

# BOONE COUNTY

2040 COMPREHENSIVE PLAN



AUGUST 11, 2023



# Acknowledgements

## With Special Thanks To:

The community participants who provided feedback to help define the final recommendations for this document.

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# I. INTRODUCTION

A comprehensive plan is a long-range document that collects data, analyzes current conditions, states the county vision, and creates viable policy solutions to achieve it. The plan provides guidance on growth, development, and investment throughout Boone County. A comprehensive plan represents county residents, business operators, and stakeholder aspirations for the future and provides the framework to get there. The 2040 comprehensive replaces the county’s 2007 plan, “Boone County, Iowa Comprehensive Development Plan Zoning and Subdivision Regulations”. Since then, priorities have shifted and what once was the distant future, is now the present.

Recommendations for the comprehensive plan were crafted with the input of a steering committee, community meetings, an interactive map, focus groups, and additional public input for each of the policy goals. At these meetings, community members described the need for affordable housing for all ages and incomes, the importance of keeping the rural community character, the need for expansion of infrastructure such as internet and roadway improvements in appropriate locations, and the desire for continued investment in local businesses. The overarching themes of the comprehensive plan were developed based on these comments and discussions. Within each section, the comprehensive plan provides clear and workable recommendations directed by residents and a roadmap of how to get there.

The comprehensive plan provides the background of the current environment. It has information covering Boone County’s population demographics, housing, economic development, hazards, public infrastructure, existing and future land use, and parks. The comprehensive plan includes an implementation matrix of goals, objectives and action items on a timeline that can be used to evaluate annual progress. As years go by, different pieces of the plan can, and should be, adjusted to fit the current needs of Boone County. We recommend a yearly review of the adopted goals and policy measures.



*Figure 1.1 – Boone County Landscape*  
*Source: Boone County*

The comprehensive plan is not a standalone plan. It is to be used in conjunction with each individual town’s plans in addition to other county plans. The plan should be used when discussing budgeting, infrastructure upgrades, and public service adjustments. The comprehensive plan should be the framework referenced when decision makers craft regulatory controls, financial tools, and other programs. The Boone County comprehensive plan provides:

- The foundation for the future development patterns, subdivisions, and other land use regulations.
- Long-term and short-term county-wide goals and action steps to achieve those goals.

- Ensures all goals incorporate professional and technical considerations regarding the future of the county.

## BACKGROUND

Boone County is primarily a rural county within central Iowa including ten incorporated cities. The rolling hills of the Des Moines River Valley extend through the center of the county east to west. The City of Ames is located within Story County, just on the eastern edge of Boone County and is host to Iowa State University, a public research college with over 30,000 students yearly.<sup>1</sup> To the south in Dallas and Polk County is the Des Moines Metro area, the largest city in Iowa. Within Boone County, there are 10 incorporated cities, with the City of Boone as the county seat. The City of Boone's population of 12,460 makes up nearly half the population of the county which has 26,277 people as of the 2020 census.

Boone County was first home to multiple Native American tribes. Historians differ on when the Sauk and Fox tribes were located in Boone County, but the earliest written accounts have settlers meeting them in 1734. By the time of the Treaty of 1825, Boone County was controlled by the Sauk and Fox tribes.<sup>2</sup> The Boone County Historical Society has compiled information of the history of Boone County. Below are excerpts from their compiled information.<sup>3</sup>



Figure 1.2 – Boone, Iowa (Unknown Date)  
Source: Boone County Historical Society

“Before 1847, when Boone County was organized, its history was Iowa’s history. The first Europeans known to set foot in what later became Iowa were the French explorers Louis Joliet and Father Jacques

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<sup>1</sup> Iowa State Registrar, *Fall 2021 University Summary Report*

<sup>2</sup> N.E. Goldthwait, *History of Boone County, Iowa*, p. 63

<sup>3</sup> Boone County Historical Society, *Boone County History*, p. 1

Marquette, who traveled down the Mississippi River in the summer of 1673 and visited Native American villages on the river's western shore.

During the next 200 years, white settlers from the east and immigrants from Europe pushed into the Midwest, driving Native Americans westward. The US government encouraged the settling of western lands and tensions between various Native American tribes and white settlers increased as the government gained control over western territories. That control began with the Louisiana Purchase in 1803, when Jefferson purchased the Louisiana Territory, of which Iowa was a part, from the French. Three years later, as a prelude to eventual settlement, Lewis and Clark explored the purchase lands, including what became the western boundary of Iowa.

Subsequently, Iowa became part of other western territories. In 1812, when Louisiana became a state, the Missouri Territory was formed out of the Louisiana Territory. Although the Michigan Territory was organized in 1805, Iowa did not become a part of that territory until 1833. Three years later, Iowa became part of the Wisconsin Territory in advance of Michigan's 1837 statehood. In 1838, the Iowa Territory was broken off from the Wisconsin Territory. Iowa became a state in 1846.

A critical conflict between government forces and Native Americans occurred in 1832 when Sauk leader Black Hawk attempted to retake the Illinois village of Saukenauk setting off the Black Hawk War. Three months later, Black Hawk and his warriors were defeated at the Bad Axe River in Wisconsin. Following the war, the Black Hawk Purchase of 1833 helped to open up Wisconsin, Illinois and Iowa for settlement.

