotation with row or close-grown crops.



**Figure 9.8 USDA-NRCS Land Capability Class (LLC) Distribution across Iowa**

Source: Iowa State University Department of Agronomy: Jan. 2016, accessed Jan. 2024

- *Non-cultivated* cropland includes permanent hay land and horticultural cropland.

**Pasture lands** are diverse types of land where the primary vegetation produced is herbaceous plants and shrubs.

**Agroforestry** combines trees and shrubs with crops and/or livestock.

**Prairie, Pollinators and Wildlife Habitat**

is a partner-driven approach to conservation that funds solutions to natural resource challenges on agricultural land.

For more information, visit <https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/iowa/iowa-land-uses>

<sup>7</sup><https://iastate.pressbooks.pub/soiljudgingiowa/capter/land-capability-class/>, copyright 2023

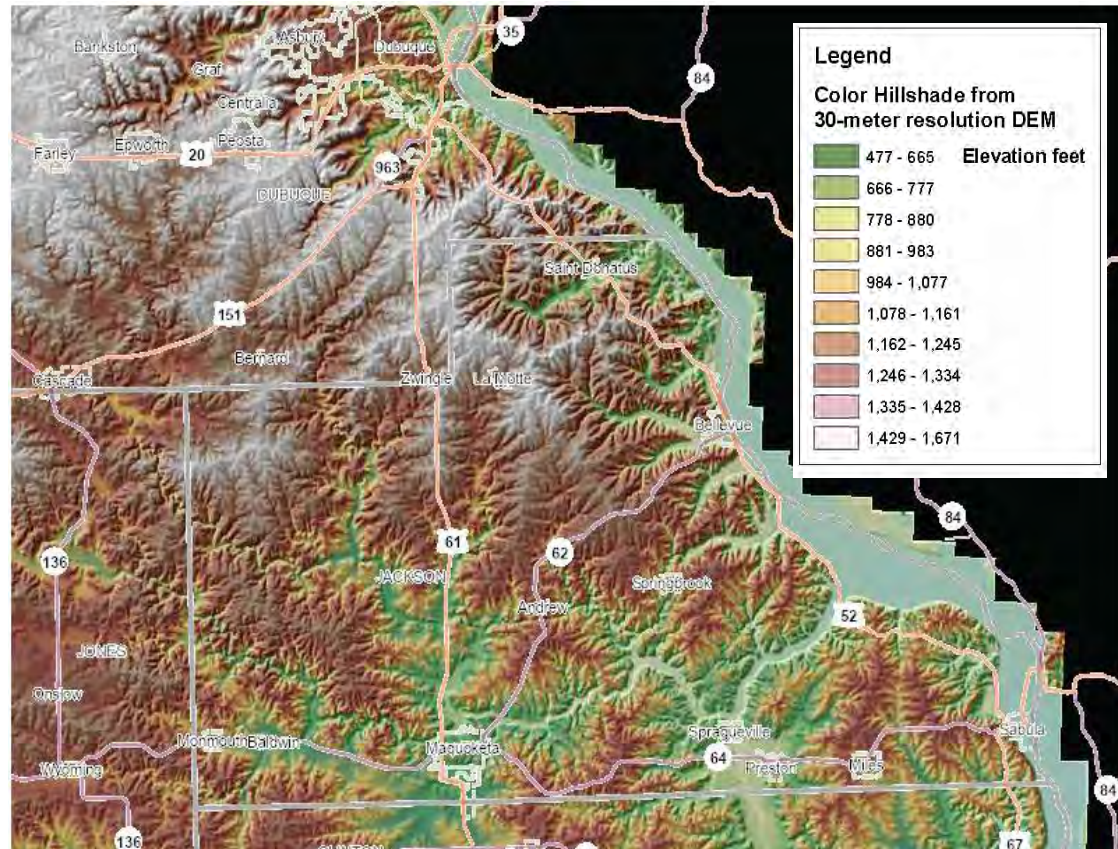
**Topography**

Jackson County’s topography is comprised of steeply rolling hills with rock outcrops and karst features in some areas. Karst is a type of landscape where the dissolving of the bedrock has created sinkholes, sinking streams, caves, and springs associated with bedrock. The county generally slopes from northwest to southeast, as shown in Figure 9.9, a topographic map of Jackson County.

**Land Cover**

According to the U.S. Geological Service (USGS), the National Land Cover Database (NLCD) provides nationwide data on land cover for characteristics of the land surface such as thematic class (e.g., urban, agriculture, and forest).

Most categories are self-explanatory; for example, Cultivated Crops and Pasture/Hay. Some categories are not; for example, *Shrub/scrub* contains some woodlands with trees over six feet. Other categories that are not self-explanatory include: *Developed, Open Space* – large lot single-family homes, parks, golf



**Figure 9.9 Topographic Map of Jackson County** Source: Iowa Geographic Map Server, 2024

courses, and landscaped areas with impervious surfaces covering less than 20%; *Developed, Low Intensity* – single-family homes with impervious surfaces of 20 - 49%; *Developed, Medium Intensity* -- single-family homes with impervious

surfaces of 50 - 79%; and *Developed High Intensity* – usually includes apartment complexes, row houses, and commercial or industrial areas with impervious surfaces covering 80 - 100%.<sup>8</sup>

<sup>8</sup> Source: USDA Agriculture Handbook 296: May 2022, p. 362



9. AGRICULTURE AND NATURAL RESOURCES

Figure 9.10 is a map of the land cover distribution for Jackson County using the 2021 National Land Cover Database. The predominant land cover categories are

agricultural uses of 82-Cultivated Crops and 81-Pasture/Hay, followed by 41-Deciduous Forests. Concentrations of Developed land covers in categories 21-

Open Space, 22-Low intensity, 23-Medium Intensity, and 24-High Intensity identify the locations of the cities in Jackson County.

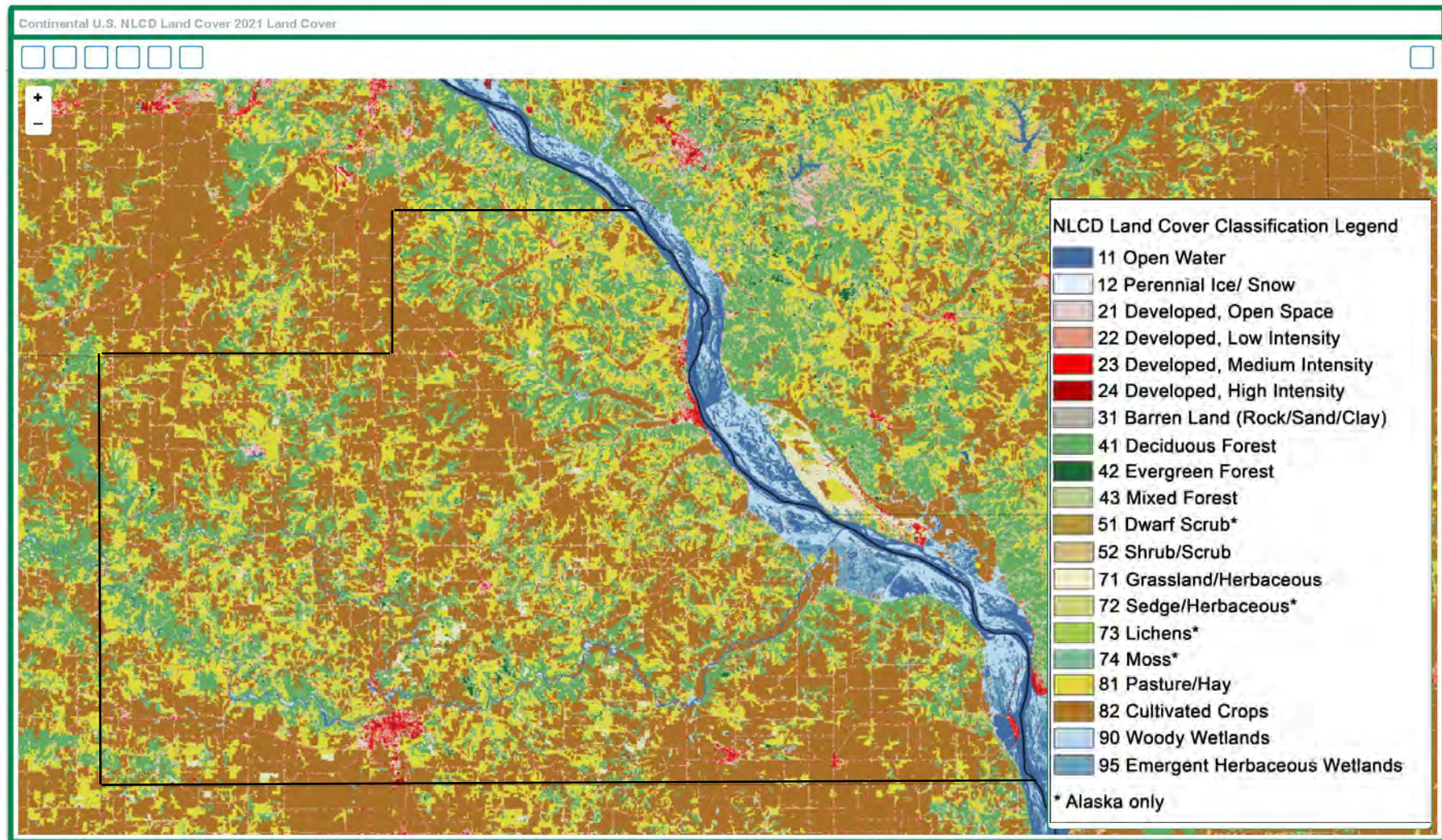


Figure 9.10 Land Cover Map for Jackson County (2021) Source: Multi-Resolution Land Characteristics Consortium, <https://www.mrlc.gov/viewer/> Dec. 2023

**SOIL QUALITY**

Most of Jackson County’s soils developed from deposits of glacial till – a mix of clay, silt, sand, gravel, and boulder; wind-deposited silt called loess; and sediment deposited by flood waters, called alluvium. The soil region is FDN with soil names of Fayette-Downs-Nordness.

Jackson County is in the landform subregion called the East-Central Drift Plain. It is characterized by shallow dolomite bedrock with sinkholes, wind-blown sand and loess deposits, and

gently sloping to rolling farmland with steep wooded valleys (see diagram in Figure 9.11).

***Decline in Soil Quality***

Prior to the mid-1800s, Jackson County (like the rest of Iowa) was covered with three major natural ecosystems: tallgrass prairie, savanna, and deciduous forest. “Humans have caused significant changes to soil since then with the rise of intensive cultivation. The primary change is a decline in organic matter, which is vital for healthy, rich, life-supporting soil.

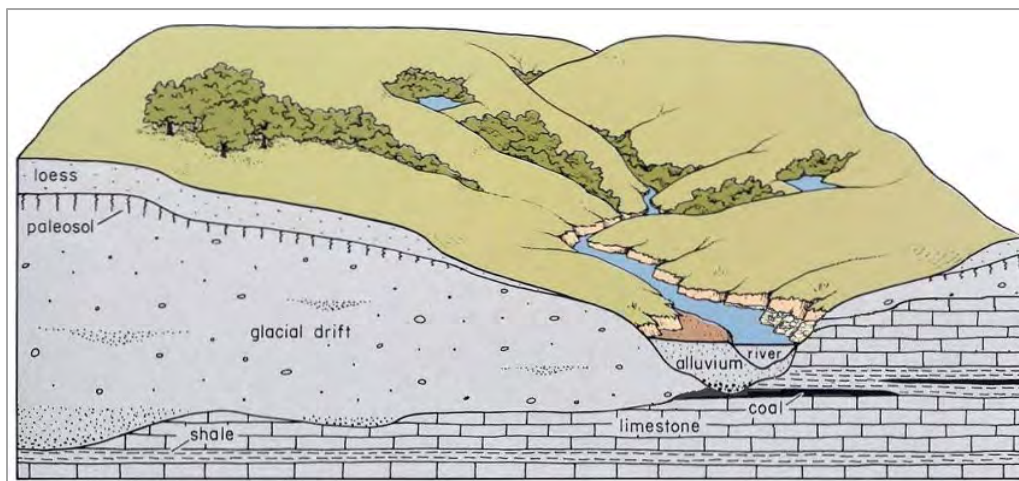
Decline in soil organic matter to approximately 50% of the original concentration present under native ecosystems is due to three major factors:

1. Erosion of topsoil due to repeated tillage and soil being left bare in the winter.
2. Lack of plant inputs to the soil and accelerated loss of soil organic matter.
3. Extensive sub-terranean drainage.”<sup>9</sup>

***Soil Erosion***

Erosion occurs where the natural ecosystem is altered significantly and soil is left bare of plant material. Erosion also occurs where the landscape has been altered through reshaping or removing the topsoil, or compacting soil with equipment such as at construction sites.

Topsoil usually has the most nutrients and organic matter. When topsoil is lost, the remaining soil is less able to maintain a healthy ecosystem. This can negatively impact the quality of drinking water sources and wildlife habitat.<sup>10</sup>



**Figure 9.11 Diagram of East-Central Drift Plain Landform Sub-Region**

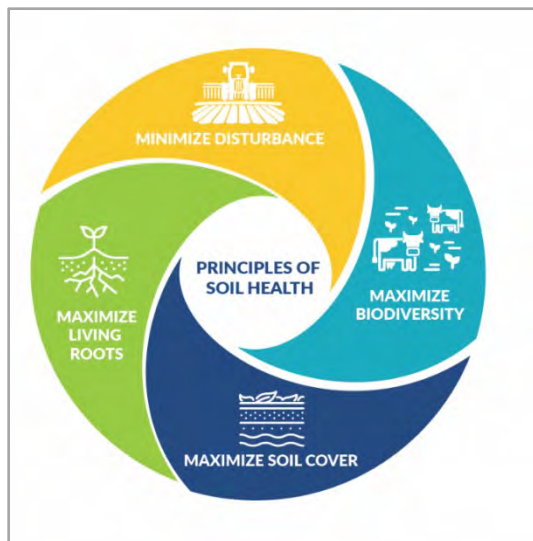
Source: <https://iowageologicalsurvey.uiowa.edu/iowa-geology/landforms-iowa>, accessed Jan. 2024

<sup>9</sup> Soils, ISU Extension and Outreach: March 2021, p.9

<sup>10</sup> Ibid

**Soil Health**

According to the USDA Natural Resources Conservation Service (NRCS), “Soil health is defined as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. Soil performs five essential functions: regulating water, sustaining plant and animal life, filtering and buffering potential pollutants, cycling nutrients, and providing physical stability



**Figure 9.12 Principles of Soil Health**

Source: Natural Resources Conservation Service

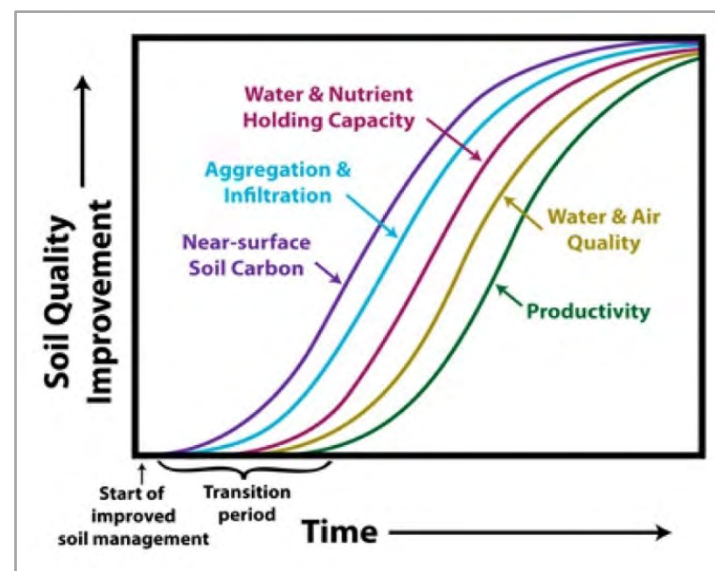
and support.”<sup>11</sup> Figure 9.12 shows the four principles of soil health.

**Improving Soil Quality**

“By farming using soil health principles and systems that include no-till, cover cropping, and diverse rotations, more and more farmers are increasing their soil’s organic matter and improving microbial activity. As a result, farmers are sequestering more carbon, increasing water infiltration, improving wildlife and pollinator habitat — all while harvesting better profits and often better yields.”<sup>12</sup>

“Maximizing soil health is essential to maximizing profitability. By enhancing soil organic matter, a series of soil changes and environmental benefits follow,”<sup>13</sup> as shown in Figure 9.13.

“Managing soil organic matter is the key to healthy soil and air and water quality. Erosion control is not enough.”<sup>14</sup>



**Figure 9.13 Role of Soil Organic Matter**

Source: Natural Resources Conservation Service

**Mining & Mineral Resources**

According to the *Five-Year Soil & Water Resource Conservation Plan for 2021-2025* of the Jackson County Soil and Water Conservation District (SWCD), there are 53 registered mineral sites in the county. Resources mined in Jackson County are primarily crushed stone, sand, and gravel. Other minerals include: lead, zinc, phosphorous, and flagstone.

<sup>11</sup> <https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/soils/soil-health>

<sup>12</sup> Ibid

<sup>13</sup> <https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/soils/soil-health/role-of-organic-matter>

<sup>14</sup> <https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/soils/soil-health/manage-for-soil-carbon>

**Soil and Water Conservation Districts**

In Iowa, there are 100 soil and water conservation districts (SWCDs); one in each county, and two in Pottawattamie County. Each district is governed by five commissioners who are elected at the general elections on a non-partisan basis for four-year terms. Iowa law grants authority to SWCDs to carry out activities that promote conservation. SWCDs form a Conservation Partnership with local, state, and federal agencies, as well as local groups and organizations.

The Iowa Department of Agriculture and Land Stewardship (IDALS) Division of Soil Conservation provides staff support to the SWCDs. Each SWCD is unique in the resource conservation problems it addresses and the way it chooses to package and deliver programs to landowners, farm operators, and local communities. Learn more at <https://iowaagriculture.gov/field-services-bureau/additional-resources>

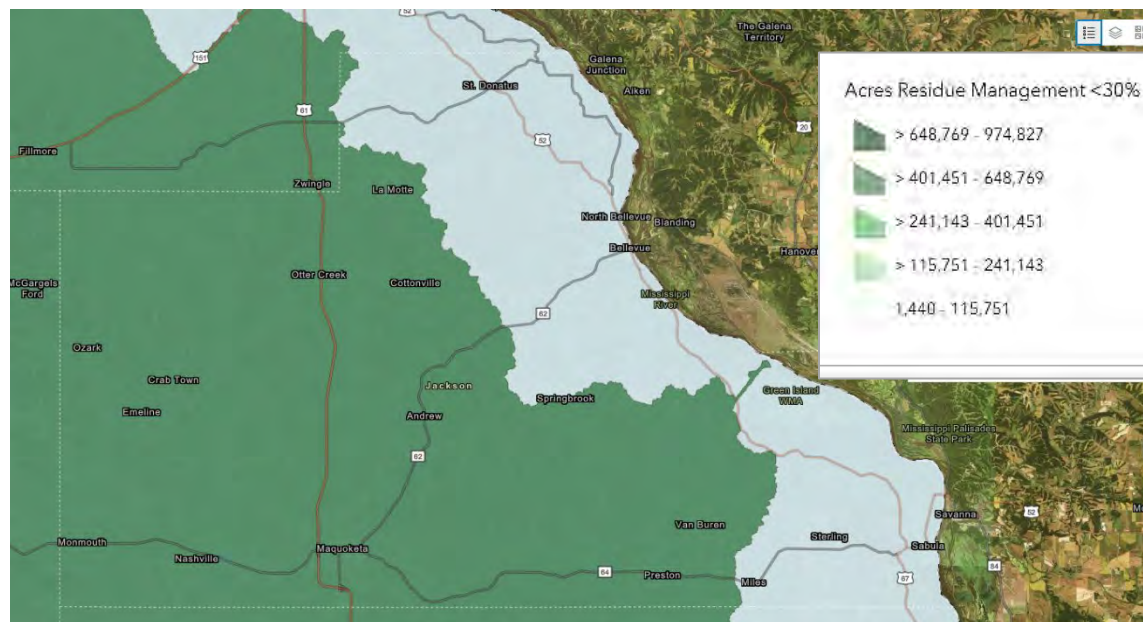
**Soil Conservation Practices**

“By investing in soil conservation, landowners improve the productivity of their farm and keep sediment out of the water. State cost share funds can be used for temporary or permanent practices.

Temporary practices include: no-till, strip till, contouring, field borders, cover crops, ridge till, critical area planting, contour strip cropping, and filter strips.

Permanent practices include: diversion, grade stabilization structures, grass strips, pasture and hay land planting, terraces, windbreaks, grassed waterways, tree planting, and conservation cover.”<sup>15</sup>

Figure 9.14 shows acres of conservation tillage and no-till practices with greater than 30% residue in Jackson County by watersheds, based on the county’s 2017 USDA Census of Agriculture.



**Figure 9.14 Conservation and No-Till Practices >30% Residue in Jackson County (2017)**

Source: <https://nrstracking.cals.iastate.edu/tracking-iowa-nutrient-reduction-strategy>

<sup>15</sup> <https://iowaagriculture.gov/field-services-bureau/financial-assistance-conservation-practices>

**Soil & Water Resource Conservation**

The following information is from the Jackson County SWCD’s *Five Year Soil & Water Resource Conservation Plan for 2021-2025*.

It is the mission of the Jackson County SWCD to: Help landowners and producers to do the best job possible of protecting and enhancing our soil and water resources. We administer local, state, and federal conservation programs that provide financial and technical assistance to implement structures and practices to preserve our soil and water.

The Soil and Water Resource Conservation Plan (SWRCP) represents the state of soil and water resources of the Jackson County SWCD. The plan



**Native grasses**

*Photo Credit: Jackson County SWRCP*

includes five-year priority goals set by the Jackson County SWCD Board to protect and promote natural resources. The Board also uses the five-year SWRCP to formulate their annual plans.

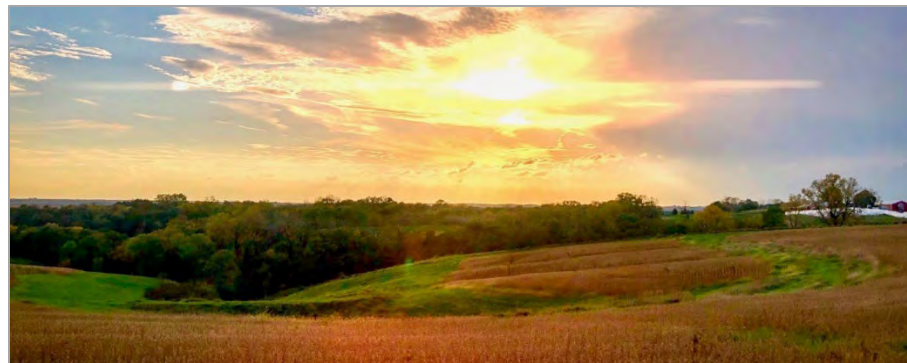
The Jackson County SWCD Board determines their priority goals from an inventory of the District’s natural resources, and in collaboration with input from a Local Working Group (consisting of farmers, local business owners, and other residents of the community), Natural Resources Conservation Service staff, and the public.

The priority goals for 2021-2025 are:

- Encourage the wise use and protection of the soil resources within the SWCD in order to sustain

crop productivity for generations to come.

- Encourage the wise use and protection of the surface water and groundwater resources within the SWCD, to prevent their contamination and to ensure their sustained use.
- Improve perennial cover by promoting profitable and sustainable use of forest and pasturelands within the SWCD.
- Connect with the greater community and other stakeholders in support of conservation, sustainability and regenerative agriculture.



**Buffer strips**

*Photo Credit: Jackson County SWRCP*

***See the Watershed Management section of this chapter for Jackson County SWCD success stories.***

**AIR QUALITY**

Everyone needs clean air. Poor air quality is unhealthy for everyone, but especially for children, senior citizens, and people with respiratory conditions like asthma. People who work or exercise outdoors also can be affected. Clean air also helps Iowa’s livestock, wildlife, crops, and other plant life.

Cleaner, healthier air requires local and regional efforts, so the Iowa Department of Natural Resources (DNR) partners with communities, business and industry, organizations, and individuals to address air quality issues.

***Air Pollutants***

The Federal Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for six commonly found pollutants known as “criteria” air pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. Jackson County meets these standards.

<sup>16</sup> *Construction Permitting Summary* at <https://www.iowadnr.gov/Environmental-Protection/Air-Quality/Construction-Permits>

Iowa DNR provides a map of current air quality conditions. Iowa DNR also provides maps and metrics of active construction permit and Title V operating permit applications, asbestos notifications, as well as emissions and monitoring data on the Air Quality Dashboard. Access these resources at <https://www.iowadnr.gov/Environmental-Protection/Air-Quality>

***Construction Permits***

“When a business wants to build or expand, they must apply for a construction permit to show how they will meet state and federal air quality standards. DNR issues permits for projects from paint booths at an auto body shop to coal-fired boilers at a power plant. Even facilities exempt from applying for a permit must meet air quality regulations. Residential heaters, cook stoves and fireplaces along with certain agricultural equipment related to raising crops and livestock are some of the items that are exempt.”<sup>16</sup> Table 9.7

<sup>17</sup> <https://www.iowadnr.gov/Environmental-Protection/Air-Quality/Operating-Permits>

shows the 132 construction permits in Jackson County from 2001 - 2023.

<b>Table 9.7 Construction Permits in Jackson County: 2001 - 2023</b>	
<b>Active Applications</b>	<b>Number</b>
Construction Standard Application	1
<b>Final Permits by Type</b>	<b>Number</b>
Group 1 Grain Elevator	5
Paint Booth Permit	12
Construction Standard Application	113
Recission	1
Source: Iowa DNR Air Quality Dashboard, Iowa Easy Air Applications page	

***Operating Permits***

Iowa DNR issues five-year operating permits to ensure certain major facilities and equipment continue to perform as designed, to protect ambient air quality under Title V of the Federal Clean Air Act.<sup>17</sup> In Jackson County, Iowa DNR issued one Title V operating permit for the Maquoketa Municipal Electric Utility for 2020 - 2025.<sup>18</sup>

<sup>18</sup> Iowa DNR Air Quality Dashboard, Iowa Easy Air Applications page

**Emissions Inventory**

Iowa DNR is responsible for reviewing and estimating air pollution data from a variety of sources throughout the state. Examples of emissions inventory data include:

*Point Sources:* Stationary sources, such as smoke stacks from industrial facilities and fermentation processes.

*Mobile Sources:* Both on-road sources (cars and trucks) and nonroad sources (agricultural equipment, construction equipment, trains, airplanes, etc.)

*Biogenic Sources:* Trees and vegetation, oil and gas seeps, and microbial activity.

*Nonpoint Sources:* Sources such as residential fuel use and landfills.<sup>19</sup>

**Greenhouse Gases**

By Iowa Code, Iowa DNR includes estimates of emissions of some greenhouse gases (GHG) in its construction permitting and emissions inventory programs. The DNR also has a voluntary GHG registry to track and credit

<sup>19</sup><https://www.iowadnr.gov/Environmental-Protection/Air-Quality/Emissions-Inventory>

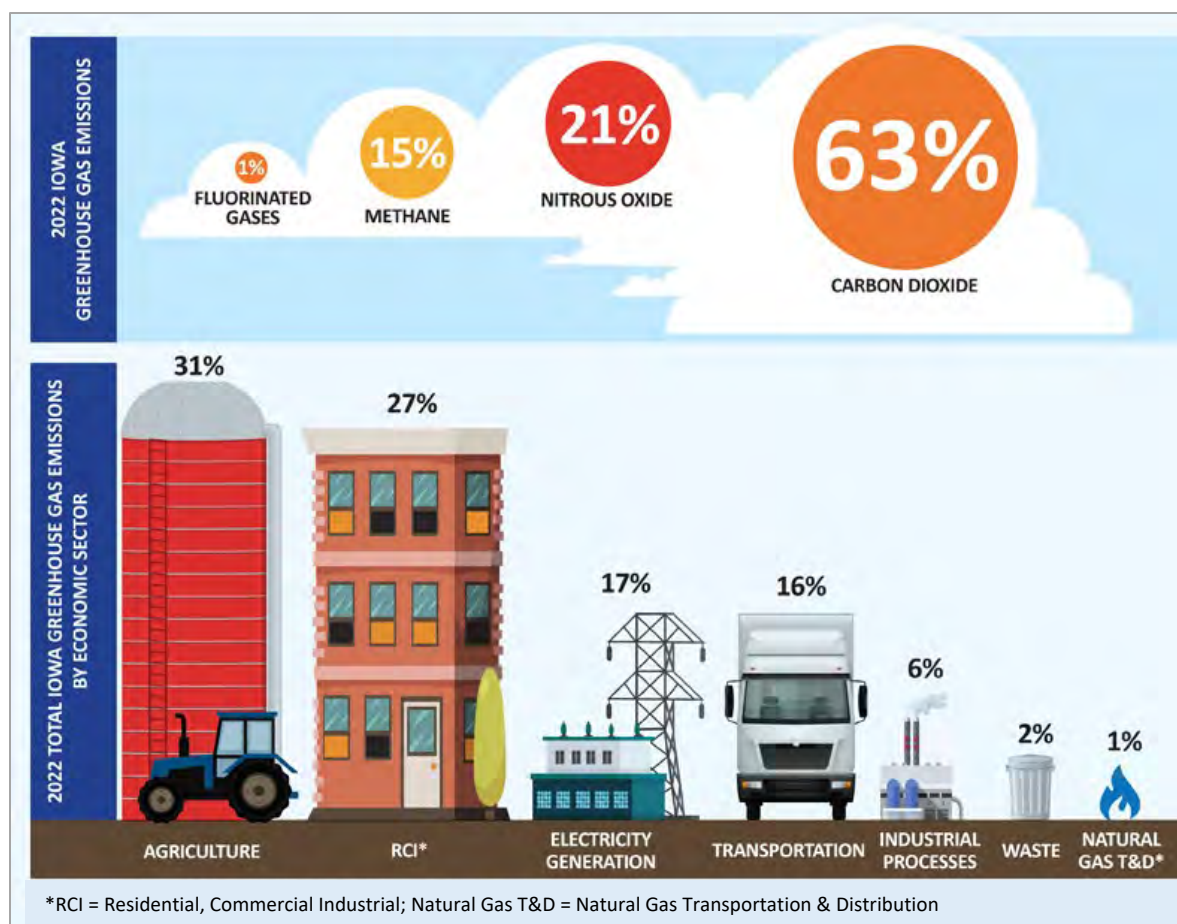


Figure 9.15 Iowa Infographic for 2022 Greenhouse Gas Inventory

Source: Iowa DNR

companies in Iowa that reduce their GHG emissions or provide increased energy efficiency. Figure 9.15 is an Iowa DNR

infographic of the 2022 Iowa GHG emissions and the 2022 Iowa total GHG emissions by economic sector.<sup>20</sup>

<sup>20</sup> <https://www.iowadnr.gov/Environmental-Protection/Air-Quality/Greenhouse-Gas-Emissions>

**WATER QUALITY**

From drinking water to wastewater, and from wetlands to lakes, ensuring clean water is an important priority for Iowa. Drinking water and wastewater are discussed in Chapter 5. Infrastructure and Utilities in this comprehensive plan. This chapter discusses enhancement and protection of water quality for agriculture, outdoor recreation, and habitats for fish and wildlife.

*Water Resources*

The information in the following tables is from the Jackson County SWCD’s *Five Year Soil & Water Resource Conservation Plan (SWRCP) for 2021-2025*.

Table 9.8 is an inventory of the water bodies in Jackson County.

<b>Table 9.8 Inventory of Water Bodies in Jackson County</b>	
Acres of waterbodies	7,680
Miles of perennial streams	200
Acres of Wetlands	4,120
Source: 2021-2025 Jackson County SWRCP	

Table 9.9 is a list of water bodies and their general location in Jackson County.

<b>Table 9.9 List of Water Bodies in Jackson County</b>			
<b>Name of Water Body</b>	<b>Area of County</b>	<b>Name of Water Body</b>	<b>Area of County</b>
<b>Bar Slough</b>	Green Island	<b>Maquoketa River</b>	Green Island
<b>Bear Creek</b>	Baldwin	<b>Mill Creek</b>	Bellevue
<b>Beaver Creek</b>	Sabula	<b>Mineral Creek</b>	Leisure Lake
<b>Beers Creek</b>	Baldwin	<b>North Fork Maquoketa River</b>	Maquoketa
<b>Bellevue Slough</b>	Bellevue	<b>North Spring Branch</b>	Leisure Lake
<b>Black Hawk Creek</b>	Canton	<b>Otter Creek</b>	Zwingle
<b>Brush Creek</b>	Delmar North	<b>Pine Creek</b>	Leisure Lake
<b>Buck Creek</b>	Fulton	<b>Pleasant Creek</b>	Springbrook
<b>Cedar Creek</b>	Fulton	<b>Prairie Creek</b>	Maquoketa
<b>Cline Branch</b>	Leisure Lake	<b>Raccoon Creek</b>	Baldwin
<b>Copper Creek</b>	Preston	<b>Rock Creek</b>	Preston
<b>Deep Creek</b>	Preston	<b>Running Slough</b>	Blackhawk
<b>Duck Creek</b>	Springbrook	<b>Ryan Creek</b>	Preston
<b>East Fork Sabula Slough</b>	Sabula	<b>Sabula Slough</b>	Sabula
<b>Eldridge Slough</b>	Sabula	<b>Silver Creek</b>	Maquoketa
<b>Esmay Slough</b>	Sabula	<b>Smith Creek</b>	Green Island
<b>Farmers Creek</b>	Fulton	<b>Snag Slough</b>	Green Island
<b>Hainer Creek</b>	Delmar North	<b>South Copper Creek</b>	Preston
<b>Hubbel Slough</b>	Sabula	<b>South Spring Branch</b>	Leisure Lake
<b>Hurstville Branch</b>	Maquoketa	<b>Spring Branch</b>	Leisure Lake
<b>Jess Branch</b>	Andrew	<b>Spruce Creek</b>	Bellevue
<b>L Esmay Slough</b>	Sabula	<b>Tarecoat Creek</b>	Fulton
<b>Little Mill Creek</b>	Bellevue	<b>Union Creek</b>	Maquoketa
<b>Lux Creek</b>	La Motte	<b>Upper West Fork West Sabula Slough</b>	Sabula
<b>Lytle Creek</b>	Leisure Lake	<b>Yeager Creek</b>	Bellevue
Source: 2021-2025 Jackson County SWRCP			



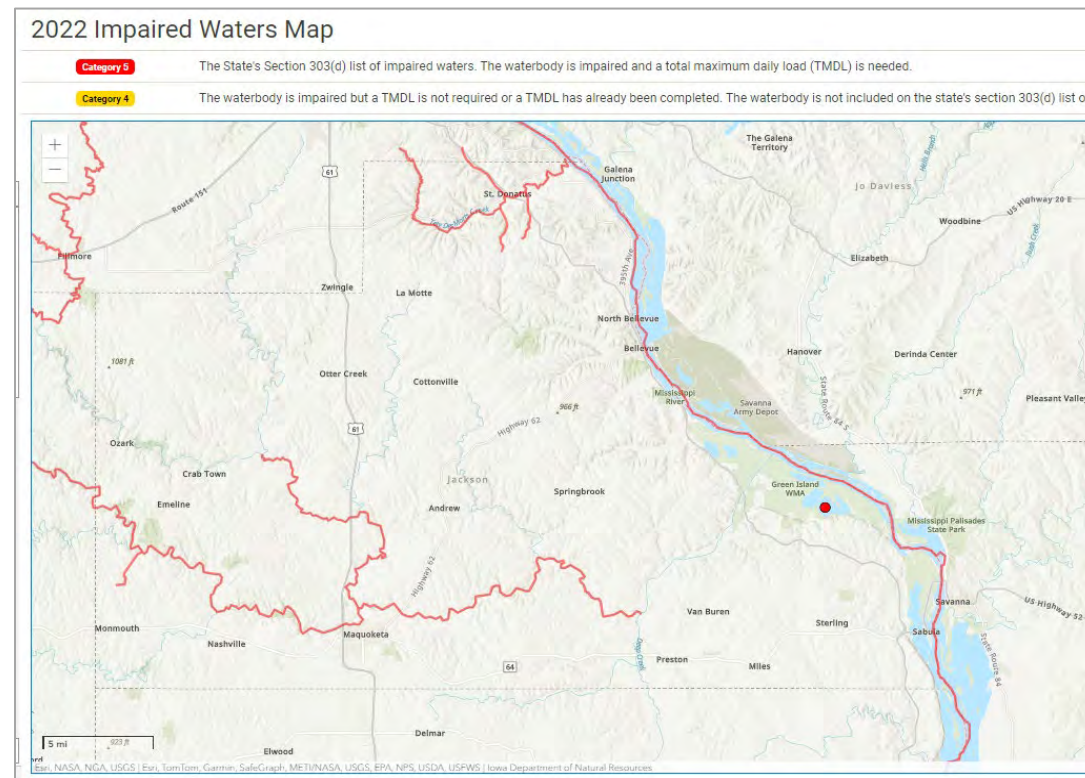
**Impaired Waters**

The Clean Water Act requires that the Iowa Department of Natural Resources (DNR) submit a list of waters which do not meet water quality standards. The failure to meet these standards might be due to an individual pollutant, multiple pollutants, "pollution," or an unknown cause of impairment. The list includes waters impaired by point sources and non-point sources of pollutants. The state also establishes a priority ranking for the listed waters, considering the severity of pollution and uses.

Iowa's most recent list of impaired waters was completed in 2022. The list includes lakes, wetlands, streams, rivers, and portions of rivers that do not meet all state water quality standards. These are considered "impaired waterbodies".<sup>21</sup> Figure 9.16 shows portions of the Maquoketa River and the North Fork in Jackson County as Category 5 impaired waters. Category 5 requires Iowa DNR to set a total maximum daily load (TMDL) for pollutants.

While these rivers are listed as impaired, they are still safe for recreational use. According to the Iowa's State Water Trail Plan: For water trail users, "impaired" water quality can range from having no bearing whatsoever on our experience to

conditions that make people ill through contact with or ingestion of the water.



**Figure 9.16 Map of Impaired Waters in Jackson County (2022)**

<https://www.iowadnr.gov/environmental-protection/water-quality/water-monitoring/impaired-waters> accessed Jan. 2024

<sup>21</sup> <https://www.iowadnr.gov/environmental-protection/water-quality/water-monitoring/impaired-waters>

**Iowa Nutrient Reduction Strategy**

The Iowa Nutrient Reduction Strategy is a science and technology-based approach to assess and reduce nutrients delivered to Iowa waterways and the Gulf of Mexico. It outlines voluntary efforts to reduce nutrients in surface water from both point sources, such as wastewater treatment plants and industrial facilities, and nonpoint sources, including farm fields and urban areas, in a scientific, reasonable and cost-effective manner.<sup>22</sup> View full strategy, including annual progress reports and strategy revisions, at [www.nutrientstrategy.iastate.edu](http://www.nutrientstrategy.iastate.edu)

Visit the Tracking the Iowa Nutrient Reduction Strategy site to access online dashboards and download data at <https://nrstracking.cals.iastate.edu/tracking-iowa-nutrient-reduction-strategy>

This dashboard presents nonpoint source — or agricultural — efforts to reduce

<sup>22</sup> <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Nutrient-Reduction-Strategy>



**Figure 9.17 Acres Protected by Structural Erosion Practices Installed in Jackson County (2011-2021)**

Source: <https://nrstracking.cals.iastate.edu/tracking-iowa-nutrient-reduction-strategy>, accessed Jan. 2024

nutrient loss using edge-of-field conservation practices and structural erosion control. Figure 9.17 displays the acres protected by structural erosion control practices installed in Jackson County from 2011 to 2021 under public conservation (i.e. cost-share) programs.

**WATERSHED MANAGEMENT**

“A watershed is an area of land that is drained by the same body of water. Within the watershed all rain water eventually ends up in the same river, lake, or ocean. Rivers and streams are hierarchical systems that begin where surface runoff flows into a small stream. The small stream then flows into a river that eventually empties into a larger river. This continues until the water reaches its final destination like an ocean or lake.

Like rivers, watersheds are also hierarchical systems with smaller watersheds nested inside larger watersheds. The watersheds of small streams that flow into the same river combine to make up the river watershed. Then, the river watershed combines with watersheds from other rivers to make up a larger watershed.”<sup>23</sup>

Watershed boundaries show the extent of surface water drainage using a hierarchical system of nesting hydrologic

units at various scales, each with an assigned hydrologic unit code (HUC).

The hydrologic unit hierarchy is indicated by the number of digits in groups of two (such as HUC 2, HUC 4, and HUC 6) within the HUC code. HUC 8 maps the subbasin level, analogous to medium-sized river basins (about 2,200 nationwide).<sup>24</sup>

Figure 9.18 is a map of the HUC 8 Watersheds in Iowa. There are two HUC 8 watersheds in Jackson County (circled in red). The Apple-Plum Watershed is located on the eastern side of the county along the Mississippi River. The Maquoketa River Watershed covers the rest of the county.

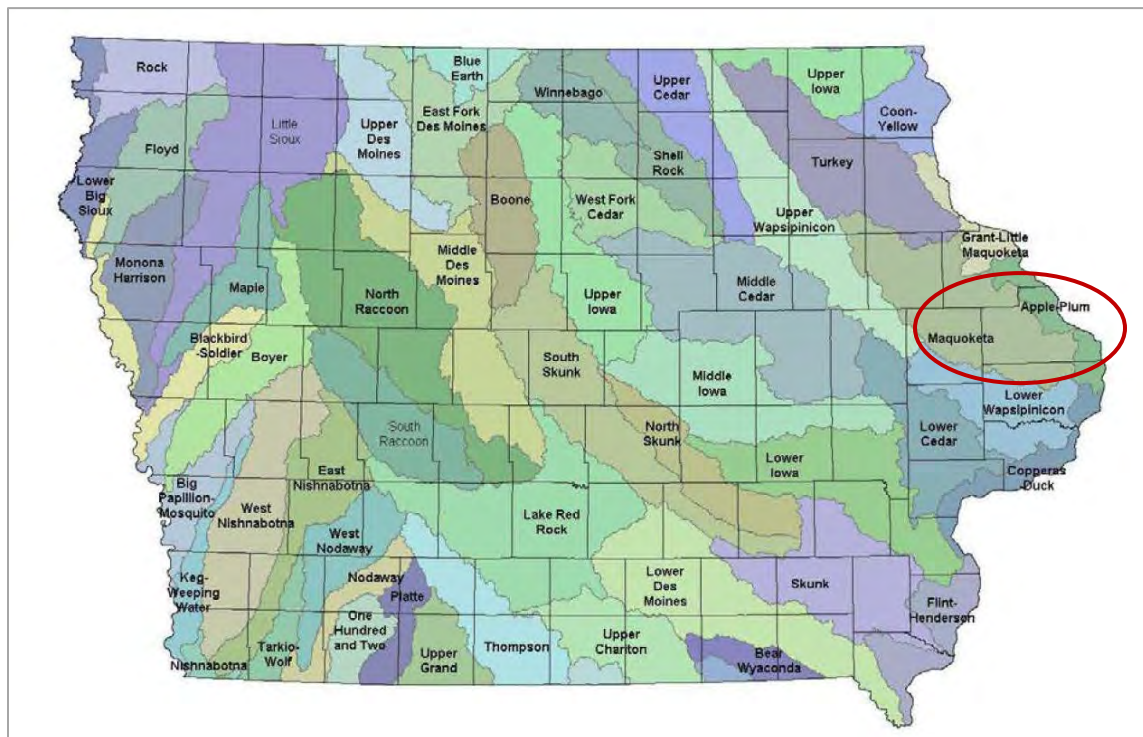


Figure 9.18 Map of HUC 8 Watersheds in Iowa Source: U.S. Environmental Protection Agency

<sup>23</sup> 2021 Jackson County Water Trail Plan, p. 11

<sup>24</sup> <https://enviroatlas.epa.gov/enviroatlas/datafact sheets/pdf/Supplemental/HUC.pdf>

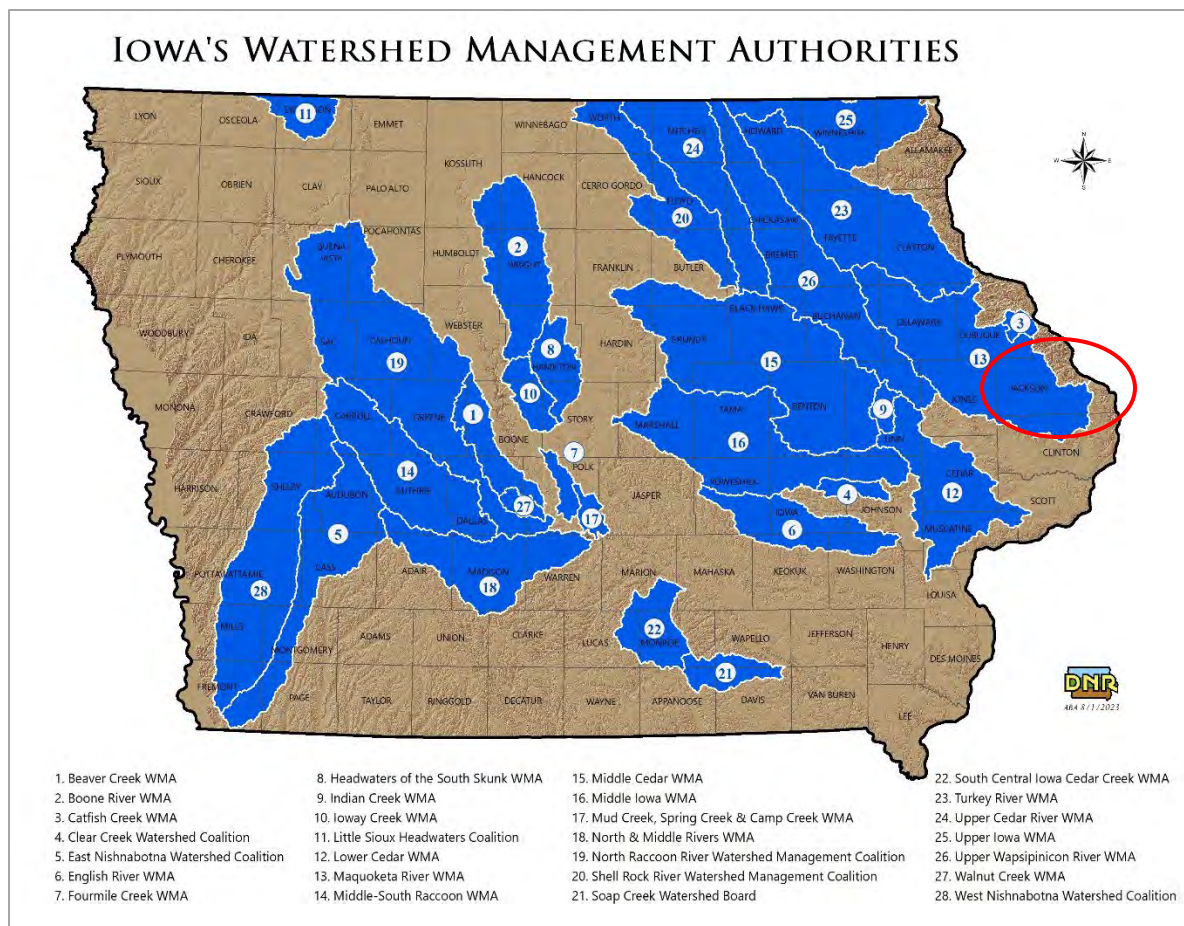
**Watershed Management Authorities**

“A Watershed Management Authority (WMA) is a mechanism for cities, counties, Soil and Water Conservation Districts (SWCDs), and stakeholders to cooperatively engage in watershed planning and management.

The WMA is formed by a Chapter 28E intergovernmental agreement by two or more eligible political subdivisions within a specific HUC 8 watershed. A board of directors governs the WMA, which may undertake the following activities: assess and reduce flood risk; assess and improve water quality; monitor federal flood risk planning and activities; educate residents of the watershed regarding flood risks and water quality; and allocate moneys made available to the authority for purposes of water quality and flood mitigation.

A WMA does not have taxing authority and it may not acquire property through eminent domain.”<sup>25</sup>

Figure 9.19 is a map of Iowa’s WMAs.



**Figure 9.19 Map and List of Iowa’s Watershed Management Authorities (2023)**

Source: <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Watershed-Management-Authorities>, accessed Jan. 2024

<sup>25</sup> <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Watershed-Management-Authorities>

**Maquoketa River Watershed WMA**

The Maquoketa River Watershed is one of 11 tributaries to the Mississippi River, and drains water from 1,870 square miles within the Upper Mississippi River Basin. The watershed includes 80 townships and nine counties. Figure 9.20 is a map of the Maquoketa River Watershed.

The Maquoketa River Watershed Management Authority (MR WMA) was formed in 2017. Members of the Board of Directors represent 19 cities, seven counties, six Soil and Water Conservation Districts (SWCDs), and the Lake Delhi District.

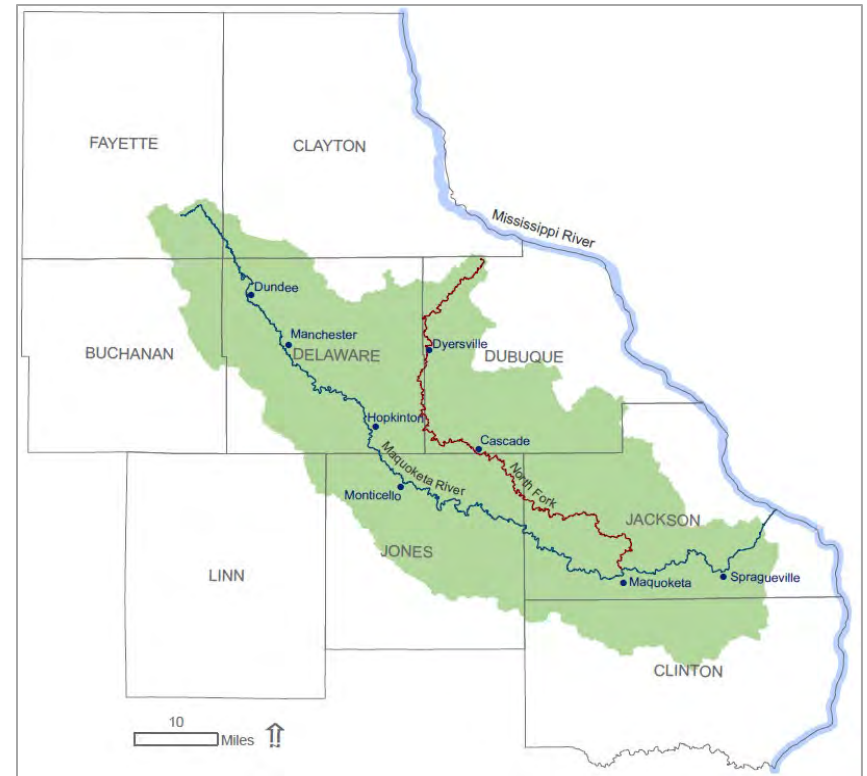
In 2021, the MR WMA developed a Watershed Management Plan: Phase 1 that serves as a guidebook and vision to achieve these broad goals to improve watershed planning and management:

- Protecting local drinking water
- Supporting positive soil health practices
- Reducing flooding
- Promoting recreation
- Improving overall water quality

In 2022, the Watershed Management Plan Phase 2: Sub-watershed Implementation was developed. It takes planning efforts further by providing insight into where resources should be directed to meet the MR WMA’s goals based on a technical analysis and continued engagement with local stakeholders.