In the wake of the Black Hawk Purchase, Lt Col. Colonel Stephen W. Kearney lead three companies of the First Regiment of the United States Dragoons, up the Des Moines River from Old Fort Des Moines into southern Minnesota. Their mission was to assess the Indian situation in Iowa and to explore the land for future settlement. On June 23, 1835, Capt. Nathan Boone, youngest son of Daniel Boone and commander of Company H, camped near Mineral Ridge in what is now Boone County.

Twelve years later, Boone County was organized and named for Nathan Boone, but for more than two years after its founding in February of 1847, it remained a part of Polk County. By 1849 residents wanted their own county jurisdiction in which to vote, pay taxes, and do business. Under Iowa law, the county sheriff was responsible for ordering the election of county officers, but there was no Boone County Sheriff. Therefore, on May 8, 1849, William McKay, judge of the Fifth Judicial District, of which Boone County was a part, appointed Samuel B. McCall as County Sheriff. Before the election could occur, McCall had to divide the county into voting precincts, so he created Boone County's first three townships— Boone, Boone River, and Pleasant Townships. The election of county officers from these townships was held on August 6, 1849. The newly elected commissioners then voted to confirm McCall's townships.”

Iowa officially gained statehood in the United States in 1846. During the 19<sup>th</sup> century many towns were founded within Boone County with the primary reasons being access to a new railroad, mining of limestone and coal as well as the commerce of agricultural products.<sup>4</sup> During this time, towns grew rapidly and often lost population just as quickly. During the 20<sup>th</sup> century towns started to gain consistency in growth and there was a reduction in the volatility of population. Currently there are 10 incorporated cities: Beaver, Berkley, Boone, Boxholm, Fraser, Luther, Madrid, Ogden, Pilot Mound, and Sheldahl.

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<sup>4</sup> Boone County Historical Society, *Boone County History*, p. 1

## 2. VISIONING

### PROCESS

The comprehensive planning process started in the Spring of 2021 and was completed in the Summer of 2022. The engagement process came at an unprecedented time, during the Covid-19 pandemic. The Covid-19 pandemic severely altered how people could gather and brought public health to the forefront of people's everyday lives. With health in mind, there were multiple options for citizens to voice their opinions from in-person meetings, a website, and a survey, along with other essential groups like the steering committee and builder focus groups.



### PUBLIC MEETINGS

Two public meetings occurred: a kick-off meeting and an open house. The kick-off meeting aimed to complete initial visioning and insight into Boone County's housing, commercial, and industrial challenges and opportunities. The open house was centered on bringing residents into the planning process, listening to their goals for Boone County, and informing residents about opportunities to be included in the future planning process.

#### *Steering Committee*

The steering committee was selected to gather input from key stakeholders. Representatives from different areas of the county, both rural and urban, were selected. Local and large businesses had representation as well as community interests such as schools and county staff. At the five meetings, a variety of visioning techniques were used to identify the current conditions and where the county would like to be in the future. First was a SWOT, or a Strengths, Weakness, Opportunity, and Threat Analysis. Next, a goals and visioning exercise was done to develop the objectives the committee felt were important and to determine priorities. Topics ranged from better defining land use, updating policy surrounding tax abatements, locations for economic developments and housing, attracting clean energy through a detailed ordinance, and protecting farmland. Maps played a large role in these exercises, with committee members dotting SWOT areas. During the third meeting, the committee reviewed the completed survey information and compared it to the SWOT Analysis from the previous meeting. During the fourth meeting the committee reviewed the Introduction, Background, Visioning, Housing, & Parks draft plan sections and provided feedback. At the final meeting, the committee reviewed the Transportation, Economic Development, Infrastructure, and Implementation draft sections of the plan.

#### *Builder Focus Group*



There was a large amount of public input and discussion surrounding housing. A builder focus group was created to learn about difficulties facing developers in Boone County. Multiple local housing developers were invited to a meeting to discuss where and what they develop. During the discussion, the group explained that within Boone County the market was primarily for detached single family homes. There were many issues identified with extending utilities and providing stormwater management. Participants noted that most development outside of cities had to use septic and wells. They also explained how rural water is often very expensive and challenging to connect.



The group explained that while there are currently no issues with roads, there was some frustration that the county does not like upgrading roads, and that most rural subdivisions had private internal roads. Participants noted there are few issues with the county’s zoning ordinance that prevent them from developing. The group felt that most of the development pressures were in the eastern portion of Boone adjacent to Story County. The group advocated for Tax Increment Financing districts (TIF) or other tax incentives as a way to promote growth, or options for clustered building on smaller lots.

### Website and INPUTiD™

The project website contained all the information related to the comprehensive plan. It defined a comprehensive plan, outlined strategic goals, contained a link to the survey, had meeting notices and summaries, along with INPUTiD™. INPUTiD™ is an interactive mapping software which allows citizens to post comments describing strengths, weaknesses, opportunities, and threats to Boone County. This application was very useful for people unable to attend public meetings. INPUTiD™ was available for public comment from September 2021 to February 2022 and had over 50 viewers.