In 2022, a Watershed Interactive Map was created using Geographic Information Systems (GIS) tools to provide location-specific information to the general public about important features and issues in the Maquoketa River Watershed.

For more information, visit <https://www.limestonebluffsrcd.org/maquoketariverwma>



**Figure 9.20 Map of Maquoketa River Watershed** Source: ECIA

Find Phases 1 and 2 of the Maquoketa River Watershed Management Plan and the Watershed Interactive GIS Map at <https://iisc.uiowa.edu/partners/maquoketa-river-watershed-management-authority>

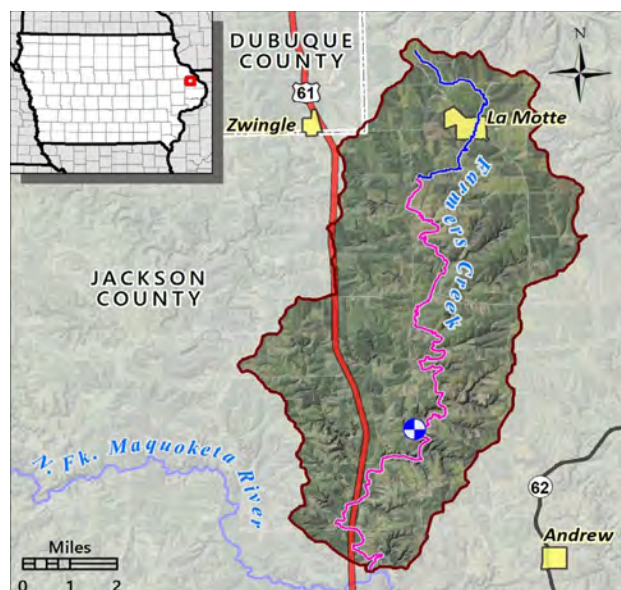
**Watershed Success Stories**

Hundreds of Iowa’s rivers, lakes, and streams are listed as impaired under the federal Clean Water Act. While it is easy for a body of water to be added to this list, it is harder to get one removed. Farmers and landowners in two small watersheds in Jackson County accomplished this feat in 2022.

The following information is from the U. S. Environmental Protection Agency at <https://www.epa.gov/nps/success-stories-about-restoring-water-bodies-impaired-nonpoint-source-pollution>

**Farmers Creek** is a warm water stream in a watershed of 30,590 acres (47.8 square miles) with rolling farmland and bluffs (Figure 9.21). The formerly impaired creek section south of La Motte is outlined in pink.

**Tete des Morts Creek** is a tributary of the Mississippi River in Jackson and Dubuque counties. Its watershed includes a total of 30,433 acres (47.6 square miles) of rolling farmland and bluffs (Figure 9.22). The formerly impaired section of Tete des Morts Creek (outlined in pink) is downstream of the biosampling station at St. Donatus.

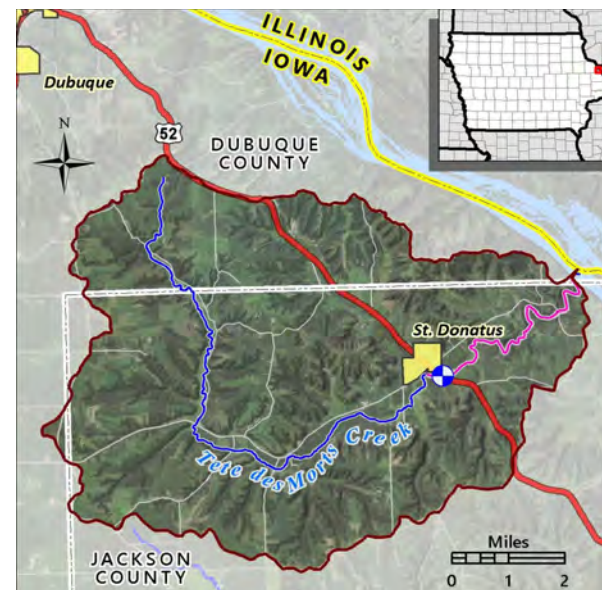


**Figure 9.21 Farmers Creek Watershed**

Source: USEPA and Iowa DNR

Due to the steep topography and soil characteristics, over 85% of both watersheds are considered highly erodible land. Land use in the watersheds is primarily agricultural and is managed for row crop and livestock production.

Nutrients and sediment delivery were identified as the primary nonpoint pollution concerns in both watersheds. Additionally, two fish kills in Farmers Creek were determined to be caused by livestock waste and runoff from land-applied dairy manure. Tete des Morts Creek had a series of fish kills of unknown



**Figure 9.22 Tete des Morts Creek Watershed**

Source: USEPA and Iowa DNR

origin. As a result, both creeks were added to Iowa’s impaired waters list due to fish and biological impairments.

The Jackson County Soil and Water Conservation District launched a five-year watershed project in 2005 for Farmers Creek and a nine-year project in 2009 for Tete des Morts Creek. Participating farmers and landowners still continue to install a variety of conservation practices. As a result, the reduction in sediment delivery achieved has improved the water quality and habitat for fish and other aquatic life in both watersheds.

## NATURAL RESOURCE CONSERVATION

The Iowa Department of Natural Resources (DNR) supports conservation of natural resources at the state level and by cities, counties, and individuals.

### *Iowa's Wildlife*

The 2015 **Iowa Wildlife Action Plan** is designed to conserve all wildlife in Iowa before they become rare and more costly to protect. To protect *Species of Greatest Conservation Need*, the plan prioritizes protecting and enhancing existing habitats, developing new habitats, and increasing broadly-applied conservation efforts to improve aquatic habitats.

The **Iowa Wildlife Diversity Program** works to preserve and protect Iowa's nongame species, including shorebirds, raptors, songbirds, small mammals, bats, amphibians, reptiles, small fish, butterflies, dragonflies, and more. The program focuses on: landscape and ecosystem management, statewide inventory and monitoring of all wildlife species, training volunteer wildlife

<sup>26</sup> <https://www.iowadnr.gov/Conservation/Iowas-Wildlife>

<sup>27</sup> <https://www.iowadnr.gov/Conservation/Forestry>

surveyors, public outreach, species reintroductions, and implementation of Iowa's Wildlife Action Plan.<sup>26</sup>

The **Iowa Natural Areas Inventory** interactive website provides data and maps for threatened, endangered, special concern, and selected rare species for professional natural resource managers and the public. The list of threatened, endangered, special concern, and rare species in Jackson County is at <https://programs.iowadnr.gov/naturalareasinventory/pages/RepDistinctSpeciesByCounty.aspx?CountyID=49>

### *Iowa's Forests*

The 2020 **Iowa Forest Action Plan** contains strategic goals and strategies aimed at maximizing forest health and productivity, strategically growing Iowa's forests, and promoting the benefits of Iowa's forest resource.<sup>27</sup>

### *Iowa's Prairie Resources*

Historically tallgrass prairie covered much of Iowa's landscape. To restore a portion

<sup>28</sup> <https://www.iowadnr.gov/Conservation/Prairie-Resource-Center>

<sup>29</sup> <https://www.iowadnr.gov/Conservation/Wildlife-Landowner-Assistance>

of Iowa's landscape to prairie, the Iowa DNR Prairie Resource Center provides over 65 species of Iowa-origin prairie grasses and wildflowers to public land managers across the state.<sup>28</sup>

### *Wildlife Landowner Assistance*

"In Iowa land in public ownership is very limited. Public areas can only serve as islands of wildlife habitat in a landscape dominated by row crops and urban sprawl. As a result, private lands efforts are reestablishing habitat. The Iowa DNR provides technical assistance for restoring wetlands, establishing grasslands, and forestry practices."<sup>29</sup>

### *Conservation Reserve Program*

"You can't have wildlife without the right habitat. The Conservation Reserve Program (CRP) is one way to add habitat to cropland, while protecting soil and water quality. All CRP programs will pay a landowner an annual rental."<sup>30</sup> The CRP is administered by the U.S. Department of Agriculture's Farm Services Agency.

<sup>30</sup> <https://www.iowadnr.gov/Conservation/Wildlife-Landowner-Assistance/Conservation-Reserve-Program>

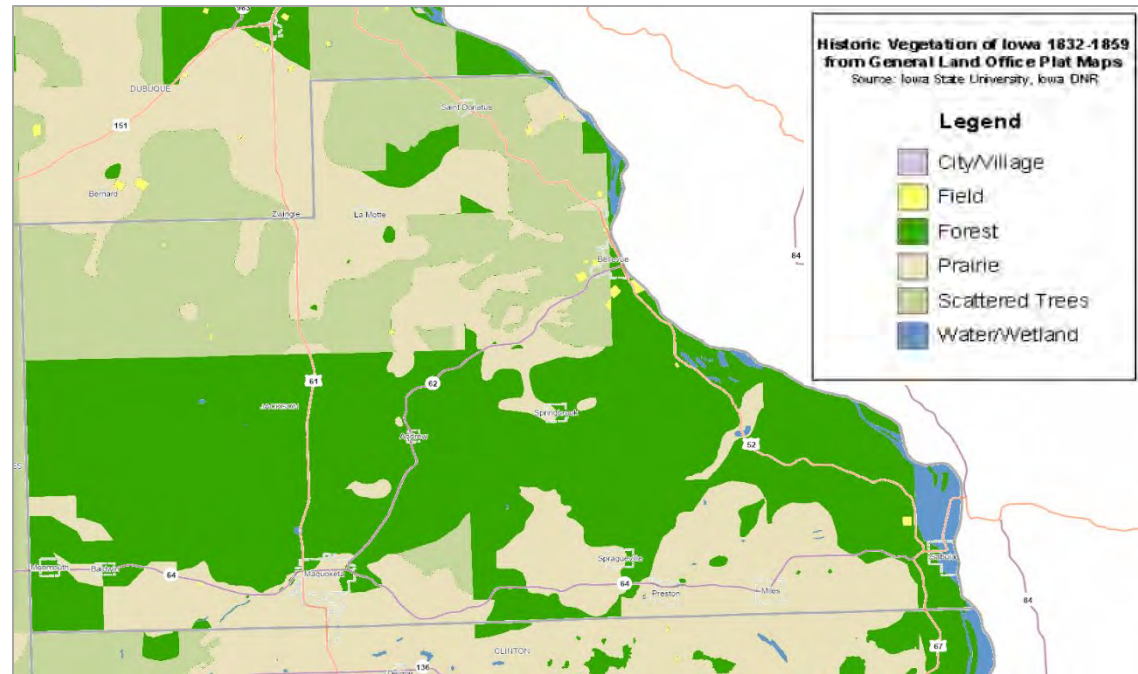
The Jackson County Conservation Department’s *2023 Outdoor Recreation Plan* supports local conservation as well.

**Native Ecosystems and Habitats**

“At the time of Euro-American contact, the state of Iowa was a mosaic of native ecosystems and habitats. These habitats were both aquatic and terrestrial, water and land. Aquatic habitats included rivers, lakes, oxbows, ponds, marshes, fens, etc. Terrestrial habitats included forest types such as riparian lowland forests, upland forests such as maple basswood forests, and open oak hickory forests. While forest habitats were found along river corridors where water was more available, tallgrass prairie and savanna habitats dominated the state.”<sup>31</sup>

Figure 9.23 shows historic vegetation in Jackson County from 1832 to 1859, derived from the General Land Office Plat Maps for Iowa. The three major types were Forest, Scattered Trees, and Prairie.

“The tallgrass prairie ecosystem is comprised of many prairie habitat types such as wet, mesic, and dry prairies. The



**Figure 9.23 Historic Vegetation in Jackson County, 1832 - 1859**

Source: Iowa Geographic Map Server, accessed Jan. 2024

prairie is an ecosystem made up of a great diversity of plant and animal species characteristic to the ecosystem. Where the forests and prairies of Iowa met, savannas occurred. Iowa’s savannas were transitional habitats between open prairie and forest. Savannas were home to plant and animal species of the prairie, the forest, and the savanna ecosystem. One of the most notable characteristics

of Iowa’s savannas were open grown oak tree species, such as bur, white, black, and chinquapin oak, as well as occasional hickory species.”<sup>32</sup> “Savannas, once common, are now one of the rarest and most threatened ecosystems in Iowa.”<sup>33</sup>

Iowa’s native prairies also provided invaluable ecosystem services. The thousands of years of the prairie plants

<sup>31</sup> 2023 Outdoor Recreation Plan, Jackson County Conservation Department, p. 8

<sup>32</sup> Ibid

<sup>33</sup> *Prairies*, Iowa State University: March 2021



living, dying, and decomposing on Iowa’s landscape gave the organic matter for Iowa’s rich and deep topsoil. The deep, complex root systems of prairie plants also provide valuable ecosystem services: carbon sequestration, erosion control, rainwater infiltration/retention which help mitigate flood risk, and acting as a filter aiding in groundwater quality.<sup>34</sup>

**Rare Aquatic Habitats**

Of the 13 major streams in Jackson County, 10 are major cold-water streams. “At least two of these streams have naturally reproducing brown trout. Acquisition and protection of land along these streams should be strongly considered. Cold-water streams are only found in the Driftless region of Iowa, providing a rare opportunity for recreation and conservation.”<sup>35</sup>

**Terrestrial Habitat Disturbances**

Iowa’s terrestrial habitats were adapted to and dependent on disturbances from wildfire, storms, flooding, grazing, and insects. These disturbances helped cycle nutrients, transport seeds, and remove

plant material, making available niche habitats for plant and animal species. These disturbances helped prevent shrub and tree species from establishing in the prairies. As a result, Iowa’s forests were much more open grown and demonstrated savanna characteristics.<sup>36</sup>

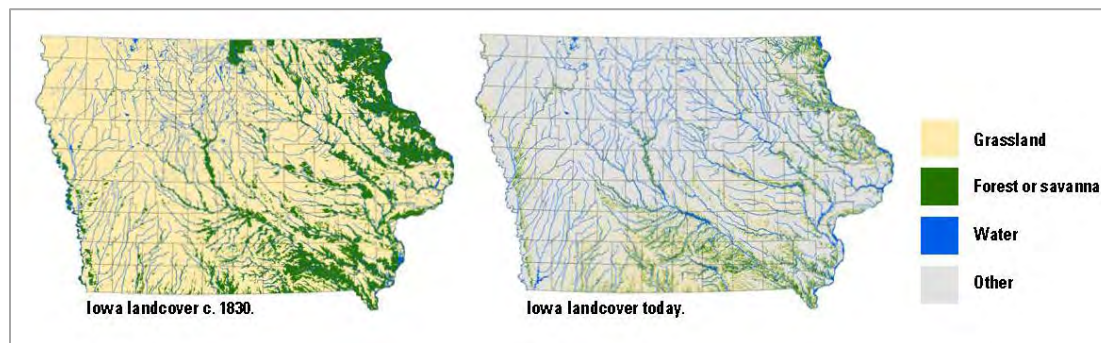
**Transition of Land Cover**

“Between the 1830s and 1870s while the original land surveys were conducted in Iowa, 80 to 85% of the landscape was some version of prairie habitat. Once Euro-American settlement took hold it was not very long for humans find that the prairie soil was incredibly rich and made for productive farms. From the early 1830s to the early 1900s the

majority of Iowa was converted into an agricultural system. The 28 million acres of prairie at the beginning of the 1800s was greatly reduced by the early 1900s. Currently less than 0.1% of Iowa’s original prairie remains.”<sup>37</sup> (See Figure 9.24)

**Reduction in Native Ecosystem Diversity**

Iowa’s native prairies and savannas were very diverse ecosystems that were home to a wide variety of plants, animals, and fungi. In many cases these plant and animal species have declined drastically in population and range due to loss of habitat. In other cases, some of these species have become extirpated, absent from occurring naturally within Iowa’s borders.<sup>38</sup>



**Figure 9.24 Transition of Iowa Land Cover since circa 1830**

Source: *Prairies*, Iowa State University: March 2021

<sup>34</sup> 2023 Outdoor Recreation Plan, Jackson County Conservation Department, p. 9

<sup>35</sup> Ibid, p. 2

<sup>36</sup> Ibid

<sup>37</sup> Ibid

<sup>38</sup> Ibid

**Forest Management Plans**

The Jackson County Conservation Board (JCCB) manages 2,280 acres of land for a variety of public use activities. Many of these managed acres are partially to mostly forest cover. These forested acres, if managed properly, provide needed wildlife habitat and public recreation opportunities.

JCCB’s forest management plans are a cooperative effort between JCCB, contract foresters, and the Iowa Department of Natural Resources (DNR), utilizing strategic and sound forest management practices.

**Forest Threats:** Oak species are very important in the region. Pre-settlement forests across Iowa were dominated by a mixture of oak species. Several factors threaten the longevity of the region’s oaks: Bur oak blight, oak wilt, and rapid white oak decline.

The Emerald Ash Borer has made its way across the area, killing off the native ash trees. As disease spread through local forests, it created opportunity for unwanted species to take hold. Invasive

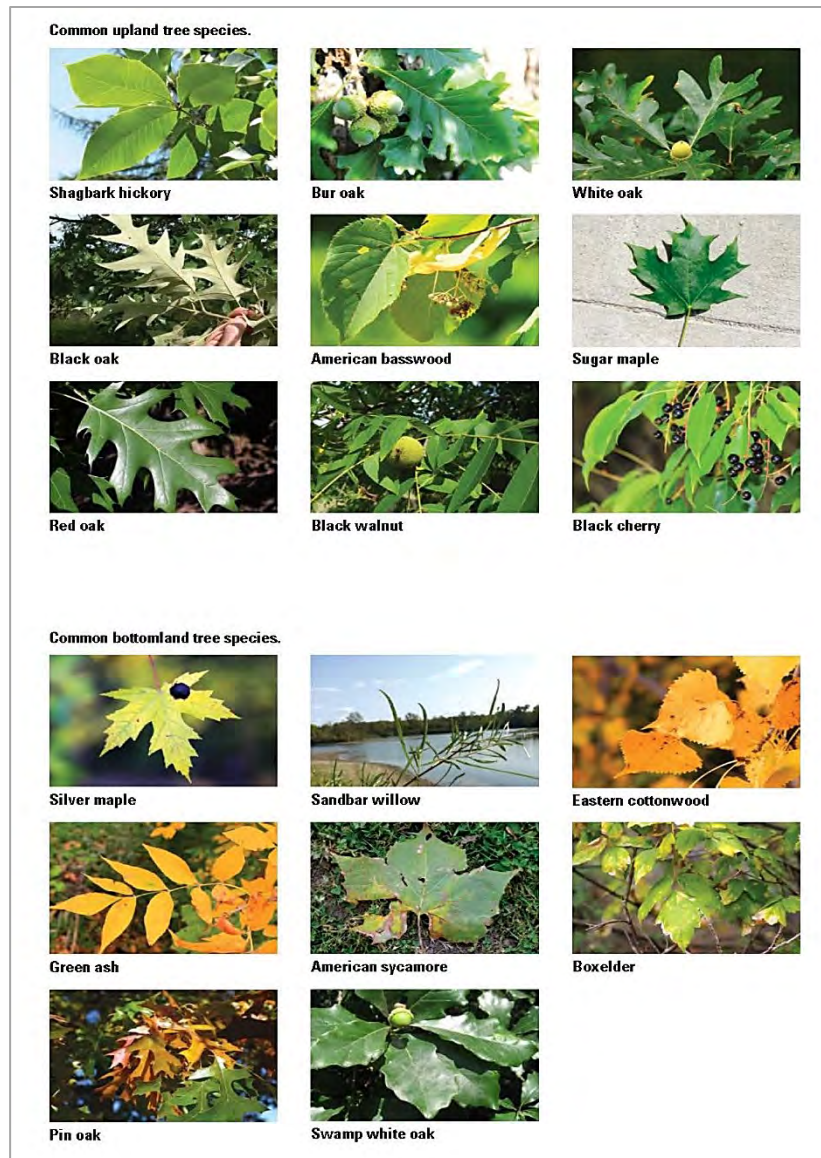
plants can outcompete native vegetation and prevent oak regeneration. Each forest area’s plan provides a targeted approach to deal with these threats.<sup>39</sup> These plans also have goals for wildlife habitats, water quality, threatened and endangered species, and low-impact recreation.

**Types of Forests in Iowa**

“Upland forests are found above the floodplains on slopes and ridge tops.

Bottomland forests can be found in the moist bottom of ravines and along streams and rivers, areas that are often susceptible to temporary flooding.”

Source: *Forests*, Iowa State University: May 2021.



**Common tree species in upland and bottomland forests in Iowa.**

Source: *Forests*, Iowa State University: May 2021.

<sup>39</sup> Ibid, p. 6

**Prairie Management Plans**

The JCCB manages several native prairie remnants and reconstructed prairie sites. While reconstructed prairies likely will never support the diversity of Iowa’s prairie of the past, creating diversity and maintaining diverse plant and animal communities within JCCB managed areas is a priority.

**Planting:** Conversion of cropland and non-native seedings to prairie on county managed areas will promote wildlife habitat and recreation. Before reestablishment, JCCB will determine site condition: is it Wet, Mesic or Dry. These conditions will advise seed selection and planting capabilities. Site conditions and seeding goals will decide seeding method. (See illustration.)

**New Planting Maintenance:** For the first few years, prairie plants are putting most of their energy into their root systems. It is common for newly seeded prairie sites to look sparse or slightly shabby. Assessment after the third and fourth growing season will provide evidence of seeding success. Maintaining the prairie

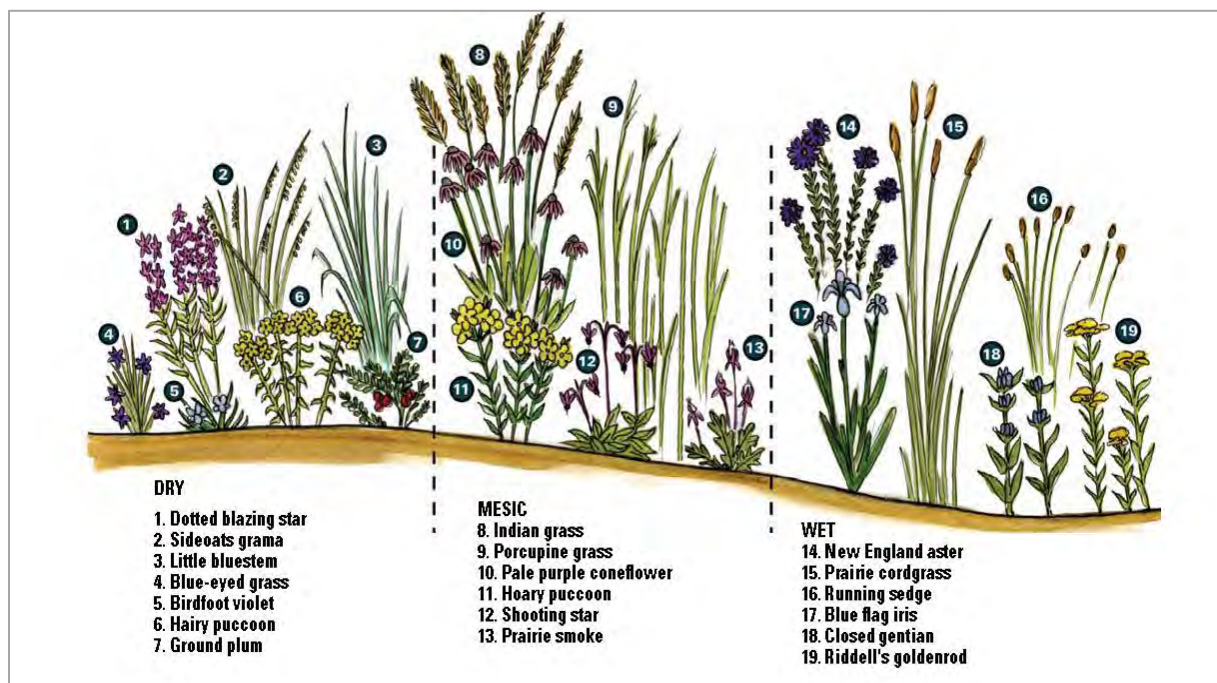
seeding through mowing can control weeds and woody plants.

**Prescribed Fire:** Prairies are fire-dependent ecosystems. Burning is the best way to maintain a diverse prairie. Burning releases nutrients and helps to discourage weeds and woody plants.<sup>40</sup>

**Education:** JCCB’s remnant prairie areas can be used to facilitate high quality environmental/conservation education.

With the sensitivity and rugged character of these remnant prairies, higher level education, research, and study can be conducted on these sites. Remnant prairies can be utilized as education field sites for middle school, high school, and adult students.<sup>41</sup>

These plans also include goals for invasive plant species, wildlife habitats, and threatened and endangered species.



Common Plants in Dry, Mesic, and Wet Prairies in Iowa. Source: *Prairies*, Iowa State University: Mar. 2021

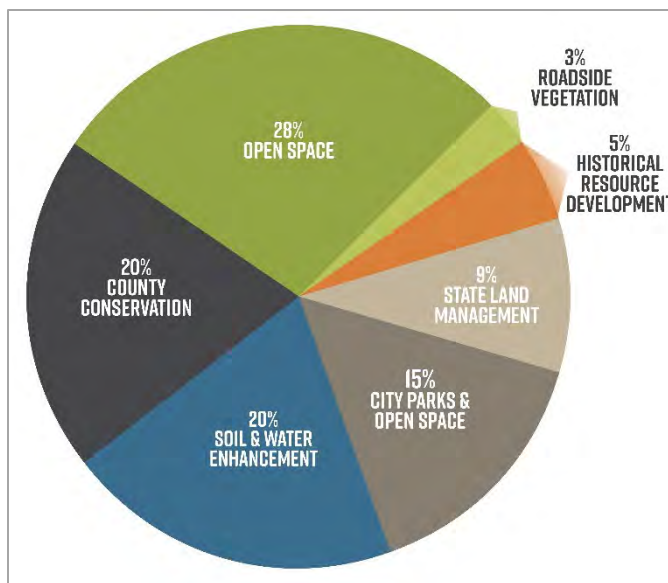
<sup>40</sup> Ibid, p. 8

<sup>41</sup> Ibid, p.10

**Sustainable Conservation Funding**

Iowa’s sustainable funding for natural resources is also known as the **Natural Resources and Outdoor Recreation Trust Fund**. In November 2010, the people of Iowa chose to amend Iowa’s Constitution and create the Fund and a dedicated funding source of 3/8 of 1% of the next sales tax increase.<sup>42</sup> No sales tax increase has been approved by the Iowa legislature, so the Fund has no funding.

The **Resource Enhancement and Protection (REAP) Program** invests in the enhancement and protection of the state's natural and cultural resources. The program is authorized to receive \$20 million per year until 2026, but the state legislature sets the amount of REAP funding every year. In 2023, REAP was funded at \$12 million. Each year, the first \$350,000 each year goes to Conservation Education, and 1% of the balance is for Iowa DNR Administration. The remaining balance is divided as shown in Figure 9.25.<sup>43</sup>



**Figure 9.25 Annual REAP Fund Distribution of Remaining Balance** Source: Iowa DNR

Since its establishment in 1989, the REAP program has been vital to the outdoor recreation planning process and a major funding source in completing recreation projects in Jackson County and around Iowa. Until the sales tax increase is approved by the state legislature, full funding for the REAP program will continue to be an annual struggle.<sup>44</sup>

The **REAP County Conservation Account** (20% of REAP funds) is available for land easements or acquisition, capital improvements, stabilization and protection of resources, repair and upgrading of facilities, environmental education, and equipment. Thirty percent (30%) of the account is allocated automatically and equally to all 99 counties on a quarterly basis. Another 30% of the account is allocated based on population. The remaining 40% of the account is available to counties through competitive grants. Grants are 100%, so local match money is not required. Visit <https://www.iowadnr.gov/Conservation/REAP/REAP-Funding-at-Work/County-Conservation>

The Jackson County Conservation Board (JCCB) sets aside **Sales of Forest Resources** to acquire and develop additional land for conservation and habitat protection/improvements. From 1986 to 2021, the JCCB has conducted 29 sales involving 141 acres, for a total revenue of just under \$720,000.<sup>45</sup>

<sup>42</sup> <https://www.iowadnr.gov/about-dnr/grants-other-funding/natural-resources-rec-trust>

<sup>43</sup> <https://www.iowadnr.gov/Conservation/REAP>

<sup>44</sup>2023 Outdoor Recreation Plan, Jackson County Conservation Department, p. 1

<sup>45</sup> Ibid, pp. 6-7

**CLIMATE CHANGE**

“Climate Change refers to any significant change in the measures of climate lasting for an extended period of time. This includes major changes in temperature, precipitation, wind patterns, or other effects that occur several decades or longer.”<sup>46</sup>

*Iowa State Climate Summary*

The 2022 Iowa State Climate Summary produced by the National Oceanic and Atmospheric Administration (NOAA) has the following three key messages:

“Temperatures in Iowa have risen more than 1°F since the beginning of the 20th century. Warming has been concentrated in winter and fall, with a general lack of summer warming. Under a higher emissions pathway, historically unprecedented warming is projected during this century.

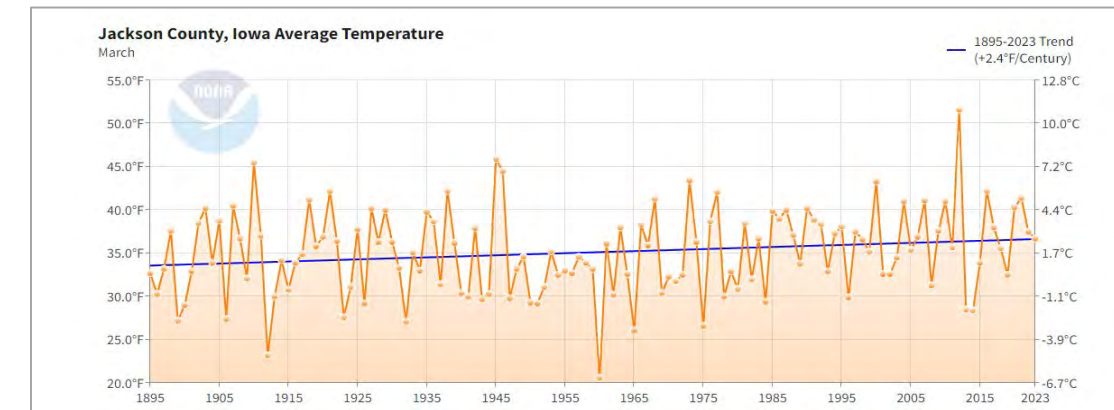
Spring precipitation has been above average since 1990, affecting agriculture both positively (adequate soil moisture) and negatively (delays in spring planting).

<sup>46</sup><https://www.iowadnr.gov/conservation/climate-change> p. 1

Projected increases in winter and spring precipitation pose a continued risk of spring planting delays.

Severe flooding and drought have occurred periodically in recent years. Future increases in the frequency and intensity of extreme precipitation events may increase the frequency and intensity of floods, while increases in evaporation rates due to rising temperatures may increase the intensity of naturally occurring droughts.”<sup>47</sup>

The 2022 Iowa State Climate Summary also notes: “Agriculture is an important



**Figure 9.26 Average Temperature in Jackson County, 1895-2023**

Source: <https://www.nci.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series>, accessed Jan. 2024

<sup>47</sup> <https://statesummaries.ncics.org/chapter/ia/>, p. 1

sector of Iowa’s economy and is particularly vulnerable to extreme weather conditions.”<sup>48</sup> “Springtime flooding in particular could pose a threat to Iowa’s economy by delaying planting and reducing yields. Periodic summer droughts, a natural part of Iowa’s climate, are likely to be more intense in the future.”<sup>49</sup>

Figure 9.26 is a NOAA chart of the average temperature for Jackson County from 1895 to 2023. The trendline marks a 2.47°F increase per century.

<sup>48</sup> Ibid, p. 3

<sup>49</sup> Ibid, p. 4

Figure 9.27 is a NOAA chart of the precipitation in Jackson County from 1895 to 2023. The trend line marks an increase of 0.22 inch per century.

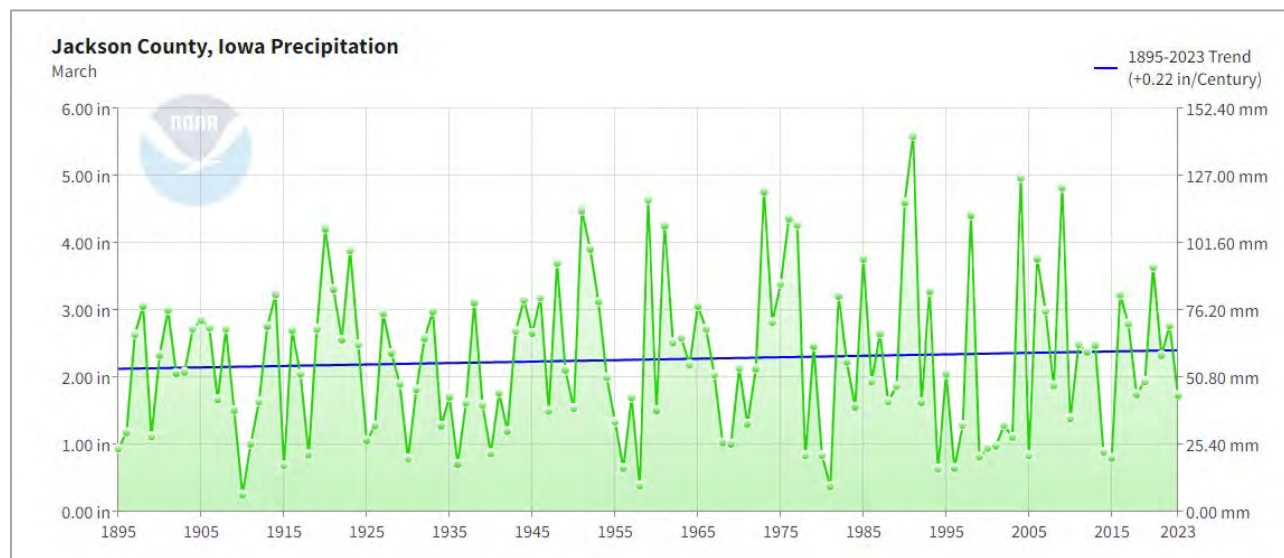
**Climate Change Indicators**

Climate change also impacts human society and natural ecosystems in a variety of ways. For example, climate change can affect human health, cause changes to forests and other habitats, and impact energy supplies. Climate-related impacts are occurring in many economic sectors.<sup>50</sup>

The U.S. Environmental Protection Agency (EPA) has developed over 50 climate change indicators that show changes over time and include more than 100 figures as graphs and maps in six topic areas: Greenhouse Gases, Weather and Climate, Oceans, Snow and Ice, Health and Society, and Ecosystems. Visit <https://www.epa.gov/climate-indicators/view-indicators>

**Climate-Resilient Land Mapping Tool**

“The Resilient and Connected Network is a proposed conservation network of



**Figure 9.27 Average Precipitation in Jackson County, 1895-2023**

Source: <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series>, accessed Jan. 2024

representative climate-resilient sites designed to sustain biodiversity and ecological functions into the future under a changing climate. The network was identified and mapped over a 10-year period by Nature Conservancy scientists using public data available at the state and national scale, and an inclusive process that involved 289 scientists from agencies, academia, and organizations across the US. The network is a starting point for conversations with local

communities, indigenous tribes, land trusts, agencies, corporations, and funders on how to coordinate conservation efforts to increase our collective impact and sustain nature. Resilient lands and waters may be conserved by a wide range of measures.”<sup>51</sup> Figure 9.28 is a map of climate-resilient sites in Jackson County. Pine Valley Nature Area and Big Mill Wildlife Management Area (circled in red) are identified as high resilience sites.

<sup>50</sup> <https://www.epa.gov/climateimpacts>

<sup>51</sup> <https://www.maps.tnc.org/resilientland/>

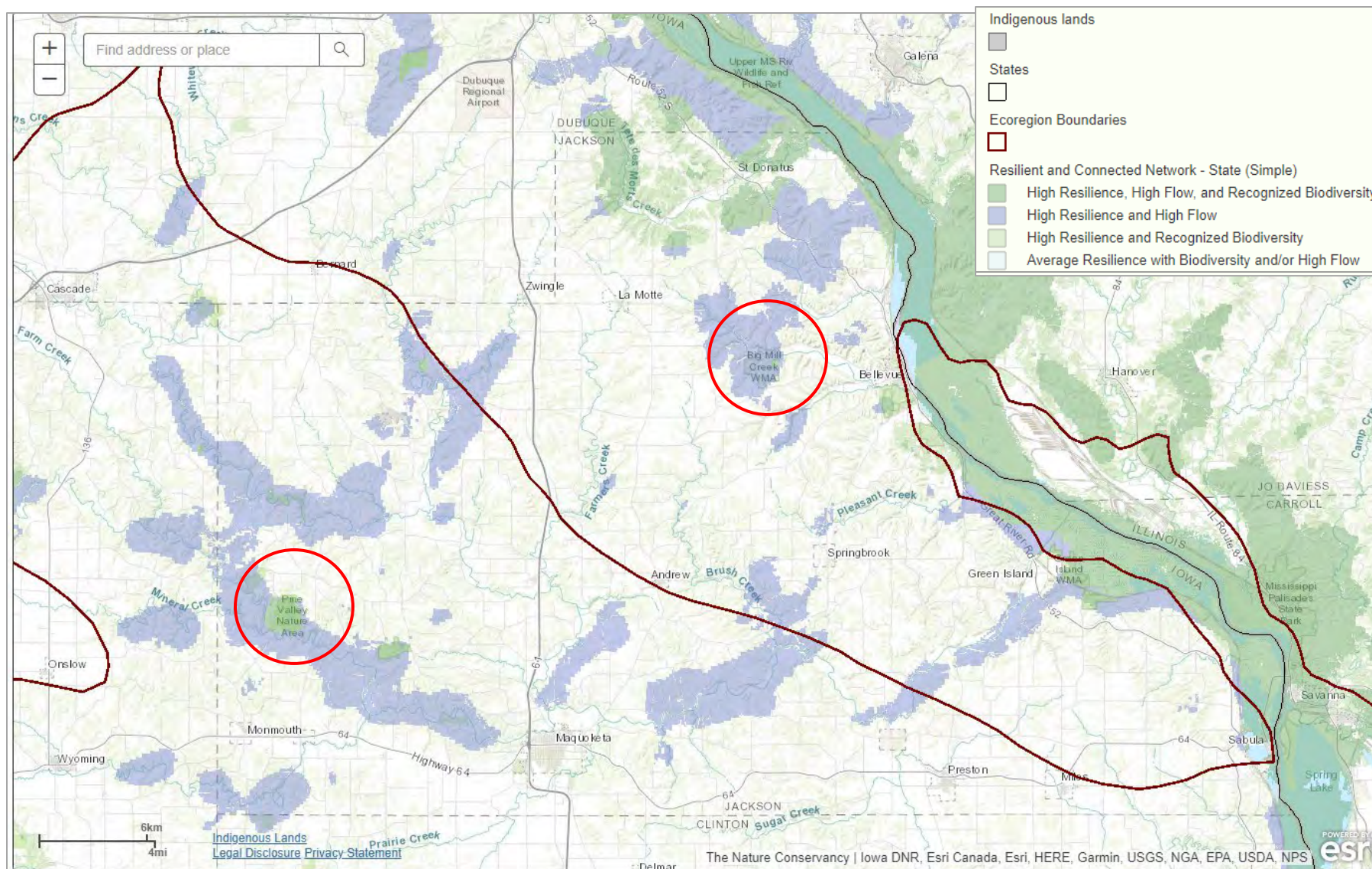


Figure 9.28 Map of Climate-Resilient Sites in Jackson County

Source: Nature Conservancy, <https://www.maps.tnc.org/resilientland/>, accessed Jan. 2024

## 9. AGRICULTURE AND NATURAL RESOURCES

**LOCAL, STATE, AND FEDERAL AGENCIES**

Resources are listed by categories.

***Agriculture***

The Iowa Department of Agriculture and Land Stewardship (IDALS) lists agriculture resources and regulations at <https://iowaagriculture.gov/>

Iowa State University Extension and Outreach provides educational information about Iowa agriculture at <https://www.extension.iastate.edu/ag/>

The U.S. Department of Agriculture (USDA) Farm Services Agency (FSA) lists agriculture programs and services at <https://www.fsa.usda.gov/>

***Agricultural Economy***

Iowa State University Extension and Outreach provides information about Iowa's agricultural economy online at <https://www.extension.iastate.edu/ag/>

The U.S. Department of Agriculture (USDA) Economic Research Service (ERS) provides farm economy information at <https://www.ers.usda.gov/topics/farm-economy/>

***Animal Feeding Operations***

Iowa Department of Natural Resources (DNR) resources and regulations for animal feeding operations are at <https://www.iowadnr.gov/Environmental-Protection/Animal-Feeding-Operations/AFO-Resources-and-Regulations>

Iowa State University Extension and Outreach developed the **Air Management Practices Assessment Tool** (AMPAT) to give livestock and poultry producers an objective overview of mitigation practices best suited to address odor, emissions, and dust at an animal feeding operation. Visit <https://www.extension.iastate.edu/ampat/>

***Land Quality***

The Iowa Department of Natural Resources (DNR) lists land quality resources and regulations at <https://www.iowadnr.gov/Environmental-Protection/Land-Quality>

***Soil Quality***

The Iowa Department of Agriculture and Land Stewardship (IDALS) lists soil quality resources and regulations at

<https://iowaagriculture.gov/field-services-bureau>

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) lists programs, initiatives, and resources for soil conservation at <https://www.nrcs.usda.gov/>

***Air Quality***

The Iowa Department of Natural Resources (DNR) lists air quality resources and regulations at <https://www.iowadnr.gov/Environmental-Protection/Air-Quality>

The U.S. Environmental Protection Agency (EPA) has educational information about air quality at <https://www.epa.gov/environmental-topics/air-topics>

***Water Quality***

The Iowa Department of Agriculture and Land Stewardship (IDALS) lists water quality resources and regulations at <https://iowaagriculture.gov/water-resources-bureau> and also at <https://iowaagriculture.gov/field-services-bureau>



The Iowa Department of Natural Resources (DNR) lists water quality resources and regulations at <https://www.iowadnr.gov/Environmental-Protection/Water-Quality>

The U.S. Environmental Protection Agency (EPA) has educational information about water quality at <https://www.epa.gov/environmental-topics/water-topics>

### ***Watershed Management***

The Iowa Department of Agriculture and Land Stewardship (IDALS) lists watershed resources and regulations at <https://iowaagriculture.gov/water-resources-bureau>

Iowa Department of Natural Resources (DNR) resources and regulations for watershed management are available at <https://www.iowadnr.gov/Environmental-Protection/Water-Quality>

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) lists information on watershed programs at <https://www.nrcs.usda.gov/>

### ***Natural Resource Conservation***

The Iowa Department of Natural Resources (DNR) lists conservation resources and regulations at <https://www.iowadnr.gov/Conservation>

Iowa State University Extension and Outreach provides educational information about conservation at <https://www.extension.iastate.edu/ag/natural-resources-stewardship>

The U.S. Department of Agriculture (USDA) lists programs, initiatives, and resources for conservation at <https://www.usda.gov/topics/conservation> and through the USDA Natural Resources Conservation Service (NRCS) at <https://www.nrcs.usda.gov/>

### ***Climate Change***

The U.S. Department of Agriculture (USDA) **Regional Conservation Partnership Program (RCPP)** has funds to support the adoption of climate-smart agriculture practices, which have direct climate mitigation benefits, advance a host of other environmental co-benefits, and offer farmers, ranchers, and foresters new revenue streams. Visit <https://www.nrcs.usda.gov/programs->

[initiations/rcpp-regional-conservation-partnership-program](https://www.nrcs.usda.gov/programs-initiatives/rcpp-regional-conservation-partnership-program)

The U.S. Environmental Protection Agency (EPA) has information about climate change online at <https://www.epa.gov/climate-change>

The Iowa Department of Natural Resources (DNR) lists climate change resources for individuals, local governments, and health providers at <https://www.iowadnr.gov/conservation/climate-change>

**ISSUES AND OPPORTUNITIES**

*Soil Health and Water Quality*

**Issue:** The Jackson County Soil and Water Conservation District (SWCD) Five-Year Soil and Water Resources Conservation Plan (SWRCP) for 2021-2025 states that: “Soil health and water quality not only determine the quality of human life, but whether human life is possible. Conservation and restoration of our soil and water resources benefits everyone and requires community-wide involvement.”

**Opportunities:** The Jackson County SWCD Five-Year SWRCP for 2021-2025 notes that: “The lands and water we enjoy in the Jackson County Soil & Water Conservation District are resources borrowed from future generations. We are responsible for their care. This Five-Year Soil and Water Resources Conservation Plan (SWRCP) recognizes that obligation. We have created it with the belief that we can enjoy the benefits of land and water stewardship today, while ensuring environmental security for tomorrow. Your involvement in the plan’s success is your gift to the future.”

*Watershed Management*

**Issue:** The 2021 Maquoketa River Watershed Management Plan notes: “An effective path toward cleaner water and flood management in Iowa includes a strong emphasis on a watershed approach, which considers the entire area of land that drains into a body of water, such as river or lake. A watershed approach incorporates both technical data and robust stakeholder participation, so that policies and actions are realistic and data-driven.

Watersheds are not confined to traditional jurisdictional boundaries, and to accomplish local watershed-based planning, many cities, counties, and Soil and Water Conservation Districts have formed Watershed Management Authorities (WMAs) through voluntary, intergovernmental agreements.”

**Opportunities:** The Maquoketa River Watershed Management Authority spans seven counties. With 35 jurisdictions having joined the agreement, the Maquoketa River WMA exists to reduce flood risks and improve water quality.

The 2021 Maquoketa River Watershed Management Plan – Phase 1 is “a

regional community-driven plan with the goal to identify, prioritize, and address water-related issues such as water quality and flood mitigation. The plan serves as a guidebook and vision for the future for the member cities, counties, and Soil and Water Conservation Districts, offering a long-range perspective and ways to improve water quality and mitigate flooding throughout the watershed.

The topics that the plan addresses include but are not limited to agricultural practices, water quality, present and future flooding, improved recreation, protection of the river ecosystem, and conservation practices. A significant portion of the planning process focused on public outreach to learn about existing attitudes, behaviors, and practices related to watershed issues in order to develop goals, objectives, and strategies.”

The 2022 Maquoketa River Watershed Management Plan – Phase 2 focuses on subwatershed analysis, prioritization, and plans. Phase 2 prioritizes subwatersheds for site-specific interventions based on the strength of improvement, negative impacts, and project cost.

*Environmental Education*

**Issue:** The county’s 2023 Environmental Education Plan states that: “The desired outcome of environmental education is environmental literacy. The environment sustains all life on earth. We all need to know how ecological systems work and function. We need to understand how natural systems are intertwined. Environmental education gives us the tools and knowledge we need to make informed decisions about environmental issues and problems in our communities. Whether it be understanding water quality and pollution in a local stream, strategic planning for sustainable development, combating invasive species, the landscape, or addressing climate change.”

**Opportunities For Children:** The county’s 2023 Environmental Education Plan notes that environmental education can:

- Improve academic achievement and test scores in all subject areas.
- Capture students’ attention and engaged students who are the hardest to reach.

- Get children outdoors and more active, improving health, addressing obesity, attention deficit disorder, and depression.
- Incorporate STEM (science, technology, engineering, and math) to help meet 21<sup>st</sup> century needs, such as questioning, critical thinking, investigating, interpreting, and problem solving.

**Opportunities For Adults:** The county’s 2023 Environmental Education Plan notes that environmental education can:

- Promote outdoor lifestyles, and ensure healthier individuals and communities.
- Ensure people are informed about sound science and equipped to make decisions that help protect our natural resources on which our lives depend.
- Create a higher degree of pro-environment and conservation behavior. The more people know, the more likely they are to recycle, be energy efficient, conserve water, etc.

*Natural Resource Conservation*

**Issue:** Outside funding sources are vital to future development of conservation enhancements. The Jackson County Conservation Department will continue to seek outside funding sources to leverage local dollars for these efforts.

**Opportunities:** The county’s 2023 Outdoor Recreation Plan provides:

- A guideline for future development and acquisition projects;
- Management plans for forest and prairie ecosystems; and
- A 5-year development plan for: wildlife areas, restoration and enhancement of habitat, and other capital development projects that will enhance conservation.

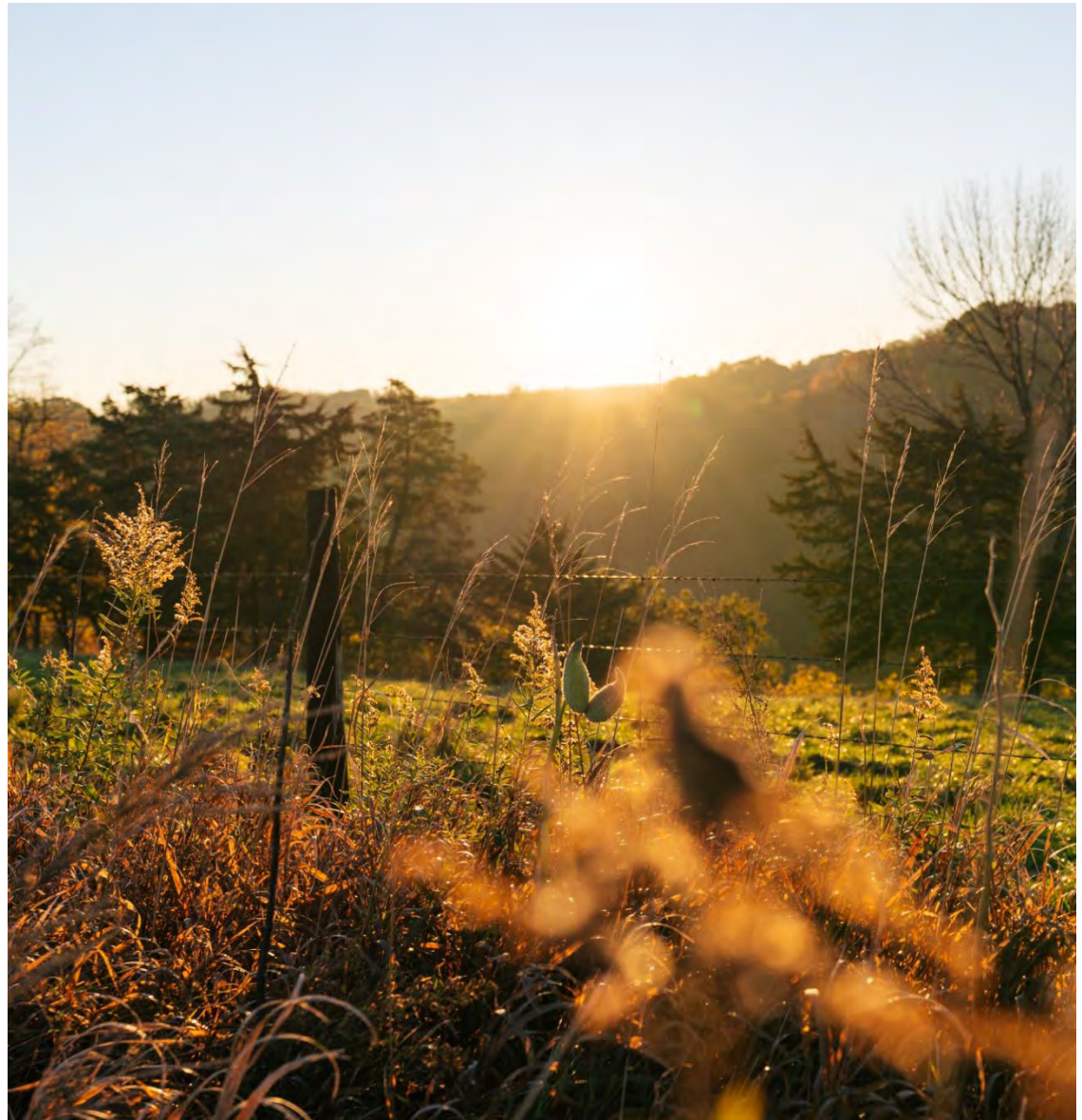
*Regional Collaboration*

The Grant Wood Loop Master Plan updated in 2022 is a roadmap and living document for collaboration toward a shared vision within the three-county region of Dubuque, Jackson, and Jones Counties over the next 20 years. This collaboration is working together to erase the boundaries and “enhance,

promote, sustain, and connect” the region’s cultural, natural, and park assets.

**Issue:** In the Grant Wood Loop region, communities were able to complete the region’s top priority park and recreation projects through the Grant Wood Loop Master Plan. With the initial set of projects completed, additional priorities and projects that will continue to move the region closer to its vision for the future have been identified.

**Opportunities:** The updated Grant Wood Loop Master Plan is meant to highlight the region’s assets, identify our opportunities as a community, and advocate for and support the effort of all groups in the region who are working on connecting people to each other and to great spaces and great experiences. The Master Plan is a collection of projects and initiatives. The region must work together across jurisdictions to implement the shared vision and bring new and expanded opportunities to our communities.



White Water Canyon Wildlife Area bridges the lines between Dubuque, Jackson, and Jones counties

Source: Grant Wood Loop Master Plan – 2022 Update, p.15

9. AGRICULTURE AND NATURAL RESOURCES

GOALS AND OBJECTIVES

*Soil Health and Water Quality*

9.1 Implement the Five-Year Soil and Water Resources Conservation Plan’s priority goals for 2021-2025:

- Encourage the wise use and protection of the soil resources within the SWCD in order to sustain crop productivity for generations to come.
- Encourage the wise use and protection of the surface water and groundwater resources within the SWCD, to prevent their contamination and to ensure their sustained use.
- Improve perennial cover by promoting profitable and sustainable use of forest and pasturelands within the SWCD.
- Connect with the greater community and other stakeholders in support of conservation, sustainability and regenerative agriculture.

*Watershed Management*

9.2 Implement the Maquoketa River Watershed Management Plan – Phase 1:

- Improve water quality through techniques for nutrient management, erosion reduction, and increased infiltration.
- Improve watershed flood management.
- Increase watershed awareness and involvement among stakeholders.
- Preserve, protect, and improve ecologically sensitive habitats and ecosystems in the watershed.
- Establish the WMA as a trusted community resource.

9.3 Implement the Maquoketa River Watershed Management Plan – Phase 2 as a subwatershed action plan to guide local authorities and residents in putting Phase I of the plan into practice:

- Use technical analysis and continued engagement with local stakeholders to identify projects where resources could be directed to meet the goals determined by the community.

- Prioritize projects that will have the biggest impact with the most efficient resource use.
- Focus on finding priority locations and explicit solutions to mitigate future flooding events, enhance water quality, and promote recreational opportunities within the watershed.

*Natural Resource Conservation*

9.4 Implement the Conservation components of the 2023 Outdoor Recreation Plan for:

- Future development and acquisition projects;
- Management plans for forest and prairie ecosystems; and
- A 5-year development plan for: wildlife areas, restoration and enhancement of habitat, and other capital development projects that will enhance conservation activities.

# Chapter 10. Parks, Recreation, and Cultural Resources



**Blackhawk Wildlife Area**



**Hurstville Interpretive Center**



**Canton Church School**



**Environmental education outdoors**



**Maquoketa River kayakers**



**Historical Education at Millrock School**

*All photos from Jackson County Conservation*

**OVERVIEW**

Jackson County’s rolling landscape is characterized by rugged hills, bluffs, caves, limestone outcroppings, and many streams and rivers. These and other unique natural, cultural, and historical resources make the county a regional destination for outdoor recreation.

Most streams flow into the Maquoketa River and the North Fork of the Maquoketa River. The two rivers flow primarily west to east before they converge near the center of the county. The Maquoketa River then continues east to the Mississippi River on the county’s eastern boundary.

Many natural areas in the County are public park and recreation areas owned by county, state, and federal agencies. They are open for activities such as camping, hunting, fishing, and paddling. Figure 10.1 is a map of the locations of the public lands and rivers. Figure 10.2 is a map of Jackson County parks and trails, as well as state and federal parks.

Cultural resources are the remnants of the people who lived in Jackson County



**Figure 10.1 Map of Public Lands and Rivers in Jackson County**

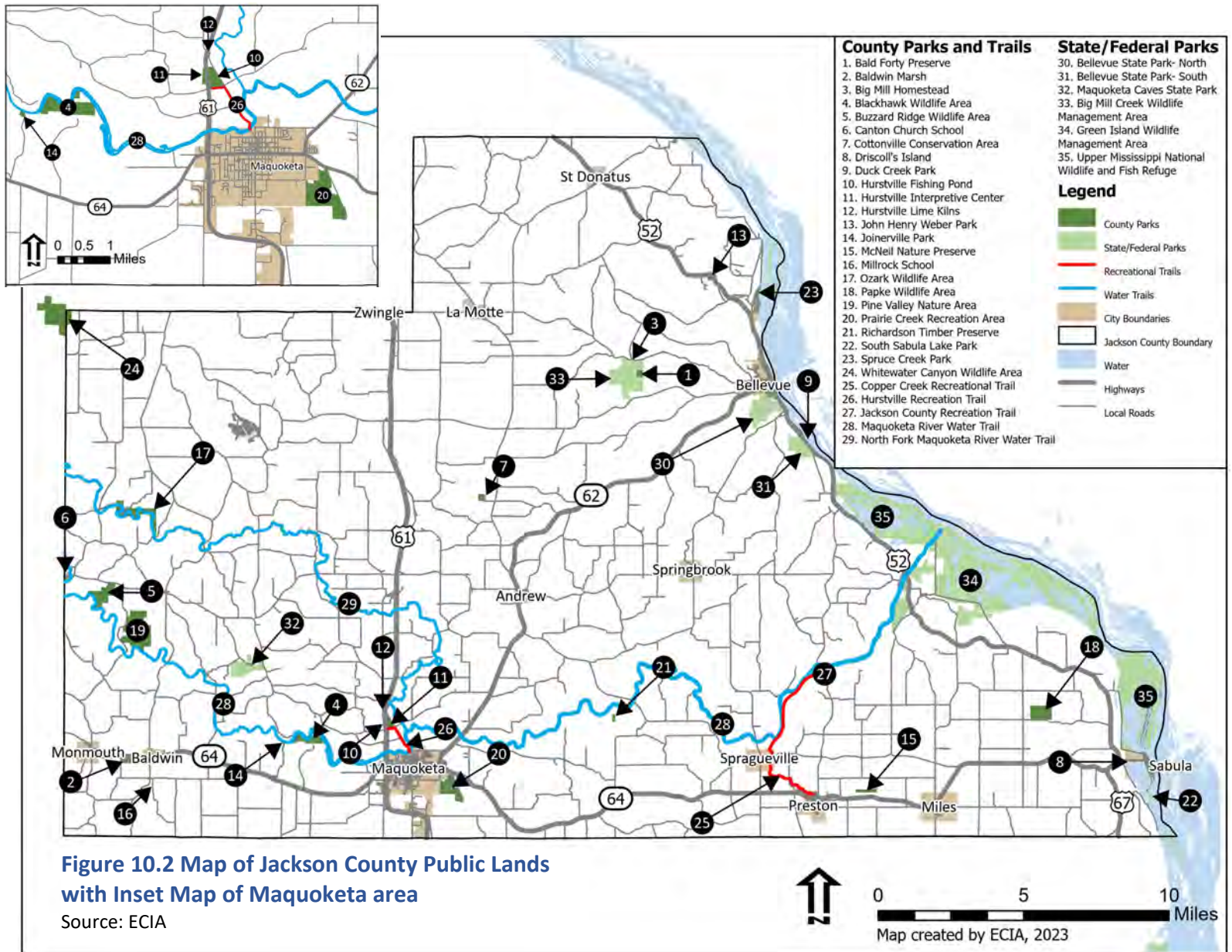
Source: 2021 Jackson County Water Trail Plan, p. 8

throughout time, including Native Americans, pioneers, and settlers. The county’s cultural resources include historic properties and districts; archeological sites (including pioneer cemeteries and ancient burial mounds); and the cultural landscape of natural resources, agriculture, and communities that intertwine with the county’s parks, recreation facilities, rivers, and streams.

Future planning for county parks and recreation improvements is linked with the conservation and interpretation of cultural resources in Jackson County.

Information about natural resources found in Jackson County is provided in Chapter 9. Agriculture and Natural Resources of this comprehensive plan.

10. PARKS, RECREATION, AND CULTURAL RESOURCES





**COUNTY PARKS & RECREATION AREAS**

The following information is from the Jackson County Conservation website at <https://www.mycountyparks.com/County/Jackson.aspx> unless noted otherwise.

The Mississippi River and its tributaries offer excellent fishing, paddling and boating. As a part of the driftless landscape, the exposed limestone provides unique hiking, biking, birding, horseback riding, backpacking, hunting, and rock-climbing opportunities.

Jackson County Conservation (JCC) manages nine hunting areas and 38 individual parks, natural areas, timber preserves, historic sites, river accesses, and campgrounds encompassing over 2,200 acres across the county. The county’s recreation areas provide both primitive and modern facilities including the Hurstville Interpretive Center, two modern campgrounds, bike trail, marina, and historical structures such as a one-room schoolhouse and the Hurstville Lime Kilns. In addition, the county maintains trails, shelters, boat ramps, and primitive campsites.

**County Parks, Preserves & Wildlife Areas**

**Bald Forty Preserve**, located five miles west of Bellevue on County Road D57, offers forested hunting and hiking. Access to this 40-acre tract is by walk-in only through the adjoining 700-acre state owned Big Mill Wildlife Area.

**Baldwin Marsh** is located one mile west of Baldwin on Highway 64. This 67-acre area includes a wetland, and native and restored prairie, providing excellent habitat for waterfowl and upland birds. It is one of the best examples of an upland marsh once very common in Iowa.



**Baldwin Marsh** Photo Credit: JCC

**Blackhawk Wildlife Area** is a 180-acre public hunting area along the South Fork of the Maquoketa River on 138<sup>th</sup> Ave. The area features 2 miles of hiking trails, cross country skiing, public hunting, seasonal equestrian use, and bird watching.



**Blackhawk Wildlife Area** Photo Credit: JCC

**Buzzard Ridge Wildlife Area** has 237 acres encompassing a variety of unique landscapes that include limestone outcroppings, upland timber, flood plain, wildlife, and panoramic scenery. The area is located on 30<sup>th</sup> Ave. along the Maquoketa River and can be accessed from the river or by hiking trail. The area features bird watching, boating, two miles of hiking trails, hunting, picnicking, pit toilets, primitive camping, stream fishing, and wildlife viewing.



**Buzzard Ridge Wildlife Area** Photo Credit: JCC

**Cottonville Conservation Area** is located three miles north of Andrew on Y61 and 189<sup>th</sup> St. Once part of the "county farm," this rolling 40-acre tract of land is managed for timber and prairie restoration projects. The area features forest and upland hunting and hiking.

**Driscolls Island** is a half-acre peninsula situated along the Highway 64 causeway just west of Sabula. It is a highway rest stop and offers fisherman and boaters access to Middle Sabula Lake.



**Driscolls Island** Photo Credit: JCC

**Duck Creek Park** is located two miles south of Bellevue on Highway 52 at the mouth of Duck Creek and the Mississippi River. A long river frontage provides beautiful scenery, and excellent bank fishing. There is limited parking and walk in access only.

**Hurstville Fishing Pond** is a two-acre borrow pit stocked with bluegill, catfish and largemouth bass. The pond is a short distance from the parking lot, via a handicap accessible sidewalk to an accessible dock. It is part of a 20-acre area on 63<sup>rd</sup> St. on the west side of US Highway 61, a mile north of Maquoketa.



**Hurstville Fishing Pond** Photo Credit: JCC

The **Hurstville Interpretive Center** provides a variety of education and recreation opportunities and serves as the headquarters of Jackson County

Conservation. The center is located at 18670 63<sup>rd</sup> St, on the east side of US Highway 61 about a mile north of Maquoketa.

The center has 20 indoor and outdoor exhibits and activities including an enclosed bee hive, live reptiles, and resident trumpeter swans. The center has Environmental Education staff.

The center is located on 48 acres that include a 15-acre restored prairie, an 18-acre wetland with boardwalk, picnic shelter, frog pond, pollinator garden, observation deck, bird blind, and a half-mile hiking trail. Check JCC website for open hours, which may vary by season.



**Hurstville Interpretive Center** Photo Credit: 2016 Grant Wood Loop Master Plan

10. PARKS, RECREATION, AND CULTURAL RESOURCES

**John Henry Weber Park** is a 20-acre roadside park and wildlife preserve located four miles north of Bellevue on Highway 52.

**Joinerville Park** is located at 123<sup>rd</sup> Ave. along the Maquoketa River about four miles west of Maquoketa. It is a major recovery point for paddlers that float down the river. The 6.5-acre park is open for day use year-round and features a concrete boat ramp and overnight camping by special permit.

**McNeil Nature Preserve** has rolling upland hills covered with cedar trees and small pockets of native prairie. A trail through the maze of cedars provides a beautiful solitary hike. It is 1.5 miles east and one mile north of Preston off 33<sup>rd</sup> St.



**Ozark Wildlife Area** Photo Credit: JCC

The 323-acre **Ozark Wildlife Area** on the North Fork of the Maquoketa River is located on 40<sup>th</sup> Ave. northeast of Canton. This public hunting area features stream fishing, forest hunting, primitive camping, river access, bird watching, and wildlife viewing.

**Papke Wildlife Area** is dominated by upland prairie and provides habitat for many upland species. In addition, there are two ponds, woodlands, and food plots. It is located at 56732 64<sup>th</sup> St. between Miles and Sabula. The area is open to hiking and public hunting.



**Papke Wildlife Area** Photo Credit: JCC

**Pine Valley Nature Area** has 676 acres of some of the most diverse resource areas in Jackson County. The area features eight miles of hiking trails, forest and

upland hunting, high-quality woodlands, rare plants and animals, scenic quality, and archeological significance. It is located three miles north of Monmouth, off 30<sup>th</sup> Ave.

**Prairie Creek Recreation Area** is a 273-acre property located at 1215 East Summit St. on the southeast side of Maquoketa. From the meandering creek, to the rolling hills of the tallgrass prairies, and dense woodlands spotted with limestone bluffs, this park is full of ecological and archaeological treasures. The park features a picnic pavilion with fireplace and restrooms, over five miles of hiking trails, a two-acre fishing pond, archery hunting, and 1.5 miles of Prairie Creek.



**Prairie Creek Recreation Area** Photo Credit: JCC

**Richardson Timber Preserve** is a 20-acre example of a typical Iowa oak/hickory forest. The park features hunting, hiking trails, and a diverse collection of wildlife and flowers. It is located on 317<sup>th</sup> Ave. northwest of Preston.

Surrounded by water, the 14-acre **South Sabula Lake Park** at 1516 South Ave. in Sabula is an ideal spot for all water-related sports. A concrete boat ramp and public dock provide easy access to South Sabula Lake and the Mississippi River. The park has picnic shelters, showers, restrooms, a playground, and 39 camp sites with water and electric service.



**South Sabula Lake Park** Photo Credit: JCC

**Spruce Creek Park**, situated on the banks of the Mississippi River, offers a variety of outdoor recreation opportunities. Enjoy boating, fishing, camping and more while enjoying the scenic views of the mighty Mississippi. This 43-acre park offers boat ramp, boat docks, 80 campsites with electric service, showers, restrooms, playground, and shelters. It is located at 30711 396<sup>th</sup> St., two miles north of Bellevue off US Highway 52.

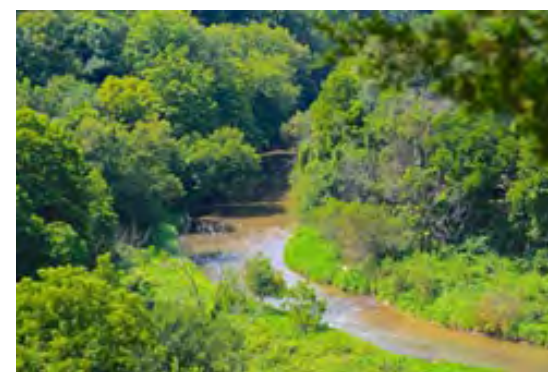


**Spruce Creek Park** Photo Credit: JCC

The following information is from the Dubuque County Conservation website, <https://www.mycountyparks.com/County/Dubuque/Park/Whitewater-Canyon-Wildlife-Area.aspx>. Bridging the lines between Dubuque, Jackson and Jones counties, **Whitewater Canyon Wildlife Area** combines biological, geological and archaeological wonders for a unique

recreational experience. As one of only three true canyons in Iowa, this 419-acre area has staggering limestone walls, beautiful lookouts, stream access for paddlers and anglers, unique wildlife, opportunities to find fossils, artifacts, geocaches, public hunting, snowshoeing, and cross-country skiing. Rare plants and animals are also sheltered in the various natural communities in this wildlife area.

This park is owned and managed by Dubuque County Conservation. Vehicle access and parking are located on Whitewater Canyon Road off Curoe Road, 3.6 miles west of Bernard via Higginsport Road and about 5 miles northeast of Cascade.



**Whitewater Canyon Wildlife Area** Photo Credit: Dubuque County Conservation

**County Recreation Trails**

The **Hurstville Recreation Trail** runs north of Maquoketa on a paved, 10-foot-wide path. Currently in two sections, the trail can be accessed on the north side of Maquoketa where Hurstville Road/Main Street crosses the Maquoketa River (parking lot is on the north side of the bridge) and from the parking lot at the Hurstville Interpretive Center.



Hurstville Recreation Trail: Maquoketa segment (upper photo) and Interpretive Center segment (lower photo) Photo Credit: JCC

The **Jackson County Recreation Trail** is a 6.6-mile crushed limestone path open for picnicking, biking, hiking, fishing, and cross-country skiing. A 3.8-mile segment runs between a trailhead on County Road Z34 on the abandoned Chicago-Milwaukee Railroad right-of-way, runs along the Maquoketa River, and ends at 45<sup>th</sup> St. just east of Spragueville.



Jackson County Recreation Trail Photo Credit: JCC

This trail connects to the 2.7-mile **Copper Creek Recreational Trail** that runs south from Spragueville to Preston. It crosses both Deep Creek and Copper Creek. Scenic overlooks provide striking views of the river valley and its limestone bluffs.

Figure 10.3 is a map of the Jackson County and Copper Creek Recreation Trails that shows the trailheads and lengths of segments.

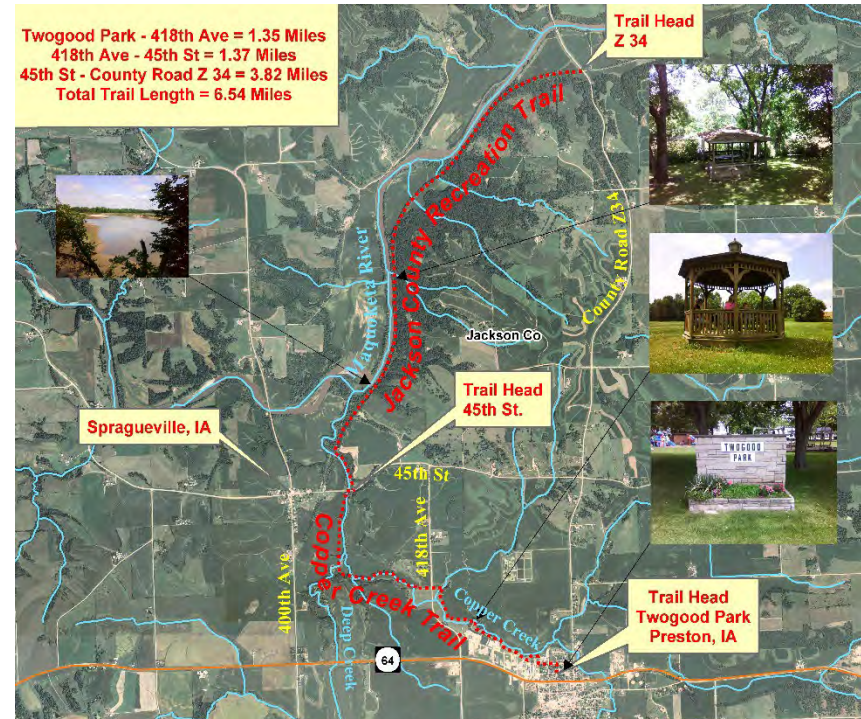


Figure 10.3 Jackson County & Copper Creek Recreation Trails

Source: Jackson County Conservation website



Figure 10.4 Map of North Fork and Maquoketa River Water Trails Source: Iowa DNR water trail brochure

### County Water Trails

According to the Iowa Department of Natural Resources (DNR), “Water Trails are recreational corridors and routes on rivers and lakes that provide a unique experience for canoeists and kayakers and provide adequate access points that can be used for planning your trips at various lengths and difficulty. A water trail may also provide access to riverside campgrounds, primitive campsites, amenities such as shelters and restrooms in city, county or state parks.”<sup>1</sup>

The Maquoketa River and the North Fork of the Maquoketa River in Jackson County are

regarded by many paddlers to be among the top Iowa destinations for canoeing and kayaking.<sup>2</sup>

The **Maquoketa River Water Trail** is the most developed. It has 13 accesses spaced at average distance of 3.5 miles at every bridge crossing along the river. Most of the accesses provide parking off of paved county roads. The **North Fork Water Trail** is less developed with fewer amenities and longer distances between its two accesses.<sup>3</sup>

Figure 10.4 is a map of the access locations on the North Fork and Maquoketa River water trails in relation to nearby parks and cities. For paddlers on the Maquoketa River, the Lakehurst Dam should be avoided.

A brochure with information on history, culture, and wildlife viewing along these trails and this map is available online at <https://www.iowadnr.gov/Things-to-Do/Canoeing-Kayaking/Water-Trail-Maps-Brochures>

<sup>1</sup> <https://www.iowadnr.gov/Things-to-Do/Canoeing-Kayaking/Water-Trail-Development>

<sup>2</sup> 2021 Jackson County Water Trail Plan, p.30

<sup>3</sup> Ibid, p. 24

**COUNTY PARK & RECREATION PLANS**

The Jackson County Conservation Department has five-year plans for outdoor recreation, environmental education, and water trail development.

***2023 Outdoor Recreation Plan***

The following information is from Jackson County Conservation’s *2023 Outdoor Recreation Plan*.

The Outdoor Recreation Plan provides a guideline for future development and acquisition projects as well as various conservation efforts. It is comprised of the sections outlined below.

**1. Acquisition and Development Proposals**

The Jackson County Conservation Department will continue to seek priority acquisitions utilizing outside funding sources to leverage local dollars. In this section, the proposed projects encompass the acquisition and development of several outdoor recreation and resource areas listed below:

- A. “Green Belts” and other unique or important natural resource areas.
- B. Unique or important natural or cultural resource areas.
- C. River Accesses.
- D. Trail Development.
- E. Campground Development.
- F. Environmental Education Program.

**2. Forest & Prairie Management Plans**

This section provides a management outline for the following three forest and prairie ecosystems:

- A. Forest Management Plan
- B. Prairie Management Plan
- C. Remnant Bluff Prairie/Savanna Management Plan

**3. Management Area Development & 5-Year Plan**

This section provides a description of areas under management by Jackson County Conservation, a current

development report, and a 5-year development plan for these areas:

- A. Campgrounds and Parks
- B. Wildlife Areas
- C. Historic Structures
- D. Trails
- E. River Accesses

**4. REAP Projects – 2023**

With creation of the Iowa DNR’s Resources Enhancement and Protection (REAP) program in 1989, the Outdoor Recreation Plan includes this program for future planning in these areas:

- A. Future acquisitions
- B. Restoration and enhancement of habitat
- C. Other capital development projects that will enhance recreational activities

**2021 Water Trail Plan**

This 2021 plan is a guide for future improvements along the Maquoketa River and North Fork water trails. The plan’s water trail development concept is to make improvements that provide a range of experiences for paddlers ranging from beginner to expert.<sup>4</sup> Figure 10.5 is a set of two maps that show the future water trail concept from the 2021 plan.

The Maquoketa River Water Trail will be developed as a mix of recreational and gateway stream segments that cater to beginner and intermediate paddlers. The trail will have two gateway segments: Canton Bridge Access to Royertown Bridge Access and Maquoketa City Access to Bridgeport Bridge Access. The remainder will be classed as recreational.<sup>5</sup>

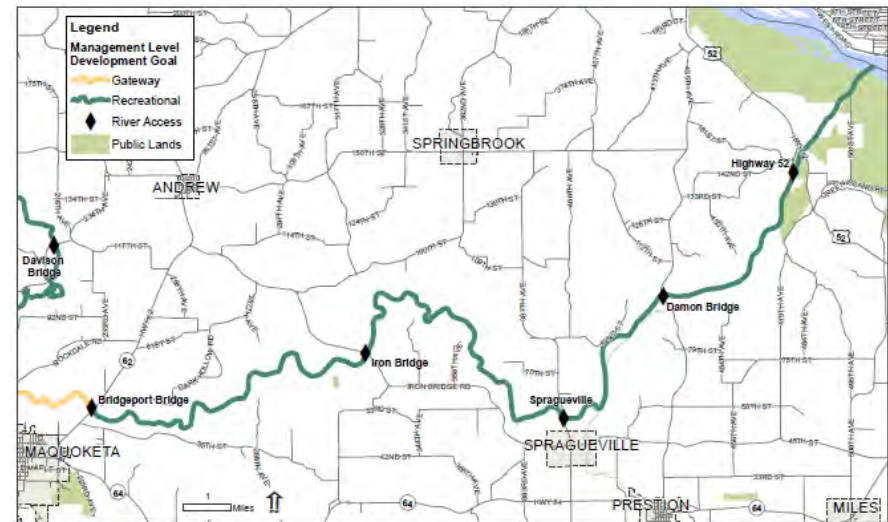
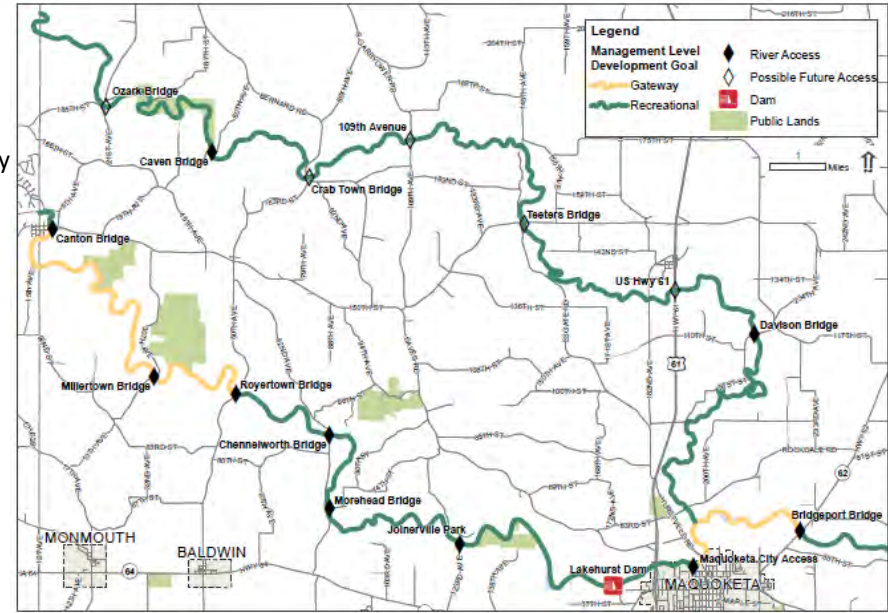
The North Fork Water Trail will be developed over the long-term as a recreational water trail for intermediate and experienced paddlers.<sup>6</sup>



**Canoeing the Maquoketa Water Trail**  
Photo Credit: JCC

**Figure 10.5 Water Trail Development Concept Maps**

Source: 2021 Jackson County Water Trail Plan, p .32



<sup>4</sup> Ibid, p. 31

<sup>5</sup> Ibid, p. 31

<sup>6</sup> Ibid, p. 32



**2023 Environmental Education Plan**

The following information is from Jackson County Conservation’s 2023 Environmental Education Plan.

The mission of the Jackson County Conservation Environmental Education Program is to increase public awareness and knowledge about environmental issues and promote environmental literacy through programs, exhibits, and visitor interaction.

Jackson County Conservation has Environmental Education staff that help teachers, students, groups, businesses, and organizations learn more about Iowa's natural resources through year-round programs in three main areas: school programs, public programs, and private programs.

**School Programs** include outreach programs to school districts, field days/field trips to county parks, and School of the Wild: a week-long outdoor experience at local parks.

**Public Programs** include outdoor recreation programs, natural resource

and ecology programs, day and overnight summer camps, volunteer workdays, special events, workshops, and training.



**Outdoor Environmental Education program**  
Photo Credit: JCC

**Private Programs** are offered for youth groups, adult groups, civic organizations, nursing homes, daycare centers, outdoor groups, and clubs at county parks.

Environmental education also includes passive interpretation and visitor interaction such as:

- exhibits and displays at the Hurstville Interpretive Center,
- interpretive signs at county parks, and
- publications (newsletters, event calendars, and social media posts).

The **5-Year Plan for Environmental Educational Programming** includes:

- increased interpretive signage;
- expansion of School of the Wild;
- connection with more upper-level students to increase their knowledge of natural resources and conservation; and
- installation of a large new exhibit at the Hurstville Interpretive Center.



**Indoor Environmental Education program**  
Photo Credit: JCC

**VOLUNTEER SUPPORT**

Volunteer support is vital to the Jackson County Conservation Department.

***County Conservation Board***

Formed in 1958, the Jackson County Conservation Board’s initial work was acquiring public areas for outdoor recreation and conservation of the county’s natural resources. In 1985, the Conservation Board hired permanent staff for the Environmental Education Program. The purposes of this five-member board appointed by the Jackson County Board of Supervisors are in Iowa Code Section 350.1: “to acquire, develop, maintain, and make available to the inhabitants of the county, public museums, parks, preserves, parkways, playgrounds, recreational centers, county forests, wildlife and other conservation areas, and to promote and preserve the health and general welfare of the people, to encourage the orderly development and conservation of natural resources, and to cultivate good citizenship by providing adequate programs of public recreation.”

***Friends of Jackson County Conservation***

Friends of Jackson County Conservation is a non-profit organization that brings people together through educational and recreational opportunities in partnership with the Jackson County Conservation Board and inspires people to understand and care for our environment. Members serve as volunteers for various programs and projects as well as raise funds for exhibits, conservation related projects, educational materials for programs and more. All donations are tax-deductible, and go towards outdoor recreation and education opportunities in the county.



**A Friends volunteer at work** Photo Credit: JCC

***Hurstville Center: 2024 Exhibit Makeover***

Jackson County Conservation and Friends of Jackson County Conservation are working to bring a new exhibit to the Hurstville Interpretive Center, celebrating the Center’s 20<sup>th</sup> anniversary in 2024.

The new exhibit will help tell the story of Iowa’s natural history through a woodland diorama with plants and wildlife, a walk-through cave interpreting cave geology, and showcasing the bluffs and hill prairies of Jackson County.

**STATE AND FEDERAL PUBLIC LANDS**

The Iowa Department of Natural Resources (DNR) manages two popular state parks and two major wildlife management areas in Jackson County.

**State Parks**

“Just south of the city of Bellevue along US Highway 52, **Bellevue State Park** encompasses a total of 770 acres divided between two separate tracts of land. The Nelson Unit is located immediately adjacent to the Bellevue city limits atop a 300-foot limestone bluff. The Dyas Unit is located two miles farther south on US Highway 52. The park’s southern boundary is located about five miles north of the Maquoketa River.

The park features scenic views of the Mississippi River, timbered walking trails, a unique butterfly sanctuary, and an enclosed nature center. The park offers a number of camp sites with electrical hook ups, modern restrooms, showers, and a sanitary dump station. The park’s four miles of hiking trails feature scenic

overlooks, a stream, bird and wildlife viewing, and woodland and prairie landscapes. The South Bluff Nature Center contains a variety of educational exhibits on the plants, animals, and geology of the park.”<sup>7</sup>



**Bellevue State Park – Mississippi River Overlook**  
Photo Credit: Iowa DNR

“**Maquoketa Caves State Park** is located on Iowa Highway 428 (Caves Rd) seven miles northwest of Maquoketa. The park’s caves, limestone formations and rugged bluffs make it one of Iowa’s most unique state parks.

The park contains more caves than any other state park in Iowa. The caves are all different sizes and shapes. Some can be

explored by walking while others can best be seen by crawling. A six-mile trail system links the park’s caves, formations, and overlooks while providing an exciting hiking experience. Trail highlights include the dramatic “Natural Bridge” which stands nearly fifty feet above Raccoon Creek, and the seventeen-ton “Balanced Rock.”

The park’s interpretive center contains detailed information about the geology of cave formations, park history, and a background of the early inhabitants of



**Maquoketa Caves State Park – Natural Bridge** Photo Credit: ECIA

the park. Other features include bird watching, camping, hiking, picnic shelters, playground, restrooms, and showers.”<sup>8</sup>

<sup>7</sup> Ibid, p. 17

<sup>8</sup> Ibid, p. 18

### State Wildlife Management Areas

The 693-acre **Big Mill Creek Wildlife Management Area** is located 5 miles west of Bellevue on Mill Creek Road/County Road D57. The area encompasses timber, upland, and wetland habitats that are home to deer, turkey, squirrel, grouse, and dove. The area is open to public hunting, fishing, and trapping.

The **Green Island Wildlife Management Area** is a 4,000-acre state-managed area located just south of the Maquoketa River's confluence with the Mississippi River. The Iowa DNR partnered with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and Ducks Unlimited to help design and develop the area. The area includes a mix of mostly wetlands with some wooded uplands and is a popular location for bird watching, duck and deer hunting, and paddling.<sup>9</sup> The U.S. Army Corps of Engineers and its partners are planning a habitat rehabilitation project at Green Island.

<sup>9</sup> 2021 Jackson County Water Trail Plan, p. 17

### National Wildlife & Fish Refuges

The U.S. Fish and Wildlife Service manages the public lands and waters throughout the country as part of the National Wildlife Refuge System. "**Upper Mississippi River National Wildlife and Fish Refuge** has been a haven for migratory birds, fish, wildlife and people since 1924. The refuge stretches 261 river miles from Wabasha, Minnesota to Rock Island, Illinois, and protects more than 240,000 acres of Mississippi River floodplain. The refuge hosts more than 3.7 million annual visits for hunting, fishing, wildlife observations, and other recreation. The refuge is a Wetland of International Importance and a Globally Important Bird Area."<sup>10</sup>



Upper Mississippi River National Wildlife and Fish Refuge Photo Credit: US Fish & Wildlife Service

<sup>10</sup> <https://www.fws.gov/refuge/upper-mississippi-river>

About 15,500 acres of the refuge are located within Jackson County. The refuge encompasses one of the largest blocks of floodplain habitat in the lower 48 states. Bordered by steep wooded bluffs that rise 100 to 600 feet above the river valley, the Mississippi River corridor and refuge offer scenic beauty and productive fish and wildlife habitat unmatched in the heart of America.<sup>11</sup>

Figure 10.6 is a map of the Upper Pool 13 in the refuge which includes information about amenities, access points, and closed areas. The map also shows the locations of Duck Creek County Park, Bellevue State Park, Green Island Wildlife Management Area, and the Great River Road National Scenic Byway.

<sup>11</sup> Ibid, p. 20

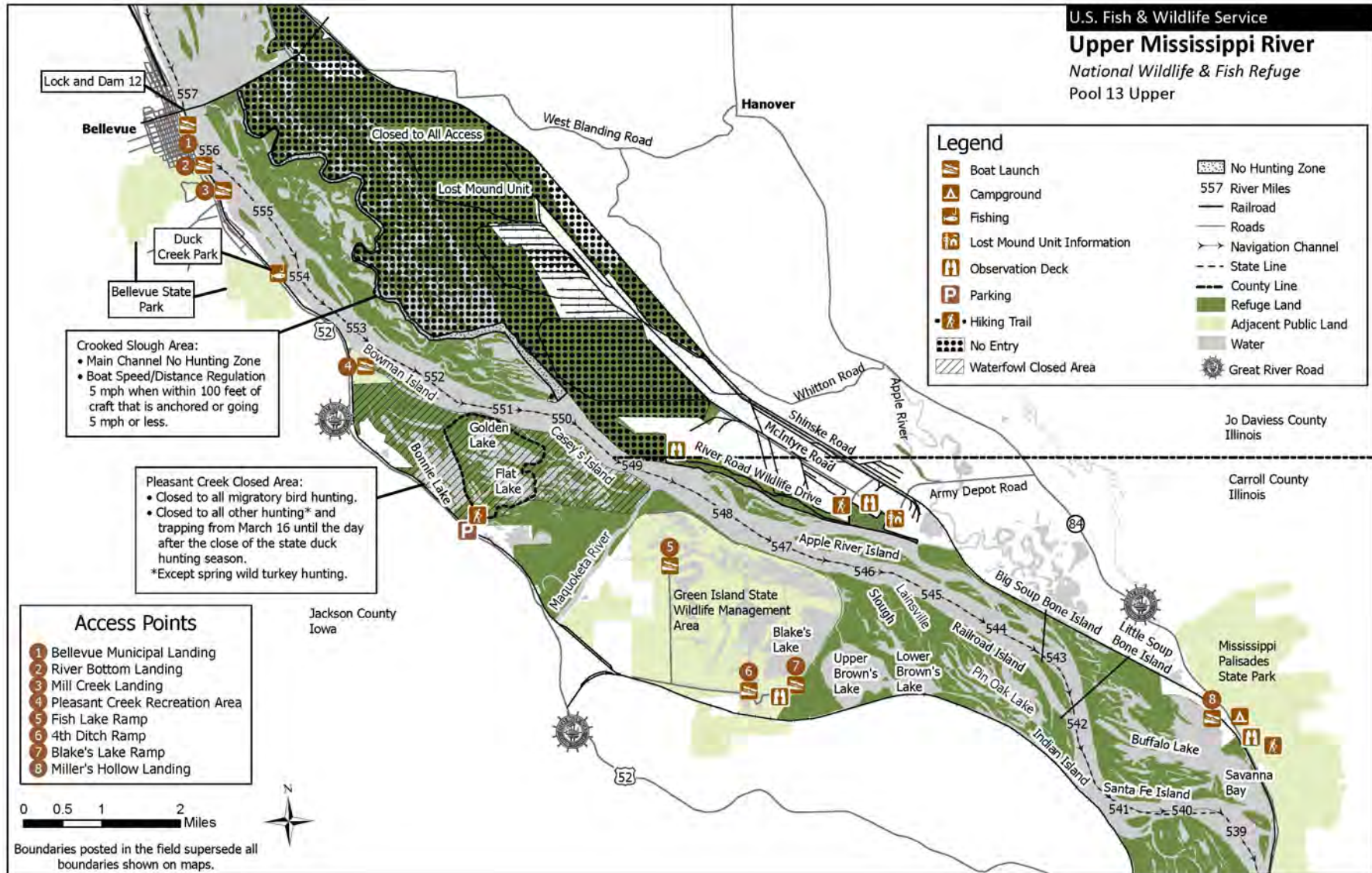


Figure 10.6 Map of Upper Mississippi River National Wildlife and Fish Refuge, Upper Pool 13 (2023 version)

Source: US Fish and Wildlife Service at <https://www.fws.gov/media/upper-miss-refuge-upper-pool13-2023-versionpdf>

**Driftless Area National Wildlife Refuge** was established in 1989 under the authority of the Endangered Species Act of 1973 to protect two federally listed endangered species: Iowa Pleistocene snail and northern monkshood. Refuge boundaries include eight counties in northeast Iowa, southwest Wisconsin, and northwest Illinois. In 2023, the refuge consisted of nine units across northeast Iowa, ranging in size from six acres to 209 acres. Refuge lands include upland hardwood forests, grassland, stream and riparian habitats.<sup>12</sup>

“Algific (cold air) talus (loose rock) slopes occur in the karst region of portions of Iowa, Wisconsin, Minnesota and Illinois. These areas are referred to as the “Driftless Area” because they escaped the last glacial event about 12,000 years ago. These steep slopes and cliffs remain cool throughout the year and are home to rare species of plants and animals such as the Iowa Pleistocene snail and northern monkshood.”<sup>13</sup>

Figure 10.7 is a map of Driftless Area National Wildlife Refuge. The Howard, Fern Creek, and Pine Creek units are open to the public. Lytle Creek Unit is a 20-acre parcel near 287<sup>th</sup> Street in Otter Creek Township in Jackson County.



**Iowa Pleistocene snail and Northern Monkshood.**  
Photo Credit: US Fish & Wildlife Service



**Figure 10.7 Map of Driftless Area National Wildlife Refuge (2023)**

Source: Wikipedia, accessed 2024

<sup>12</sup><https://www.fws.gov/refuge/driftless-area/about-us>

<sup>13</sup><https://www.fws.gov/refuge/driftless-area>

**CULTURAL RESOURCES**

“Cultural resources encompass all the physical evidence of past human activity. They are non-renewable resources that are important to our nation’s history as they tell the story of our human past and interaction with the natural environment.”<sup>14</sup>

Cultural resources are the remnants of the lives of people who occupied and lived in an area throughout time, including Native Americans, pioneers, and settlers.<sup>15</sup>

Jackson County’s cultural resources include historic properties and districts, archeological sites (including pioneer cemeteries and ancient burial mounds), and the cultural landscape of natural resources, agriculture, and communities.

Figure 10.8 is a map showing the county’s historic structures, historic districts in rural areas, and archeological sites.

<sup>14</sup> <https://www.fsa.usda.gov/programs-and-services/environmental-cultural-resource/cultural-resources/index>

***Early County History***

“Native Americans lived in Iowa for at least 13,000 years. During this time, they gradually changed from highly mobile hunters and gatherers living in small camps to farmers living in large villages.”<sup>16</sup>

“Early settlers’ accounts note large groups of Sauk, Meskwaki, and Ho-Chunk groups, of which some had moved to this area from the Wisconsin area due to European encroachment from the east. Some of the early European settlers to the Maquoketa area noted several large Native American camps and villages, which may have been established in the late eighteenth century. Prehistoric occupation around Maquoketa and near the confluence of the Maquoketa and North Fork Maquoketa rivers is also evident by multiple archaeological sites recorded in that area, some dating to the Archaic Period.”<sup>17</sup>

<sup>15</sup> Ibid

<sup>16</sup> 2017 Office of the State Archaeologist Technical Report 556, p. 4

The earliest European settlers began arriving in Iowa in 1834. Their numbers grew rapidly after the area was surveyed for settlement in 1838 - 1839. The U.S. Congress established the Territory of Iowa in 1838. In 1846, Iowa became a state and its population expanded quickly. Early growth of Jackson County’s communities was spurred by the extension of railroads which reached the city of Maquoketa in 1873.<sup>18</sup>

When Jackson County was established in 1837, the county seat was located at Bellevue. It was moved back and forth between Andrew and Bellevue until 1873, when Maquoketa became the permanent county seat.<sup>19</sup>

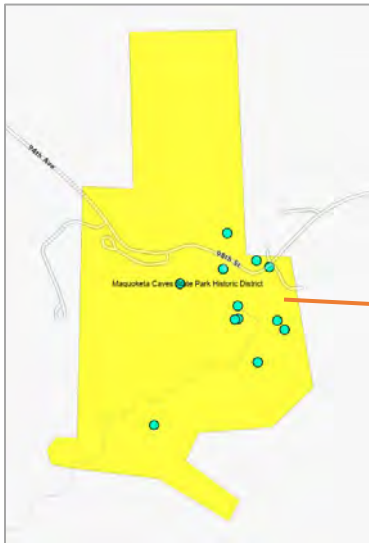
<sup>17</sup> Ibid, p. 23

<sup>18</sup> 2021 Jackson County Water Trail Plan, p. 9

<sup>19</sup> <https://jacksoncounty.iowa.gov/about/>



Hurstville Historic District



Maquoketa Caves State Park  
Historic District

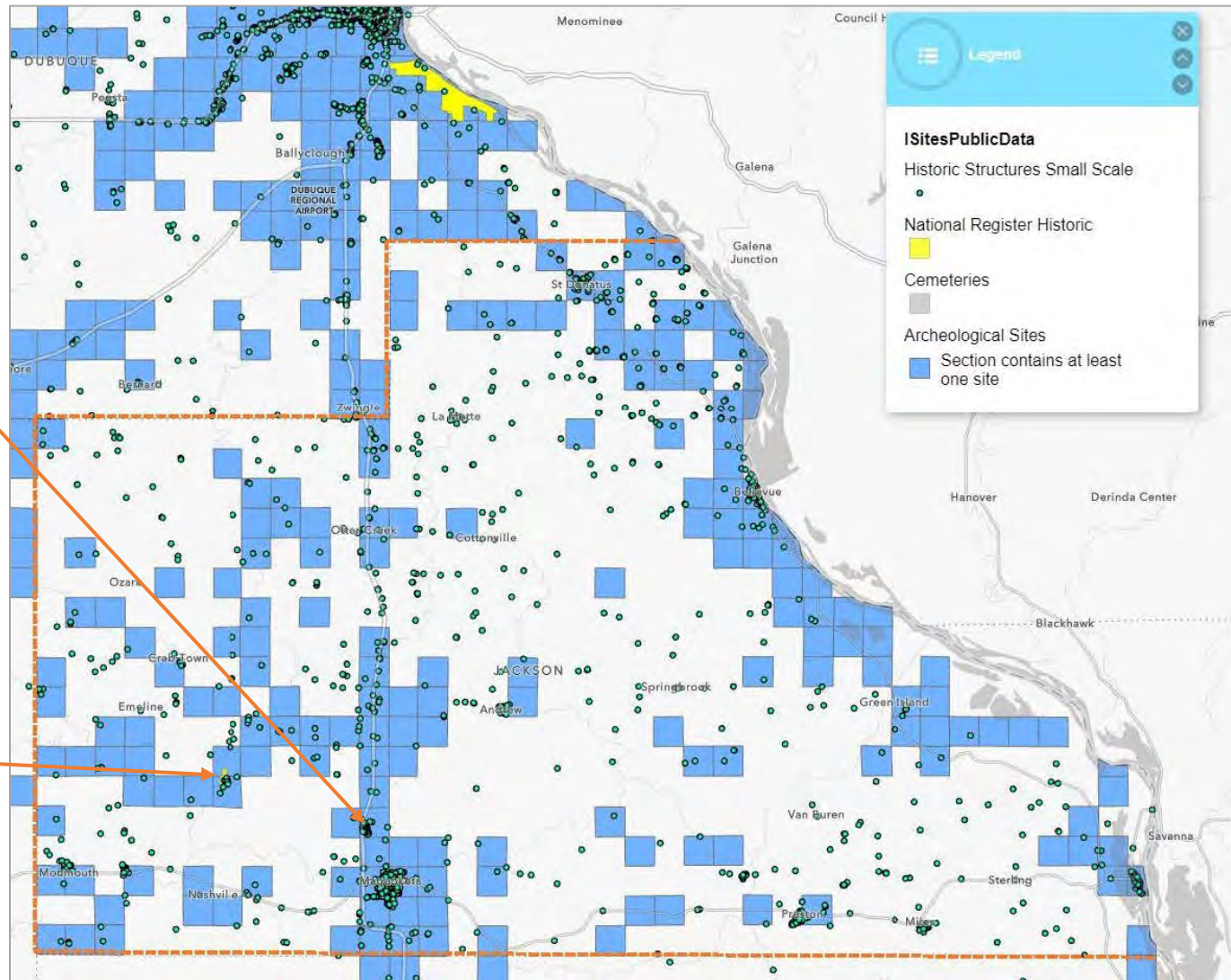


Figure 10.8 Map of Cultural Resources in Jackson County (2023)

[Note: inset maps are National Register Historic Districts located outside of cities]

Source: I-Sites Public Data Web Map at <https://archaeology.uiowa.edu/services/i-sites> accessed by ECIA in November 2023



**NATIONAL REGISTER OF HISTORIC PLACES (NRHP)**

The National Register of Historic Places (NRHP) is a federal-level inventory of places of local, state, and/or national significance, administered by the National Park Service under the National Historic Preservation Act of 1966. Visit <https://www.nps.gov/subjects/nationalregister/index.htm>

The NRHP listing does not provide legal protections at the local level. Rather, it is a planning tool for identifying properties worth preserving. Listing in the NRHP provides owners with opportunities for federal and state preservation incentives.