## SURVEY

The community survey was posted on Boone County’s website and on the comprehensive plan’s website. The survey had 300 completed responses. The overall results of the survey provided valuable input into what stakeholders were concerned about, what they valued, and what they thought would improve the county.

### Current and Future Boone County

The survey asked what made Boone County unique and their favorite components of Boone County.

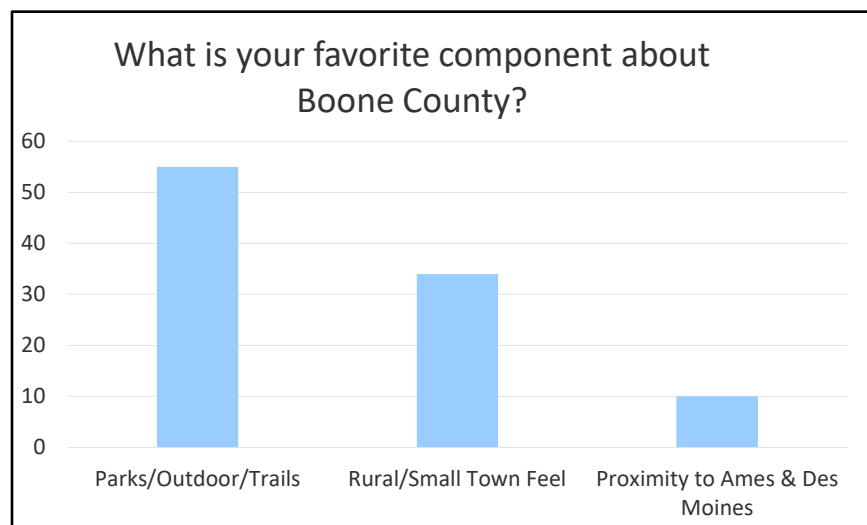


Figure 2.1 – Favorite Component of Boone County  
Source: Boone County Comprehensive Plan Survey Results

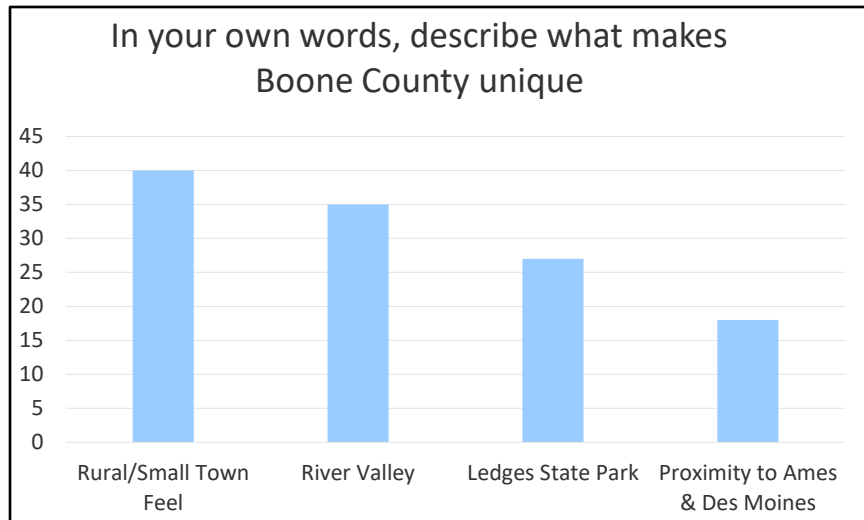


Figure 2.2 – Boone County Description  
 Source: Boone County Comprehensive Plan Survey Results

The community was asked to pick the three most important priorities for the future of Boone County. Parks was the top choice, followed by community events, businesses, youth development, and housing. A further list is shown below:

- Low density housing (single-family homes)
- Medium to high density housing (duplexes, triplexes, and apartments)
- Parks, recreational opportunities, and green space
- Commercial/retail centers
- Agricultural uses
- Industrial development
- Community events
- Public transportation options
- Youth development
- Senior adult activities
- Other – Write In

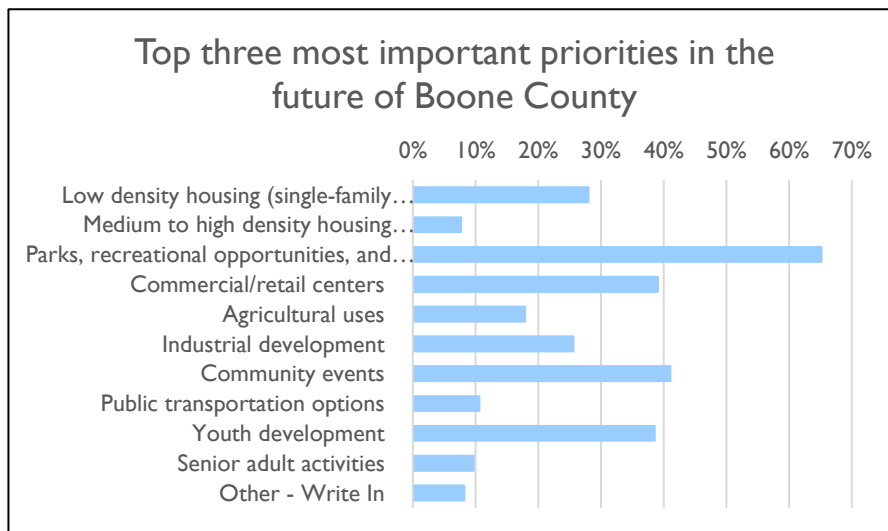


Figure 2.3 – Priorities for Boone County  
 Source: Boone County Survey Results

## Housing

The concerns over housing continued, with a large portion of the community believing there is currently an inadequate supply of housing, and that the biggest challenge is the affordability of housing.