“Under Federal Law, listing in the NRHP places no restrictions on what a non-federal owner may do with their property up to and including destruction, unless the property is involved in a project that receives Federal assistance, usually funding or licensing/permitting.”<sup>20</sup>

<sup>20</sup><https://www.nps.gov/subjects/nationalregister/how-to-list-a-property.htm>

**Eligibility** for listing in the NRHP is based the following evaluation criteria:

*Age and Integrity:*

- Is the property old enough to be considered historic (generally at least 50 years old)?
- Does it still look much the way it did in the past?

*Significance:*

- Is the property associated with events, activities, or developments important in the past?
- With the lives of people who were important in the past?
- With significant architectural history, landscape history, or engineering achievements?
- Does it have the potential to yield information through archeological investigation about our past?”<sup>21</sup>

<sup>21</sup> Ibid

The NRHP has three levels of significance:

Properties would be considered to have **Local significance** when their importance relates only to a particular city or county.

Properties would be considered to have **State significance** when they represent an aspect of overall history of a State.

Properties would be considered to have **National significance** when they represent an aspect of the history of the United States and its territories.<sup>22</sup>

*In 2023, there were 76 listings for Jackson County, Iowa in the NRHP data base available online at <https://www.nps.gov/subjects/nationalregister/database-research.htm>*

<sup>22</sup>[https://www.nps.gov/subjects/nationalregister/upload/NRB-15\\_web508.pdf](https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf)

**Jackson County NRHP Historic Properties**

The 2023 NRHP data base for Jackson County lists 68 individual properties, generally for a single historic structure or building. They include houses, barns, shops, commercial buildings, schools, churches, government buildings, and mills. Table 10.1 lists the four individual NRHP historic properties in Jackson County with State significance. The remaining 64 individual NRHP historic properties are of Local significance.

Historic Resource	Location	Year Listed	Level of Significance	Area(s) of Significance
<b>Dyas Hexagonal Barn</b>	Bellevue	1986	State	Agriculture; Engineering
<b>Maquoketa Free Public Library</b>	Maquoketa	1989	Local & State	Architecture; Communications; Social History
<b>Polygonal Barn*</b>	Van Buren Township	1986	State	Agriculture; Engineering
<b>Savanna-Sabula Bridge*</b>	Sabula	1999	State	Engineering

Source: NRHP data base and NRHP nominations \*No longer in existence



**Dyas Hexagonal Barn** Photo Credit: Wikipedia



**Maquoketa Free Public Library**  
Photo Credit: Maquoketa Public Library Facebook page



**Polygonal Barn (no longer in existence)**  
Source: 1986 NRHP nomination



**Savanna-Sabula Bridge (no longer in existence)** Source: Wikipedia

*Jackson County NRHP Historic Districts*

The 2023 National Register data base for Jackson County lists eight historic districts with multiple buildings and structures. They represent areas of residential, commercial, industrial, agricultural, and recreational use and development.

Table 10.2 lists the eight NRHP historic districts in Jackson County. Two have State significance, and two have National significance.



**Bellevue Commercial Historic District**  
Source: 2022 NRHP Nomination



**Maquoketa Commercial Historic District**  
Source: 2022 NRHP Nomination

Name of Historic District	Location	Year Listed	Total Acres	Contributing Resources	Level of Significance	Area(s) of Significance
<b>Bellevue Commercial</b>	Bellevue	2022	12	42	Local	Commerce; Transportation
<b>Hurstville<sup>1</sup></b>	North of Maquoketa	1979	39	84	State	Industry
<b>Lock and Dam No. 12</b>	Bellevue	2004	102	8	National	Transportation; Maritime History; etc. <sup>2</sup>
<b>Maquoketa Caves State Park</b>	West of Maquoketa	1991	111	9	Local & State	Conservation; Architecture
<b>Maquoketa Commercial</b>	Maquoketa	2022	2	41	Local	Commerce
<b>Paradise Farm</b>	West of Bellevue	1977	200	3	Local	Local
<b>Village of St. Donatus</b>	St. Donatus	1989	50	33	National	European; Architecture; Social History
<b>West Pleasant Street</b>	Maquoketa	1991	12	29	Local	Architecture

Source: NRHP data base and NRHP nominations

1. This district includes the four limestone kilns on Hurstville Road. Most of the other contributing resources in the district are no longer in existence.  
 2. The complete list of areas is: Transportation; Maritime History; Military; Social History; Commerce; Politics/Government; Economics.

**County Owned/Managed NRHP Sites**

The following information is from the Jackson County Conservation website at <https://www.mycountyparks.com/County/Jackson.aspx> unless noted otherwise.

**Big Mill Homestead** is located at 32575 Mill Creek Rd., five miles west of Bellevue on County Road D57. Built circa 1845, this two-story limestone farmstead was probably built as a dormitory for Paradise Farm owned by the Potter family. It was listed on the NRHP in 1991. Building access is by appointment only. It is located on a one-acre site in the Iowa DNR's Big Mill Creek Wildlife Management Area. The site is owned and managed by the Jackson County Conservation Board.



**Big Mill Homestead** Photo Credit: JCC

The **Canton Church School** is located at 14723 3<sup>rd</sup> Ave., south off County Road E17. This combination school and church was last actively in use in the 1960's. Built in 1877, this limestone structure is a wonderful example of local building styles of the period. It was listed in the NRHP in 1979. The 0.6-acre site is open daily year-round. Building access is available by appointment. This site is owned and managed by the Jackson County Conservation Board.



**Canton Church School** Photo Credit: JCC

The limestone **Millrock School** was built in 1867 and is typical of the one-room schools that once dotted the countryside. The school served the town of Mill Rock until 1910. It's one-acre site is 1.5 miles south of Baldwin at 2980 53<sup>rd</sup> Ave. The school is filled with items common to its time period: desks, chairs, books, lunch pails, Victrola, wood burning stove, and more. There are two outhouses on site. Tours are available upon request. This site is owned and managed by the Jackson County Conservation Board.



**Millrock School** Photo Credit: JCC

The **Jackson County Insane Asylum** is listed on the NRHP, is a site in the Silos and Smokestacks National Heritage Area, and has an Iowa Great Places designation. The Insane Asylum is located north of Andrew on 250<sup>th</sup> Ave. Guided tours are by appointment only.<sup>23</sup> It is the only remaining building on the site of the Jackson County Poor Farm. The asylum was constructed in 1870 of local limestone.<sup>24</sup> This site is owned by the Jackson County "County Farm", in care of the Jackson County Board of Supervisors.



**Jackson County Insane Asylum** Photo Credit: Jackson County Beacon GIS

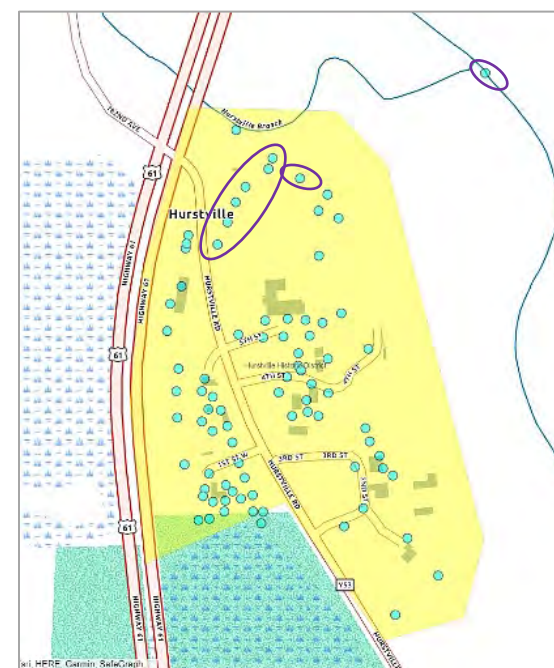
The **Hurstville Lime Kilns** were once part of the company town of Hurstville. They are located at 7301 Hurstville Road two miles north of Maquoketa. This three-acre historic site features the four restored lime kilns and a roadside rest area with a picnic shelter. Interpretive signs tell the story of the kilns and a stairway allows visitors to walk up around the kilns. The site is open daily year-round. Owned by the Jackson County Historical Society, the site is managed by the Jackson County Conservation Board.

<https://www.mycountyparks.com/county/Jackson/Park/Hurstville-Lime-Kilns.aspx>



**Hurstville Lime Kilns** Photo Credit: Maquoketa Chamber of Commerce

The kiln site is located in the 39-acre Hurstville NRHP Historic District, which was listed in 1979 with 84 resources shown as green dots in Figure 10.9. In 2023 the few remaining resources (circled) include the four lime kilns, and rock-crushing building, water tower, and part of the narrow-gauge railway bridge that once crossed the Maquoketa River.



**Figure 10.9 Hurstville NRHP Historic District**  
Source: I-Sites Public Data Web Map, November 2023

<sup>23</sup><https://www.silosandsmokestacks.org/attraction/limestone-asylum/>

<sup>24</sup><https://www.loc.gov/item/2016630510/>

**ARCHEOLOGICAL SITES**

“Archaeology is the study of the ancient and recent human past through material remains. In Iowa, archaeologists identify and study the sites, artifacts, and physical remains that make up the past 13,000 years of human settlement.”<sup>25</sup>

Iowa Code requires everyone to report findings of all human remains. Visit <https://archaeology.uiowa.edu/archaeology-basics/state-and-federal-laws>

Archeological sites must remain confidential by Iowa Code Section 22.7, subsection 20. The I-Sites Public Data Web Map shows recorded archaeological sites in one-square-mile sections in Iowa counties. Non-archaeologists can search I-Sites for general details (site type, cultural affiliation, and associated burial data if present) but cannot access confidential locational within the one-mile buffer. Learn more at <https://archaeology.uiowa.edu/services/i-sites>

<sup>25</sup><https://archaeology.uiowa.edu/archaeology-basics>

***Ancient Burial Mounds***

The Jackson County Historic Preservation Commission and the Jackson County Board of Supervisors have supported two projects to identify and protect Native American burial mound sites in the county.

Both projects were initiated by Jackson County due to concerns that mounds cannot be protected in accordance with Iowa Code Chapter 263B and Iowa Administrative Code 685-11 if they are not properly identified.

The first project was an inventory and assessment that identified 26 mound sites in Jackson County in 1997.

The second project was focused on locating, assessing, and mapping ancient mound sites in 1998. The total increased to 34 known mound sites as a result.

Resolution # 184-12-07-99 adopted by the Jackson County Board of Supervisors established certain procedures to guard against destruction of ancient burial

mounds in the course of developments which require specific approval of the Board of Supervisors or the Zoning Board of Adjustment.

The Resolution also required that the official Mound Potential Map signed by the Board of Supervisors, which designates portions of Jackson County with significant potential for the existence of mounds, be available for public reference.

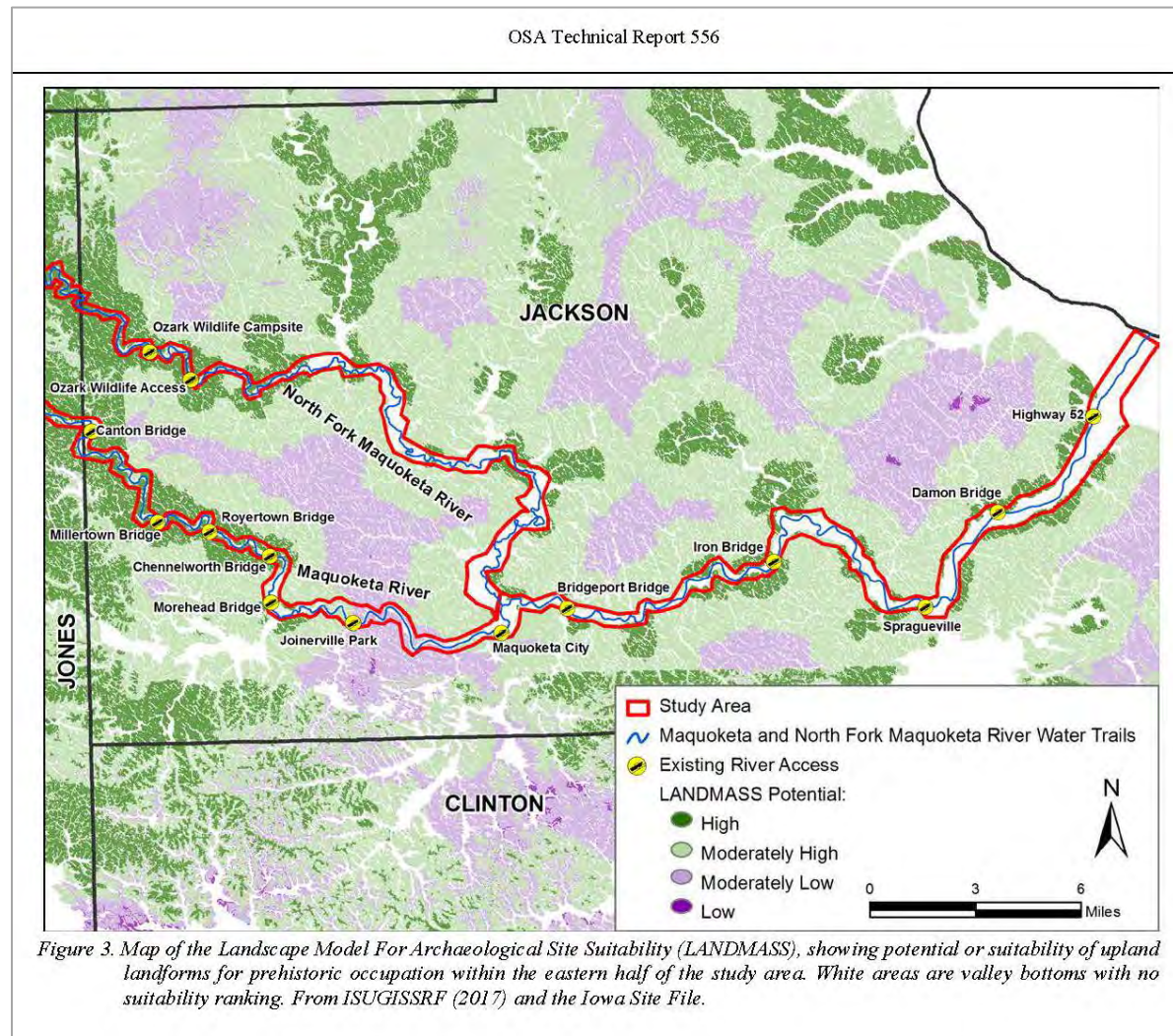
***Pioneer Cemeteries***

In Iowa Code Section 331.325, “pioneer cemetery” means a cemetery where there have been twelve or fewer burials in the preceding fifty years.

The Jackson County IAGenWeb maintains a list and a map of the cemeteries in Jackson County, including pioneer cemeteries, on their website at <https://iagenweb.org/jackson/cemeteries/>

“In 2017, The University of Iowa’s Office of the State Archeologist conducted a Phase I-A archaeological reconnaissance survey along the Maquoketa River and North Fork of the Maquoketa River through Delaware, Dubuque, and Jackson Counties. The resulting report, referred to as OSA Technical Report 556, summarizes previously documented archeological resources and discusses the potential for previously unidentified archeological resources along the water trail corridors. The OSA team identified 121 previously recorded archeological prehistoric and historic sites in the study area including 27 prehistoric rock shelters and nine historical cemeteries.”<sup>26</sup>

Figure 10.10 is a map from the 2017 OSA Technical Report 566 showing the Landscape Model for Archeological Site Suitability (LANDMASS) in Jackson County. The model shows potential (suitability) of upland landforms for prehistoric occupation, color-coded from High in dark green to Low in purple. White areas have no ranking.



**Figure 10.10 Map of Archeological Site Suitability Model for Jackson County (2017)**  
 Source: 2017 OSA Technical Report 556, p.42

<sup>26</sup> 2021 Jackson County Water Trails Plan, p.30

**VOLUNTEER SUPPORT**

*Jackson County Historical Society*

The Jackson County Historical Society is a private non-profit corporation located in Maquoketa. Its mission is to seek out, preserve and tell the story of the rich heritage of this area. The 12 Board members are appointed by the Jackson County Board of Supervisors. The Society operates two museum sites.

The **Jackson County Museum** is located inside the Pearson Memorial Center on the County Fairgrounds at 1212 E. Quarry Street in Maquoketa. Its two floors of facts, photos, and artifacts collectively share the story of Jackson County. The Hall of Fame Wall recognizes men and women important to the county. Also at this site, the Penningroth Machine Shed tells the story of agriculture from when settlers first arrived, through the eras of horsepower and steam engines.

The **Clinton Engines Museum** is located in Maquoketa on the site of the former Clinton Machine Company at 607 E. Maple Street in Maquoketa. The former administration building houses this

museum highlighting the history of one of the largest manufacturers of small gasoline engines. Also at this site, the Agricultural Heritage Center picks up the story of agriculture from where the Penningroth Machine Shed leaves off. The La Motte Depot built in 1911 was relocated to the museum site in 2015.

The Historical Society maintains an extensive research and family history library in the museum in partnership with the Jackson County Genealogical Chapter. Learn more at <http://www.jciahs.com/>



**Clinton Engines Museum at night.**  
Photo Credit: Jackson County Historical Society Facebook page.

*County Historic Preservation Commission*

This seven-member Commission is appointed by the Jackson County Board of Supervisors to recognize and promote

historic sites in Jackson County. The Commission conducts and supports studies to identify and designate National Register historic districts and sites. The Commission advises Board of Supervisors and residents on matters related to historic preservation and undertakes special projects in the county. Visit <http://www.jacksoncountyhp.org/>

*County Pioneer Cemetery Commission*

In accordance with Iowa Code, the Jackson County Board of Supervisors created this nine-member Commission to assume jurisdiction and management of the care, repair, and restoration of the pioneer cemeteries in the county.



**Commissioners and volunteers at work with the repair and restoration of a pioneer cemetery.**  
Photo credit: Jackson County Pioneer Cemetery Commission Facebook page



**PARTNERS FOR CULTURAL RESOURCES**

***Silos & Smokestacks National Heritage Area (SSNHA)***

“National Heritage Areas are places where historic, cultural, and natural resources combine to form cohesive, nationally important landscapes.”<sup>27</sup> “Silos & Smokestacks National Heritage Area (SSNHA) preserves and tells the story of American agriculture and its global significance through partnerships and activities that celebrate the land, people, and communities of Northeast Iowa.”<sup>28</sup>

SSNHA is a 37-county region covering over 20,000 square miles in Iowa (see Figure 10.11). The attractions, sites and communities are partners in developing the SSNHA and sharing its many stories. SSNHA partner sites in Jackson County eligible for funding and other resources are: Historic Limestone Insane Asylum, Hurstville Interpretive Center, Hurstville Lime Kilns, and Jackson County Museum. <https://www.silosandsmokestacks.org/>

<sup>27</sup><https://www.nps.gov/subjects/heritageareas/index.htm>



**Figure 10.11 Map of SSNHA**

Source: National Park Service

***Certified Local Government Program***

The Jackson County Historic Preservation Commission is part of Iowa’s Certified Local Government (CLG) Program, which fosters a local commitment to preservation and establishes partnerships between local, state, and federal governments. As a CLG, Jackson County is eligible for funding, training, technical assistance, and networking resources. <https://culture.iowaeda.com/certified-local-governments/>

<sup>28</sup><https://www.nps.gov/places/silos-and-smokestacks-national-heritage-area.htm>

***Scenic Byways***

Iowa’s 11 state-designated and three national scenic byways are a great way to experience the State’s natural beauty, history and culture. Jackson County’s byways are the Great River Road National Scenic Byway along the Mississippi River and the Grant Wood Scenic Byway between Stone City and Bellevue.

<https://iowadot.gov/iowasbyways>

***Grant Wood Loop***

The Grant Wood Loop provides an online guide at <https://gwloop.com/> of the natural resources and thriving arts and culture in Dubuque, Jackson, and Jones Counties, to experience these amenities:

- Dramatic, timeless landscapes,
- Inspiring parks and pathways,
- Rivers, creeks and lakes,
- Arts, culture and history,
- Historic communities and places,
- Local food and agriculture,
- Interpretive, educational and recreational programs for all ages.

**LOCAL, STATE, & FEDERAL PROGRAMS**

Programs are listed by category.

*All Categories*

The **Alliant Energy Community Tree Planting Program** provides grants up to \$5,000 for community-based, tree-planting projects - like parks, gateways, cemeteries, nature trails, libraries, nursing homes, schools, and more. <https://www.alliantenergy.com/communitysupportandsafety/communityprograms/onemilliontrees/communitytreeplantingprogram>

The **Black Hills Energy Power of Trees** program provides grants up to \$5,000 for public and private tree-planting projects like schools, parks, nursing homes, street trees, residential plantings, and replacement of storm-damaged trees. <https://treesforever.org/power-of-trees/>

The Iowa Economic Development Authority (IEDA) **Community Attraction and Tourism (CAT)** program assists communities with up to 15% of total project costs for of multiple purpose attraction or tourism facilities available

for public use. Examples are museums, theme parks, cultural and recreational centers, recreational trails, heritage attractions, and sports arenas.

<https://www.iowaeda.com/enhance-iowa/>

The IEDA **Rural Enrichment Grant Program** supports small quality of life projects in rural communities. Iowa businesses, colleges, universities, cities, counties, nonprofits, and foundations are eligible for grants of \$1,000 to \$20,000. <https://www.iowaeda.com/empower-rural-iowa/rural-enrichment/>

Iowa's **Resource Enhancement and Protection (REAP)** program invests in the enhancement and protection of the state's natural and cultural resources. REAP funds are allocated to conservation education, roadside vegetation, historic resources, city parks and open spaces, soil and water conservation, county conservation, and open space protection. <https://www.iowadnr.gov/Conservation/REAP>

The **Iowa Great Places** program provides designation and supports development of

new and existing infrastructure intended to cultivate the unique qualities of neighborhoods, communities, and regions. Designated communities may receive an average of \$227,355 with a required 1:1 match through the grant program. <https://iowaculture.gov/about-us/about/grants/iowa-great-places>

The **Community Foundation of Jackson County** awards grants for community development, diversity, education, environment, health and human services, children, youth, families, senior citizens, arts and culture, historic preservation, and wellness projects. Nonprofits, public institutions, and/or organizations without nonprofit status partnering with a fiscal sponsor organization are eligible. <https://dbqfoundation.org/grants#community-foundation-of-jackson-county-grants>

*Parks and Recreation*

The Iowa DNR's **Land and Water Conservation Fund (LWCF)** is a federally-funded program that provides 50% matching funds for outdoor recreation area development and acquisition.

<http://www.iowadnr.gov/InsideDNR/GrantsOtherFunding/LandWaterConservationFund.aspx>

The **People For Bikes Community Grant Program** supports bicycle infrastructure projects and targeted advocacy initiatives that make it easier and safer for people of all ages and abilities to ride with grants at 50% of project budget up to \$10,000. <https://www.peopleforbikes.org/grants#application>

The Iowa Department of Transportation (DOT) administers the **Federal and State Recreational Trails Programs**. Funding up to 80% of project cost is available to counties, cities, private organizations, and nonprofits to provide and maintain motorized and non-motorized recreational trails and related projects. [http://www.iowadot.gov/systems\\_planning/fedstate\\_rectrails.htm](http://www.iowadot.gov/systems_planning/fedstate_rectrails.htm)

### ***Cultural Resources***

The Jeffris Family Foundation assists the development of historic sites for non-profit organizations in small towns and cities. **Jeffris Heartland Fund** – \$5,000 to \$50,000 to cover 50% the cost of an

Historic Structure Report, and must be matched with cash. **Capital Campaign Challenge Grants** – \$50,000 to \$2 million, but typically \$250,000 to \$500,000.

<https://www.jeffrisfoundation.org/>

Grants from **National Trust Preservation Funds (NTPF)** encourage preservation at the local level by providing seed money of \$2,500 to \$5,000 for preservation projects. Membership requirements must be met to receive funding from the NTPF. <https://savingplaces.org/preservation-funds>

The State Historical Society of Iowa's **Country School Grant Program** provides matching grants up to \$5,000 to nonprofits, governments, individuals, and for-profits to help preserve and maintain one-room or two-room country schools. <https://history.iowa.gov/about-us/about/grants/country-school-grant-program>

The State Historical Society of Iowa's **Historical Resource Development Program (HRDP)** provides matching grants up to \$50,000 to nonprofits, governments, individuals, and for-profits

to help preserve, conserve, interpret, enhance, and educate the public about Iowa's historical assets. The HRDP provides funding for documentary collections, historic preservation and museums. <https://history.iowa.gov/about-us/about/grants/historical-resource-development-program>

Iowa's **State Historic Preservation Tax Credit Program** offers a 25% state income tax credit to developers to ensure character-defining features and spaces of historic buildings are retained. Project must comply with federal standards. <https://www.iowaeda.com/historic-preservation-tax-credit/>

The **Federal Historic Preservation Tax Credit Program** offers a 20% federal income tax credit for rehabilitation of income-producing historic structures in compliance with federal standards. <https://www.nps.gov/subjects/taxincentives/about.htm>

**ISSUES AND OPPORTUNITIES**

*Environmental Education*

**Issue:** The county’s 2023 Environmental Education Plan states that: “The desired outcome of environmental education is environmental literacy. The environment sustains all life on earth. We all need to know how ecological systems work and function. We need to understand how natural systems are intertwined. Environmental education gives us the tools and knowledge we need to make informed decisions about environmental issues and problems in our communities. Whether it be understanding water quality and pollution in a local stream, strategic planning for sustainable development, combating invasive species, the landscape, or addressing climate change.”

**Opportunities For Children:** The county’s 2023 Environmental Education Plan notes that environmental education can:

- Improve academic achievement and test scores in all subject areas.

- Capture students’ attention and engaged students who are the hardest to reach.
- Get children outdoors and more active, improving health, addressing obesity, attention deficit disorder, and depression.
- Incorporate STEM (science, technology, engineering, and math) to help meet 21<sup>st</sup> century needs, such as questioning, critical thinking, investigating, interpreting, and problem solving.

**Opportunities For Adults:** The county’s 2023 Environmental Education Plan notes that environmental education can:

- Promote outdoor lifestyles, and ensure healthier individuals and communities.
- Ensure people are informed about sound science and equipped to make decisions that help protect our natural resources on which our lives depend.
- Create a higher degree of pro-environment and conservation

behavior. The more people know, the more likely they are to recycle, be energy efficient, conserve water, etc.

*Outdoor Recreation and Conservation*

**Issue:** Outside funding sources are vital to future development of outdoor recreation and conservation enhancements. The Jackson County Conservation Department will continue to seek outside funding sources to leverage local dollars for these efforts.

**Opportunities:** The county’s 2023 Outdoor Recreation Plan provides:

- A guideline for future development and acquisition projects;
- Management plans for forest and prairie ecosystems; and
- A 5-year development plan for: campgrounds and parks, wildlife areas, historic structures, trails, river accesses, restoration and enhancement of habitat, and other capital development projects that will enhance recreational activities.

***Honor Cultural and Natural Resources***

A priority goal of the 2022-2027 Comprehensive Economic Development Strategy (CEDS) five-year plan for Cedar, Clinton, Delaware, Dubuque and Jackson Counties is: Honoring our cultural and natural resources.

**Issue:** Diversity remains a priority, encouraging more inclusive activities and recruiting a more diverse population overall to the CEDS region. This region continues to have a relatively low diverse population with less than 5% overall in minority population.

Efforts to recruit remain strong but we continue to lack the cultural resources and support systems in place to maintain a diverse population in the CEDS region. Funding for natural, cultural, and tourism related projects has decreased at both the State and Federal levels leaving it to the region to secure funding for many of its cultural and natural resource related projects.

**Opportunities:** Public-private partnerships are important to move forward many of the cultural and natural

resource projects in the CEDS region and to secure any type of grant funding.

Convention and visitors bureaus, economic development organizations, and Chambers of Commerce will continue to play a vital role in recruiting and retaining households and to maintain the workforce which is critical to the needs of our regional businesses.

Continued sensitivity, diversity, and equity training needs to remain a priority across the CEDS region providing for a more open and inclusive environment encouraging a diverse population. This training needs to come from the top down to encourage all participation.

***Regional Collaboration***

The Grant Wood Loop Master Plan updated in 2022 is a roadmap and living document for collaboration toward a shared vision within the three-county region of Dubuque, Jackson, and Jones Counties over the next 20 years. This collaboration is working together to erase the boundaries and “enhance, promote, sustain, and connect” the region’s cultural, natural, and park assets.

**Issue:** Communities in the Grant Wood Loop region were able to complete the region’s top priority park and recreation projects through the Grant Wood Loop Master Plan. With the initial set of projects completed, additional priorities and projects that will continue to move the region closer to its vision for the future have been identified.

**Opportunities:** The updated Grant Wood Loop Master Plan is meant to highlight the region’s assets, identify our opportunities as a community, and advocate for and support the effort of all groups in the region who are working on connecting people to each other and to great spaces and great experiences. The Master Plan is a collection of projects and initiatives. The region must work together across jurisdictions to implement the shared vision and bring new and expanded opportunities to our communities.

**GOALS AND OBJECTIVES**

*Environmental Education*

10.1 Implement the 2023 Jackson County Conservation Environmental Education Plan’s 5-Year Plan for programming:

- Increase interpretive signage at Prairie Creek Recreation Area and Jackson County Recreation Trail.
- Host all 5<sup>th</sup> grade students in Jackson County in School of the Wild by 2024-2025 school year.
- Work more with upper-level students to increase knowledge of natural resources and conservation.
- Connect with middle and high school teachers, and local college professors, to help enhance their curriculum with outreach programs or field trips to natural areas.
- Design and construct a large new exhibit at the Hurstville Interpretive Center to tell the story of Iowa’s natural history and celebrate the Center’s 20<sup>th</sup> anniversary in 2024.

*Outdoor Recreation and Conservation*

10.2 Implement Jackson County Conservation’s 2023 Outdoor Recreation Plan for:

- Future development and acquisition projects;
- Management plans for forest and prairie ecosystems; and
- A 5-year development plan for: campgrounds and parks, wildlife areas, historic structures, trails, river access, restoration and enhancement of habitat, and other capital development projects that will enhance recreational activities.

*Honor Cultural and Natural Resources*

10.3 Enhance quality of life through honoring arts and cultural events and natural resources in our CEDS region.

- Improve the livability factor and desirability of the region as a destination for business by enhancing and expanding access to arts/cultural events, rivers, trails,

and other recreational and national excursion areas.

10.4 Promote celebration of the arts and cultural events.

- Support and assist our partners to increase investments in cultural and arts events, organizations, and institutions.
- Promote quality and artistic renewal by encouraging commission of murals and other artwork throughout the region.
- Educate elected officials and citizens on values of developing and funding quality of life amenities to attract and retain workforce throughout the region.

10.5 Ensure cultural sustainability for the wellbeing of all.

- Integrate culture within daily activities, policies, and programs.
- Ensure equal access to and participation in activities and events within the region.

- Mobilize culture by promoting events as inclusively as possible.

10.6 Enhance access to natural excursion areas and recreational activities.

- Continue to expand the level of public awareness of parks available by promoting sites like: <http://www.gwloop.com/>.
- Enhance and expand walking, biking, running, and other recreational facilities in the region.
- Expand and enhance the region’s existing recreational tourism activities, areas and facilities with maximum effectiveness recognizing budget constraints and the need for grant and local funding.
- Continually strive to improve existing facilities while seeking opportunities for future development.

*Regional Collaboration*

10.7 Implement the updated Grant Wood Loop Master Plan’s Future Priorities:

- Expand programming in and around parks and trails including natural resource education, nature and cultural interpretation, and outdoor recreation.
- Expand marketing of outdoor recreational parks and assets that also incorporates experiential tourism and ecotourism efforts.
- Expand outdoor education opportunities and connect more with the natural environment.
- Reforest areas and cities devastated by storms and pests such as the derecho and Emerald Ash Borer.
- Promote outdoor recreation and parks friends’ groups to grow the base of advocates and volunteers for natural resources and programming.

- Preserve and/or acquire unique natural, cultural, and recreational assets of the region, especially those containing sensitive environmental spaces.
- Preserve and/or acquire areas affected by creeks and rivers and by weather, rain, and flood events to increase resiliency and decrease devastation.
- Promote the relationship between outdoor spaces and public health, especially brain health.
- Preserve and/or acquire unique areas related to the Mississippi River Corridor.

**PARKS, RECREATION, AND CULTURAL RESOURCES PROJECTS**

Table 10.3 shows the 2022-2027 CEDS Action/Implementation Plan for *Goal 4: Honor Cultural and Natural Resources* relating to the three High Priority projects in Jackson County.

Table 10.4 lists the 2022 Update of the Grant Wood Loop Master Plan’s future projects in Jackson County, found on

pages 12-13 of the plan. Projects are grouped by the primary sponsor of the project. The table lists project cost estimates, if one is available, the amount of funding that has already been committed to the project, and the amount of additional funding needed to complete the project.

**Table 10.3 2022-2027 CEDS Action/Implementation Plan for Goal 4: Honor Cultural and Natural Resources: Projects in Jackson County**

Objective	Tasks/Projects	Lead Agency	Funding Source/Agency	Timeframe	Priority	Investment
<b>Increase # of KIB communities; Increase # of active projects</b>	Secure additional Keep Iowa Beautiful (KIB) funding – in 2021, started new KIB contract in Jackson County	ECIA, Cities	Keep Iowa Beautiful; Respective Cities	2021-2027	High	
<b>Prairie Creek Development</b>	Develop Prairie Creek in Jackson County and secure funding for project. City partnering with Jackson County Conservation. Secured \$750,000 Destination Iowa Grant	Maquoketa and Jackson County Conservation	Maquoketa, Jackson County Conservation, State of Iowa	2023-2026	High	\$2,000,000
<b>Expand Grant Wood Loop</b>	Secure additional funding for Grant Wood Loop to continue doing park and trail projects	ECIA, Grant Wood members	ECIA, Grant Wood members	2022-2025	High	

Source: 2022-2027 CEDS five-year plan, p. 29



**Table 10.4 Grant Wood Loop Master Plan: Future Projects in Jackson County**

Source: 2022 Update Grant Wood Loop Master Plan

Project Title	County	Sponsor	Project Description	Total Est. Cost	Committed Funding	Funding Needed
Quarry Trail Paving	Jackson	Bellevue State Park	Finish paving the Quarry trail from the Butterfly garden to Felderman Park.	-	-	-
Nelson Unit to Dyas Unit Trail	Jackson	Bellevue State Park	Construct a trail connecting the Nelson Unit and the Dyas Unit of Bellevue State Park.	-	-	-
Bellevue Bike Rental Program	Jackson	City of Bellevue	Bellevue Bike Rental Program. Bellevue BIG is researching ideas and how other communities use a bike rental program.	-	-	-
Bellevue Municipal Boat Ramp and Parking Improvements	Jackson	City of Bellevue	City of Bellevue Municipal Parking Lot Improvements: Boat Ramp (completed) & dry handicap loading ramp (waiting CORE application approval) both through DNR grant. Lifejacket rental program (Bellevue BIG, waiting CORE approval).	\$200,000	\$200,000	\$0
Bellevue State Park Butterfly Garden Improvements	Jackson	City of Bellevue	State Park, butterfly garden improvements, ongoing. A group of volunteers started improvements last fall and look to continue to improve the area.	-	-	-
Bellevue Tree Improvements	Jackson	City of Bellevue	City of Bellevue Tree Board, tree planting in city parks. Ongoing effort to replant diversity and correct trees due to Emerald Ash Borer taking out so many trees in town. We have an active Tree Board and plan in place for future trees in the parks.	-	-	-
Ensign Playground	Jackson	City of Bellevue	Small playground equipment at Ensign Ball Diamonds in Bellevue. This is a goal for the Bellevue Ball Association.	\$25,000	\$0	\$25,000
Felderman Park Improvements	Jackson	City of Bellevue	Felderman Park improvements. Committee has been formed and project ideas have been received. Completion time depends on funding sources & moving compost sight.	-	-	-
Mill Creek Riverbank Improvements	Jackson	City of Bellevue	Felderman Park: bank erosion & stabilization project. Will take place as weather allows. Funding through DNR REAP grant.	\$39,500	\$39,500	\$0
Riverview Park Gazebo	Jackson	City of Bellevue	Bellevue, north Riverview Park, new gazebo. The Medinger family donated land that extends the Riverview Park and they would like to look at putting up a gazebo in their family's honor.	-	-	-
Downtown Trail	Jackson	City of Preston	Trail connecting Genos (ball diamonds) to downtown	-	-	-
Peppermint Park Improvements	Jackson	City of Preston	The goal is to revamp and re-organize the layout of Peppermint Park, eliminate safety issues that pose risk to the community, create an environment that is inviting and usable to individuals and families of all ages by updating the play equipment.	\$60,000	\$27,000	\$33,000
Westside Park Ninja Course	Jackson	City of Preston	Adding a Ninja Course (Fit Core Course) to Westside Park. It included 15 pieces of equipment that promote strength and agility for all ages.	\$112,000	\$16,797	\$95,203
Horseshoe Pond Master Plan	Jackson	City of Maquoketa	Continued dog park development, walking path around pond, dredging the pond, annual stocking (IKES), removing invasive species, adding name plates for plantings, new blacktop, and possible walking bridge over creek	-	-	-

**Table 10.4 Grant Wood Loop Master Plan: Future Projects in Jackson County**

Source: 2022 Update Grant Wood Loop Master Plan

Project Title	County	Sponsor	Project Description	Total Est. Cost	Committed Funding	Funding Needed
Parks Master Plan	Jackson	City of Maquoketa	Removing and replacing old/dated park equipment, new walking paths, benches, plantings, etc.	-	-	-
YMCA Facility Upgrades	Jackson	City of Maquoketa	The project will address key facility needs including indoor pool updates, painting, flooring, and equipment replacement.	\$1,041,490	\$755,050	\$286,440
Sabula Municipal Dock	Jackson	City of Sabula	Improvements to the Sabula Municipal Boat Landing including pavilion, ramp, dock, and restrooms.	\$350,000	-	\$350,000
Bridgeport Access Improvements	Jackson	Jackson County	Water Trails - Bridgeport Access 2 phases. 1. Grade and place paved ramp. 2. Pave parking are and access road. Place latrine. Planning and design in process.	\$300,000	\$0	\$300,000
Canton Access improvements	Jackson	Jackson County	Pave Ramp, pave parking lot and lane, place latrine, sidewalk along placed fishing habitat.	\$300,000	\$0	\$300,000
Hurstville Trail Phase 3	Jackson	Jackson County	Connect trail from 55th St. to 63rd St.	\$500,000	\$0	\$500,000
Joinerville Park Improvements	Jackson	Jackson County	Replace boat launch and build parking area.	\$50,000	\$0	\$50,000
North Fork Maquoketa River Access	Jackson	Jackson County	Acquire land. Build primitive access along Teeters Bridge on the North Fork Maquoketa River.	\$50,000	\$0	\$50,000
Papke Wildlife Area Improvements	Jackson	Jackson County	Papke wildlife area. Build fishing ponds. Land access.	\$150,000	\$90,000	\$60,000
Pine Valley Land Acquisition	Jackson	Jackson County	Land acquisition Pine Valley WMA. 20 acres to provide public access to north half of area	\$100,000	\$12,000	\$88,000
Prairie Creek Recreation Area Enhancements	Jackson	Jackson County	Improvements to Prairie Creek Recreation area. Prairie Creek water quality and recreation improvements, shelter, restrooms, parking, expanded trail system with pedestrian bridges, and disk golf course.	\$2,000,000	-	\$2,000,000
Royertown Access Improvements	Jackson	Jackson County	Pave lane and parking area. Upgrade access.	\$200,000	\$0	\$200,000
Sabula Lake Improvements	Jackson	Jackson County	Middle Sabula Lake renovation. Sallow lake fish control structure. Dredge over wintering areas. Build parking and ramp. Create shore fishing access.	\$20,000	\$0	\$20,000
Spruce Harbor Renovation	Jackson	Jackson County	Replace existing Boat ramp. Extend Parking Area. Replace south wall of Harbor.	\$500,000	\$10,000	\$490,000
<b>Jackson County Total</b>				<b>\$5,997,990</b>	<b>\$1,150,347</b>	<b>\$4,847,643</b>

# Chapter 11. Hazard Mitigation



Tornado near Iowa farm

Source: <https://ready.iowa.gov/>



Severe thunderstorm

Source: <https://ready.iowa.gov/>



Ice storm impacts power lines

Source: <https://ready.iowa.gov/>



Floods

Source: <https://ready.iowa.gov/>

**OVERVIEW**

Hazard mitigation is a coordinated, multi-jurisdictional process involving federal, state, and local agencies, volunteer groups, and businesses. It is a vital part of a comprehensive plan.

“To many, responding to disasters and emergencies does not come naturally. The response from the various agencies and organizations has developed with thorough and informed planning, training, exercises, and unfortunately, experience of responding to past disasters. This experience has been invaluable in highlighting the need for considered, integrated, and coordinated emergency planning.

Planning for emergencies ensures that the emergency services, local authorities and other organizations better communicate and coordinate their efforts, improving the management at the scene, in the emergency operations center, and the post-disaster recovery process.”

Source: Jackson County Emergency Management at <https://jacksoncounty.iowa.gov/emergency-management/>

**EMERGENCY MANAGEMENT AGENCIES**

The **Federal Emergency Management Agency (FEMA)** is part of the U. S. Department of Homeland Security. FEMA helps state and local agencies reduce their disaster risk, coordinates federal response efforts to stabilize communities after a disaster, and provides support for individuals and communities to rebuild and become more resilient. To learn more, visit <https://www.fema.gov/about>

The **Iowa Department of Homeland Security and Emergency Management (HSEMD)** coordinates homeland security and emergency management activities statewide. The HSEMD administers disaster grants provided by the federal government. To learn more, visit <https://homelandsecurity.iowa.gov/about/>

The coordinates local efforts in partnership with the HSEMD to prepare for, respond to, and recover from disasters. The JCEMA’s Emergency Management Commission and the Emergency Management Coordinator work with cities, school districts, and other partners to lay out the county’s hazard mitigation strategies in the

Jackson County Multi-Jurisdictional Hazard Mitigation Plan.

The Emergency Management Commission includes a member of the Board of Supervisors, the Sheriff, and the Mayor from each city within the county. The Commission appoints the Emergency Management Coordinator.

The JCEMA and the HSEMD are the primary emergency management agencies for Jackson County. Their services include addressing these types of hazards, disasters, and emergencies:

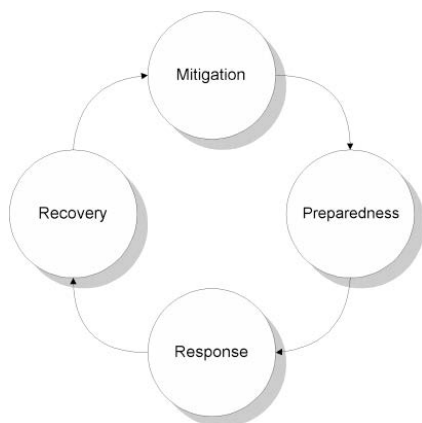
- **Natural** – such as a blizzard, tornado, flood, severe storm, or dam failure.
- **Public Health** – disease outbreak in people, animals, crops, or plants.
- **Technological (man-made)** – such as hazardous materials, infrastructure failure, transportation incident, or terrorism.

To learn more, visit <https://jacksoncounty.iowa.gov/emergency-management/>

**Emergency Management Cycle**

Emergency managers think of disasters as a recurring cycle with these four phases:

- **Mitigation:** Includes actions taken to prevent or reduce the cause, impact, and consequences of disasters.
- **Preparedness:** Includes planning, training, and educational activities for events that cannot be mitigated.
- **Response:** Occurs in the immediate aftermath of a disaster; business and other operations do not function normally.
- **Recovery:** Restoration efforts occur concurrently with regular operations and activities.



Source: FEMA Training “Emergency Management in the United States” at <https://training.fema.gov>

**Preparedness Cycle**

According to the Iowa Department of Homeland Security and Emergency Management (HSEMD): “The Preparedness Cycle is an important organizational tool that is comprised of five phases: preparedness, prevention, response, recovery and mitigation.



There is a continuous cycle of planning, organizing, training, equipping, exercising and evaluating emergency preparedness activities that allows organizations to increase their overall capacity and resiliency to experience and recover from any type of disaster.

**Planning**

Planning for emergencies ensures that emergency services, local authorities and other organizations better communicate and coordinate efforts, improving disaster response and post-disaster recovery. Federal, state, and local planning provides safety and security for the public under threat of a full spectrum of potential disasters.

**Training**

HSEMD training has helped prepare thousands of state and local first responders to prevent, protect, respond to and recover from a variety of emergency situations at all levels of government throughout the state.

**Exercise**

The goal of the Iowa HSEMD exercise program is to test the plans and practice the training in a simulated real-life environment to better prepare for actual emergencies.”

Source: Iowa HSEMD at <https://homelandsecurity.iowa.gov/alert-iowa/>

**Alert Iowa Messaging System**

Alert Iowa is the State of Iowa’s official emergency notification system. Through Alert Iowa, state and local officials can utilize a single, statewide notification system that provides local control of how and when to disseminate emergency and public safety messages to residents. Jackson County participates in Alert Iowa.

**Sign up to receive free community and weather alerts via text message, email, and/or voice message.**

1. Create a profile through Jackson County’s website opt-in page: <https://www.smart911.com/smart911/ref/reg.action?pa=JacksonCountyAlerts>
2. Download the Smart911 app and create a customized profile
3. Text JacksonIA to 672-83



Source: Iowa HSEMD at <https://homelandsecurity.iowa.gov/alert-iowa/>

**Iowa 911 Emergency Program**

All 99 Iowa counties have the capability of accepting wireless enhanced 911 Phase II service, which provides the call taker at the public safety answering point with latitude and longitude coordinates so they can more readily locate the

person who has placed the 911 call. All carriers have taken the necessary steps to allow callers to text 911 on a mobile phone. Text to 911 has been enabled in 911 centers across the United States.

**It's always preferred that you call 911, but in Iowa if you can't call, then text!**

**WHEN TO CALL 911?**

911 is for emergencies only. Reasons you may need to call 911 may include;

- To report a crime or a suspicious person
- To assist someone who is injured and needs help
- If you smell smoke or see a fire
- If you or someone else is having a medical emergency
- If you suspect a crime is taking place

You should call 911 anytime you believe there is an actual emergency. If you are unsure, call 911 and the dispatcher will make the final determination.

**KNOW WHEN TO NOT CALL 911**

Don't call 911 for city or local program information, to play a joke, or because you are late for a meeting and need help finding an address. While those situations may count as emergencies for you, they aren't for public safety. Inappropriate use of the 911 system wastes resources and ties up the lines at the 911 center.

**WHAT WILL YOU BE ASKED WHEN YOU CALL 911?**

When you call 911 the dispatcher will ask you questions that help them determine the correct personnel and equipment that needs to be sent. Questions you may be asked are;

**WHAT?** You are the dispatchers eyes and ears. You can provide detailed information that helps them dispatch the right services. Try not to panic, the dispatcher is trained to ask you questions to determine what is needed.


**WHERE?** Knowing where the problem is or where you are is a crucial detail that you can provide when you call 911. Be aware of your surroundings and be as detailed as possible.

**WHO?** If there is a person or persons involved in the incident dispatchers will need good descriptions of what they look like, what they are wearing, or what they might be carrying.

While you answer these questions dispatchers are providing this information to first responders. Do not hang up until the dispatcher tells you.

**TEACH YOUR KIDS ABOUT 911**

It is important that children learn that there are specific times when calling 911 is the right thing to do. Let them know that they should only call when someone or something is hurt or in danger or if they need a police officer, a firefighter, or a doctor.



**CAN AN INACTIVE PHONE CALL 911?**

You may have an old phone laying around at home, maybe your kids use it as a "play phone". Those old phones can still call 911. As long as the phone is charged and turned on a call can be placed to 911. Though an inactive phone does not provide a location or call back number.

If your kids use a real phone as a play phone make sure they know not to dial 911 as a joke or during playtime. If an accidental call is made, stay on the line and let the dispatcher know what has happened.

Source: Iowa HSEMD at <https://homelandsecurity.iowa.gov/programs/911-program/>

**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**

In Jackson County, the Jackson County Emergency Management Agency (JCEMA) and partner jurisdictions, including the cities, lay out the area’s hazard mitigation strategies in the 2024 Jackson County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP).

The 2024 Hazard Mitigation Plan assesses the risks to communities from natural hazards and identifies actions that can be taken in advance to reduce future losses. The law requires all local governments and districts to have an approved plan to be eligible for federal disaster assistance and hazard mitigation funding programs.

*Hazard Identification and Ranking*

The 2024 plan identifies and ranks risks from the natural hazards and the human-caused/technological, or non-natural, hazards. Hazards are prioritized using a scoring system with these four elements of risk:

- **Probability:** the likelihood of a hazard occurring again in the future.

- **Magnitude:** the severity in terms of injuries, fatalities, and damage to property and infrastructure.
- **Warning Time:** the potential amount of warning time available before the hazard occurs.
- **Duration:** how long the hazard will affect the area.

The score is called a Calculated Priority Risk Index (CPRI). Based on each hazard’s overall weighted score, they are ranked as High (3.0-4.0), Moderate (2.0-2.9), and Low (1.0-1.9) for their risk level.

According to the 2024 Hazard Mitigation Plan, these terms relate to the level of planning analysis to be given to the hazard in the risk assessment process and are not meant to suggest that a hazard would have only limited impact. To focus on the most critical natural hazards, those assigned a level of high or moderate were given more extensive attention in the remainder of the risk assessment (e.g., quantitative analysis or loss estimation), while those with a low level were addressed in more general or

qualitative ways. The 2024 overview of hazard ranking scores for Jackson County are in Table 11.1.