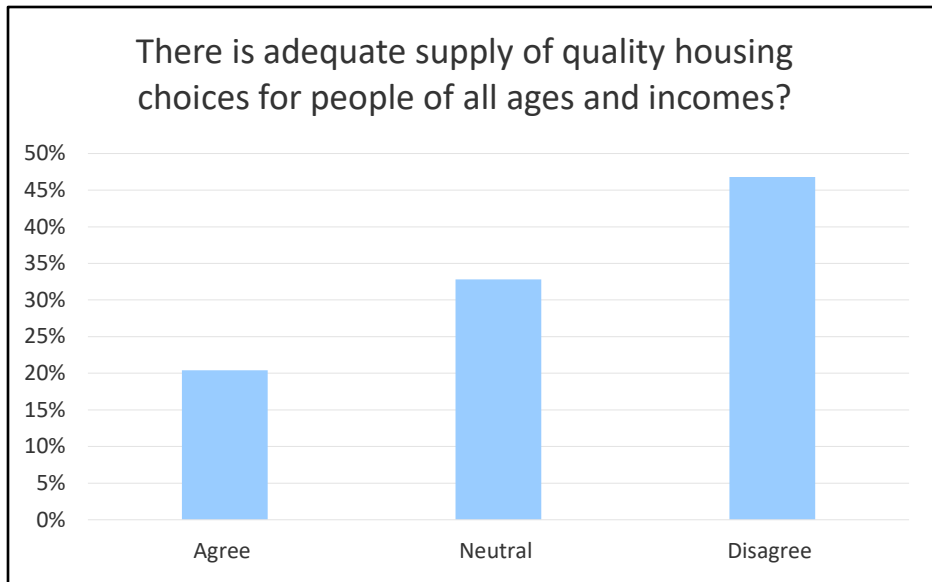


Figure 2.4 – Housing Diversity  
Source: Boone County Survey Results

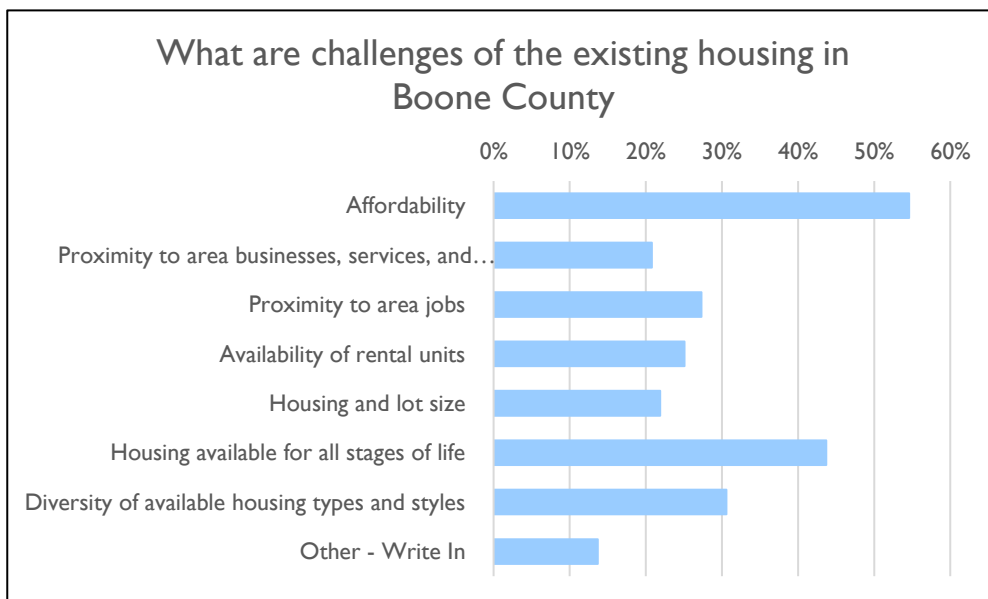


Figure 2.5 – Housing Challenges  
Source: Boone County Survey Results

Most respondents agreed new housing should be located within or near the City of Boone. Other respondents felt housing should be located in the area near existing communities such as Ogden and Madrid.