Table 11.1 Overview of Jackson County Hazards: Ranking Score Results (2024)		
Natural Hazards	Score	Risk Level
Tornado/Windstorm	3.1	High
Hail/Lightning/Thunderstorm	2.9	Moderate
Flooding -- Riverine	2.55	Moderate
Drought	2.5	Moderate
Excessive Heat	2.4	Moderate
Severe Winter Storm	2.4	Moderate
Wildland/Grass Fire	2.3	Moderate
Dam/Levee Failure	2.2	Moderate
Flooding -- Flash	2.15	Moderate
Sinkholes	1.4	Low
Non-Natural Hazards	Score	Risk Level
Hazardous Materials	2.3	Moderate
Transportation Incident	2.3	Moderate
Infrastructure Failure	2.25	Moderate
Animal/Plant/Crop Disease	2.05	Moderate
Pandemic Human Disease	2.05	Moderate
Terrorism	1.75	Low
Radiological Incident	1.5	Low

Source: 2024 Jackson County MJHMP

**Multi-Jurisdictional Risk Assessment**

Jackson County is fairly uniform in terms of climate and topography as well as building construction characteristics. Accordingly, most weather-related hazards occur similarly across the county.

For the 2024 Hazard Mitigation Plan, the hazards were ranked for the following jurisdictions: unincorporated Jackson County, the 13 cities, and four community school districts: Andrew, Bellevue, Easton Valley, and Maquoketa. Risk assessment for the additional public and private schools that serve Jackson County is found in the Hazard Mitigation Plans for their respective counties. Chapter 4. Community Facilities and Services of this comprehensive plan has information about the schools serving Jackson County.

**Multi-Jurisdictional Mitigation Strategy**

For the 2024 Hazard Mitigation Plan, the Mitigation Strategy was developed through a collaborative group process and consists of updated general goal statements to guide the jurisdictions in efforts to lessen disaster impacts as well as specific mitigation actions that can be

put in place to directly reduce vulnerability to hazards and losses. The following definitions are based upon those found in the March 2023 *Local Mitigation Planning Handbook*:

- **Goals** are general guidelines that explain what the community wants to achieve with the plan. They are usually broad policy-type statements that are long-term, and they represent visions for reducing or avoiding losses from the identified hazards.
- **Mitigation Actions** are specific actions that help achieve goals.
- **Action Plan** describes how the mitigation actions will be carried out.

Jackson County’s hazard mitigation strategy set forth in the 2024 Hazard Mitigation Plan is incorporated by reference in this comprehensive plan. For more information about the 2024 Hazard Mitigation Plan, contact the Jackson County Emergency Management Agency (JCEMA) at <https://jacksoncounty.iowa.gov/emergency-management/>

A **Comprehensive Emergency Operations Plan** describes how the local government will conduct emergency operations:

- Identifies departments and agencies designated to perform response and recovery activities and specifies tasks they must accomplish.
- Outlines integration of assistance that is available to local jurisdictions during disaster situations that generate emergency response and recovery needs beyond what the local jurisdiction can satisfy.
- Specifies the direction, control, and communications procedures and systems that will be relied upon to alert, notify, recall, and dispatch emergency response personnel; warn the public; protect residents and property; and request aid/support from other jurisdictions and/or the Federal Government (including the role of the Governor’s Authorized Representative).
- Provides coordinating instructions and provisions for implementing mutual aid agreements, as applicable.
- Describes the logistical support for planned operations.

Source: “Developing and Maintaining Emergency Operations Plans,” FEMA, November 2010 at [https://www.fema.gov/sites/default/files/2020-05/CPG\\_101\\_V2\\_30NOV2010\\_FINAL\\_508.pdf](https://www.fema.gov/sites/default/files/2020-05/CPG_101_V2_30NOV2010_FINAL_508.pdf)



**LOCAL, STATE, & FEDERAL PROGRAMS**

*Jackson County Emergency Management Agency (JCEMA)*

The JCEMA coordinates emergency management and hazard mitigation activities in Jackson County in partnership with federal, state, county, and city governments, schools, private companies, businesses, volunteer organizations, and individuals.

Through its emergency management grant fund, the JCEMA can apply for and manage state and federal pass-through grants for hazard mitigation, emergency management, and disaster response projects on behalf of the county and individual cities.



*Iowa Department of Homeland Security and Emergency Management (HSEMD)*

HSEMD programs and campaigns offer a variety of information, training, and assistance with federal government, non-profit, faith-based, volunteer, and private-sector partners.

The **School Safety Improvement Fund** provides up to \$50,000 per school building to implement recommended safety measure capital improvements identified through the vulnerability assessment.

*Federal Grant Programs – Managed By HSEMD Available to Local Governments*

The **Emergency Management Performance Grant (EMPG)** assists with development, maintenance, and improvement of state and local emergency management capabilities.

The **State Homeland Security Program (SHSP)** supports state, local, and tribal efforts to build, sustain, and deliver the capabilities necessary to prevent, prepare for, protect against, and respond to acts of terrorism.

The **Nonprofit Security Grant Program – State (NSGP-S)** integrates preparedness activities of nonprofit organizations with broader state and local preparedness efforts. It supports physical security enhancements and other security-related activities to nonprofit organizations at high risk of a terrorist attack.

The **State and Local Cybersecurity Grant Program (SLCGP)** provides funding to eligible entities to address cybersecurity risks and threats to information systems owned or operated by, or on behalf of, state, local, or tribal governments.

<https://homelandsecurity.iowa.gov/grants-overview/>

*Iowa Individual Assistance Programs*

The **Iowa Individual Disaster Assistance Grant Program (IIAGP)** offers grants to families whose household’s annual income is at *200% or less of the federal poverty level*. Each eligible household may receive up to \$5,000 for items that qualify under one of the four categories: temporary housing, food assistance, personal property, and home repair. Supporting documentation is required.

<https://homelandsecurity.iowa.gov/assistance/>

The **Iowa Disaster Case Advocacy Program** is designed to address serious needs to overcome a disaster-related hardship, injury or adverse condition.

*There are no income eligibility requirements for this program.* Disaster case managers work with clients to create a disaster recovery plan and provide guidance, advice and referral to obtain a service or resource. For Jackson County, service is provided by the Hawkeye Community Action Program, Inc. in Hiawatha.

#### ***Disaster Unemployment Assistance***

After a Presidential Disaster Declaration for Individual Assistance, certain Iowans may be eligible for the federal **Disaster Unemployment Assistance (DUA) Program**. This program extends unemployment insurance benefits to self-employed civilians, farm workers, individuals who have worked for only a few weeks, and others who have lost earned income or whose income has been interrupted as a result of a major disaster. The benefits cover those usually not entitled to unemployment insurance. Claims are handled by Iowa Workforce Development.

#### ***Iowa Crisis Counseling***

The Iowa Department of Health and Human Services offers **Project Recovery Iowa**, which provides free counseling and support for those impacted by disasters with resources for ongoing support.

The **Iowa Disaster Behavioral Response Team (DBHRT)** are trained volunteers who can mobilize resources to provide post-disaster mental health services statewide to individual victims, family members, volunteers, responders, survivors, or the community affected by critical incidents or disasters.

<https://homelandsecurity.iowa.gov/disasters/individual-assistance/>

#### ***Federal Emergency Management Agency (FEMA) Disaster Grants***

FEMA's **Public Assistance** program awards grants to assist state and local governments and certain nonprofit organizations with response to and recovery from disasters. The program provides funding for debris removal, implementation of emergency protective measures, and permanent restoration of infrastructure. The program also encourages protection from future

damage with aid for hazard mitigation measures during the recovery process. HSEMD works with FEMA to manage the program and administer the funding.

#### ***FEMA Hazard Mitigation Grants***

FEMA's two **Hazard Mitigation Assistance (HMA)** programs provide both pre- and post-disaster grant funding.

The **Building Resilient Infrastructure and Communities (BRIC)** program is for research-supported, proactive investment in community resilience with innovative approaches to partnerships, such as shared funding mechanisms, and/or project design.

The **Flood Mitigation Assistance (FMA)** program was created to assist states and communities in implementing measures that reduce or eliminate the long-term risk of flood damage to buildings insured under the National Flood Insurance Program. There are three types of FMA grants available to states and communities: planning, project, and management cost grants.

<https://homelandsecurity.iowa.gov/grants-overview/>

***U.S. Department of Agriculture (USDA) Assistance For Agricultural Producers***

The USDA offers a variety of **Disaster Assistance Programs** to help farmers, ranchers, communities, and businesses that have been hard hit by natural disaster events through the **Farm Service Agency (FSA)**. Eligible agricultural producers who have sustained losses from recent weather events can apply for assistance through the local Farm Service Agency office at the USDA Service Center in Maquoketa.

Following is a list of available FSA programs; visit [farmers.gov](http://farmers.gov) for additional USDA programs that can help agricultural producers recover.

**Livestock Assistance:** Livestock Forage Disaster Program, Livestock Indemnity Program, Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish (ELAP), and Emergency Livestock Relief Program (ELRP).

**Farm Loans:** Emergency Loan Program and Disaster Set-Aside Program.

**Farmland Damage:** Emergency Conservation Program (ECP) and

Emergency Forest Restoration Program (EFRP).

**Crop Losses:** Noninsured Disaster Assistance Program (NAP) and Tree Assistance Program (TAP).

***SBA Assistance for Private Non-Profits***

The U.S. Small Business Administration (SBA) may provide **low-interest federal loans to private nonprofit organizations** (PNPs) that provide essential services of a governmental nature after a disaster to repair or replace damaged or destroyed real estate, machinery and equipment, inventory, and other business assets. <https://homelandsecurity.iowa.gov/disasters/individual-assistance/>

***USDOT Hazardous Materials Grant***

The U.S. Department of Transportation (USDOT) **Hazardous Materials Emergency Preparedness (HMEP)** grant program provides financial and technical assistance to eligible Local Emergency Planning Committees (LECPs) for hazmat planning and training. A guidebook for conducting hazardous materials commodity flow studies can be downloaded at no cost at

<https://www.trb.org/Publications/Blurbs/165775.aspx>.

Jackson County is part of the Region 6 LEPC. The Davenport Fire Department is the hazmat response team for Jackson County.

<https://homelandsecurity.iowa.gov/programs/lepc/>



Haz Mat Team Source: <https://ready.iowa.gov/>

***Ready Iowa***

Ready Iowa is an online resource of the Iowa HSEMD that helps people to be prepared for and be aware of potential disasters and emergencies. Learn more at <https://ready.iowa.gov/>



**ISSUES AND OPPORTUNITIES**

The following information is from the 2024 Jackson County Multi-Jurisdictional Hazard Mitigation Plan.

*Monitoring, Evaluating, and Updating the Plan*

**Issue:** With adoption of the Hazard Mitigation Plan, the Hazard Mitigation Planning Committee (HMPC) is tasked with plan monitoring, evaluation and maintenance, led by the Jackson County Emergency Management Coordinator.

The HMPC is an advisory body and can only make recommendations to county, city, town, or district elected officials. Its primary duty is to see the plan successfully carried out and to report to the community governing boards and the public on the status of plan implementation and mitigation opportunities.

**Opportunities:**

*Plan Maintenance Schedule:* The HMPC agreed to meet annually to monitor progress, discuss recent hazard events, changes in development that impact

vulnerability, and update the mitigation strategy.

The Jackson County Emergency Management Coordinator is responsible for initiating the plan reviews which will be integrated into the regularly scheduled Emergency Management Commission meetings.

In coordination with the other participating jurisdictions, a five-year written update of the plan will be submitted to the Iowa HSEMD and FEMA.

*Plan Maintenance Process:* Evaluation of progress can be achieved by monitoring changes in vulnerabilities identified in the plan. Changes in vulnerability can be identified by noting:

- Decreased vulnerability as a result of implementing recommended actions,
- Increased vulnerability as a result of failed or ineffective mitigation actions, and/or
- Increased vulnerability as a result of new development (and/or annexation).

*Incorporation into Existing Planning Mechanisms*

**Issue:** Many of the small jurisdictions in Jackson County do not have standing formal planning mechanisms such as a Comprehensive Plan or Capital Improvements Plan through which formal integration of mitigation actions can be documented.

As a result, activities that occur in these small communities are developed through annual budget planning, regular City Council Meetings, and other community forums rather than a formal planning process.

**Opportunities:** Where possible, plan participants use existing plans and/or programs to implement hazard mitigation actions. After the annual review of the Hazard Mitigation Plan, the Emergency Management Coordinator provides the updated Mitigation Strategy with current status of each mitigation action to the county’s Emergency Management Commission and county Department Heads as well as all Mayors, City Clerks, and School District Superintendents requesting that the updated mitigation strategy be

incorporated, where appropriate, in other planning mechanisms.

#### *Continued Public Involvement*

**Issue:** The update process provides an opportunity to publicize success stories from the plan's implementation and seek additional public comment.

**Opportunities:** The public is involved in the plan maintenance process by publication of a press release after each annual review indicating the committee has met with a summary of mitigation action status updates and highlights of specific completed mitigation actions, as applicable.

When the HMPC reconvenes for an update, it coordinates with all stakeholders participating in the planning process, including those who joined the HMPC after the initial effort, to update and revise the plan.

Public notice is posted through available website postings and social media outlets.

#### *Plan Update*

**Issue:** The five-year update for Jackson County's 2024 Hazard Mitigation Plan is scheduled for completion in 2029.

**Opportunities:** Jackson County's integration process for annual updates of the 2024 Hazard Mitigation Plan is:

- Incorporate into annual emergency management training, planning, and purchasing plans.
- Continue coordination of mitigation strategy with the county's Emergency Management Grant Fund as well as seek additional funding sources.
- Continue integration of the Risk Assessment in future updates of the county's Comprehensive Emergency Operations Plan.
- Incorporate into future updates of the county's Comprehensive Plan.

**GOALS AND OBJECTIVES**

*Mitigation*

11.1 Protect the health, safety and quality of life for Jackson County citizens while reducing or eliminating property losses, economic costs, and damage to the natural environment caused by a disaster.

- Maintain or consider National Flood Insurance Program (NFIP) membership as required.
- Continue to maintain and enforce snow removal policies.
- Purchase or elevate structures, add lift stations, increase/reinforce culvert size, and add curb and gutter to streets in areas in flood zones with severe and repetitive flood damage to prevent reoccurrence.

*Prevention*

11.2 Ensure government operations, response and recovery in Jackson County are not significantly disrupted by disasters.

- Provide backup power generators and wiring for critical facilities.

- Consider building a tornado safe room for all new construction and rehabilitation projects.
- Train personnel as weather spotters.

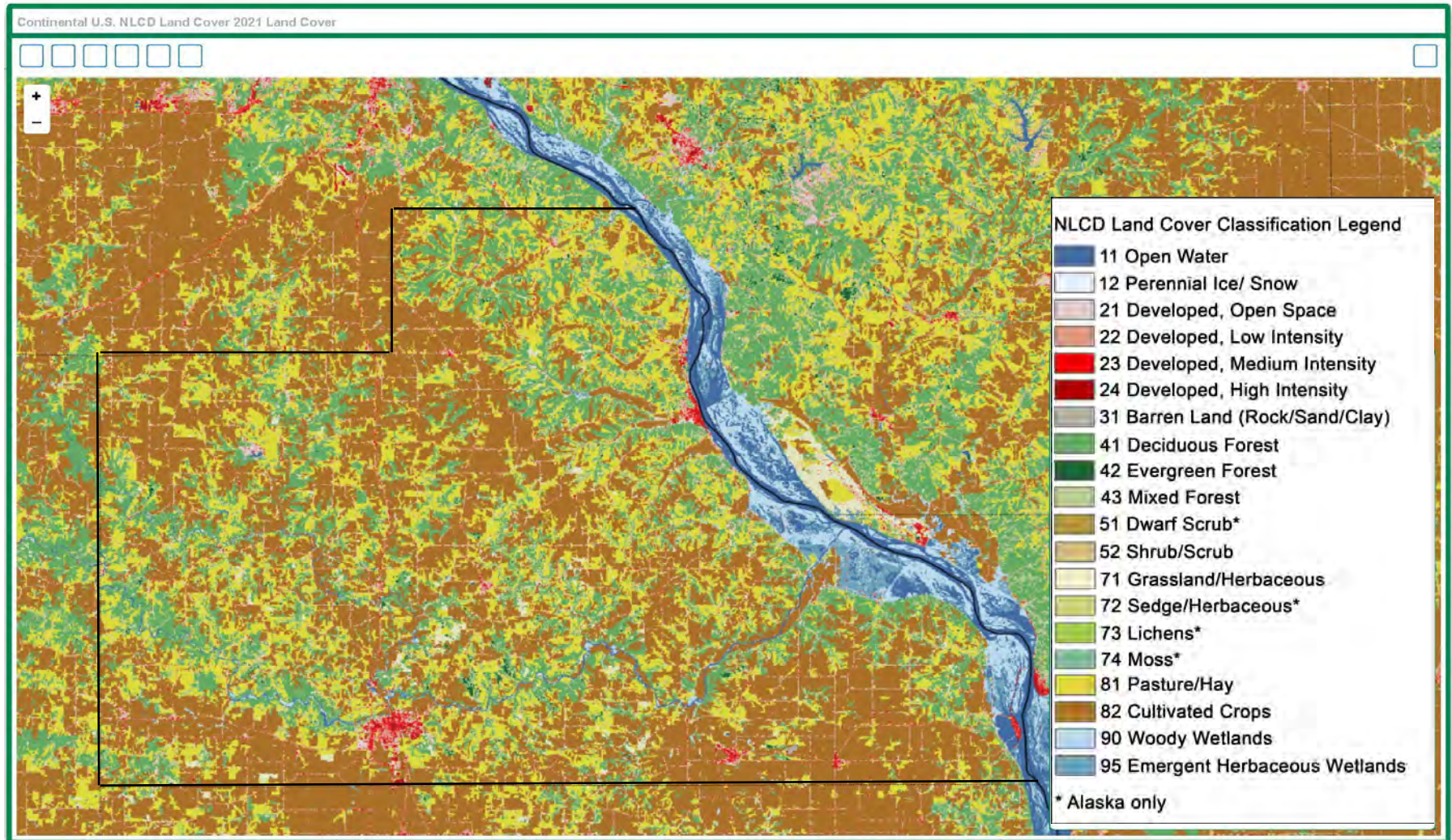
*Preparedness*

11.3 Expand public awareness and encourage intergovernmental cooperation, coordination and communication in Jackson County to build a more resilient community against all hazards.

- Continue to maintain existing outdoor warning siren systems and ensure appropriate coverage for population or ensure National Oceanic and Atmospheric Administration (NOAA) weather radios are available in uncovered areas.
- Purchase barricades and signage as deemed necessary to better communicate information.
- Continue to improve public awareness of hazardous weather through newsletters, public notices, strolling signs, etc.

- Create a data base of individuals with special needs to assist in a hazard event.
- Review and implement snow policies and implement during smaller storms as appropriate so residents are familiar with rules and regulations.

# Chapter 12. Land Use



Land Cover Map for Jackson County (2021) Source: Multi-Resolution Land Characteristics Consortium, <https://www.mrlc.gov/viewer/> Dec. 2023

## OVERVIEW

Land use planning is a very important part of effective local governance. The future land use plan establishes the county's goals and priorities that will guide decision making for a variety of situations. The Comprehensive Plan also encourages orderly development of land that minimizes conflicts between incompatible land uses and preserves key resources.

The goal of this chapter is to help Jackson County plan for future development by evaluating its conditions and resources and by making recommendations that ensure the community can grow while keeping its rural character.

## LAND DEVELOPMENT TOOLS

Jackson County has several regulatory tools available to help promote orderly land development. The county can use its zoning, subdivision, and floodplain management ordinances and its resolutions regarding land use policy and ancient burial mounds to help establish logical and orderly land use patterns that address the priorities established in the Comprehensive Plan. This section covers the ordinances and resolutions that the county can utilize to implement its development priorities.

### *Zoning Ordinance*

In conjunction with the Comprehensive Plan, Jackson County uses its zoning ordinance to establish orderly land use patterns. The zoning ordinance divides the county into districts and defines how property within those districts can be used. The zoning ordinance assigns compatible uses to the same district and separates incompatible uses. Zoning also regulates the physical characteristics of structures (such as height and size), their separation from other buildings, and standards for parking and signage.

### *Zoning Ordinance Application*

The Jackson County zoning ordinance applies to the unincorporated areas of Jackson County. The ordinance also applies to properties located within the boundaries of an incorporated city if the city has not adopted its own zoning regulations.

The Iowa Code gives cities the ability to create their own zoning ordinances that apply to areas within their corporate limits. In Jackson County the cities of Bellevue and Maquoketa have adopted zoning ordinances.

Iowa Code Chapter 335 County Zoning exempts farmland, farm houses, farm barns, farm outbuildings, or other buildings or structures which are primarily adapted for use for agricultural purposes from county zoning ordinances. However, Iowa Code Chapter 335 also states that county zoning ordinances may apply to any structure, building, dam, obstruction, deposit, or excavation in or on the floodplains of any river or stream.



**What is the purpose of county zoning regulations in Iowa?**

Iowa Code Chapter 335 County Zoning (<https://www.legis.iowa.gov/docs/code/335.pdf>) requires in section 335.5 that:

1. The regulations shall be made in accordance with a comprehensive plan and shall be designed:

- to preserve the availability of agricultural land;
- to consider the protection of soil from wind and water erosion;
- to encourage efficient urban development patterns;
- to lessen congestion in the street or highway systems;
- to secure safety from fire, flood, panic, and other dangers;
- to protect health and the general welfare;
- to provide adequate light and air;
- to prevent the overcrowding of land;

- to avoid undue concentration of population;
- to promote the conservation of energy resources;
- to promote reasonable access to solar energy; and
- to facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements.

2. The regulations shall be made with reasonable consideration, among other things, as to the character of the area of the district and the peculiar suitability of such area for particular uses, and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout such county.

3. The regulations and comprehensive plan shall be made with consideration of the smart planning principles in Iowa Code Chapter 18B Land Use – Smart Planning.

For more information, see Chapter 1. Introduction of this comprehensive plan.

**Zoning Districts**

Jackson County’s zoning ordinance divides the county into five zoning districts. A brief description of each district is provided below.

The **A-1 Agricultural District** is intended to preserve areas appropriate for agriculture and related uses and to reserve areas suitable for the efficient development of other uses when and if there is a demonstrated need and intent to develop such areas in accordance with the future land use policy.

The **R-1 Residential District** is intended to provide for limited residential development in the rural areas of the county where such use is compatible with surrounding land uses and where residential development will result in the most appropriate permanent use of the land regarding agricultural land, woodlands, and other natural resources.

The **C-1 Highway Commercial District** is intended to provide areas for commercial development which primarily serve the travelling public. This district is also intended to accommodate certain other

commercial uses which ordinarily require access to a major street or highway.

The **M-1 Limited Industrial District** is intended principally for manufacturing, processing, storage, wholesaling, distribution, and related uses that are generally contained within a building. It is further the intent of this district to accommodate such uses in appropriate locations which will not adversely affect existing and future land uses in other districts.

The **M-2 General Industrial District** is intended primarily for heavy manufacturing and closely related uses while providing protection against harmful effects to existing and future uses in other districts.

As shown in Figure 12.1, the zoning map of Jackson County, the A-1 Agricultural District (shown in white) covers most of the county.

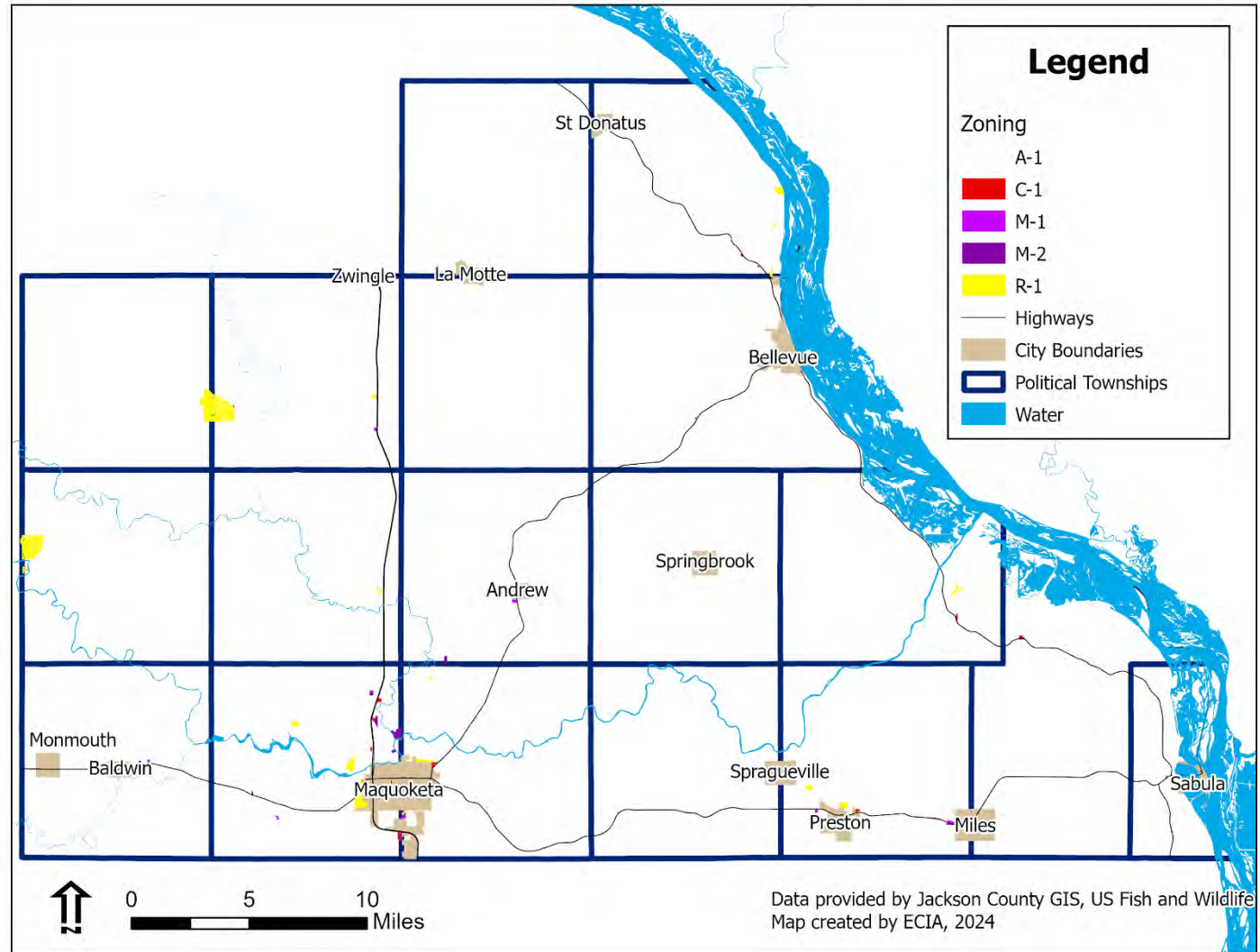


Figure 12.1 Zoning Map of Jackson County (2024)

Source: Jackson County GIS

**Subdivision Ordinance**

Jackson County’s subdivision ordinance provides rules for the division and development of vacant land into parcels for agricultural, commercial, residential, or industrial uses. The ordinance aims to:

- provide a balance between land use rights of individuals and the economic, social, and environmental concerns of the public; and
- encourage orderly community development and provide control for the extension of public improvements, services, and utilities.

In Jackson County the cities of Bellevue, Maquoketa, and Preston also have adopted subdivision ordinances.

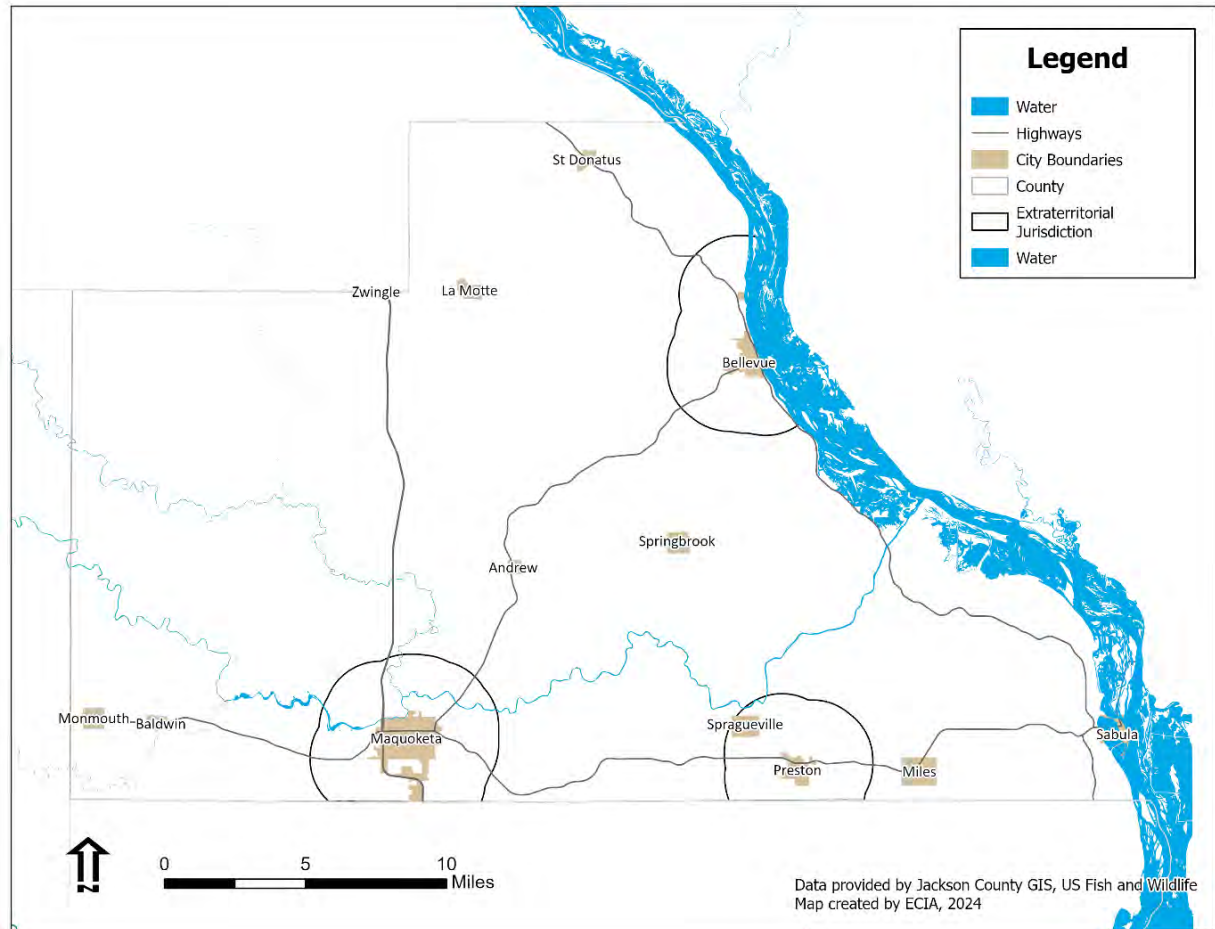
**Extraterritorial Jurisdiction**

Iowa Code gives cities that have adopted subdivision ordinances the option to review subdivision plats that are located within two miles of their city boundaries. If a property owner within two miles of the city plans to subdivide their land, they must apply to both Jackson County

and that city for approval. The cities of Bellevue, Maquoketa, and Preston have adopted two-mile extraterritorial jurisdictions for subdivision review.

Figure 12.2 shows the two-mile

extraterritorial jurisdictions of these cities.



**Figure 12.2 Extraterritorial Jurisdiction in Jackson County (2024)** Source: Jackson County GIS

**Floodplain Management Ordinance**

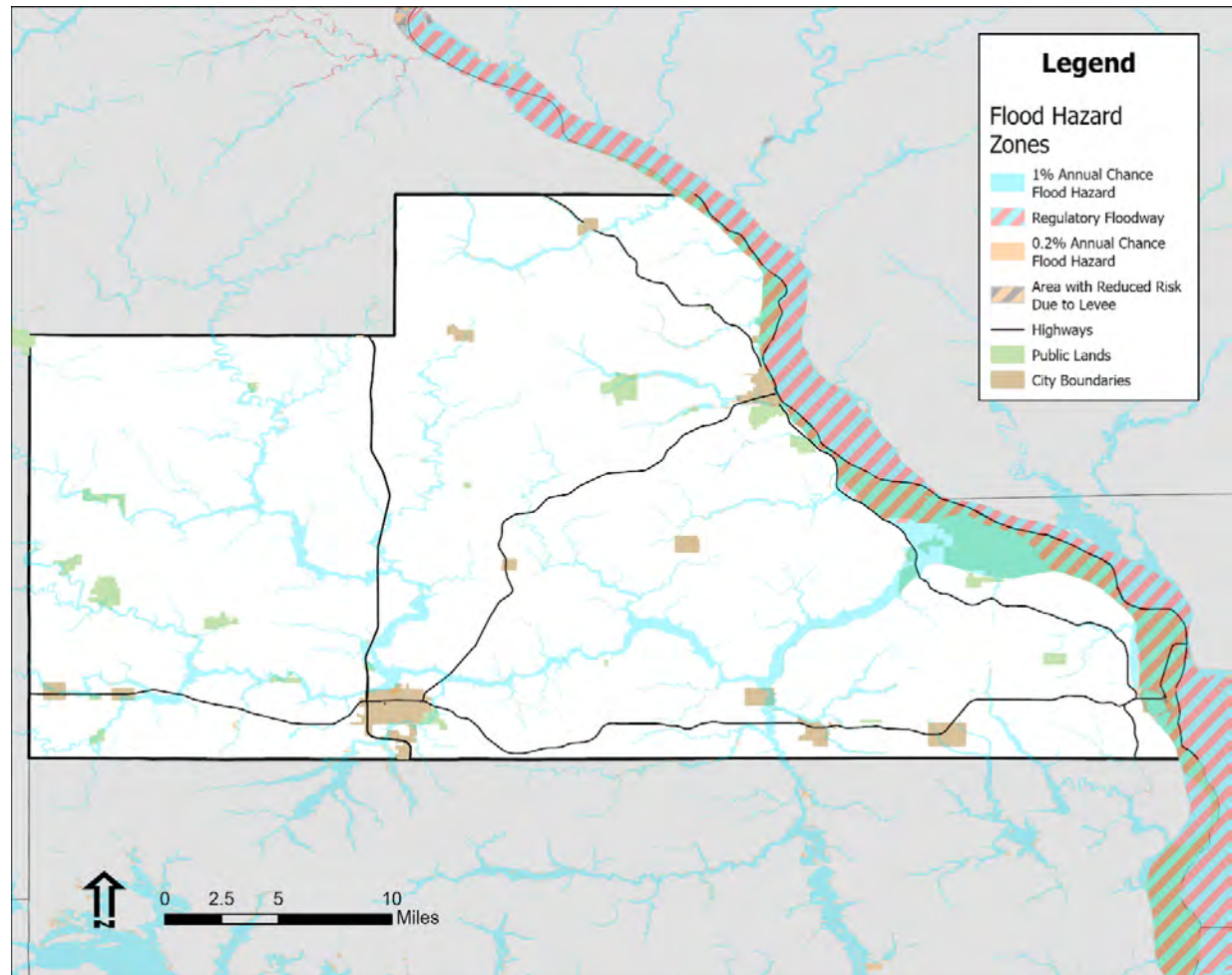
Jackson County’s floodplain management ordinance applies to all lands and uses which have significant flood hazards. The Iowa Code’s agricultural exemption for zoning does not apply to regulated floodplains. The cities of Bellevue, Maquoketa, and Preston have adopted floodplain management ordinances.

The Flood Insurance Rate Map produced by the Federal Emergency Management Agency (FEMA) for Jackson County identifies all flood hazard areas within the 100-year flood boundary (see Figure 12.3). There are multiple types of flood hazard zones present in Jackson County:

- The 1% annual chance flood zone has a 1% chance of its height being equaled or exceeded in a given year.
- The 0.2% annual chance flood zone has a 0.2% chance of its height being equaled or exceeded in a given year.
- A "Regulatory Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without

cumulatively increasing the water surface elevation more than a designated height.

- Areas with reduced risk due to levee indicate that the area is provided protection through a levee system that prevents overflow.



**Figure 12.3 Flood Hazard Zones in Jackson County (2024)**

Source: FEMA

**Land Use Policy Resolution**

Resolution #485-02-17-98, as amended by Resolution #116-09-09-03, of the Jackson County Board of Supervisors established the Jackson County Land Use Policy.

**GOALS:** The fundamental goals of land use planning and regulation in Jackson County are to enhance the quality of life of our residents, to utilize and conserve land and other natural resources to the best advantage and to provide a desirable level of facilities and services as economically and efficiently as possible.

**Land Use Objectives**

1. Accommodate anticipated growth by providing optimum locations for residential, commercial, industrial, public and semi-public land uses.

A. Residential land use in the rural area of the county should consist of single-family dwellings. Multi-family dwellings or high-density development should be encouraged to locate near the population centers where an adequate level of municipal facilities and services

as well as streets, schools and other facilities are available.

B. Commercial development in the county should be limited primarily toward highway-oriented uses and agricultural services. Major retail shopping centers should be encouraged to locate in urban areas.

C. Industrial development should be encouraged to locate along major transportation arteries and at locations where adequate utilities and services exist or can be readily supplied.

D. Locations for public and semi-public uses must be selected with regard for agricultural land, woodland and other natural resources as well as proximity to major streets and highways, users and effects on the environment.

2. Encourage future growth and development to occur in a compact and orderly manner.

3. Protect valuable natural resources from incompatible uses or other uses that would make their future utilization difficult or impossible.

4. Encourage urban development to take place near cities and towns where municipal facilities, such as sewers and water, are or will ultimately become available.

5. Future development should be coordinated with existing and proposed transportation systems.

6. Flood plains must be protected from encroachment.

7. The natural beauty and historic treasures of the county should be conserved and enhanced for the benefit of the population of Jackson County and the entire region.

8. The land use plan must have sufficient flexibility to permit private enterprise to operate freely in an open market.

9. Accommodate existing development without encouraging its continued growth in inappropriate areas.

10. Encourage home-based enterprise which does not conflict with neighboring uses.

The complete Land Use Policy contains commentary on each objective.

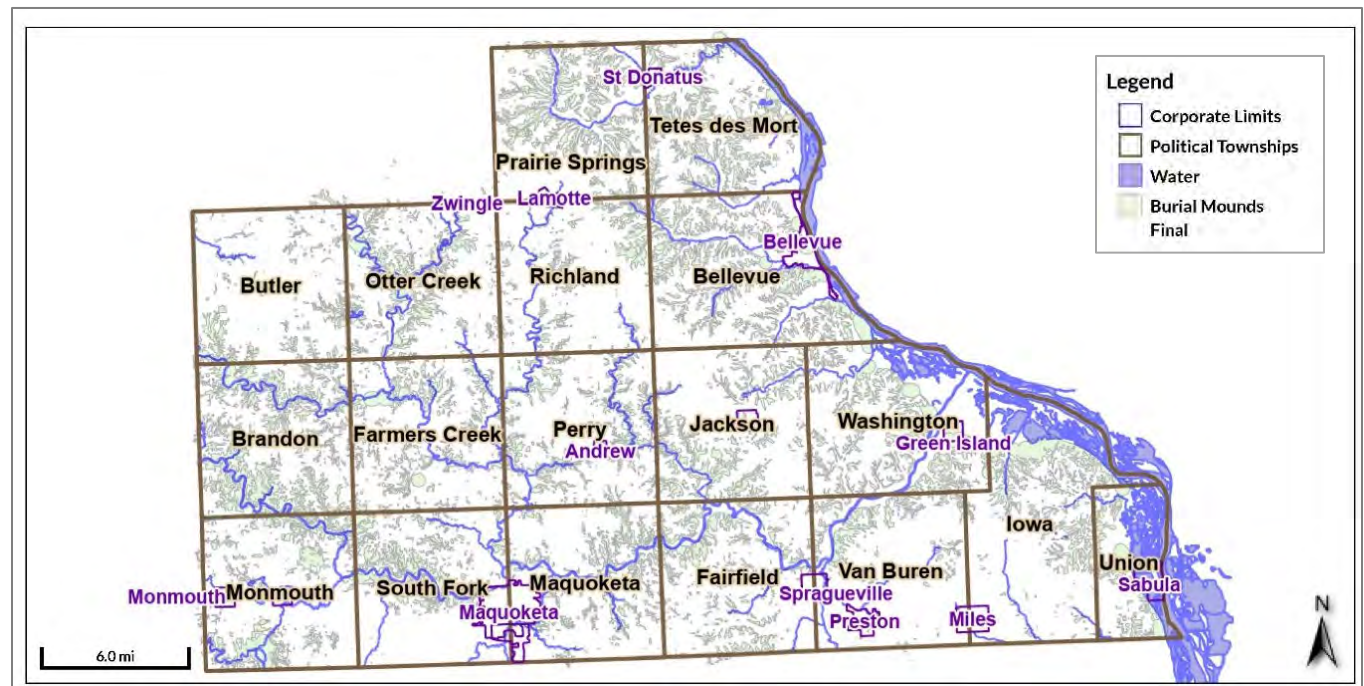
**Ancient Burial Mounds Resolution**

Jackson County has had two archeological projects completed to identify and protect ancient burial mound sites. Both projects were initiated by Jackson County due to concerns that mounds cannot be protected in accordance with Iowa Code Chapter 263B and Iowa Administrative Code 685-11 if they are not properly identified.

Jackson County Resolution #184-12-07-99 established certain procedures to guard against destruction of ancient burial mounds in the course of developments which require specific approval of the Board of Supervisors or the Zoning Board of Adjustment. In 2024, the official Mound Potential Map became available to the public on the county’s Geographic Information System (GIS) as shown in Figure 12.4.

Whenever applications are received for rezoning of land, subdivision of land, special exception uses, or structures

within the areas of the county designated on the Mound Potential Map as having significant potential for the existence of mounds, the Jackson County Zoning Administrator contacts the OSA to determine whether or not the site proposed for development, or any land within one-quarter mile, contains mounds known to the OSA.



**Figure 12.4 Mound Potential Map of Jackson County (2024)**

Source: Jackson County GIS

**EXISTING LAND USE**

This section covers the existing land use within the County to best understand current conditions within the county.

*Urban and Rural Breakdown*

Table 12.1 shows the breakdown of rural (unincorporated areas) and urban (incorporated cities) land collected with GIS analysis of existing parcel data. Jackson County is mostly rural with its incorporated communities composing less than 2% of the county’s total area.

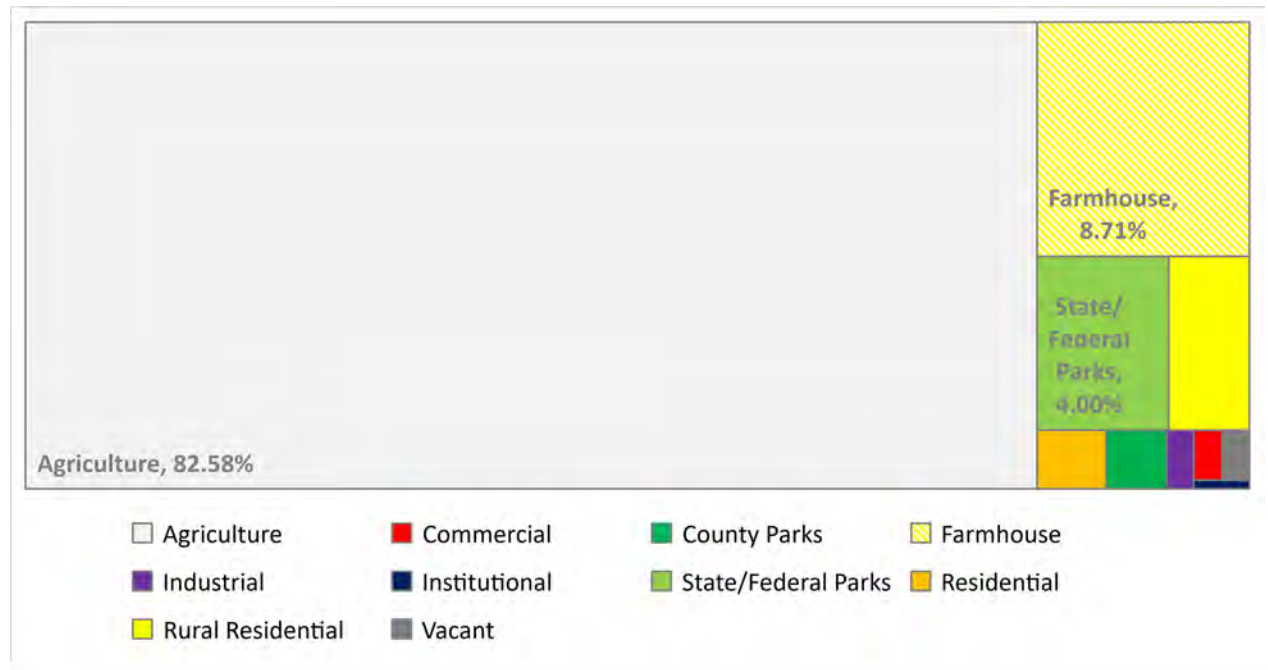
*Land Use Categories*

The comprehensive plan uses nine categories to describe land uses within Jackson County. Figure 12.5 shows the breakdown of unincorporated parcels in Jackson County by land use type. Nearly 83% of the land use is agricultural.

The land use categories are described below and shown in the map of existing land use for Bellevue Township (see Figure 12.6). Existing land use maps for all 18 townships in Jackson County are shown in Figures 12.13 through Figure 12.30 at the end of this Chapter.

Type of Land	Number of Parcels	Total Acres	Percent	Average Parcel Size in Acres
<b>Urban (Incorporated Cities)</b>	6,279	66,13.22	1.62%	1.05
<b>Rural (Unincorporated Areas)</b>	15,982	402,689.82	98.38%	25.20

Source: Jackson County GIS



**Figure 12.5 Land Uses in Unincorporated Jackson County (2023)**

Source: Jackson County GIS

**Agricultural** (white) is land use solely for farms and agricultural purposes such as crop and livestock production.

**Commercial** (red) is land used for variety of businesses that provide goods and services.

**Industrial** (purple) is land used for manufacturing, warehousing, wholesale trade, construction, and quarrying.

**Institutional** (blue) is land used for public facilities such as governmental buildings, schools, churches, cemeteries, and health services.

**County Park** (dark green) is County owned land used for parks, passive and active recreation areas, trails, and conservation areas.

**State/Federal Park** (green) is state or federally owned land used for parks, passive and active recreation areas, trails, and conservation areas.

**Residential** (orange) is residentially zoned land used for single-family, two-family or multi-family dwellings.

**Rural Residential** (yellow) is a dwelling on agriculturally-zoned land that is classified for tax purposes as residential.

**Farmhouse** (yellow and white stripes) is a farm with a dwelling. These parcels will be both agriculturally zoned and classified as agricultural for tax purposes.

**Vacant** (gray) is land used for open space or agricultural purposes that is zoned or platted for a different use; for example, a lot in a subdivision where no dwelling is built on it. These parcels would generally be in an agricultural or residential zone.

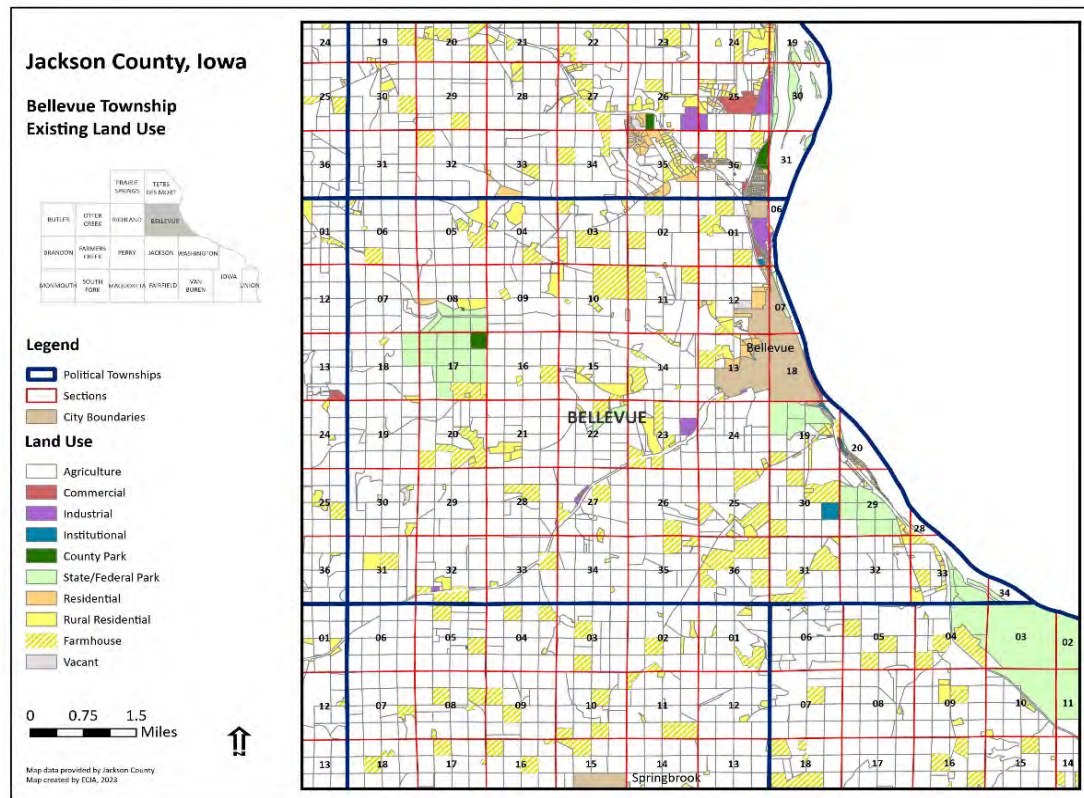


Figure 12.6 Existing Land Use Map for Bellevue Township (2023)

Source: Jackson County GIS

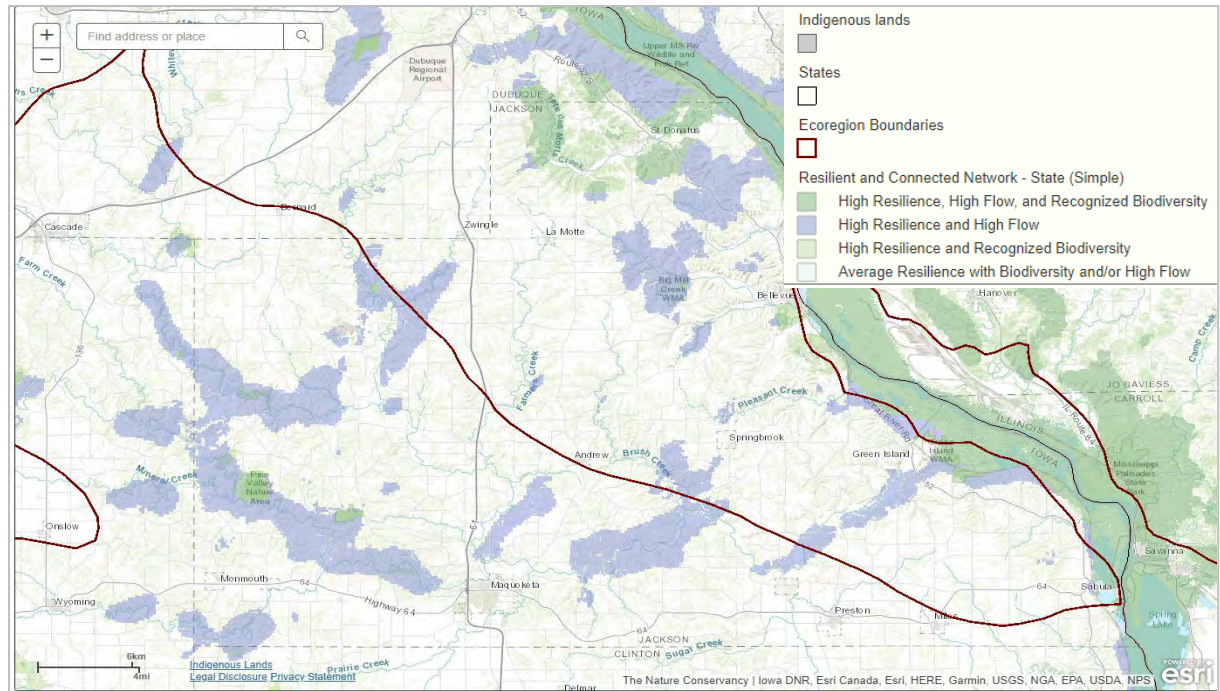


**FUTURE LAND USE ANALYSIS**

New growth can be a powerful catalyst for economic development within a community. Therefore, it is important that the location and type of growth is suitable for the existing conditions in Jackson County. When development occurs within the county it is important that it can answer the questions that have to be addressed to ensure the development is suitable for the area, such as:

- Is adequate infrastructure available?
- Will the use negatively impact surrounding lands?
- Is the topography and land quality suitable for the development?
- Is the land on a floodplain?
- Will the development lead to negative environmental impacts?

This section identifies criteria that can be evaluated to identify appropriate areas for new development. The criteria can be evaluated during the review process for a proposed development project.



**Figure 12.7 Climate Resilient Sites in Jackson County (2024)**

Source: Nature Conservancy, <https://www.maps.tnc.org/resilientland/> accessed Jan. 2024

**Land Development Tools**

Review of all of Jackson County’s land development tools should be conducted for each development project: zoning, subdivision, and floodplain management ordinances; and land use policy and ancient burial mound resolutions.

**Resiliency**

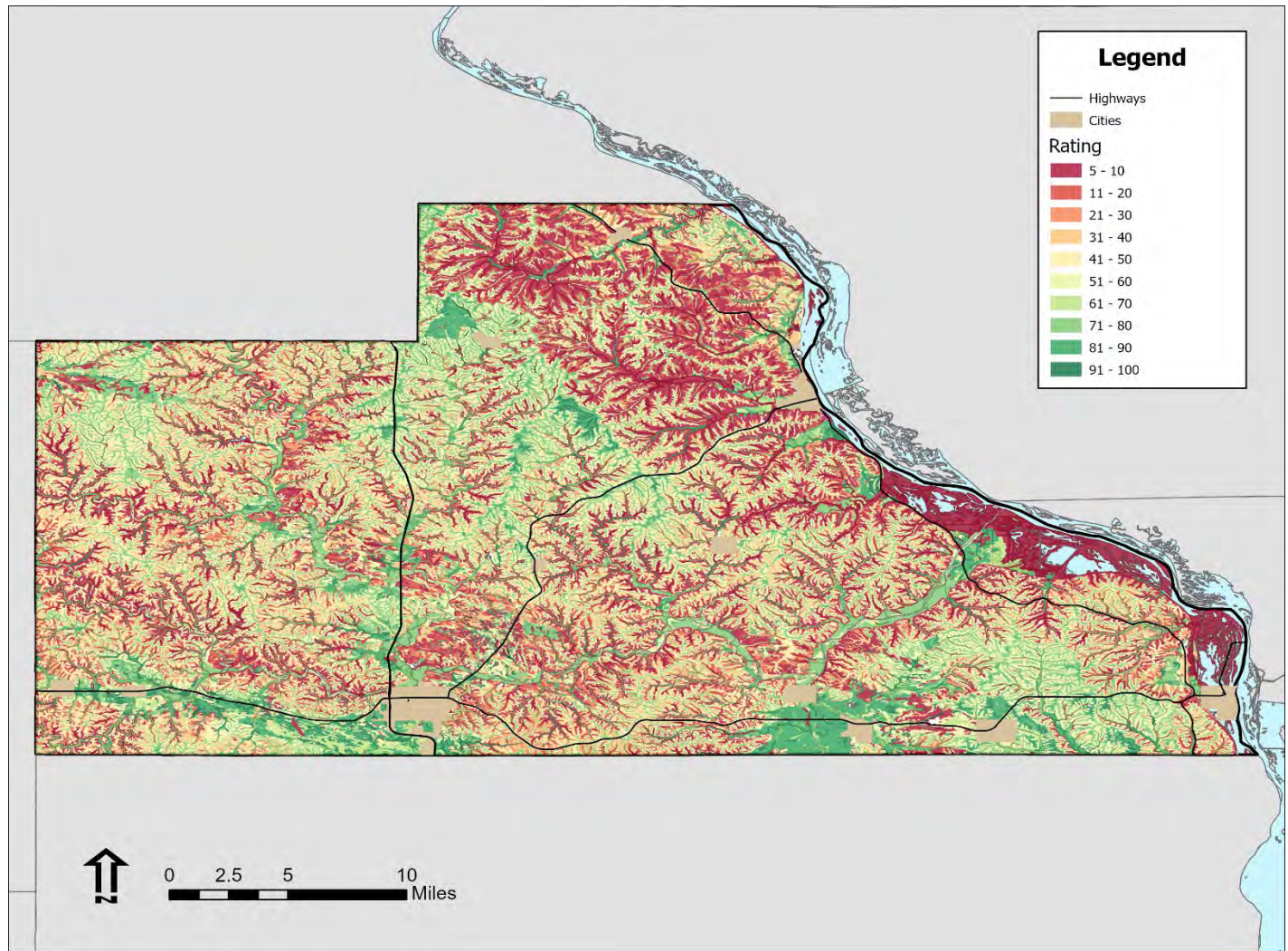
Preserving sites with high levels of climate resiliency is also important to

protect the biodiversity and ecological functions of the area. As referred to in Chapter 9. Agriculture and Natural Resources, the Resilient and Connected Network mapped a collection of resilient sites (see Figure 12.7). If development is to occur at sites with high resiliency for biodiversity, it is important that the development mitigates its risk on the natural environment.

**Corn Suitability Rating**

Corn Suitability Rating (CSR2) is an index developed by Iowa State University that rates soil types by their potential row-crop productivity. Its purpose is to equalize tax assessments based on the soil types and their inherent agricultural properties. For more information on CSR2 see Chapter 9. Agriculture and Natural Resources.

CSR2 is one indicator of agricultural capabilities for a given area and can help guide which areas are better suited for agriculture or development. Figure 12.8 shows land in Jackson County by CSR2. The higher rating (in green) indicates better suitability for agricultural purposes.



**Figure 12.8 Land in Jackson County by Corn Suitability Rating 2 (CSR2)**

Data Source: Iowa State University

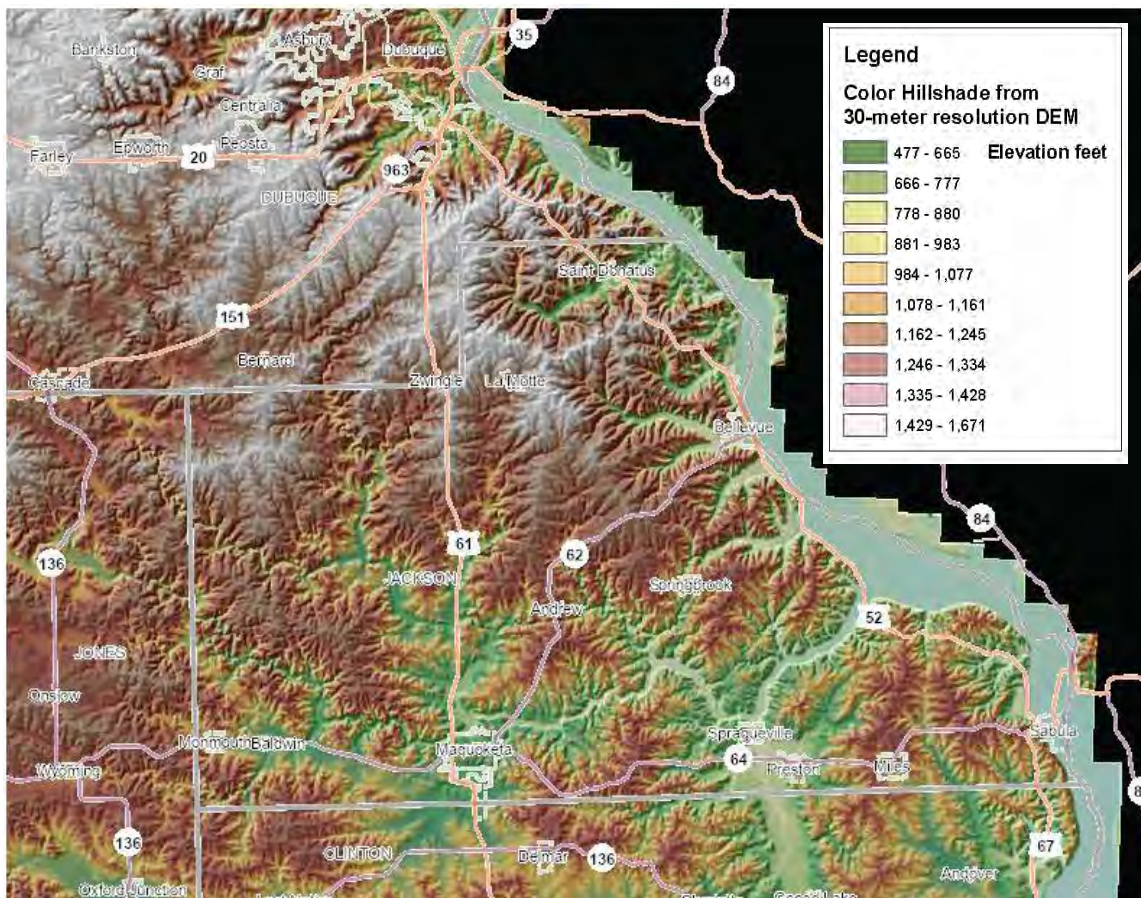
**Land Quality**

Land quality refers to the extent that land is free from contamination and therefore suitable for a particular use.

The existing measures of land quality discussed in Chapter 9. Agriculture and Natural Resources of this Comprehensive Plan can also be a way to determine whether land is more suited for agricultural purposes or for development. Determining the Natural Resource Conservation Service (NRCS) Land Capability Class for a site could be an indicator as to whether the land is appropriate for the type of development being proposed.

**Topography**

Jackson County’s unique topography is also important to consider for development. The karst terrain present in Jackson County creates sinkholes that can create challenges for development as they may not be able to support certain types of uses. There is also the presence of steep bluffs along the Mississippi that also limit development. Figure 12.9 shows a topographic map of Jackson County.



**Figure 12.9 Topographic Map of Jackson County (2024)**

Source: Iowa Geographic Map Center, 2024

**Other Development Regulations**

Coordination is necessary with other county and state offices that may impact development. These include road access and E911 addressing by the County

Engineer, location of wells and septic systems by the County Health Department, and floodplain development by the Iowa Department of Natural Resources.

**Preliminary Analysis with GIS Mapping**

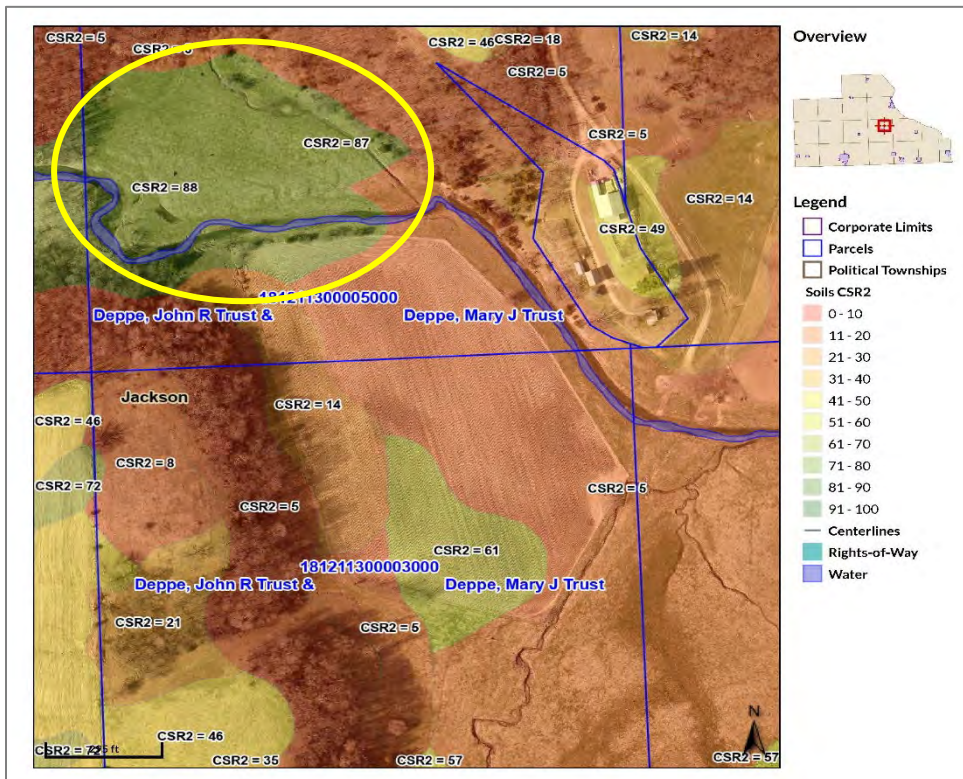
The Jackson County GIS provides some preliminary tools for land use analysis in connection with future development. The corn suitability rating (CSR2), regulated floodplain, and potential burial mound areas are three layers that can help identify development constraints.

Figure 12.10 is a sample land use analysis map using CSR2 data. Land within the yellow circle has CSR2 ratings of 88 and 87, indicating high suitability for growing corn. The area of land to the south has CSR2 ratings from 5 to 14, indicating low suitability for growing corn.

The southern third of the land within the yellow circle lies in the floodplain, and a portion in the northeast quadrant lies in the potential burial mound area.

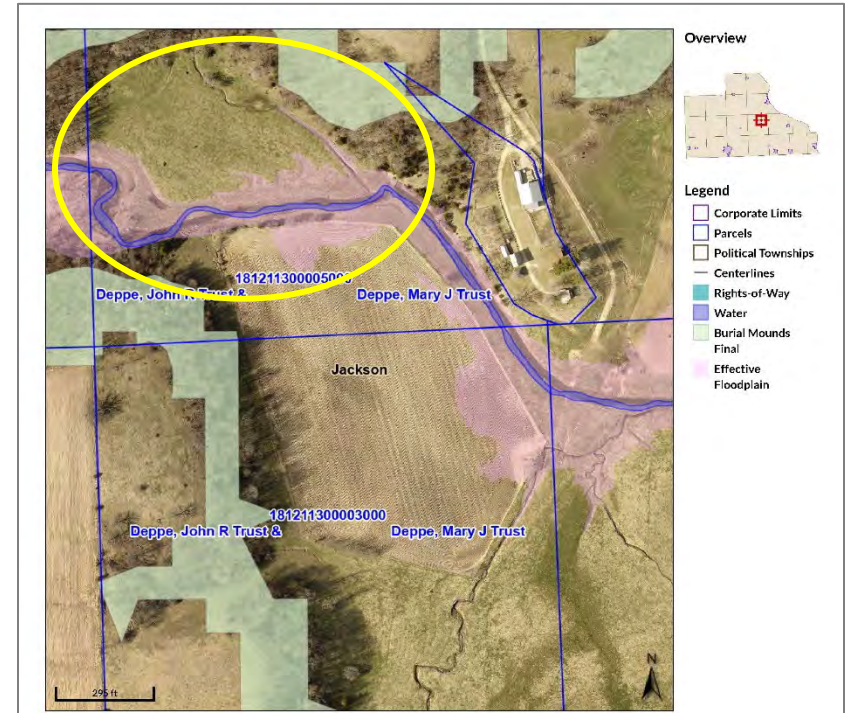
Figure 12.11 is a sample land use analysis map using floodplain and burial mound

Analysis of topography, zoning, access, easements, surrounding uses, and other characteristics also should be evaluated.



**Figure 12.10 Sample Land Analysis Map Using CSR2 Layer (2024)**

Source: Jackson County GIS, 2024



**Figure 12.11 Sample Land Analysis Map Using Floodplain and Burial Mound Layers (2024)**

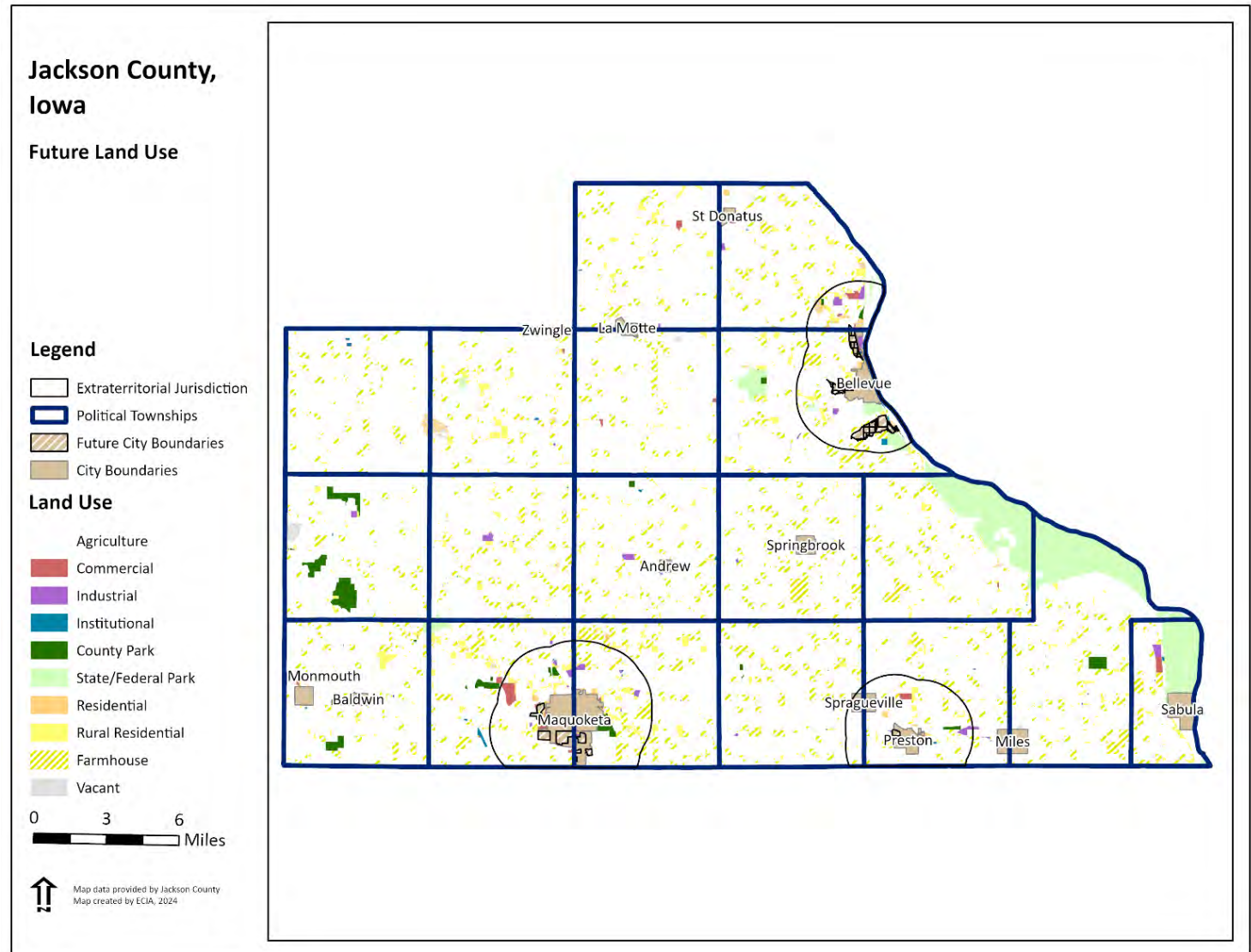
Source: Jackson County GIS, 2024

**FUTURE LAND USE MAP**

The Future Land Use Map for Jackson County is shown in Figure 12.12.

The cities of Bellevue, Maquoketa, and Preston have adopted comprehensive plans that include future growth areas. The future city boundaries that are represented by these growth areas are identified with a light brown stripe outlined in black. Jackson County should coordinate with these cities when reviewing development proposals that are within the future growth areas.

Jackson County also should coordinate with these three cities for subdivision review and approval within the extraterritorial jurisdictions.



**Figure 12.12 Future Land Use Map for Jackson County (2024)**

Source: Jackson County GIS

## ISSUES AND OPPORTUNITIES

Through the process of developing the Comprehensive Plan, the Jackson County community identified several land use priorities. These priorities were used to guide the development of the future land use map and will be used by the county to guide future land use decisions. The following section describes the issues and opportunities for each of Jackson County's land use priorities.

### *Keep the Land Use Policy Current*

**Issue:** The Jackson County Land Use Policy was adopted in 1998 and amended in 2003. It is important to keep the Land Use Policy current with changing growth conditions in the region by employing best practices.

**Opportunities:** The Land Use Policy should be evaluated on a 5-year basis to make sure it remains a useful guide for growth and development. Evaluation can be considered in less than 5 years if development conditions change significantly.

### *Identify Appropriate Areas for New Development*

**Issue:** New land development is necessary for quality of life and economic vitality. However, it is equally important that new growth occurs in appropriate locations and in an orderly manner.

**Opportunities:** Following the recommendations set out in this chapter can help provide procedures to determine whether or not specific land development works with the goals of the county.

### *Protect Agricultural Land and Open Space*

**Issue:** Agriculture is a key part of the Jackson County economy and the county's residents value its rural landscape. Therefore, conservation of the farmlands, forests, and other natural areas that contribute to the rural experience is a critical land use priority for the county. Commercial and residential development, job growth, and population expansion are also significant priorities for Jackson County. However, development related to these priorities

could conflict with the natural landscapes that define the county's character.

**Opportunities:** To protect its natural spaces, Jackson County can work to foster a supportive economic climate that strikes a balance between future commercial, residential, and industrial development and the conservation of the agricultural land and open spaces. Long-range, strategic planning can determine which land is most important to conserve and which land is better suited to accommodate the projected need for future growth.

### *Maintain Jackson County's Public Lands and Parks*

**Issue:** Public lands and parks are also important for preservation. The county's recreational opportunities are a source of pride for residents. Limiting the impact of new developments on existing public lands is also a critical land use priority.

**Opportunities:** The county can continue to conserve existing lands while also seeking opportunities for expansion of public lands for further preservation.

### *Preserve Soil and Water Quality*

**Issue:** All new developments must consider the effects on surrounding watersheds, as healthy watersheds bring the benefit of clean drinking water, healthy soil, reduced flooding, recreational opportunities, and better water quality.

**Opportunities:** The State of Iowa is monitoring erosion control practices to ensure that the soils in the region are healthy and that nutrients are not being lost to other regions. Development must therefore consider the effects that it would have on the area's soil quality, as erosion has negative consequences on soil organic matter as referenced in Chapter 9. Agriculture and Natural Resources.

### *Protecting Cultural Sites*

**Issue:** Many areas within the county hold special cultural significance to the region. One example is century and heritage farms. The Iowa Department of Agriculture and Land Stewardship awards these designations to families who have held farmland for over 100 years for the

century farm or 150 years for the heritage designation.

Within Jackson County there are 232 Century Farms and 51 Heritage Farms. These farms are vital to the agricultural character of Jackson County therefore preserving these sites is important to preserving the heritage of the region. For a list of all the farms in the county, visit: <https://centuryfarms.iowaagriculture.gov/>.

There are also various historical sites in the county that are important to preserve for the community's heritage. The National Register of Historic Places has 76 listings within the county, with four resources being labeled with "State Significance".

The Mound Potential Map and the 2017 OSA Technical Report 566 referenced in Chapter 10 also should be taken into consideration when evaluating the suitability of a piece of land. There are many locations within the county with high potential suitability for archeological research, and precautions must be taken before seeking development at those sites.

**Opportunities:** Keeping an inventory of important cultural heritage sites could be useful when reviewing specific sites for new development.

### *Coordination with Cities*

**Issue:** It is important for communities in Jackson County to work together for zoning codes and subdivision codes to have the best effect. Under Iowa Code, communities are given extraterritorial subdivision review, allowing them to require that new rural subdivisions within two miles to meet the community's subdivision standards. The cities of Bellevue, Maquoketa, and Preston, in Jackson County, already have their own comprehensive plans that guide their future developments. It is important that these plans are considered when determining land use within the county.

**Opportunities:** Work with cities to ensure that they are able to apply their zoning and subdivision codes to the best of their ability.

**GOALS AND OBJECTIVES**

*Best Practices*

12.1 Keep the Land Use Policy current with changing growth conditions in the region by employing best practices.

- Evaluate land use goals on a 5-year basis to make sure the Land Use Policy remains a useful guide for growth and development.
- Consider reviewing and amending Land Use Policy’s goals between 5-year intervals should development conditions significantly change.
- Review zoning and subdivision ordinances to ensure compliance with the recommendations in the Jackson County Comprehensive Plan.

12.2 Ensure that cities are coordinating with each other for their best development.

- Review existing future land use maps of each jurisdiction to ensure compatibility of goals with other jurisdictions in the county.

*Preservation*

12.3 Preserve and protect viable land for agriculture.

- Review the A-1 Agricultural District zone to ensure it effectively protects current open spaces.
- Evaluate the quality of land using indicators such as CSR2 and Land Capability Class in the county to determine the best use.
- Enforce zoning ordinance when proposed developments interfere with viable agricultural lands.

12.4 Preserve and protect parks, open spaces, and natural resources.

- Ensure that development is not interfering with water quality and cultural sites.
- Evaluate the effectiveness of the zoning code based on its ability to protect natural resources.



Jackson County landscape

Photo Credit: Jackson County Area Tourism



EXISTING LAND USE MAPS

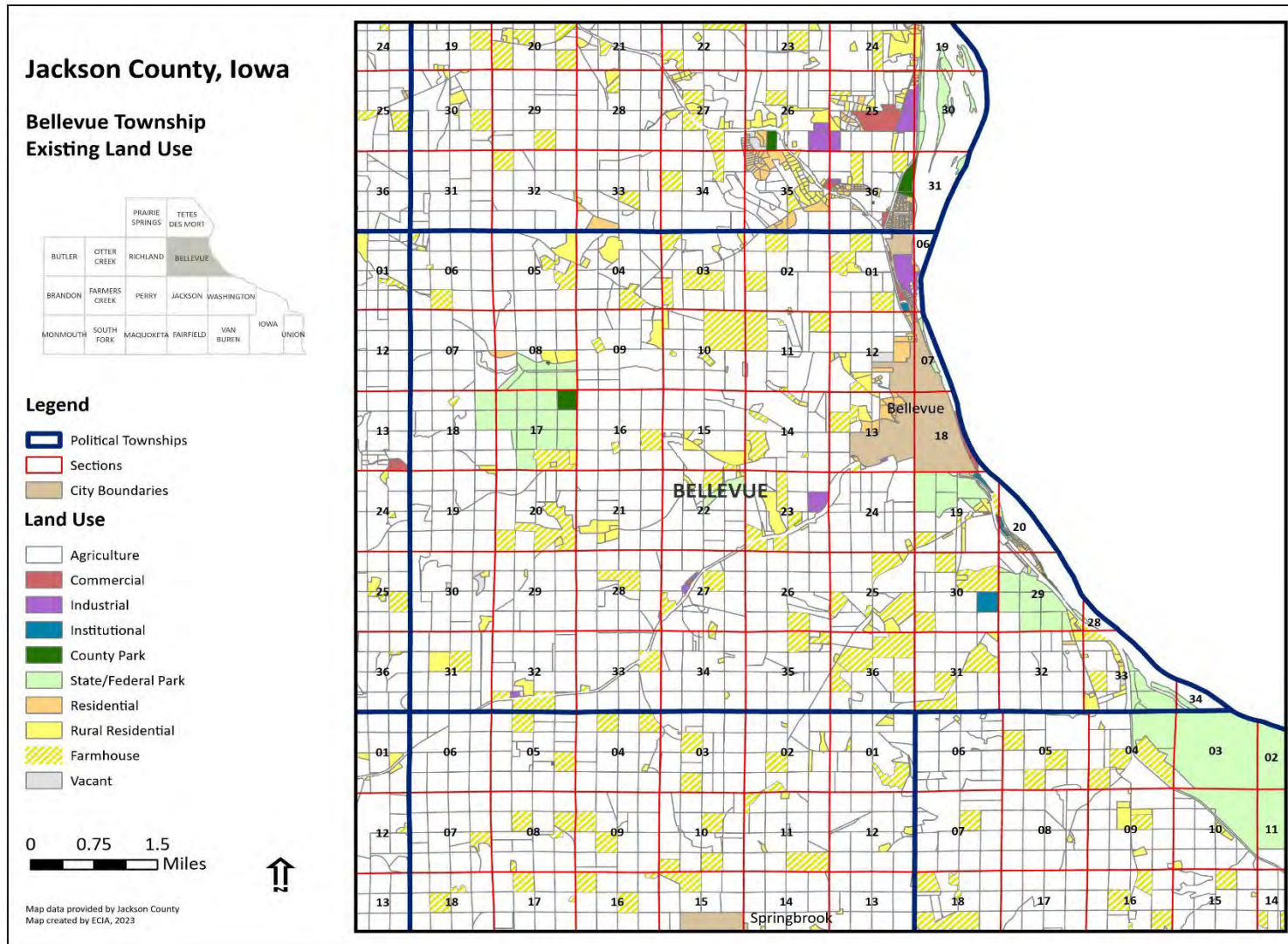


Figure 12.13 Existing Land Use Map for Bellevue Township (2023)

Source: Jackson County GIS

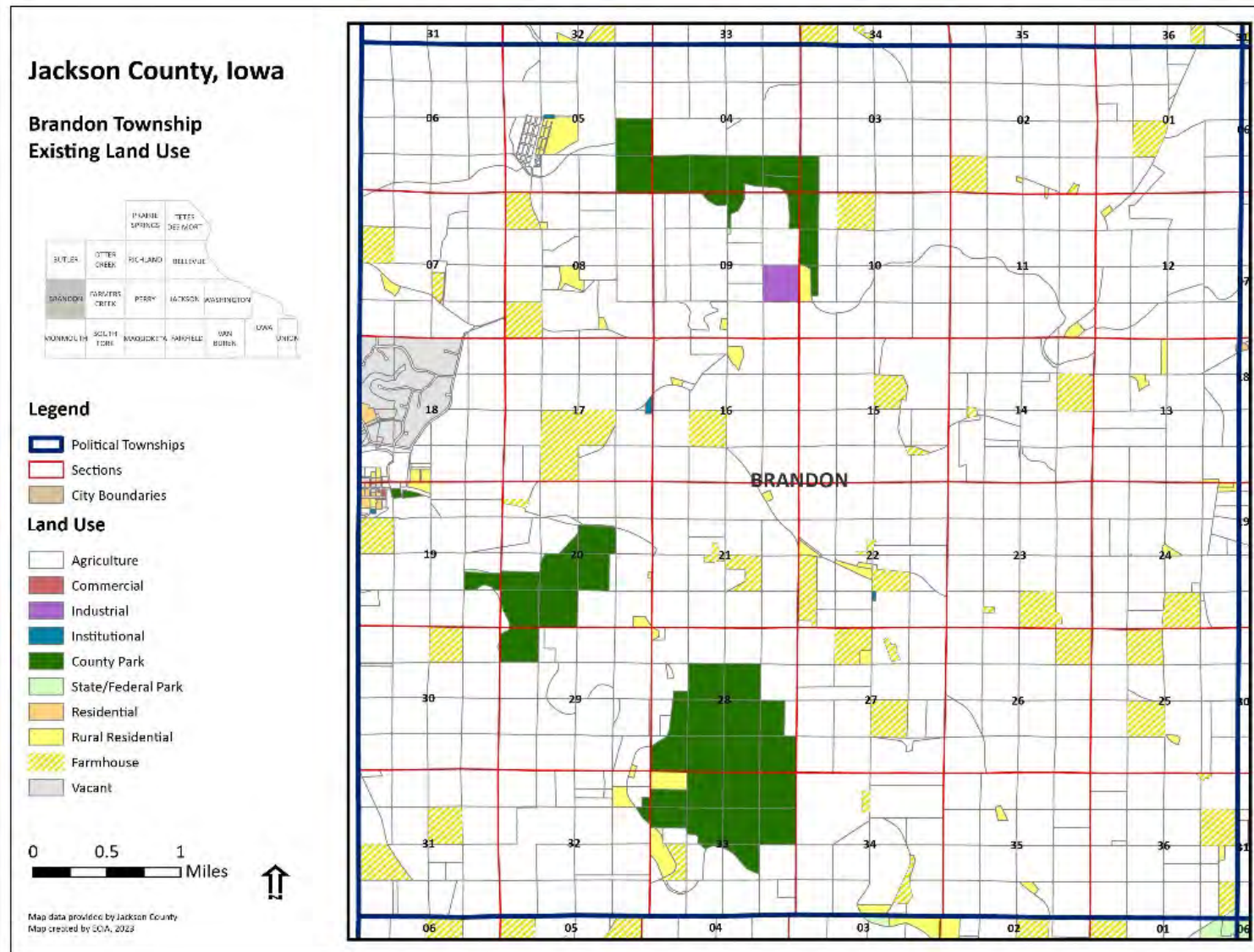


Figure 12.14 Existing Land Use Map for Brandon Township (2023)

Source: Jackson County GIS

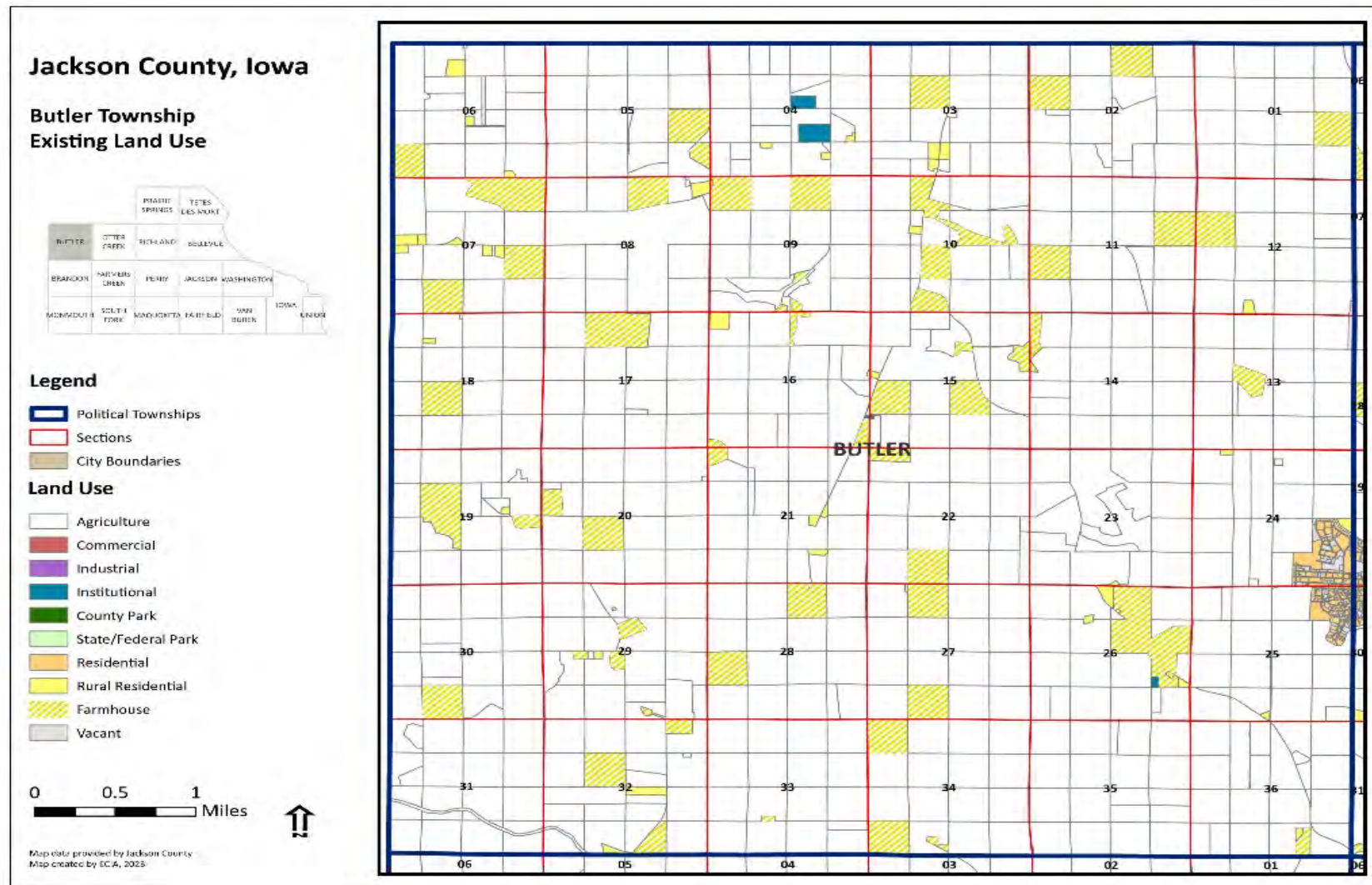


Figure 12.15 Existing Land Use Map for Butler Township (2023)

Source: Jackson County GIS

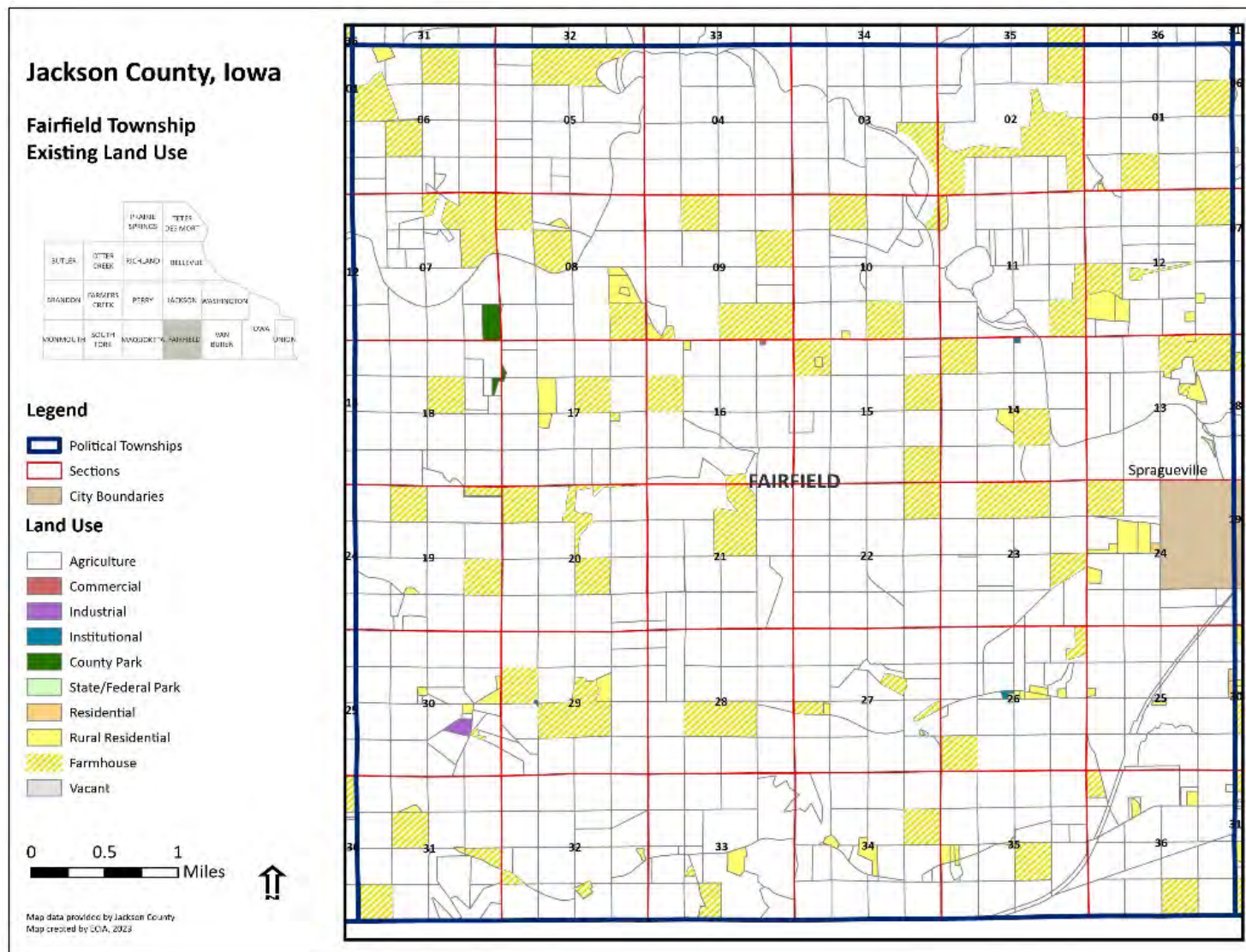


Figure 12.16 Existing Land Use Map for Fairfield Township (2023)

Source: Jackson County GIS

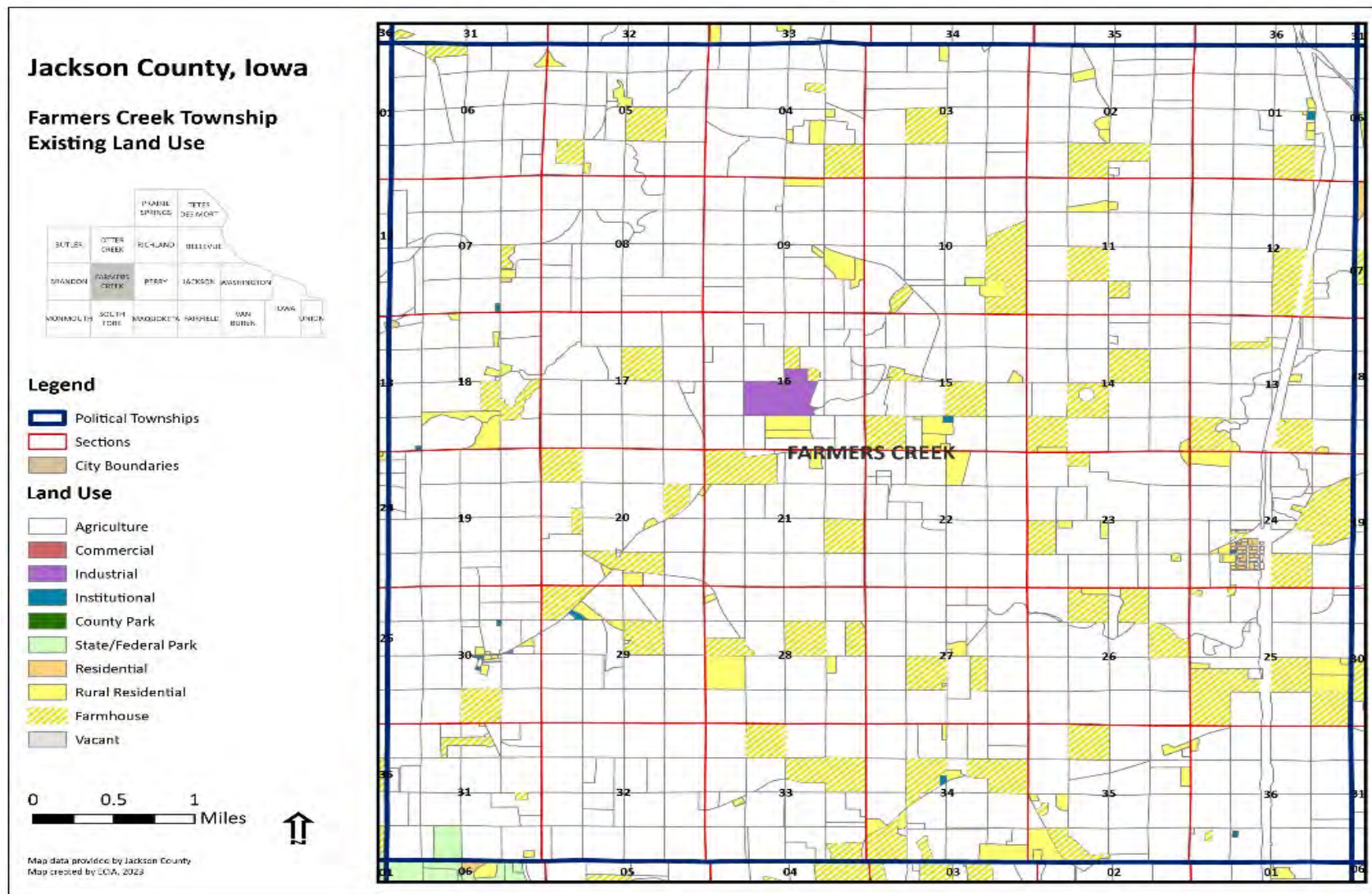


Figure 12.17 Existing Land Use Map for Farmers Creek Township (2023)

Source: Jackson County GIS

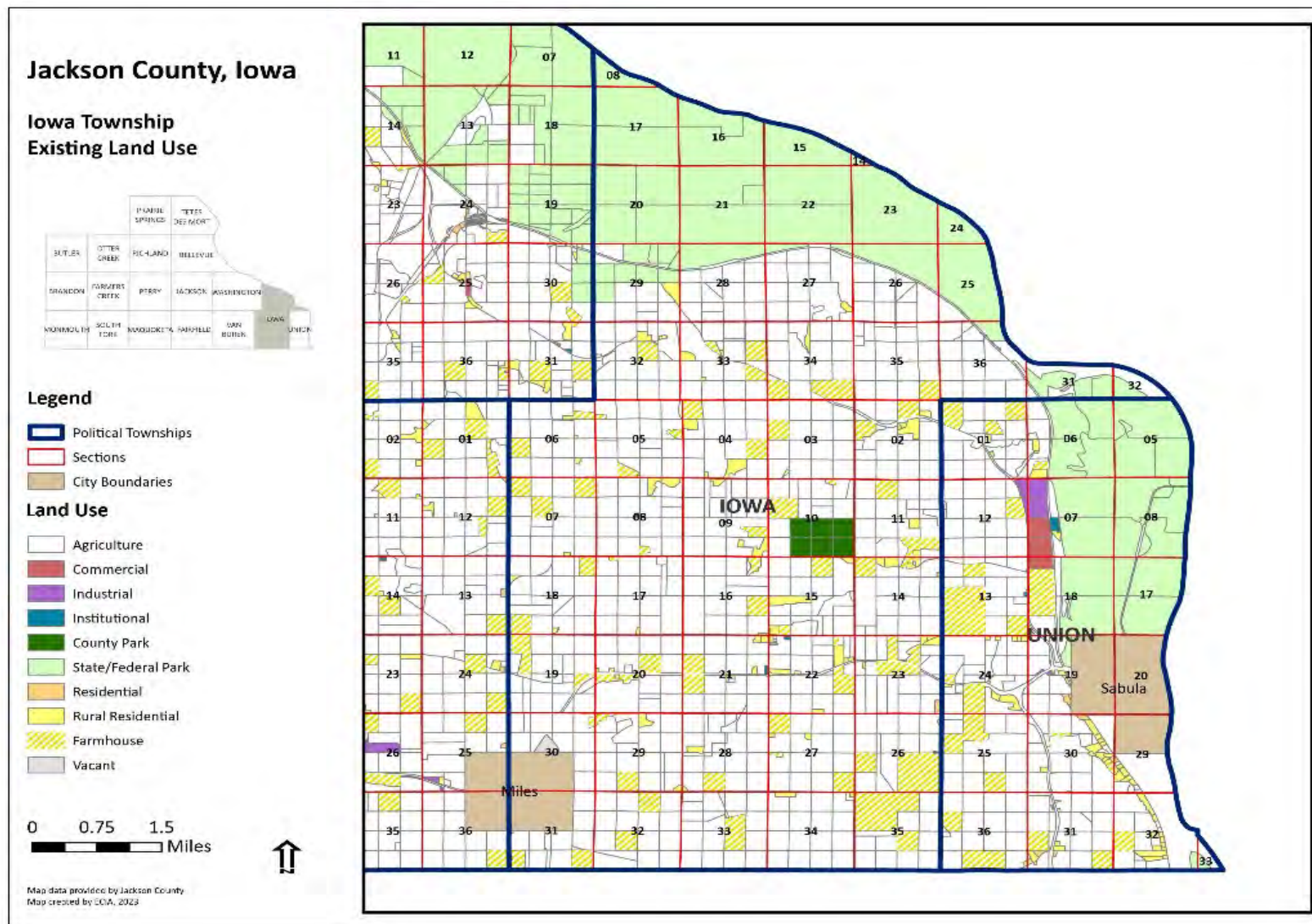


Figure 12.18 Existing Land Use Map for Iowa Township (2023)