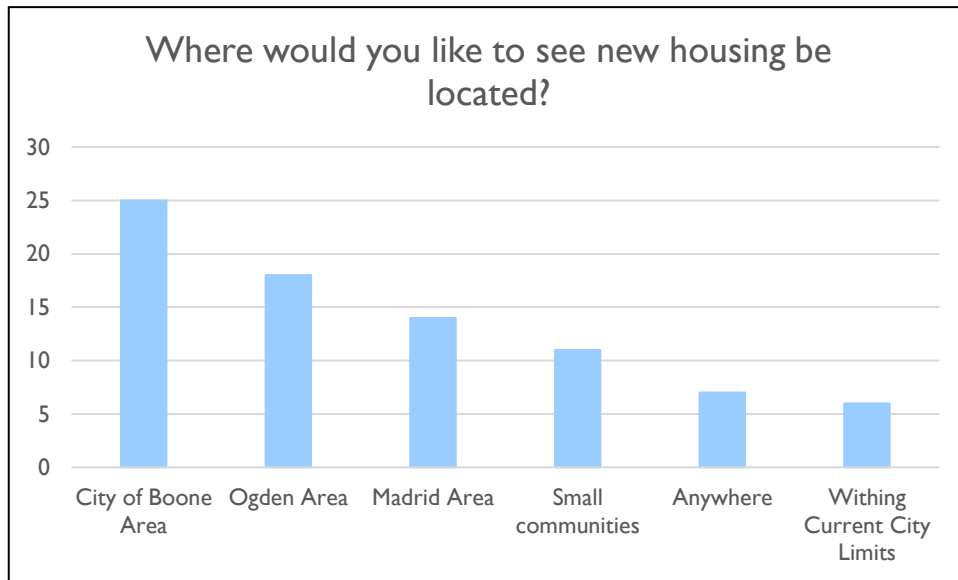


Figure 2.6 – New Housing Location  
 Source: Boone County Comprehensive Plan Survey

### Transportation

The largest transportation priorities within Boone County were anything related to roadway maintenance. This mirrored the comments made in INPUTiD™ where citizens advocated for more paved roads.

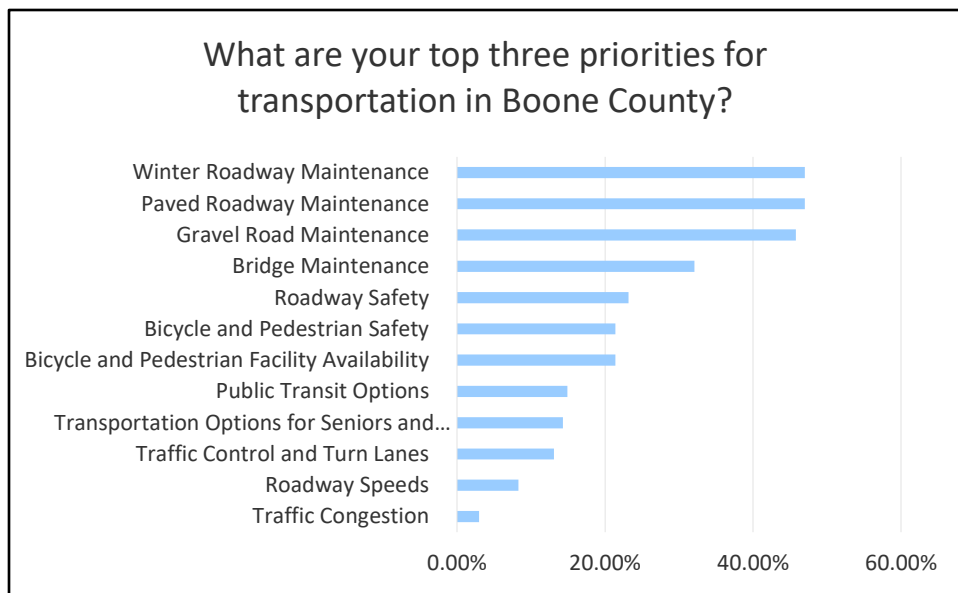
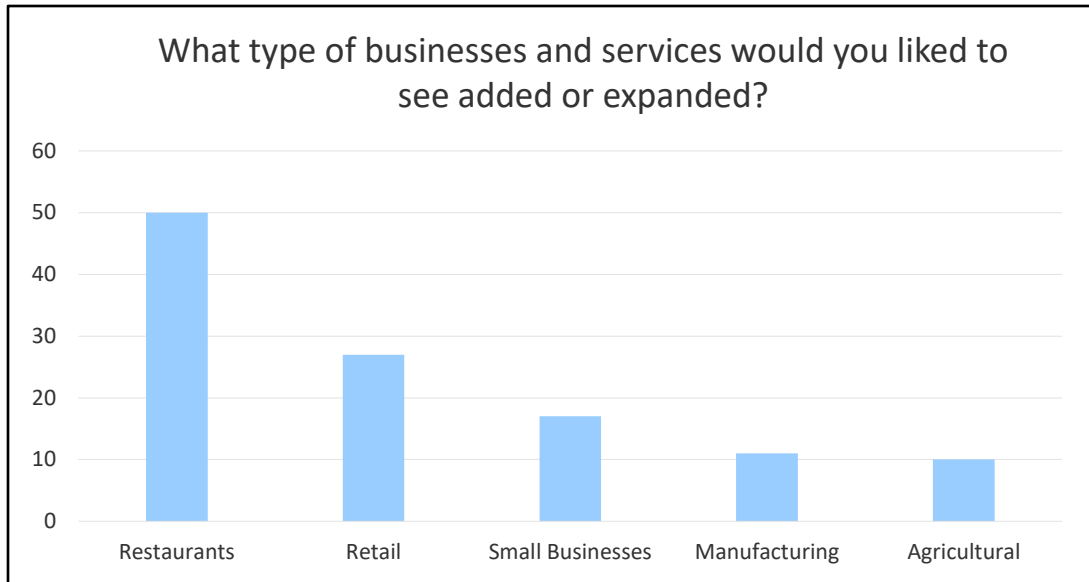


Figure 2.7 – Priorities for Transportation  
 Source: Boone County Comprehensive Plan Survey

### Economic Development

Respondents were most excited for the addition of more restaurants within Boone County.



*Figure 2.8 – Business and Service Priorities  
Source: Boone County Comprehensive Plan Survey*

## GOALS

After gathering data from the public, the steering committee, focus group, INPUTiD™, and survey, overall goals created as key points for growth and improvement in the community. These goals reflect what the community wants to see accomplished in Boone County.

Goal 1: Maintain the small town feel and welcoming community.

Goal 2: Create housing opportunities for people of all incomes, ages, and needs.

Goal 3: Invest in local businesses to diversify and add resiliency to the tax base.

Goal 4: Increase connection to nature by increasing amenities at current parks and adding new parkland.

Goal 5: Encourage the development and redevelopment of properties near existing infrastructure.

Goal 6: Conserve open space and natural resources to maintain environmental and community health.

Goal 7: Identify and develop local infrastructure upgrades for internet, roadways, and water.

Goal 8: Promote diversity by creating a strong and inclusive plan that provides equitable opportunities for all.

Goal 9: Strengthen education, community events, and local gathering spaces.

## VISION STATEMENT

The vision statement is the essence of all the goals and aspirations for what Boone County strives to become by the year 2040. Below are the Boone County mission and vision statements.

### *Mission Statement*

The mission of Boone County is to be accountable to its citizens in providing innovative and high-quality government services in an economical, fair, professional and courteous manner to enhance and protect the health, welfare and safety of those who live and work in Boone County.

### *Vision Statement*

Boone County...A welcoming community – Embracing the history of its rural character – Focusing on our prosperous future.

### *Comprehensive Plan Vision Statement*

The following Comprehensive Plan Vision Statement was created using input from residents to illustrate the planned future for Boone County.

*Boone County looks to foster its community and is working towards creating housing and business opportunities for all, while maintaining its rural community, natural resources and open space.*



### 3. DEMOGRAPHICS & DATA ANALYSIS

#### POPULATION

Boone County experienced a moderate decline in population from 1950 to 1990, but has seen growth over the past two decades. Since 2000, Boone County population grew from 26,224 to 26,448. Prior to the 2000s, the population dropped from 28,139 in 1950 to 25,186 in 1990. The population grew by approximately 5% between 1990 and 2020. Table 3.1 identifies historic population and households in the city.

	1950	1960	1970	1980	1990	2000	2010	2020
Population	28,139	28,037	26,470	26,184	25,186	26,224	26,224	26,448
Households	*	*	*	*	*	10,374	10,728	10,921

Source: US Census Data and Boone County  
 \*Data not available

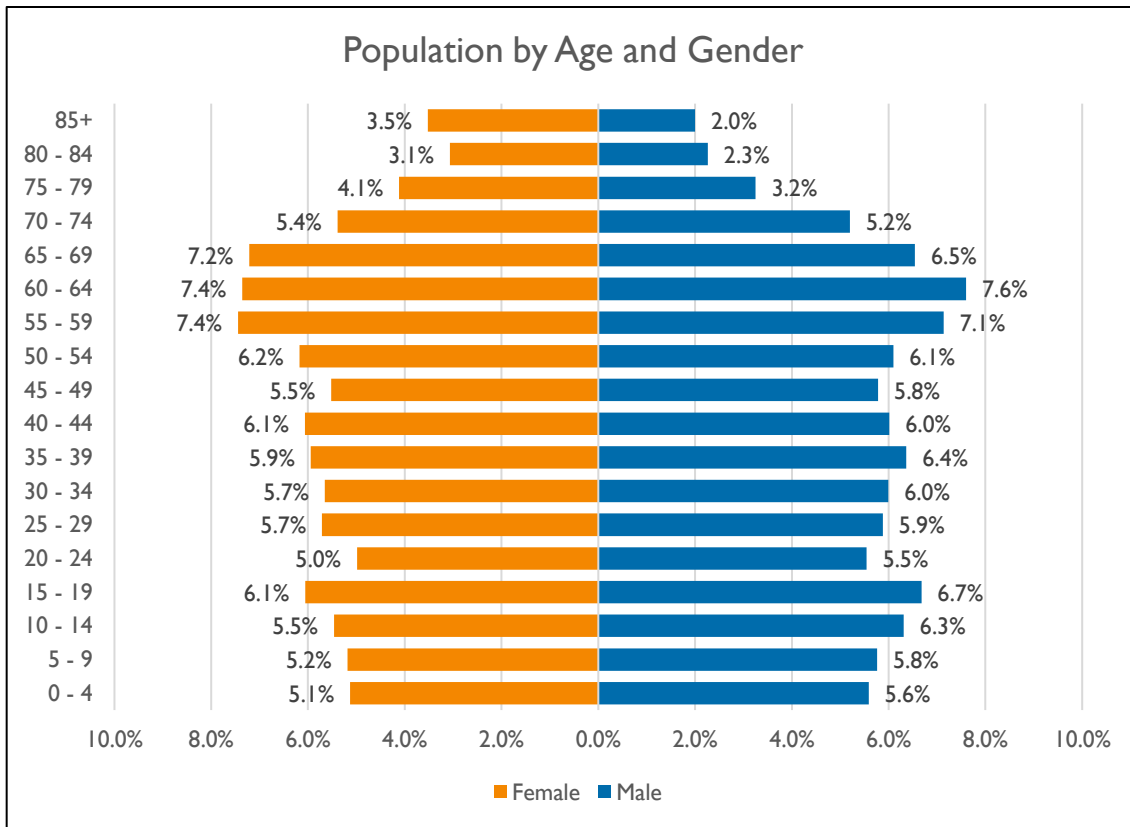
Historical data tells us where we have been. Population projections give an idea of what to expect in the future. These projections provide a basis to determine demand for various land uses and infrastructure. Population and house- hold projections are based on Woods & Poole Economics. These projections show slow increases in population within Boone County. Table 3.2 provides population projections from 2020 to 2040.