Source: Jackson County GIS

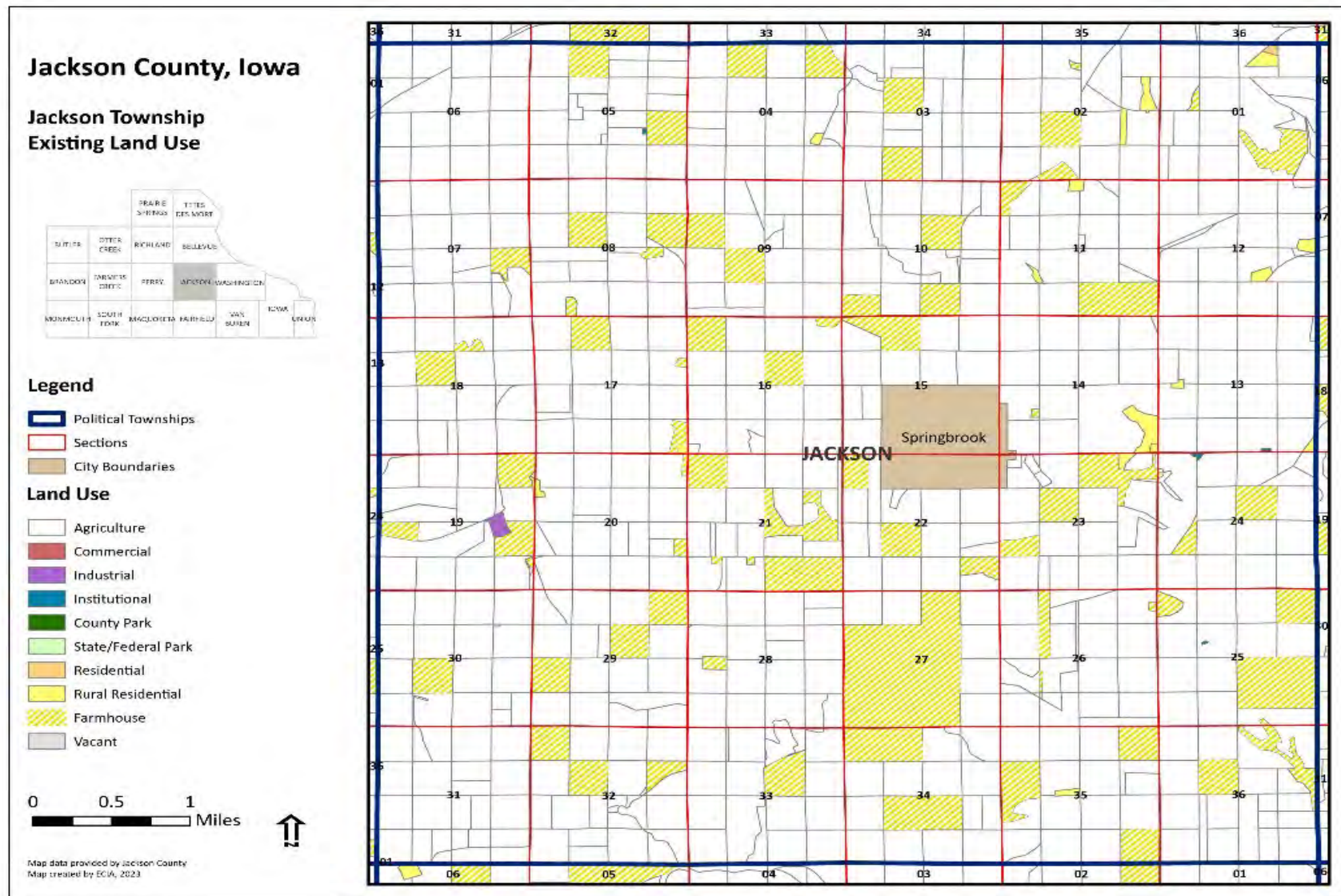


Figure 12.19 Existing Land Use Map for Jackson Township (2023)

Source: Jackson County GIS

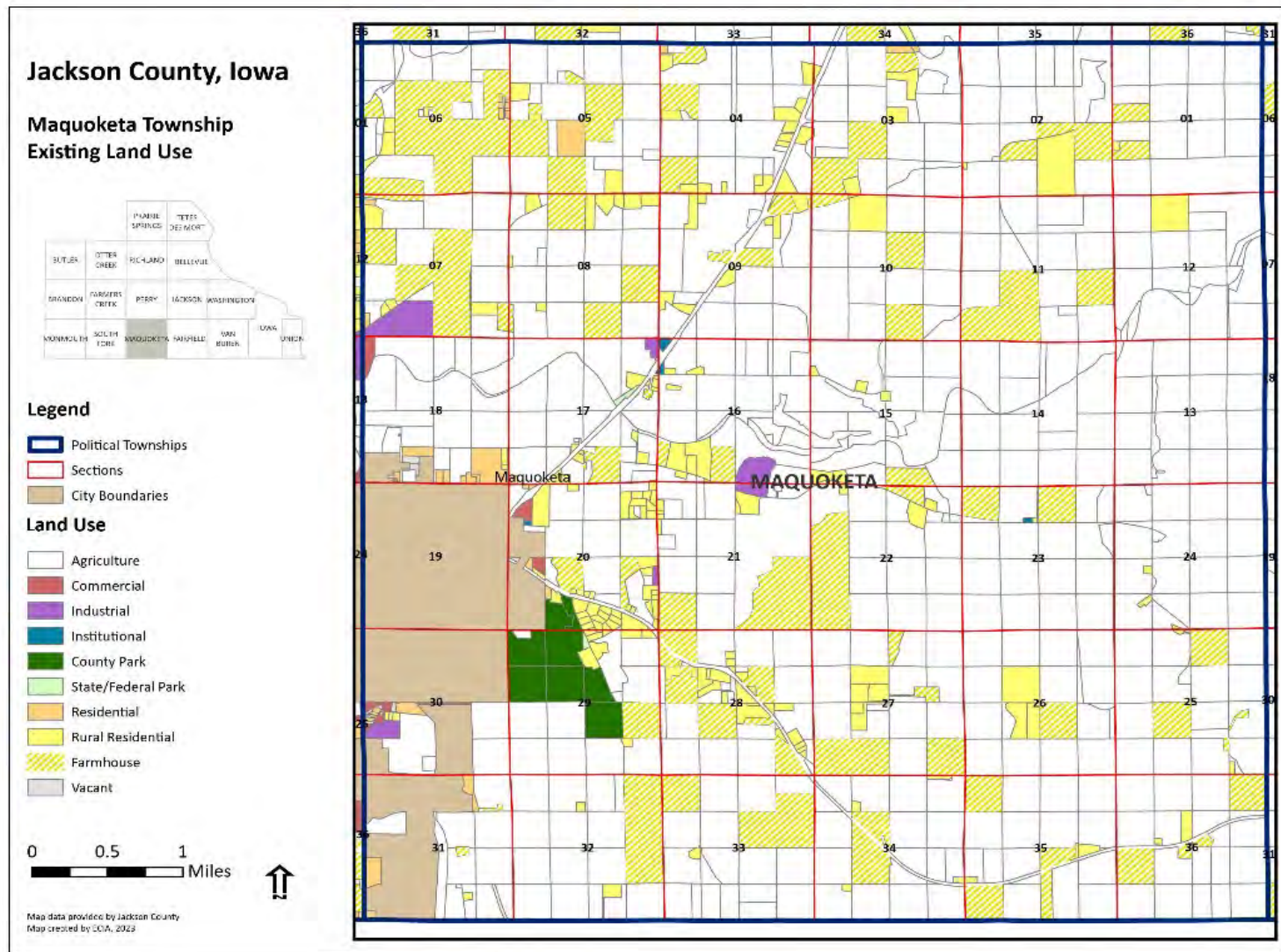


Figure 12.20 Existing Land Use Map for Maquoketa Township (2023)

Source: Jackson County GIS



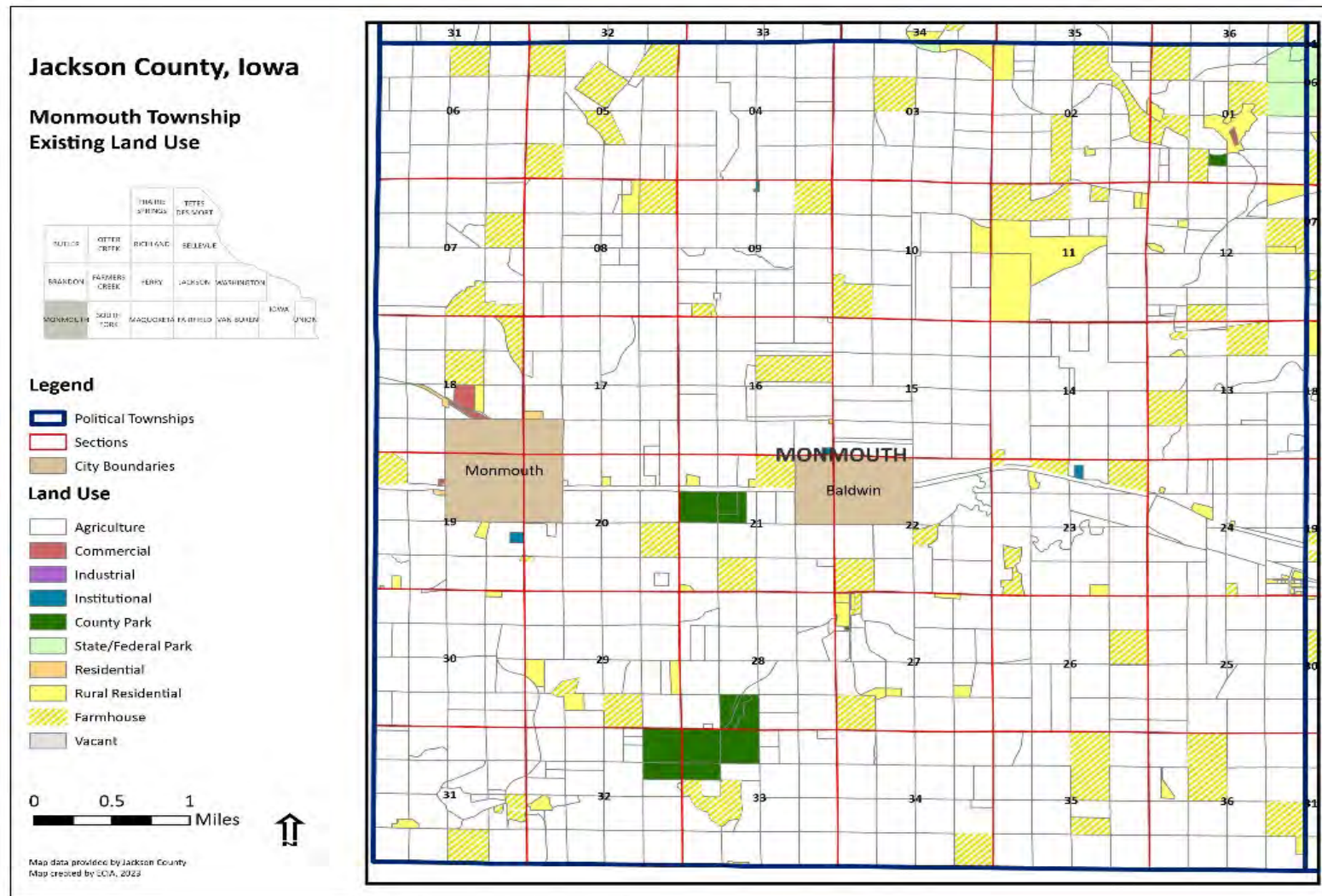


Figure 12.21 Existing Land Use Map for Monmouth Township (2023)

Source: Jackson County GIS

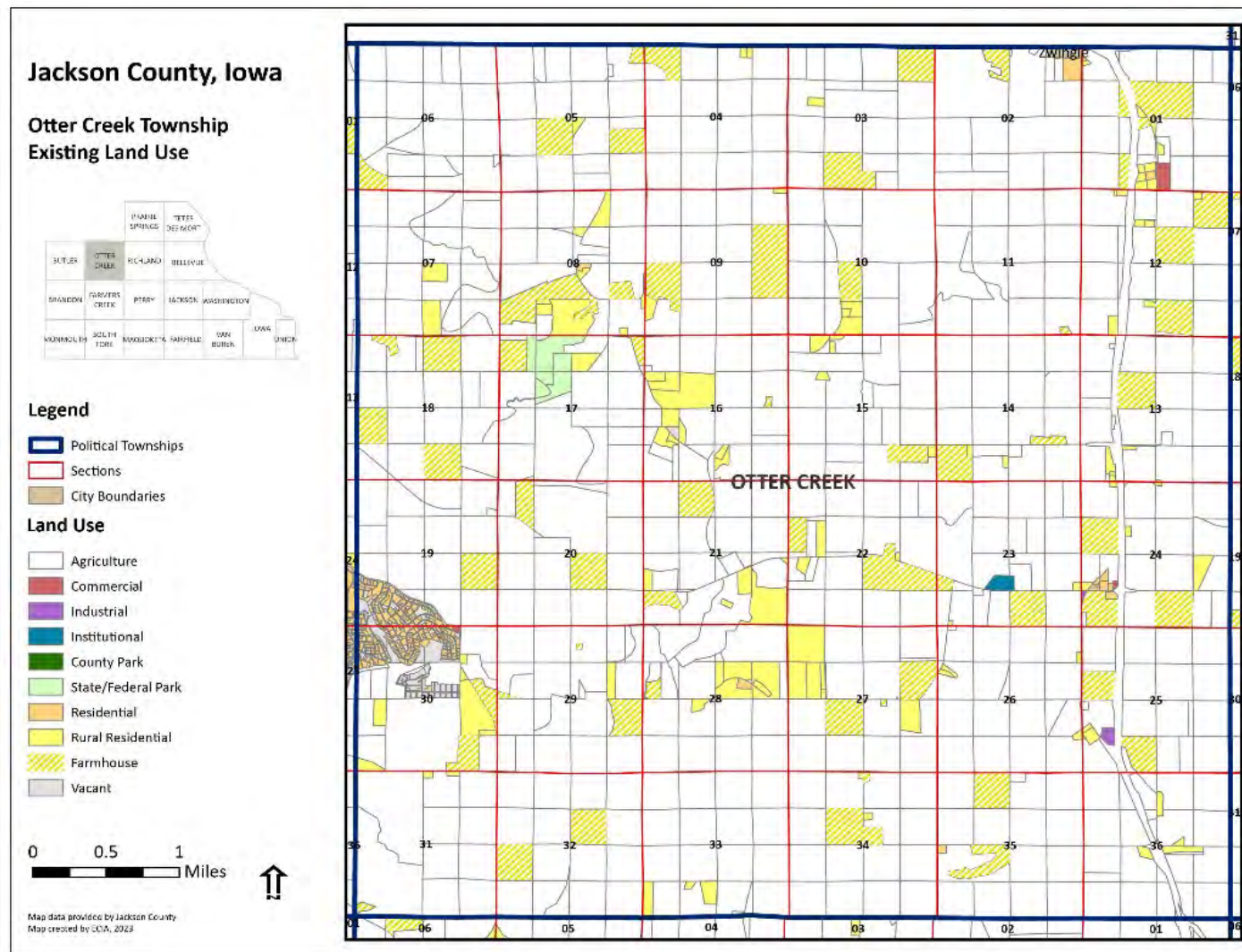


Figure 12.22 Existing Land Use Map for Otter Creek Township (2023)

Source: Jackson County GIS

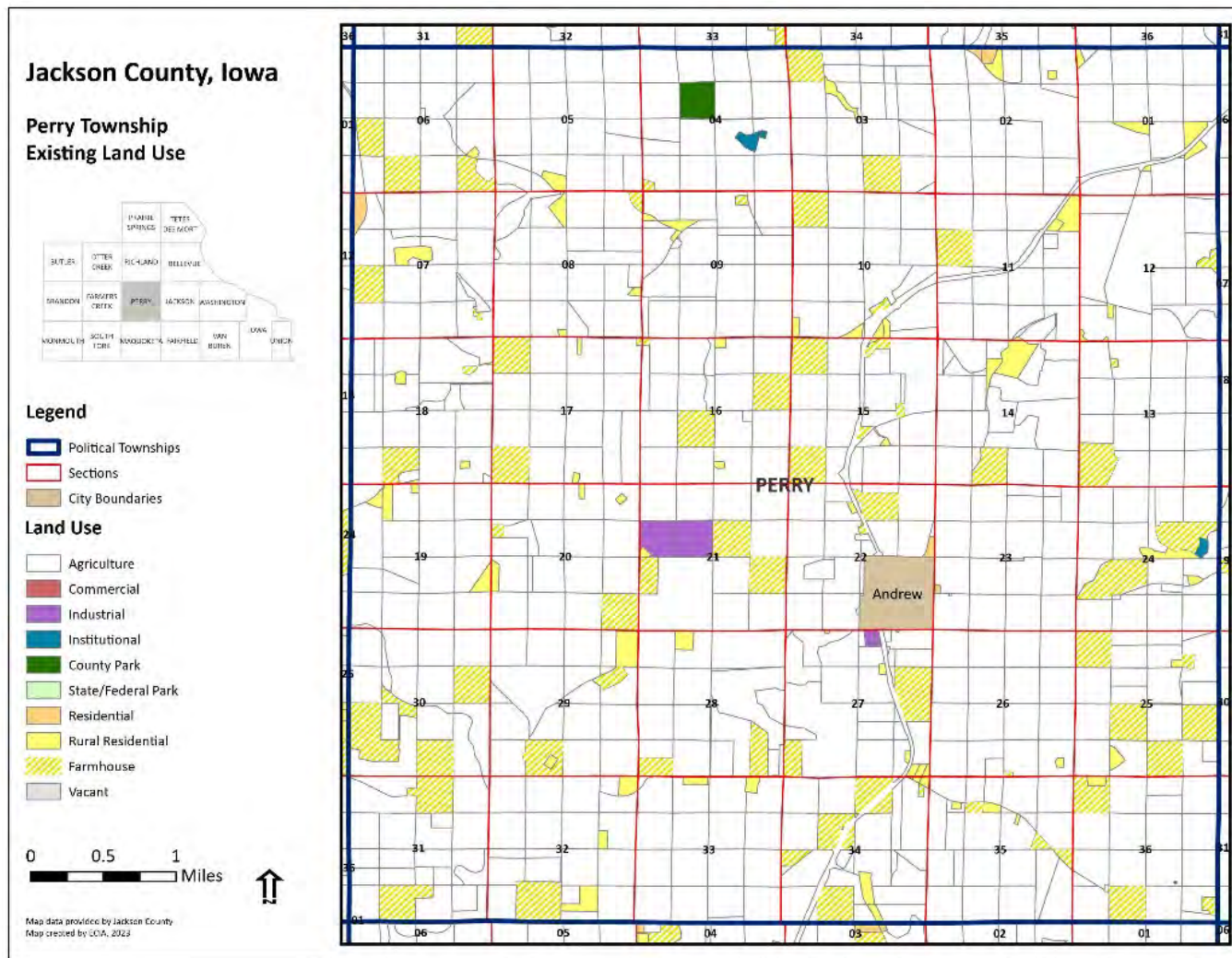


Figure 12.23 Existing Land Use Map for Perry Township (2023)

Source: Jackson County GIS

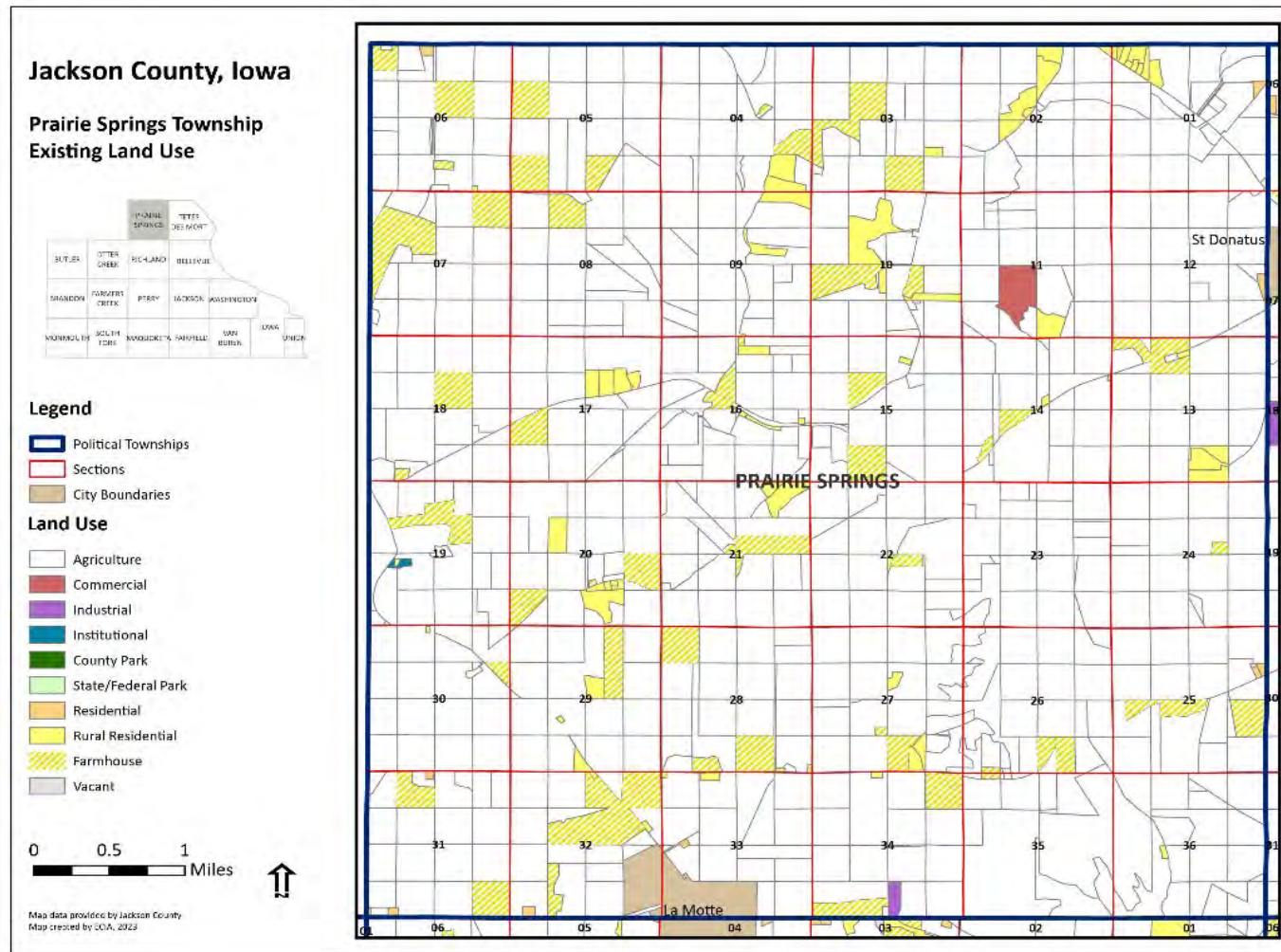


Figure 12.24 Existing Land Use Map for Prairie Springs Township (2023)

Source: Jackson County GIS

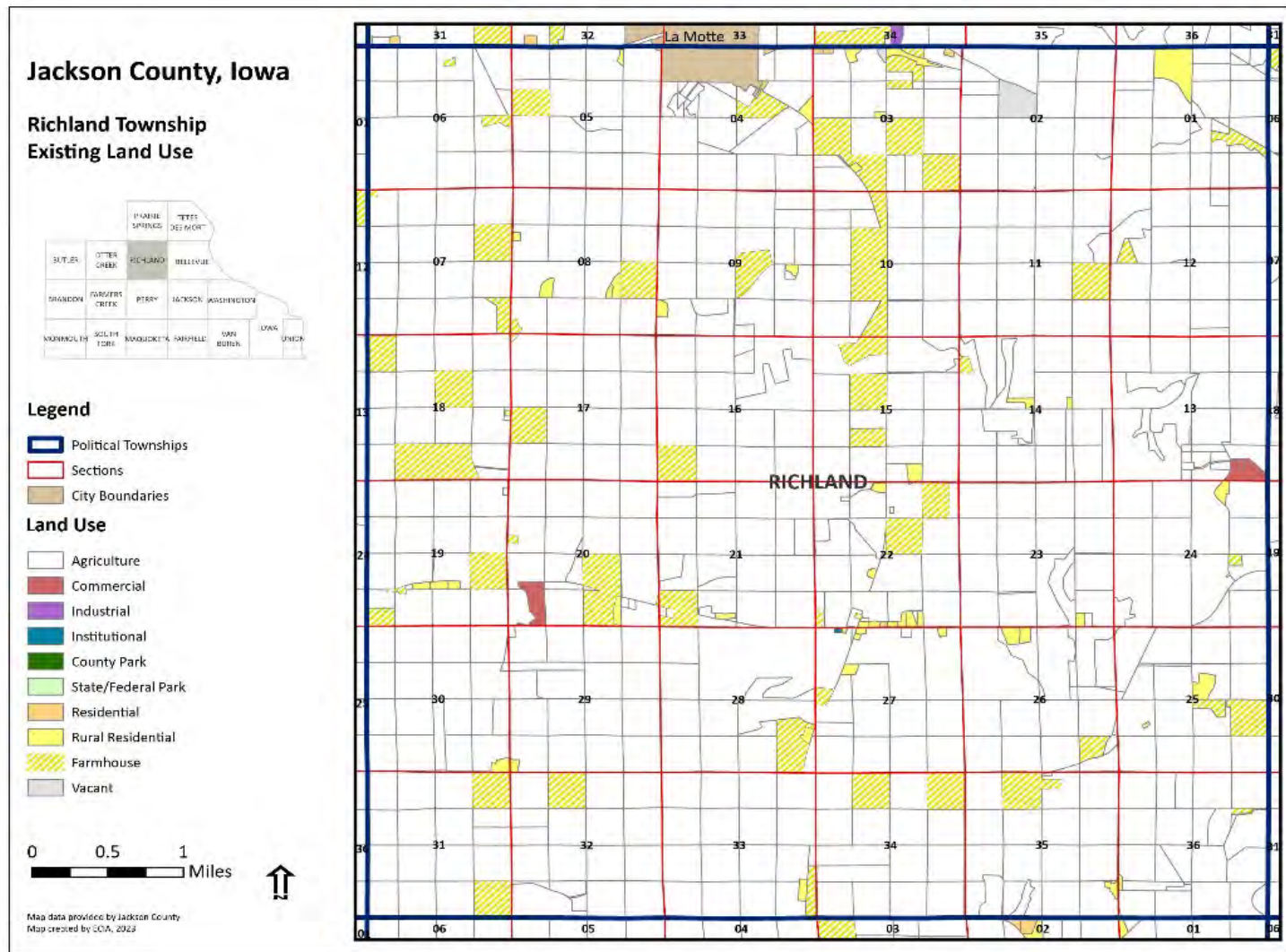


Figure 12.25 Existing Land Use Map for Richland Township (2023)

Source: Jackson County GIS

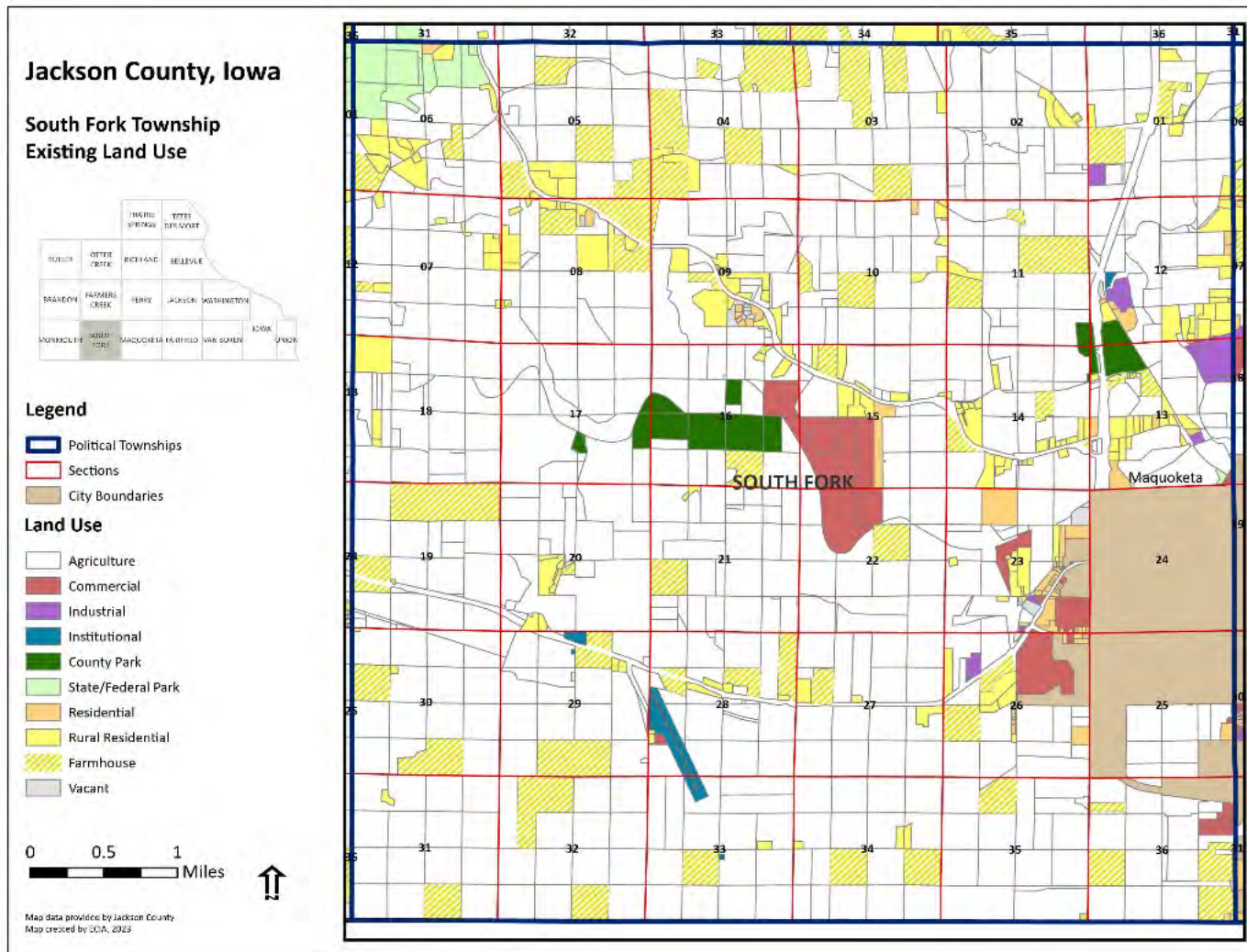


Figure 12.26 Existing Land Use Map for South Fork Township (2023)

Source: Jackson County GIS

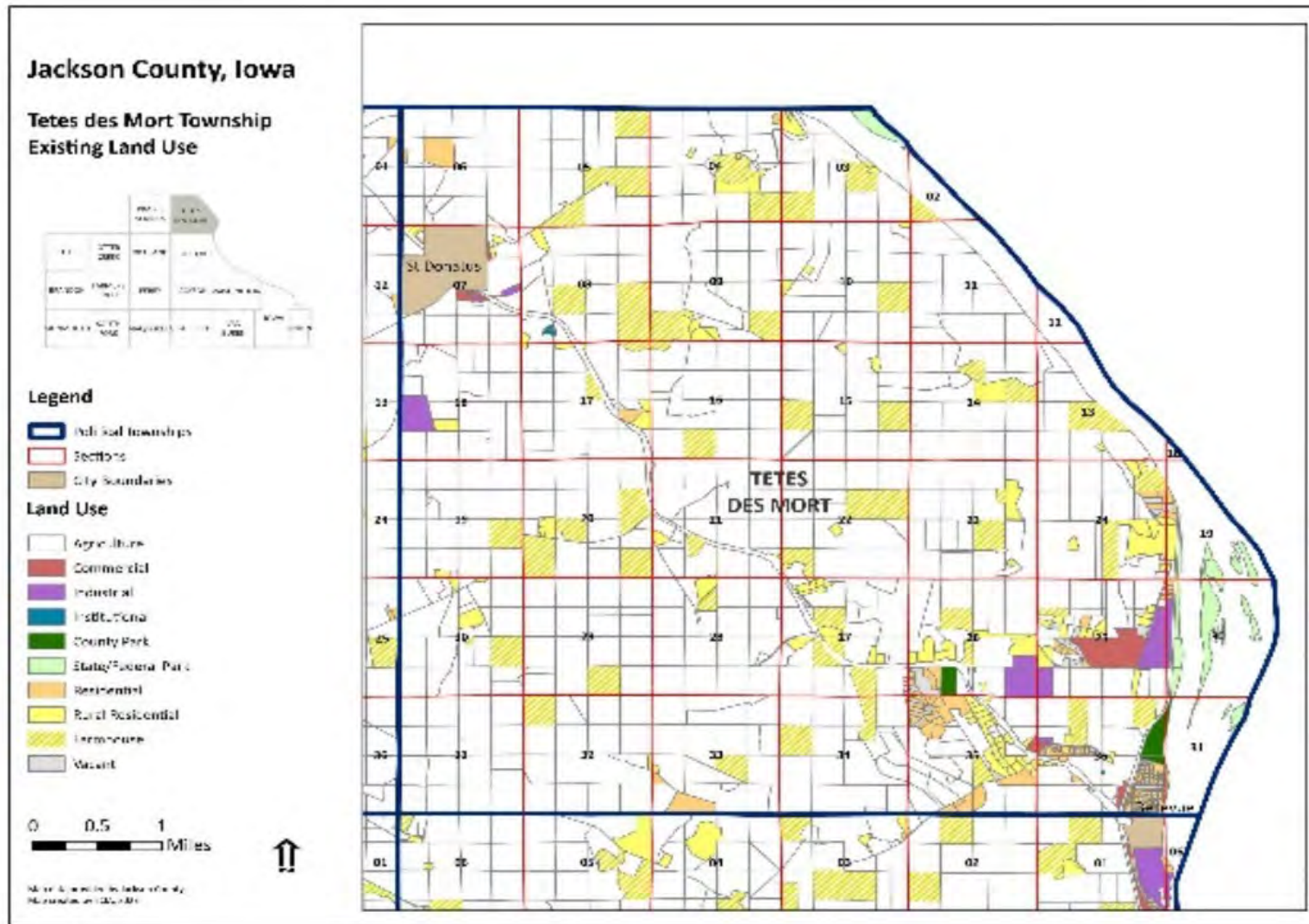


Figure 12.27 Existing Land Use Map for Tete des Morts Township (2023)

Source: Jackson County GIS

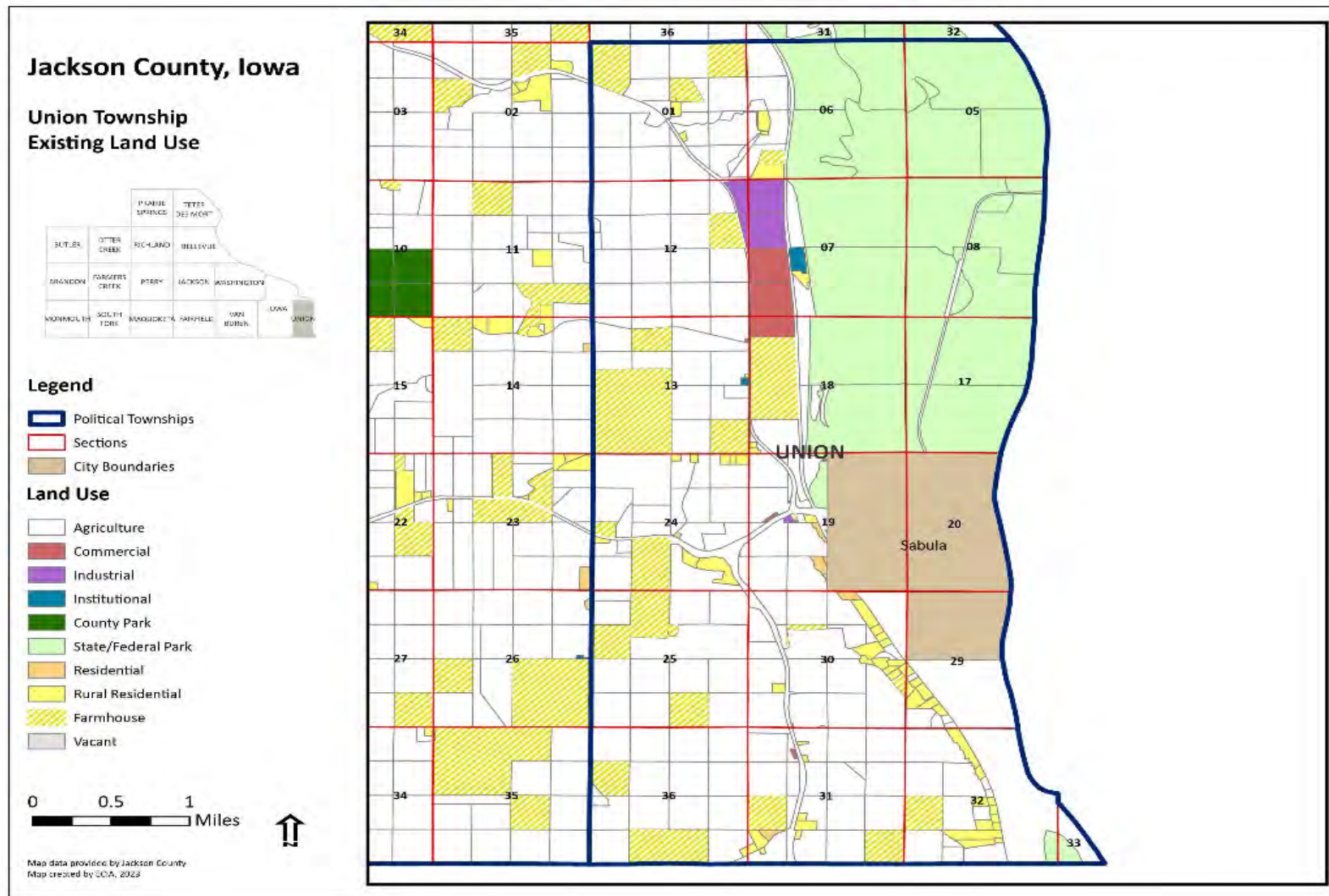


Figure 12.28 Existing Land Use Map for Union Township (2023)

Source: Jackson County GIS



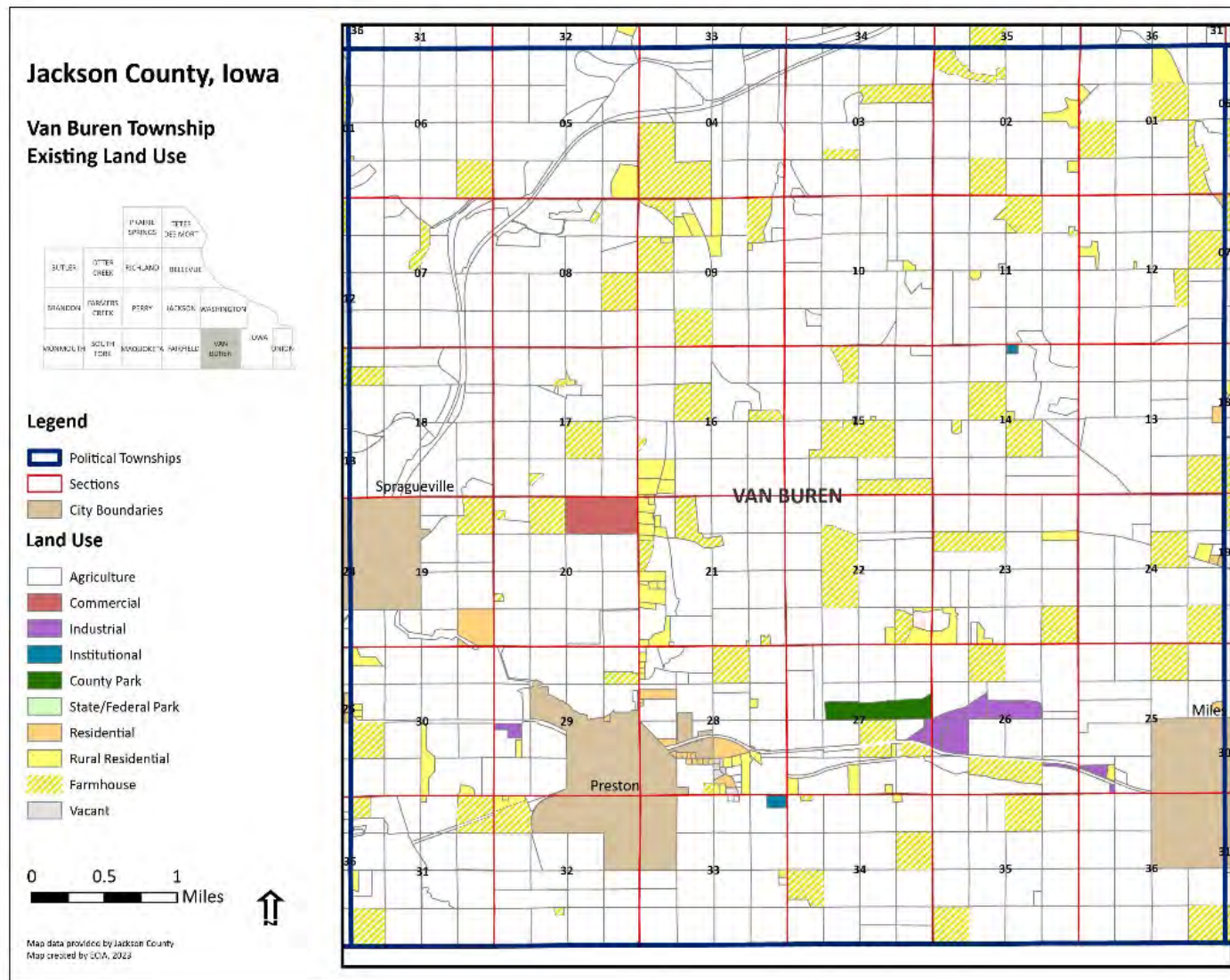


Figure 12.29 Existing Land Use Map for Van Buren Township (2023)

Source: Jackson County GIS

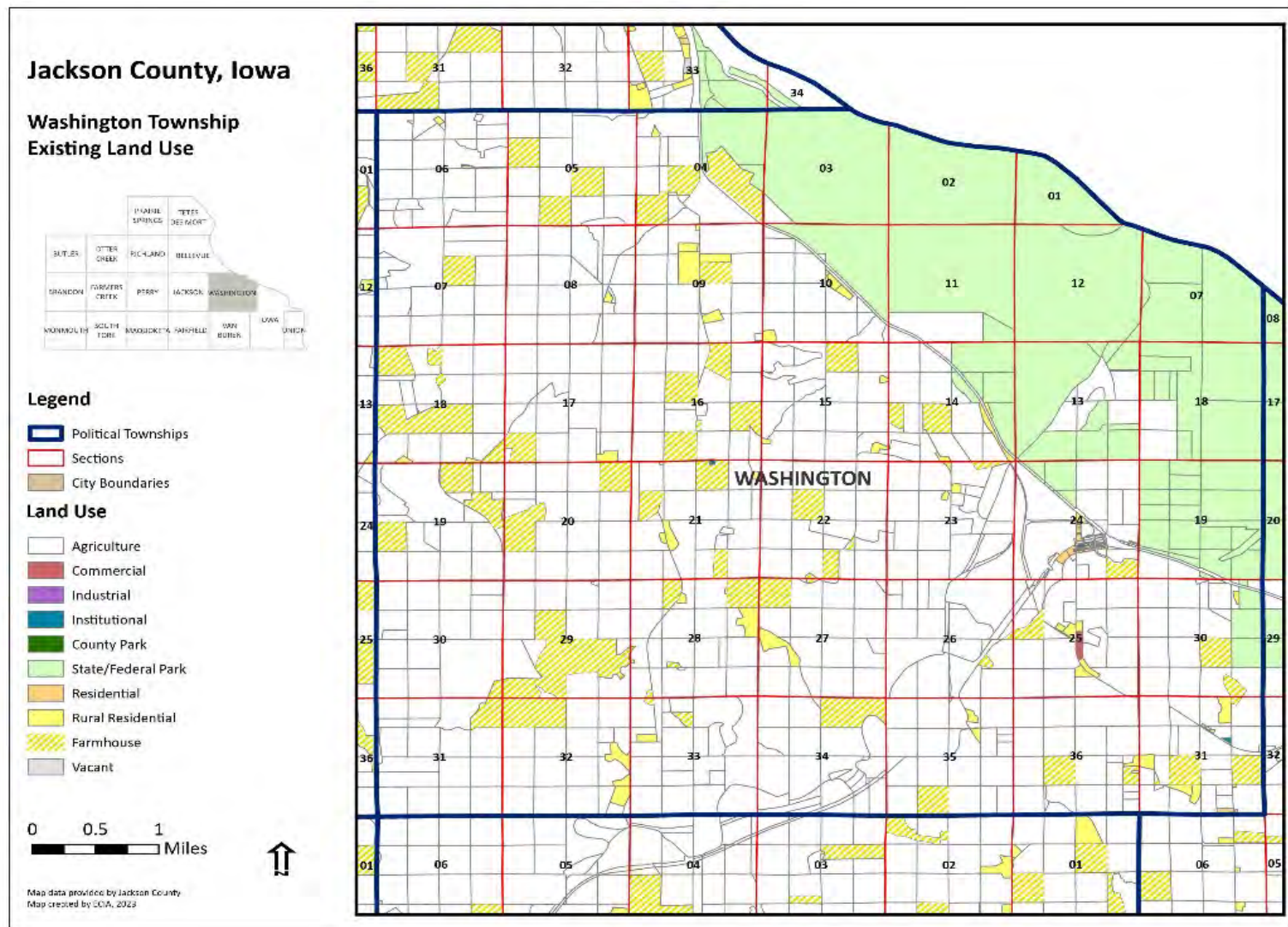


Figure 12.30 Existing Land Use Map for Iowa Township (2023)

Source: Jackson County GIS

# Chapter 13. Intergovernmental Collaboration



Photo Credit: Eastern Iowa Mental Health and Disability Region website, <https://easterniowamhds.org/>



Photo Credit: Eastern Iowa Mental Health and Disability Region website, <https://easterniowamhds.org/about-eastern-iowa-mental-health/>

**OVERVIEW**

The success of the Comprehensive Plan will rely on the ability of Jackson County and individual communities to come together as a region to achieve a common goal. Historically, the county and city governments in Jackson County have had a good working relationship. Jackson County and the cities are able to cooperate to complete projects of mutual interest. Cities and the county also work together to share information and resources, and are active in several regional organizations.

The county and cities take advantage of many opportunities for collaboration in economic development, law enforcement, hazard mitigation, and mutual aid. This chapter will outline current collaboration efforts within the county and profile several regional organizations that facilitate collaboration. The chapter also will identify additional opportunities for collaboration.

Recommendations included in this chapter will help county and city governments continue to work together to achieve their shared goals for the future.

**BENEFITS OF COLLABORATION**

Intergovernmental collaboration offers many benefits. They include:

*Cost Savings*

Cooperation can save money by increasing efficiency and avoiding unnecessary duplication. Cooperation can enable communities to provide their residents with services that would otherwise be too costly.

*Address Regional Issues*

By communicating and coordinating their actions, and working with regional and state agencies, counties and cities are able to address and resolve issues which are regional in nature.

*Early Identification of Issues*

Cooperation enables jurisdictions to identify and resolve potential conflicts at an early stage, before affected interests have established rigid positions, before substantial funds have been expended, before the political stakes have been raised, and before issues have become conflicts or crises.

*Reduced Litigation*

Communities that cooperate may be able to resolve issues before they become mired in litigation. Reducing the possibility of costly litigation can save money, as well as the disappointment and frustration of unwanted outcomes.

*Consistency*

Cooperation can lead to consistency of the goals, objectives, plans, policies, and actions of neighboring cities, counties, and other jurisdictions.

*Predictability*

Jurisdictions that cooperate provide greater predictability to residents, developers, businesses, and others. Lack of predictability can result in lost time, money, and opportunity.

*Understanding*

As jurisdictions communicate and collaborate on issues of mutual interest, they become more aware of one another’s needs and priorities. They can better anticipate problems and work to avoid them.

13. INTERGOVERNMENTAL COLLABORATION

*Trust*

Cooperation can lead to positive experiences and results that build trust and good working relationships between jurisdictions.

*History of Success*

When jurisdictions cooperate successfully in one area, the success creates positive feelings and an expectation that other intergovernmental issues can be resolved as well.

*Service to Residents*

The biggest beneficiaries of intergovernmental cooperation are residents for whom government was created in the first place. They may not understand, or even care about, the intricacies of an intergovernmental issue, but all residents can appreciate their benefits, such as cost savings, provision of needed services, and a strong economy.

**CURRENT COLLABORATION**

Local governments in Jackson County collaborate with each other and with regional, state, and federal government agencies using a combination of formal and informal agreements to provide services to their residents.

*Intergovernmental 28E Agreements*

Formal municipal agreements are generally referred to as 28E agreements as they are permitted under Iowa Code Chapter 28E: Joint Exercise of Governmental Powers. Iowa Code Section 28E.1 permits “state and local governments in Iowa to make efficient use of their powers by enabling them to provide joint services and facilities with other agencies and to co-operate in other ways of mutual advantage.”

Several Jackson County departments use 28E agreements, such as Engineering, Mental Health, the Recorder, and the Waste Authority of Jackson County.

*Mutual Aid Agreements*

Mutual aid agreements are a type of 28E agreement that provides procedures for sharing of resources. In Jackson County, there are mutual aid agreements for sharing fire response, ambulance services, criminal investigation, and maintenance of secondary roads.

The Jackson County Emergency Management Agency coordinates local efforts in partnership with the Iowa Department of Homeland Security and Emergency Management to prepare for, respond to, and recover from disasters. The Emergency Management Agency also works with cities, school districts, and other partners in planning for and responding to hazards and emergencies.

The Iowa Secretary of State maintains an online database of 28E agreements at: <https://sos.iowa.gov/search/28ESearch.html>. When accessed in December 2023, this database listed 96 active 28E agreements for Jackson County. Table 13.1 breaks out these agreements by service type. The most common 28E service types for Jackson County were 24 for Health and 14 for Street and Road Systems.

13. INTERGOVERNMENTAL COLLABORATION

*Informal Collaboration*

Jackson County local governments also collaborate through a variety of informal agreements with nonprofit, private, and community organizations.

The county and cities partner with or belong to chambers of commerce, economic development associations, transportation planning agencies, tourism bureaus, and other groups.

For example, the Jackson County Economic Alliance (JCEA) is responsible for developing and implementing an overall economic development plan for Jackson County. Investors include: the county; five cities; utilities; chambers of commerce; financial, health, and educational institutions; businesses; and nonprofit organizations.

The JCEA Board of Directors has five-year goals and objectives established for 2023-2028, including: Collaboration with Jackson County, cities, schools, hospitals, and service organizations to better facilitate collaborative success and creative economic solutions.

<https://www.theicea.org/>

<b>28E AGREEMENTS BY SERVICE TYPE</b>	<b>2023 TOTAL</b>
<b>Law Enforcement</b>	
Criminal Investigation	6
Emergency Management	1
Police Protection	4
<b>Fire Services</b>	
Fire Response	2
<b>Highway &amp; Public Works</b>	
Engineering	4
Sanitation	1
Street & Road Systems	14
Water System	4
Wastewater System	3
Other Public Works	2
<b>Transportation</b>	
Motor Vehicles	4
<b>Community &amp; Neighborhood Services</b>	
Economic Development	1
Health	24
Planning	2
Other Neighborhood Services	7
<b>General Management</b>	
Finance & Tax Administration	1
Information Services	5
Purchasing Services	2
Risk Management	1
<b>Elected Officials, Boards, &amp; Commissions</b>	
Any Elected Officials, Boards, & Commissions	7
<b>Other</b>	
Watershed Management Authority	1

## 13. INTERGOVERNMENTAL COLLABORATION

**Regional Collaborations**

Jackson County participates in various regional collaborations. Below are some examples that relate directly to chapters of this Comprehensive Plan.