	2020	2025	2030	2035	2040
Population	26,448	26,704	26,859	27,020	27,188
Households	10,921	11,012	*	*	*

Source: US Census Data and Woods & Poole Economics  
 \*Data not available

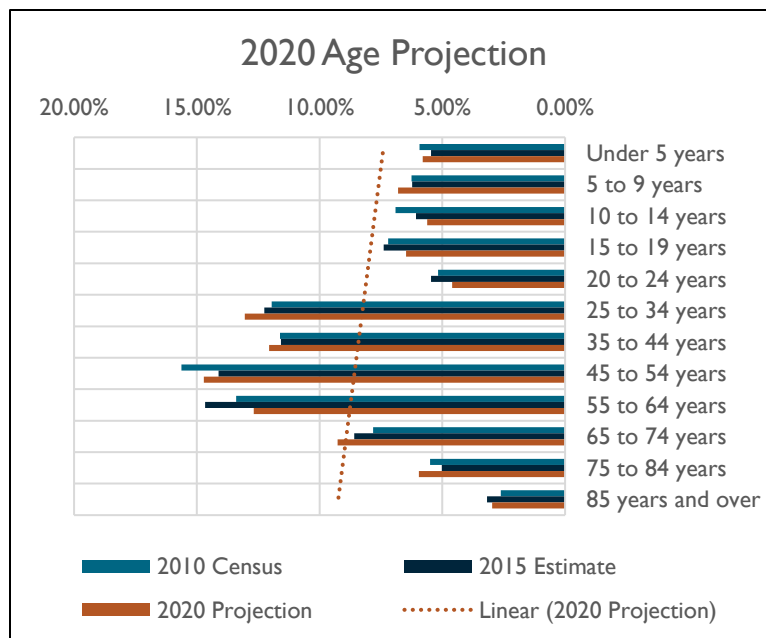
#### Age

Figure 3.1 shows the population of Boone County by sex and age. The largest age groups within Boone County are people 45 to 64 years old. This 20-year age group accounts for 27.1% of the entire population. The population of Boone County is slightly older than the average for Iowa; the median age for Boone County is 41.8 years old while the state median is 38 years old.



*Figure 3.1 – 2022 Population by Age and Gender*  
 Source: Esri Business Analyst

As of August 2022, detailed 2020 Census data has not been released. Figure 3.2 shows the projected population of Boone County by age. The median age for Boone County is anticipated to be higher as people between 30 and 65 continue to grow older.



*Figure 3.2 – Projected Age 2020*  
 Source: US Census Data



### Household Size and Quantity

As shown in Table 3.3, there were approximately 10,921 households in Boone County in 2020. Although the population of Boone County has steadily increased from 2000 to 2020, the amount of housing grew by approximately 1,100 units. At the same time, the number of persons per household has decreased, a trend occurring both in Boone County and statewide. Table 3.3 shows the average number of persons per household and the quantity of households.

	2000	2010	2020
Households	10,374	10,728	10,921
Person Per Household	2.44	2.38	2.35

Source: US Census Data

### Household Income

Median household income in Boone County was estimated to be \$59,057 in 2020, while the median for Iowa (in 2019) was \$60,523. Boone County had a lower per capita income than the state of Iowa with \$31,624 and \$32,176 (2019) respectively. Boone County generally has a lower median household income than the state of Iowa and most surrounding counties as shown in Figure 3.3. Table 3.4 shows a breakdown of income. Approximately 77.5% of Boone County households made between \$25,000 and \$149,000, with 19.7% making between \$100,000 and \$149,000.