The **East Central Intergovernmental Association (ECIA)** is a membership sponsored organization of local governments in Cedar, Clinton, Delaware, Dubuque, and Jackson Counties. ECIA services cover six broad categories: community development, economic development, transportation planning, housing assistance, employment and training, and rural transit services. <https://www.ecia.org/>

The **Eastern Iowa Mental Health and Disabilities Services (MH/DS) Region** serves Cedar, Clinton, Jackson, Muscatine and Scott Counties under a 28E agreement. “The community-based, person-centered mental health and disability services system for adults provides locally delivered services, regionally managed with statewide standards.” <https://easterniowamhds.org/>

The **Eastern Iowa Regional Housing Authority (EIRHA)** serves Cedar, Clinton, Delaware, Dubuque, Jackson, Jones and Scott Counties, excluding the cities of Clinton, Camanche, Davenport, and Dubuque. The goal of EIRHA is to provide decent, safe, and affordable housing for eligible households; promote self-sufficiency; create economic independence; and provide home ownership opportunities for Housing Choice Voucher and Public Housing Program participants. <https://www.eirha.org/>

The **Grant Wood Loop** region includes Dubuque, Jackson, and Jones counties. “The region boasts a wealth of assets and opportunities for a collaborative effort to connect parks to people and places. The Grant Wood Loop Master Plan is a roadmap and living document for collaboration toward a shared vision within the region to enact over the next 20 years.” <https://gwloop.com/>

The **Maquoketa River Watershed Management Authority (WMA)** enables cities, counties, a benefitted lake district, partners, stakeholders, and Soil and Water Conservation Districts to

collaborate on watershed management and improvement in 1,870 square miles across 80 townships and nine counties. <https://www.limestonebluffsrcd.org/maguoketariverwma>

**Prosperity Eastern Iowa** is a partnership of economic development stakeholders that leverage financial and human resources to achieve efficiencies for the economic prosperity of the eastern Iowa region of Clinton, Delaware, Dubuque, Jackson, and Jones Counties. <https://prosperityeasterniowa.org/>

The **Regional Planning Affiliation (RPA)** encompasses Clinton, Delaware, and Jackson Counties, and the rural portion of Dubuque County. The RPA plans for the regional transportation network using Federal funds under the guidance of the State of Iowa. The RPA is led by a policy board that is made up of representatives from local county and city governments. <https://www.eciatrans.org/rpa8/index.php>

13. INTERGOVERNMENTAL COLLABORATION

**CONFLICT MANAGEMENT**

Local governments in Jackson County work together to provide the best services possible to their residents; however, conflicts may arise.

**Preventing Conflicts**

In most cases, communities can avoid conflicts by establishing agreements and developing consistency in their local policies. Working closely with the county and other cities will help all parties involved identify and resolve issues before they become conflicts.

**Resolving Conflicts**

If conflicts do occur, counties and cities may use an alternative dispute resolution process that provides a low-cost flexible approach to resolving conflicts.

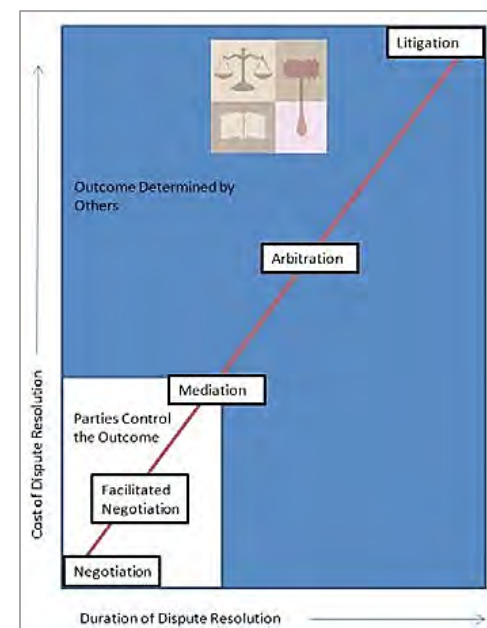
“Alternative dispute resolution is the use of mediation that enables people to reach a mutually agreeable solution to their conflict with the assistance of a neutral mediator. Mediators are not judges. They make no decisions for the parties. A mediator helps parties realize

and explain their needs, clarify issues, explore solutions and negotiate an agreement. The purpose of mediation is to help parties find a solution that will work for them.”<sup>1</sup>

The principal benefits of utilizing an alternative dispute resolution process to resolve conflicts include:

- Saving time and legal expenses.
- Having greater control over the dispute resolution process.
- Resolving conflicts in a more creative way than might be possible if left to a decision by a judge or jury.
- Greater privacy in resolving disputes than is afforded in a courtroom.
- Responding to conflict in a rational and courteous manner can increase communication, foster positive intergovernmental relationships, provide an opportunity for learning, and broaden perspectives and solutions.

Figure 13.1 shows a dispute resolution ladder. The goal is to resolve conflicts at the lowest steps on the ladder. If the dispute is not resolved at the lower stages, the dispute moves up the ladder. It is in the best interest of all parties involved to resolve the dispute at the lower stages on the ladder, as both the cost and duration of the process increase at the higher stages and the involved parties have less control over outcomes.



**Figure 13.1 Dispute Resolution Ladder**  
Source: Washington, WI Comprehensive Plan:

<sup>1</sup> <https://www.iand.uscourts.gov/alternative-dispute-resolution>



13. INTERGOVERNMENTAL COLLABORATION

ISSUES AND OPPORTUNITIES

*Build Local Capacity*

**Issues:** Local governments, non-profits, and community organizations play an essential role in developing and implementing community goals for the future through plans, regulations, infrastructure investments, programs, and services.

However, many of these groups may work with limited staff and funds, or may not have the knowledge, training, or technical resources to achieve their goals, or to tap into financial and technical assistance from local, state, and federal programs on their own.

**Opportunities:** The need for local governments, non-profits, and community organizations facing similar issues to cooperate in finding solutions is an opportunity to share resources they could not afford individually.

Efforts to build local capacity for these groups can range from training and building technical knowledge, to ensuring sustainable funding, to networking and enhancing partnerships to share resources.

Capacity building resources include:

The **Government Training Institute** at East Central Intergovernmental Association (ECIA), based in Dubuque, is aimed at increasing the capacity of city and county officials and economic development groups in the region.

[https://www.ecia.org/programs/government\\_training\\_institute.php](https://www.ecia.org/programs/government_training_institute.php)

The **ECIA Fundraising Team** is a non-profit resource for communities and non-profits for capital campaigns and capital projects that require various funding sources. [https://www.ecia.org/programs/fundraising\\_consulting/index.php](https://www.ecia.org/programs/fundraising_consulting/index.php)

The **Community Foundation of Jackson County**, based in Dubuque, inspires people to give back; collaborates with local leaders to identify needs and solutions to community-wide issues; builds endowments to support local organizations; and strengthens local non-profits through funding, capacity-building, and other services.

<https://dbqfoundation.org/affiliates/cfjc>

**Iowa State University Extension and Outreach**, based in Ames, engages Iowans and strengthens communities and

their local economies by enhancing leadership capacity, creating partnerships, teaching best practices, and delivering research-based education and information to address current and emerging real-life challenges. The Jackson County Extension office is located in Maquoketa.

<https://www.extension.iastate.edu/our-story/2022-iowa-state-university-extension-and-outreach-annual-report>

*Informal Collaboration*

**Issue:** The Jackson County Economic Alliance (JCEA) Board of Directors has established five goals and objectives for the Alliance for 2023 to 2028.

Goal 3 is: Collaboration with Jackson County, cities, schools, hospitals, and service organizations.

**Opportunity:** The JCEA will further develop its relationship with Jackson County's public institutions and service organizations to better facilitate collaborative success and creative economic solutions.

<https://www.thejcea.org/about-us>

*Collaboration for Youth Development*

**Issue:** The Jackson County Economic Alliance (JCEA), in conjunction with the East Central Intergovernmental Association (ECIA), contracted the Iowa Initiative for Sustainable Communities, an organization within the University of Iowa’s Office of Outreach and Engagement, to develop strategies to attract young adults to the region.

The resulting 2018 *Jackson County Tomorrow Strategic Plan* aims to align the region’s resources to help reverse the “brain drain” experienced over the prior two decades.

“Jackson County’s young residents and high school alumni leave for educational or professional opportunities and do not return, taking their talents with them. Their departures create disproportioned population pyramids that seem “hollowed out.”

This trend saps local morale, diminishes productivity, limits economic dynamism, and causes an outbound flow of community wealth. Businesses close,

schools consolidate, and a downward spiral ensues.”<sup>2</sup>

**Opportunities:** “There is cause for optimism, however. Although national trends appear to be working against small towns, emerging strategies leverage regional assets – natural, cultural, and economic – to ensure long-term growth and stability.

The strategies within *Jackson County Tomorrow* will not produce immediate results – it takes focus, time, and effort to attract younger residents – but they can help ensure that residents of today and tomorrow live in a Jackson County with a sustainable future.”<sup>3</sup>

“Students reported in surveys distributed to local schools that they wanted to return to their communities, but believed that job opportunities are limited across the county. Investing and developing young people’s talents can introduce fresh ideas to the community while also teaching young people the skills they can bring back to the county in the future.”<sup>4</sup>

“Investing in young people – especially students – represents a two-pronged approach to increasing the number of young families in Jackson County. First, investing in the community’s current young population makes the community more attractive to the young people themselves – they may feel valued, important, and empowered. Consider a hypothetical teen currently attending a local high school.

Teaching this student leadership and entrepreneurial skills today can pay off down the line when, after attending college and after a job or two, they consider relocating with a family in tow. Armed with the independence and real-world skills developed in Jackson County and cultivated thereafter, they decide to start a business back home. The student had a great experience growing up and wants to provide the same opportunities to the next generation. They already know the business climate, the available resources, and how to leverage them.”<sup>5</sup>

<sup>22</sup> 2018 *Jackson County Tomorrow Strategic Plan*, p. 11

<sup>3</sup> Ibid

<sup>4</sup> Ibid, p. 23

<sup>5</sup> Ibid, p. 46

13. INTERGOVERNMENTAL COLLABORATION

**GOALS AND OBJECTIVES**

*Build Local Capacity*

13.1 Build capacity of local governments, non-profits, and community organizations in Jackson County through:

- Provide training to build technical knowledge.
- Ensuring sustainable funding.
- Networking and enhancing partnerships to share resources.

*Informal Collaboration*

13.2 Jackson County Economic Alliance (JCEA) collaboration with Jackson County, cities, schools, hospitals, and service organizations.

- JCEA will develop a comprehensive questionnaire based on the premise of the Synchronist software to identify the needs, activities, and goals of these organizations.
- JCEA will meet with Jackson County staff and officials on at least a quarterly basis and develop a set of goals and initiatives to better

understand the county’s challenges, assets, and opportunities.

- JCEA will meet with City staff and officials on at least a quarterly basis and develop a set of goals and initiatives to better understand each city’s challenges, assets, and opportunities.
- JCEA will meet with each school district every year and develop a joint program between the JCEA and each school district to promote community development and economic growth.
- JCEA will meet with each chamber and development group every year.
- JCEA will meet with the hospital every year.
- JCEA will meet with at least 5 service organizations and/or non-profits every year.

*Youth Development*

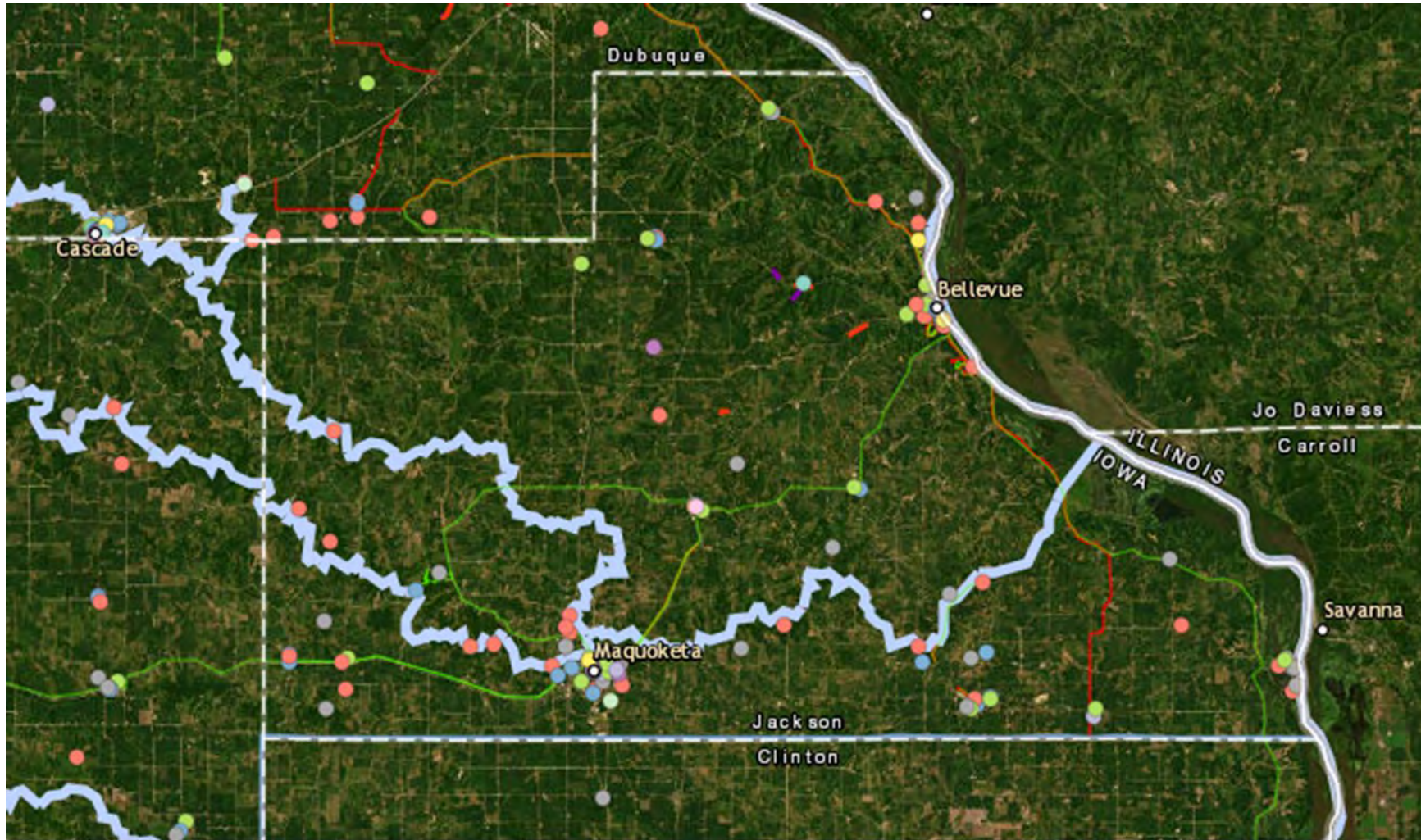
13.3 Promote engagement and entrepreneurship among the county’s youth, including professional development opportunities for young workers.

- Improve youth leadership and engagement through engaging activities and leadership development opportunities.
- Improve youth entrepreneurship through innovative programming.



**PBNJ Youth Advisory Board presents grant (2021)**  
 Photo Credit: Community Foundation of Jackson County, <https://dbqfoundation.org/affiliates/cfjc>

# Chapter 14. Implementation



Fields of Opportunities Map of Jackson County

Source: <https://gwloop.com/articles/eastern-iowa-field-of-opportunities> accessed Feb. 2024

**PURPOSE OF COMPREHENSIVE PLAN**

State law enables a county to create and amend a comprehensive plan for two fundamental purposes:

First, a comprehensive plan presents a shared vision for the future, a policy guide with long-range community goals.

It's **comprehensive** because it covers a wide range of issues and activities.

With a **shared vision** everyone has a common destination and common goals. People then can work together as a team, supporting and encouraging each other to reach community goals.

It's **long-range** because it looks forward 20 years as a **policy guide**, a road map, shaped by public participation. It's *not* rules or regulations.

Second, the plan provides a legal basis for land use regulations by analyzing existing conditions and establishing goals to guide public policies and improvements as well as future growth and development.

**VISION, BROAD GOALS, & PRIORITIES**

The Comprehensive Plan presents a unified and compelling vision for the future of Jackson County. The vision defines aspirations of what the community hopes to achieve in the future.

***Shared Vision Statement***

The shared vision statement for Jackson County declares where the community wants to be in the future:

**Jackson County is an engaging community, enthusiastically creating opportunity, supporting growth, and enhancing quality of life for all who live, work, and visit.**

This community vision helps local governments, organizations, businesses, and individuals to make strategic decisions, aligning their efforts with the following broad goals and future priorities that will enable Jackson County to reach the destination described in the shared vision statement.

***Broad Goals and Future Priorities***

1. Rural quality of life and safe communities that compete well with larger cities
2. Recreational opportunities, historic sites, natural resources, unique amenities, and river access points
3. Business retention, expansion, and recruitment
4. Available, trained workforce of professionals, skilled trades, and labor in general
5. Locally owned and operated shops and restaurants engaged in their communities
6. Quality, affordable, and accessible housing options and pathways, especially for underserved populations
7. Affordable childcare available countywide
8. Strong volunteerism

**PLAN IMPLEMENTATION**

The Comprehensive Plan provides the Board of Supervisors with a 20-year guide for future decision making to realize the community’s shared vision.

To achieve this shared vision, Jackson County must actively work to incorporate the plan’s recommendations into its budgets, policies, and ordinances. Many plan recommendations will require additional research, analysis, public input, and consideration from the Board of Supervisors before they can be implemented. When choosing how to implement the Comprehensive Plan, the Board of Supervisors should consider all relevant factors and weigh the public good with the cost and impact on the county.

Once adopted, the Comprehensive Plan should be updated every 5 to 10 years, so that it continues to provide an accurate picture of how the county wants to grow, develop, and prosper.

**IMPLEMENTATION STRATEGY**

Chapters 4 through 13 of the Comprehensive Plan offer an overview of existing conditions and trends; local, state, and federal programs; issues and opportunities; and goals and objectives for these key planning elements:

- 4. Community Facilities and Services
- 5. Infrastructure and Utilities
- 6. Transportation
- 7. Economic Development
- 8. Housing
- 9. Agriculture and Natural Resources
- 10. Parks, Recreation, and Cultural Resources
- 11. Hazard Mitigation
- 12. Land Use
- 13. Intergovernmental Collaboration

Chapter 14. Implementation brings together the goals and objectives of Chapters 4 through 13 into a strategy for the future.

From 2013 to 2024, Jackson County has engaged in many planning efforts at the county level as well as in various regional planning efforts. The public input, goals, and objectives described in these plans are part of or referenced in the Comprehensive Plan.

The information and perspectives provided through the public participation process helped identify updated and new goals and objectives for the Comprehensive Plan.

The implementation strategies for Chapters 4 through 13 are presented in a series of Tables 14.1 through 14.10, one for each Chapter with this format:

- The heading summarizes the focus of the goals and objectives for each chapter.
- The goals for each chapter are numbered, and followed by one or more objectives listed below.
- Each objective has a one or more potential sponsors and partners.
- Each objective has a timeframe.
- Related plans are referenced in the last row of each table.

14. IMPLEMENTATION

**Goals** are broad statements that describe the way things should be. For example, Child Care goal 4.2 is to: “Ensure that high-quality child care opportunities are available and affordable to all residents.” This goal is a general description of how you want to improve child care in the future. You have not said how you are planning to do it and what resources you need to do it.

**Objectives** are specific, measurable steps to be taken to reach a goal. One objective for this Child Care goal is: “Increase overall capacity for child care in Jackson County.”

**Potential Sponsors and Partners** are entities that help implement an objective. Sponsors may be public, private, or non-profit agencies that serve as organizer, leader, and/or funder for an objective. Partners can include these entities as well as volunteer groups and community members helping to accomplish an objective. The Potential Sponsors and Partners for this Child Care objective are: “Jackson County and city governments, JCEA, local banks.”

**Timeframes** are specific periods of time for an objective to occur. Some objectives require ongoing implementation while others can be implemented within a short-term (1 to 5 years), medium-term (6 to 10 years), or long-term (11 to 20 years) timeframe. This Child Care objective has a timeframe of “Medium.”

**Related plans** that are the source of a Chapter’s goals and objectives are identified. The goals contain a reference number for each related plan, which is listed in the last row of the table similar to footnotes. The related plan for this Child Care objective is the “2018 Jackson County Tomorrow Strategic Plan.”

The **Jackson County Comprehensive Plan Steering Committee** made recommendations for several objectives. These recommendations contain a reference number which is listed in the last row of the table similar to footnotes.

**Acronyms** used in Tables 14.1 through 14.10 for public, private, and non-profit agencies are listed below.

ACRONYMS in Tables 14.1 – 14.10
CEDS = Community Economic Development Strategy
CFJC = Community Foundation of Jackson County
ECIA = East Central Intergovernmental Association
EDA = Economic Development Administration
ECDC = East Central Development Corporation
FSA = Farm Service Agency
FEMA = Federal Emergency Management Agency
IDALS = Iowa Department of Agriculture and Land Stewardship
IDCA = Iowa Department of Cultural Affairs
IDNR = Iowa Department of Natural Resources
IDOT = Iowa Department of Transportation
IEDA = Iowa Economic Development Authority
ISU = Iowa State University
JCEA = Jackson County Economic Alliance
MR WMA = Maquoketa River Watershed Management Authority
NRCS = Natural Resources Conservation Service
RPA = Regional Planning Affiliation
RTA = Regional Transit Authority
SILT = Sustainable Iowa Land Trust
SWCD = Soil and Water Conservation District
USDA = U.S. Department of Agriculture
YMCA = Young Men’s Christian Association

14. IMPLEMENTATION

<b>Table 14.1 Chapter 4. Community Facilities and Services -- Implementation Summary:</b> These goals and objectives focus on maintaining current public-private and intergovernmental partnerships and establishing new relationships to provide high quality community facilities and services that improve quality of life for residents.		
GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>4.1 Community Health Goal: Address the top three health priorities for Jackson County through community partnerships.<sup>1</sup></b>		
1. Substance Abuse: Access to substance abuse prevention and treatment.	Area Substance Abuse Council, Opioid Awareness Program	Short
2. Mental Health: Access to mental health services and treatment.	Jackson County Regional Health Center Telehealth Mental Health Services, Regional Mobile Crisis Services	Short
3. Obesity: Integrated health, wellness, nutrition, physical activity, and weight status.	Maquoketa YMCA programs, Jackson County Regional Health Center Diabetic Education and Nutritional Consult services, Jackson County Farmers Market vouchers	Short
<b>4.2 Child Care Goal: Ensure that high-quality child care opportunities are available and affordable to all residents.<sup>2</sup></b>		
1. Increase overall capacity for child care in Jackson County.	Jackson County and city governments, JCEA, local banks	Medium
2. Strengthen relationships with county teachers and child care workers.	School districts, licensed center directors, registered home providers	Medium
<b>4.3 Child Care Goal: Support efforts to attract, maintain, and expand child care services in the region.<sup>3</sup></b>		
1. Work with partners to identify/expand affordable/multi-shift day care.	Prosperity Eastern Iowa, RPA, JCEA, Jackson County, city governments, Chambers of Commerce, Clinton Community College, Childcare Resources and Referrals, IEDA, EDA, USDA	Short
2. Assist in implementing and working with communities toward improving available child care options.		Short
3. Promote and assist with access to child care issues due to barriers such as transportation, distance, hours, openings.		Short
<b>4.4 Education Goal: Continue to support the Jackson County Campaign for Grade-Level Reading in the four areas supporting academic achievement: School attendance, School readiness, Summer learning, Access to books.<sup>4</sup></b>		
1. Build community awareness of children’s academic and social-emotional needs.	CFJC, Campaign for Grade-Level Reading partners	Ongoing
2. Provide a unified vision and strategy to improve academic success and child well-being inside and outside the classroom.		Ongoing
3. Fund child- and family-focused initiatives by utilizing existing financial resources and offering a way for generous community members to give in support of children’s well-being.		Ongoing
4. Analyze local data to identify needs and inform plans to address them.		Ongoing
Related Plan(s): 1. 2021 Jackson County Community Health Needs Assessment, 2. 2018 Jackson County Tomorrow Strategic Plan, 3. Comprehensive Economic Development Strategy 2022-2027, 4. CFJC Initiative		



14. IMPLEMENTATION

**Table 14.2 Chapter 5. Infrastructure and Utilities -- Implementation Summary:** These goals and objectives focus on maintenance and improvement of public and private infrastructure and utilities, and outline strategies for a transition from non-renewable to renewable energy sources, to enhance quality of life for residents.

GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>5.1 Public Infrastructure Goal: Maintain and modernize critical infrastructure for transportation, broadband, water, sewer, downtowns, and community facilities for a more competitive region.<sup>1</sup></b>		
1. Enhance community and public facility infrastructure and increase access to community services and amenities to meet the demands of regional employers and their employees.	Prosperity Eastern Iowa, RPA, JCEA, Jackson County, city governments, Chambers of Commerce, RTA, IDOT, IEDA, EDA, USDA	Ongoing
<b>5.2 Renewable Energy Goal: Install photovoltaic (PV) solar panels on County-owned buildings.<sup>2</sup></b>		
1. Utilize the feasibility study in the Jackson County Clean Energy Plan.	Jackson County, professional solar installers	Short
2. Partner with professional solar installers for cost estimates.		Short
<b>5.3 Renewable Energy Goal: Create solar-ready zoning and building codes.<sup>2</sup></b>		
1. Partner with Jackson County jurisdictions to develop zoning and development standards to support solar panel adoption across the county.	Jackson County, city governments	Short
2. Incorporate building codes that make the process for solar easier.		Short
<b>5.4 Renewable Energy Goal: Expand data collection for the Jackson County Energy District’s solar installation map.<sup>2</sup></b>		
1. Adopt Jackson County permits or registration requirements for roof mounted PV solar installations.	Jackson County, city governments, Jackson County Energy District	Short
2. Partner with municipalities to record their photovoltaic (PV) solar installations.		Short
<b>5.5 Renewable Energy Goal: Advocate for clean energy policy by the Iowa Legislature and Iowa Utilities Board.<sup>2</sup></b>		
1. Encourage involvement with the Jackson County Energy District and legislature representatives to support stronger clean energy policies for greater accessibility and affordability within the county.	Jackson County, city governments, Jackson County Energy District	Short
<b>5.5 Renewable Energy Goal: Encourage involvement in the Grow Solar Jackson County Program through the Jackson County Energy District.<sup>2</sup></b>		
1. Make solar power in the county affordable and accessible to residents and businesses.	Jackson County, city governments, Jackson County Energy District	Short
2. Increase civic engagement among residents to actively participate in the future of energy in their communities.		Short
3. Encourage municipalities to pursue conversations with utility providers about transitioning to renewable energy.	Jackson County, city governments, Jackson County Energy District, utility providers	Short
Related Plan(s): 1. Comprehensive Economic Development Strategy 2022-2027, 2. 2022 Jackson County Clean Energy Plan		

14. IMPLEMENTATION

<b>Table 14.3 Chapter 6. Transportation -- Implementation Summary:</b> These goals and objectives seek to maintain and improve the county and regional transportation network, with priority on improvements and projects that improve quality of life for residents.		
GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>6.1 Maintain and Improve the Existing Transportation Network Goal: Strategically preserve existing infrastructure and focus future investment in areas that are already served by significant public infrastructure investments.<sup>1,2</sup></b>		
1. Preserve and maintain road surfaces.	Jackson County Engineer and Secondary Roads, RPA, IDOT	Ongoing
2. Preserve and maintain bridges.		Ongoing
<b>6.2 Maintain and Improve the Existing Transportation Network Goal: Increase the safety, security, and resiliency of the transportation system.<sup>1,2</sup></b>		
1. Reduce serious injuries and fatalities from vehicle crashes.	Jackson County Engineer and Secondary Roads, RPA, IDOT	Ongoing
2. Reduce pedestrian and bicycle fatalities and serious injuries.		Ongoing
<b>6.3 Prioritize Transportation Improvements and Projects Goal: Support transportation improvements and projects that promote existing and future economic development.<sup>1,2</sup></b>		
1. Identify potential connections to support existing and future business operations within and outside the region.	Jackson County Engineer and Secondary Roads, RPA, IDOT	Ongoing
2. Improve access to jobs for both residents and employers in the region.		Ongoing
<b>6.4 Prioritize Transportation Improvements and Projects Goal: Provide a high degree of multimodal accessibility and mobility for individuals, and better integration and connectivity between modes of travel.<sup>1,2</sup></b>		
1. Provide more on-road bicycle facilities throughout the community.	Jackson County Engineer and Secondary Roads, RPA, IDOT, IDNR	Ongoing
2. Provide more trails to connect destinations throughout the community, including the completion of existing regional and local trail systems.		Ongoing
3. Improve access to basic services and important destinations with transit.	Jackson County Engineer and Secondary Roads, RPA, IDOT, RTA	Ongoing
<b>6.5 Prioritize Transportation Improvements and Projects Goal: Support efficient freight system in the region.<sup>1,2</sup></b>		
1. Maintain adequate infrastructure conditions on primary freight corridors.	Jackson County Engineer and Secondary Roads, RPA, IDOT	Ongoing
2. Reduce delay on primary freight corridors.		Ongoing
Related Plan(s): 1. Regional Planning Area (RPA) 2045 Long Range Transportation Plan, 2. Jackson County Secondary Roads Five-Year Construction Plan FY 2025-2028		

14. IMPLEMENTATION

<b>Table 14.4 Chapter 7. Economic Development -- Implementation Summary:</b> These goals and objectives seek to improve economic quality and sustainability as a foundation for a resilient community and an enhanced quality of life for residents.		
GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>7.1 Workforce Development Goal: Attract and maintain a diverse population and workforce that can meet the needs of regional employers.<sup>1</sup></b>		
1. Partner with existing workforce agencies to analyze workforce skills and trends.	Prosperity Eastern Iowa, RPA, JCEA, Jackson County, city governments, Chambers of Commerce, Clinton Community College, Childcare Resources and Referrals, IEDA, EDA, USDA	Short
2. Research best practices for attracting high demand workers to the region.		Ongoing
3. Partner with institutions such as Clinton Community College for job training programs.		Short
4. Attract a diverse workforce by creating a more inclusive environment.		Ongoing
<b>7.2 Business Attraction and Retention Goal: Continue to support business retention and expansion through capital investments and entrepreneurial centers.<sup>1</sup></b>		
1. Support efforts that attract, maintain, promote, and expand regional industries.	Prosperity Eastern Iowa, RPA, JCEA, Jackson County, city governments, Chambers of Commerce, Clinton Community College, Childcare Resources and Referrals, IEDA, EDA, USDA	Ongoing
2. Support and promote the efforts of educational institutions and their business programs.		Ongoing
3. Identify entrepreneurial resources that are lacking and collaborate with community partners to improve.		Ongoing
4. Encourage an economic development environment that supports entrepreneurship and existing businesses while attracting new businesses.		Ongoing
5. Partner with institutions that provide resources to help businesses increase their knowledge.		Short
6. Develop and maintain a Small Business Committee and a business directory to promote awareness of and support for local businesses in Jackson County <sup>2</sup> .		Ongoing
<b>7.3 Tourism Goal: Improve the region's desirability by enhancing and expanding access to the arts and recreational opportunities.<sup>1</sup></b>		
1. Invest in cultural/arts events, organizations, and institutions.	Prosperity Eastern Iowa, RPA, JCEA, Jackson County, city governments, Chambers of Commerce, Clinton Community College, Childcare Resources and Referrals, IEDA, EDA, USDA	Ongoing
2. Spread awareness of community events and resources such as gwloop.com.		Ongoing
3. Develop and maintain a data base of Jackson County businesses, venues, attractions, and other resources to promote tourism in Jackson County <sup>2</sup> .		Ongoing
Related Plan(s): 1. Comprehensive Economic Development Strategy 2022-2027, 2. Jackson County Comprehensive Plan Steering Committee recommendation		

14. IMPLEMENTATION

<b>Table 14.5 Chapter 8. Housing -- Implementation Summary:</b> These goals and objectives focus on actions that the county and its partners can take to have a supply of good-quality, affordable housing available in a variety of shapes, sizes, and price points that will ensure an improved quality of life for residents.		
GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>8.1 Workforce Housing Goal: Provide affordable housing to make Jackson County attractive for young workers.<sup>1,2</sup></b>		
1. Support new pocket neighborhood development.	ECIA, ECDC, Jackson County and city governments, local Realtors	Short
2. Support transition to homeownership by seeking partnerships for down payment assistance.	City governments, local financial institutions	Ongoing
<b>8.2 Housing Options Goal: Increase and diversify housing options throughout Jackson County.<sup>2</sup></b>		
1. Explore federal and state grant opportunities to diversify housing options.	Jackson County and City governments	Ongoing
2. Partner with regional public and private housing developers to research and develop housing opportunities.	City governments, regional and local public and private housing developers	Ongoing
3. Promote housing needs assessment and housing implementation plans in the county to support the development of new housing opportunities.	Jackson County and City governments	Short
4. Follow state construction codes to ensure quality housing stock. <sup>3</sup>	Jackson County and City governments, State Building Code Commissioner, State Fire Marshal, regional and local public and private housing developers <sup>3</sup>	Ongoing
5. Establish programs that help make improvements to existing housing stock.	Jackson County and City governments	Short
6. Allow cities within the county to pursue incentives to encourage private development of housing within their incorporated areas.	Jackson County and City governments	Ongoing
<b>8.3 Age-Friendly Housing Goal: Provide more housing options for seniors.<sup>2</sup></b>		
1. Develop new senior housing through private development or through establishing a housing cooperative.	Senior housing developer/Co-op property management company, city governments	Medium
Related Plan(s): 1. Comprehensive Economic Development Strategy 2022-2027, 2. 2018 Jackson County Tomorrow Strategic Plan, 3. Jackson County Comprehensive Plan Steering Committee recommendation		

14. IMPLEMENTATION

**Table 14.6 Chapter 9. Agriculture and Natural Resources -- Implementation Summary:** In coordination with Chapter 10, these goals and objectives seek to maintain and improve the quality of agriculture and natural resources to enhance quality of life for residents.

GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>9.1 Soil Health and Water Quality Goal: Implement Jackson County Soil and Water Conservation District (SWCD) Five-Year Soil and Water Resources Conservation Plan’s priority goals for 2021-2025.<sup>1</sup></b>		
1. Encourage the wise use and protection of the soil resources within the SWCD in order to sustain crop productivity for generations to come.	Jackson County SWCD, SWCD Local Working Group (farmers, local business owners, and community residents), USDA, NRCS, FSA, IDALS	Ongoing
2. Encourage the wise use and protection of the surface water and groundwater resources within the SWCD, to prevent their contamination and to ensure their sustained use.		Ongoing
3. Improve perennial cover by promoting profitable and sustainable use of forest and pasturelands within the SWCD.		Ongoing
4. Connect with the greater community and other stakeholders in support of conservation, sustainability and regenerative agriculture.		Ongoing
<b>9.2 Watershed Management Goal: Implement Maquoketa River Watershed Management Plan - Phase 1.<sup>2</sup></b>		
1. Improve water quality through techniques for nutrient management, erosion reduction, and increased infiltration.	MR WMA, USDA, NRCS, Jackson County SWCD, IDNR, IEDA, Iowa Flood Center, Iowa Farm Bureau, ISU Extension, SILT, Jackson County and city governments, Interested community members	Medium
2. Improve watershed flood management.		Short
3. Increase watershed awareness and involvement among stakeholders.		Short
4. Preserve, protect, and improve ecologically sensitive habitats and ecosystems in the watershed.		Medium
5. Establish the WMA as a trusted community resource.		Long
<b>9.3 Watershed Management Goal: Implement Maquoketa River Watershed Management Plan – Phase 2 as a subwatershed action plan to guide local authorities and residents in putting Phase 1 into practice.<sup>2</sup></b>		
1. Use technical analysis and continued engagement with local stakeholders to identify projects where resources could be directed to meet the goals determined by the community.	MR WMA, USDA, NRCS, Jackson County SWCD, Jackson County and city governments, landowners	Ongoing
2. Prioritize projects that will have the biggest impact with the most efficient resource use.		Short
3. Focus on finding priority locations and explicit solutions to mitigate future flooding events, enhance water quality, and promote recreational opportunities within the watershed.		Ongoing
<b>9.4 Natural Resource Conservation Goal: Implement Jackson County Conservation’s 2023 Outdoor Recreation Plan.<sup>3</sup></b>		
1. Future development and acquisition projects.	Jackson County Conservation, IDNR, USDA, friends and volunteer groups	Ongoing
2. Management plans for forest and prairie ecosystems.		Ongoing
3. A 5-year development plan for: wildlife areas, restoration and enhancement of habitat, and other capital development projects that will enhance conservation activities.		Short
Related Plan(s): 1. Jackson County SWCD Five-Year Soil and Water Resources Conservation Plan 2021-2025, 2. Maquoketa River Watershed Management Plan – Phases 1 and 2, 3. Jackson County Conservation’s 2023 Outdoor Recreation Plan		

14. IMPLEMENTATION

<b>Table 14.7 Chapter 10. Parks, Recreation, and Cultural Resources -- Implementation Summary (part 1):</b> In coordination with Chapter 9, these goals and objectives focus on improvements for county parks and recreation areas, as well as conservation and interpretation of cultural and natural resources, to enhance quality of life.		
GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>10.1 Environmental Education Goal: Implement the 2023 Environmental Education Plan’s 5-Year Plan for programming.<sup>1</sup></b>		
1. Increase interpretive signage at Prairie Creek Recreation Area and Jackson County Recreation Trail.	Jackson County Conservation, local school districts, area colleges	Short
2. Host all 5 <sup>th</sup> grade students in Jackson County in School of the Wild by 2024-2025 school year.		Short
3. Work more with upper-level students to increase knowledge of natural resources and conservation.		Short
4. Connect with middle and high school teachers, and local college professors, to help enhance their curriculum with outreach programs or field trips to natural areas.		Short
5. Design and construct a large new exhibit at the Hurstville Interpretive Center to tell the story of Iowa’s natural history and celebrate the Center’s 20 <sup>th</sup> anniversary in 2024.		Short
<b>10.2 Outdoor Recreation and Conservation Goal: Implement the 2023 Outdoor Recreation Plan.<sup>2</sup></b>		
1. Future development and acquisition projects.	Jackson County Conservation, IDNR, USDA, IDCA, friends and volunteer groups	Ongoing
2. Management plans for forest and prairie ecosystems.		Ongoing
3. A 5-year development plan for: campgrounds and parks, wildlife areas, historic structures, trails, river access, restoration and enhancement of habitat, and other capital development projects that will enhance recreational activities.		Short
<b>10.3 Honor Cultural and Natural Resources Goal: Enhance quality of life through honoring arts and cultural events and natural resources in the region.<sup>3</sup></b>		
1. Improve the livability factor and desirability of the region as a destination for business by enhancing and expanding access to arts/cultural events, rivers, trails, and other recreational and national excursion areas.	JCEA, Chambers of Commerce, Jackson County and city governments, IEDA, IDCA, United Way, Jackson County Area Tourism, local cultural and arts groups	Ongoing
<b>10.4 Honor Cultural and Natural Resources Goal: Promote celebration of the arts and cultural events.<sup>3</sup></b>		
1. Support and assist our partners to increase investments in cultural and arts events, organizations, and institutions.	Prosperity Eastern Iowa, JCEA, Chambers of Commerce, Jackson County and city governments, EDA, IEDA, IDCA, United Way, Jackson County Area Tourism, local cultural and arts groups	Ongoing
2. Promote quality and artistic renewal by encouraging commission of murals and other artwork throughout the region.		Ongoing
3. Educate elected officials and citizens on values of developing and funding quality of life amenities to attract and retain workforce throughout the region.		Ongoing
Related Plan(s): 1. Jackson County Conservation’s 2023 Environmental Education Plan, 2. Jackson County Conservation’s 2023 Outdoor Recreation Plan, 3. Comprehensive Economic Development Strategy 2022-2027		

14. IMPLEMENTATION

<b>Table 14.7 Chapter 10. Parks, Recreation, and Cultural Resources -- Implementation Summary (part 2):</b> In coordination with Chapter 9, these goals and objectives focus on improvements for county parks and recreation areas, as well as conservation and interpretation of cultural and natural resources, to enhance quality of life.		
GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>10.5 Honor Cultural and Natural Resources Goal: Ensure cultural sustainability for the wellbeing of all.<sup>3</sup></b>		
1. Integrate culture within daily activities, policies, and programs.	Prosperity Eastern Iowa, JCEA, Chambers of Commerce, Jackson County and city governments, EDA, IEDA, IDCA, United Way, Jackson County Area Tourism, local cultural and arts groups	Short
2. Ensure equal access to and participation in activities and events within the region.		Ongoing
3. Mobilize culture by promoting events as inclusively as possible.		Short
<b>10.6 Honor Cultural and Natural Resources Goal: Enhance access to natural excursion areas and recreational activities.<sup>3</sup></b>		
1. Continue to expand the level of public awareness of parks available by promoting sites like: <a href="http://www.gwloop.com/">http://www.gwloop.com/</a> .	Prosperity Eastern Iowa, JCEA, Chambers of Commerce, Jackson County and city governments, EDA, IEDA, IDCA, United Way, Jackson County Area Tourism, local cultural and arts groups	Ongoing
2. Enhance and expand walking, biking, running, and other recreational facilities in the region.		Long
3. Expand and enhance the region’s existing recreational tourism activities, areas and facilities with maximum effectiveness recognizing budget constraints and the need for grant and local funding.		Long
4. Continually strive to improve existing facilities while seeking opportunities for future development.		Ongoing
<b>10.7 Regional Collaboration Goal: Implement the updated Grant Wood Loop Master Plan’s Future Priorities.<sup>4</sup></b>		
1. Expand programming in and around parks and trails including natural resource education, nature and cultural interpretation, and outdoor recreation.	Prosperity Eastern Iowa, JCEA, Chambers of Commerce, Jackson County and city governments, EDA, IEDA, IDCA, United Way, Jackson County Area Tourism, local cultural and arts groups, outdoor recreation and parks friends’ groups, interested community members	Ongoing
2. Expand marketing of outdoor recreational parks and assets that also incorporates experiential tourism and ecotourism efforts.		Ongoing
3. Expand outdoor education opportunities and connect more with the natural environment.		Ongoing
4. Reforest areas and cities devastated by storms and pests such as the derecho and Emerald Ash Borer.		Ongoing
5. Promote outdoor recreation and parks friends’ groups to grow the base of advocates and volunteers for natural resources and programming.		Ongoing
6. Preserve and/or acquire unique natural, cultural, and recreational assets of the region, especially those containing sensitive environmental spaces.		Ongoing
7. Preserve and/or acquire areas affected by creeks and rivers and by weather, rain, and flood events to increase resiliency and decrease devastation.		Ongoing
8. Promote the relationship between outdoor spaces and public health, especially brain health.		Ongoing
9. Preserve and/or acquire unique areas related to the Mississippi River Corridor.		Ongoing
Related Plan(s): 3. Comprehensive Economic Development Strategy 2022-2027, 4. 2022 Grant Wood Loop Master Plan Update		

14. IMPLEMENTATION

<b>Table 14.8 Chapter 11. Hazard Mitigation -- Implementation Summary:</b> these goals and objectives focus on mitigation, prevention, and preparedness to reduce potential losses and enhance quality of life.		
GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>11.1 Mitigation Goal: Protect the health, safety and quality of life for Jackson County citizens while reducing or eliminating property losses, economic costs, and damage to the natural environment caused by a disaster.<sup>1</sup></b>		
1. Maintain or consider National Flood Insurance Program (NFIP) membership as required.	Jackson County and city governments, FEMA, Iowa HSEMD (Homeland Security and Emergency Management Department)	Ongoing
2. Continue to maintain and enforce snow removal policies.		Ongoing
3. Purchase or elevate structures, add lift stations, increase/reinforce culvert size, and add curb and gutter to streets in areas in flood zones with severe and repetitive flood damage to prevent reoccurrence.		Ongoing
<b>11.2 Prevention Goal: Ensure government operations, response and recovery in Jackson County are not significantly disrupted by disasters.<sup>1</sup></b>		
1. Provide backup power generators and wiring for critical facilities.	Jackson County Emergency Management Agency	Ongoing
2. Consider building a tornado safe room for all new construction and rehabilitation projects.		Ongoing
3. Train personnel as weather spotters.		Ongoing
<b>11.3 Preparedness Goal: Expand public awareness and encourage intergovernmental cooperation, coordination and communication in Jackson County to build a more resilient community against all hazards.<sup>1</sup></b>		
1. Continue to maintain existing outdoor warning siren systems and ensure appropriate coverage for population or ensure National Oceanic and Atmospheric Administration (NOAA) weather radios are available in uncovered areas.	Jackson County and city governments, FEMA, Iowa HSEMD	Ongoing
2. Purchase barricades and signage as deemed necessary to better communicate information.		Ongoing
3. Continue to improve public awareness of hazardous weather through newsletters, public notices, strolling signs, etc.		Ongoing
4. Create a data base of individuals with special needs to assist in a hazard event.		Ongoing
5. Review and implement snow policies and implement during smaller storms as appropriate so residents are familiar with rules and regulations.		Short
Related Plan(s): 1. 2024 Jackson County Multi-Jurisdictional Hazard Mitigation Plan		



14. IMPLEMENTATION

<b>Table 14.9 Chapter 12. Land Use -- Implementation Summary:</b> These goals and objectives seek to minimize conflicts between incompatible land uses, preserve key resources, and ensure the Jackson County can grow while keeping its rural character and quality of life for residents.		
GOALS AND OBJECTIVES	POTENTIAL SPONSOR AND PARTNERS	TIMEFRAME
<b>12.1 Best Practice Goal: Keep Land Use Policy current with changing growth conditions in the region.</b>		
1. Evaluate land use goals on a 5-year basis to make sure the Land Use Policy remains a useful guide for growth and development.	Jackson County and city governments, Jackson County SWCD, MR WMA	Short
2. Consider reviewing and amending land use goals between 5-year intervals should development conditions significantly change.		Short
3. Review zoning and subdivision ordinances to ensure compliance with the recommendations in the Jackson County Comprehensive Plan.		Short
<b>12.2 Best Practice Goal: Ensure that cities are coordinating with each other for their best development.</b>		
1. Review existing future land use maps of each jurisdiction to ensure compatibility of goals with other jurisdictions in the County.	Jackson County and city governments	Ongoing
<b>12.3 Preservation Goal: Preserve and protect viable land for agriculture.<sup>1, 2, 3</sup></b>		
1. Review the A-1 Agricultural District zone to ensure it effectively protects current open spaces.	Jackson County and city governments, Jackson County SWCD, MR WMA	Short
2. Evaluate the quality of land using indicators such as CSR2 and Land Capability Class in the county to determine the best use.		Short
3. Enforce zoning ordinance when proposed developments interfere with viable agricultural lands.		Ongoing
<b>12.4 Preservation Goal: Preserve and protect parks, open spaces, and natural resources.<sup>1, 2, 3</sup></b>		
1. Ensure that development is not interfering with water quality and cultural sites.	Jackson County and city governments, IDNR, Jackson County SWCD, MR WMA	Ongoing
2. Evaluate the effectiveness of the zoning code based on its ability to protect natural resources.		Short
Related Plan(s): 1. Jackson County SWCD Five-Year Soil and Water Resources Conservation Plan 2021-2025, 2. Maquoketa River Watershed Management Plan – Phases 1 and 2, 3. Jackson County Conservation’s 2023 Outdoor Recreation Plan		

14. IMPLEMENTATION

**Table 14.10 Chapter 13. Intergovernmental Collaboration -- Implementation Summary:** These goals and objectives seek to improve and expand intergovernmental collaboration to build on Jackson County’s active community spirit and strong volunteerism to improve quality of life for residents.

GOALS AND OBJECTIVES	POTENTIAL SPONSORS AND PARTNERS	TIMEFRAME
<b>13.1 Build Local Capacity Goal: Build capacity of local governments, non-profits, and community organizations in Jackson County.</b>		
1. Provide training to build technical knowledge.	Jackson County, city governments, ECIA, ISU Extension, CFJC	Ongoing
2. Ensuring sustainable funding.		Ongoing
3. Utilize networking and enhancing partnerships to share resources.		Ongoing
<b>13.2 Informal Collaboration Goal: Jackson County Economic Alliance (JCEA) collaborates with Jackson County, cities, schools, hospital, and service organizations.<sup>1</sup></b>		
1. Develop a comprehensive questionnaire based on the premise of the Synchronist software to identify the needs, activities, and goals of these organizations.	JCEA	Short
2. Meet with Jackson County staff and officials on at least a quarterly basis and develop a set of goals and initiatives to better understand the County’s challenges, assets, and opportunities.	JCEA, Jackson County	Ongoing
3. Meet with city staff and officials on at least a quarterly basis and develop a set of goals and initiatives to better understand each city’s challenges, assets, and opportunities.	JCEA, city governments	Ongoing
4. Meet with each school district every year and develop a joint program between the JCEA and each school district to promote community development and economic growth.	JCEA, area school districts	Ongoing
5. Meet with each chamber and development group every year.	JCEA, Chambers of Commerce, local development groups	Ongoing
6. Meet with the hospital every year.	JCEA, Jackson County Regional Health Center	Ongoing
7. Meet with at least 5 service organizations and/or non-profits every year.	JCEA, local service organizations and non-profits	Ongoing
<b>13.3 Youth Development Goal: Promote engagement and entrepreneurship among the county’s youth, including professional development opportunities for young workers.<sup>2</sup></b>		
1. Improve youth leadership and engagement through engaging activities and leadership development opportunities.	Area school districts, TeamMates mentorship program, 4-H youth organization, CFJC, local governments, Maquoketa YMCA	Short
2. Improve youth entrepreneurship through innovative programming.	School districts, local businesses and business leaders, JCEA, CFJC	Short
Related Plan(s): 1. <a href="https://www.thejcea.org/about-us/director-reports">https://www.thejcea.org/about-us/director-reports</a> , September 2023, p. 28; 2. 2018 Jackson County Tomorrow Strategic Plan		