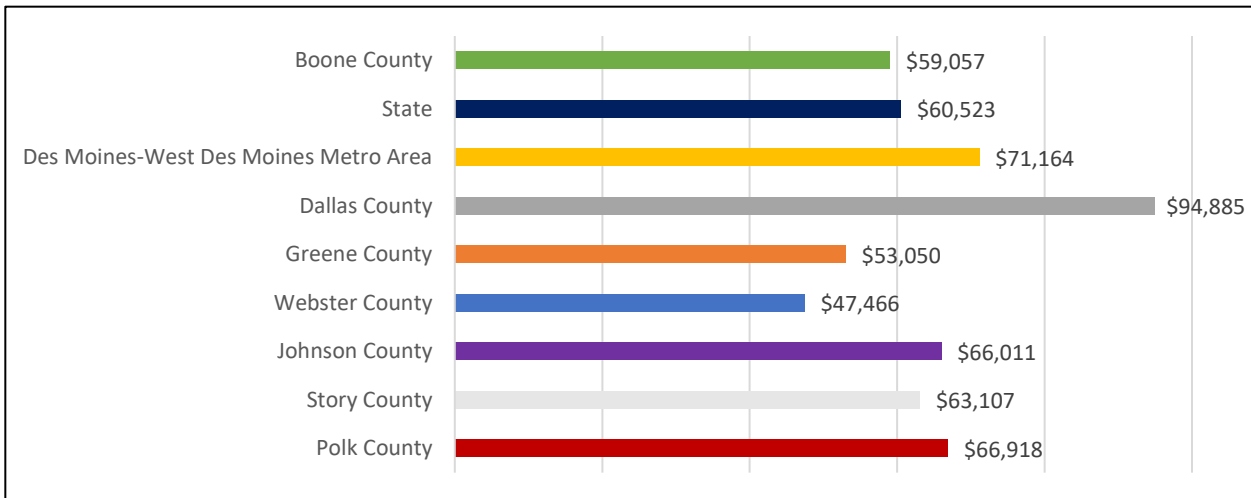


Figure 3.3 – Median Household Income  
Source: US Census Data

Less than \$10,000	2.8%
\$10,000 to \$14,999	3.4%
\$15,000 to \$24,999	7.5%
\$25,000 to \$34,999	10.7%
\$35,000 to \$49,999	12.4%
\$50,000 to \$74,999	19.0%
\$75,000 to \$99,999	15.7%
\$100,000 to \$149,999	19.7%
\$150,000 to \$199,999	4.3%
\$200,000 or more	4.4%

Source: US Census Data

### Race and Ethnicity

Figure 3.4 illustrates the estimated racial composition of Boone County compared with the state and other neighboring communities as a whole. About 95.5% of Boone County residents identified as “White.” Boone County has a less diverse population compared to the state of Iowa.

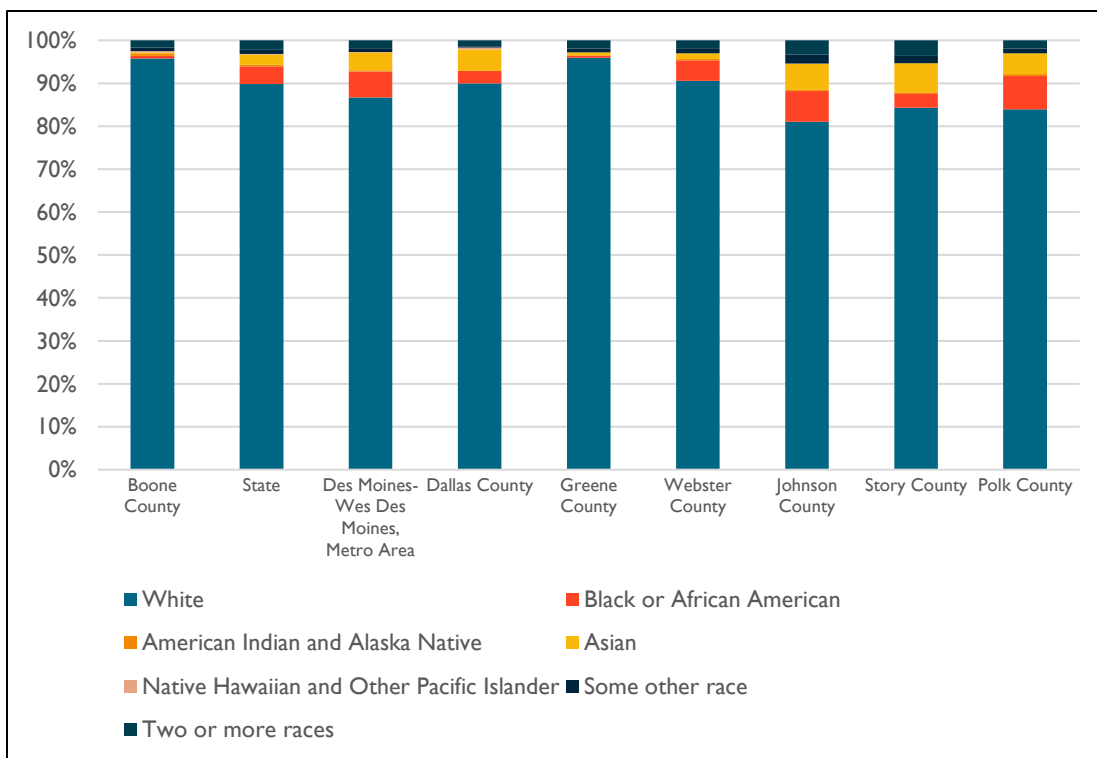
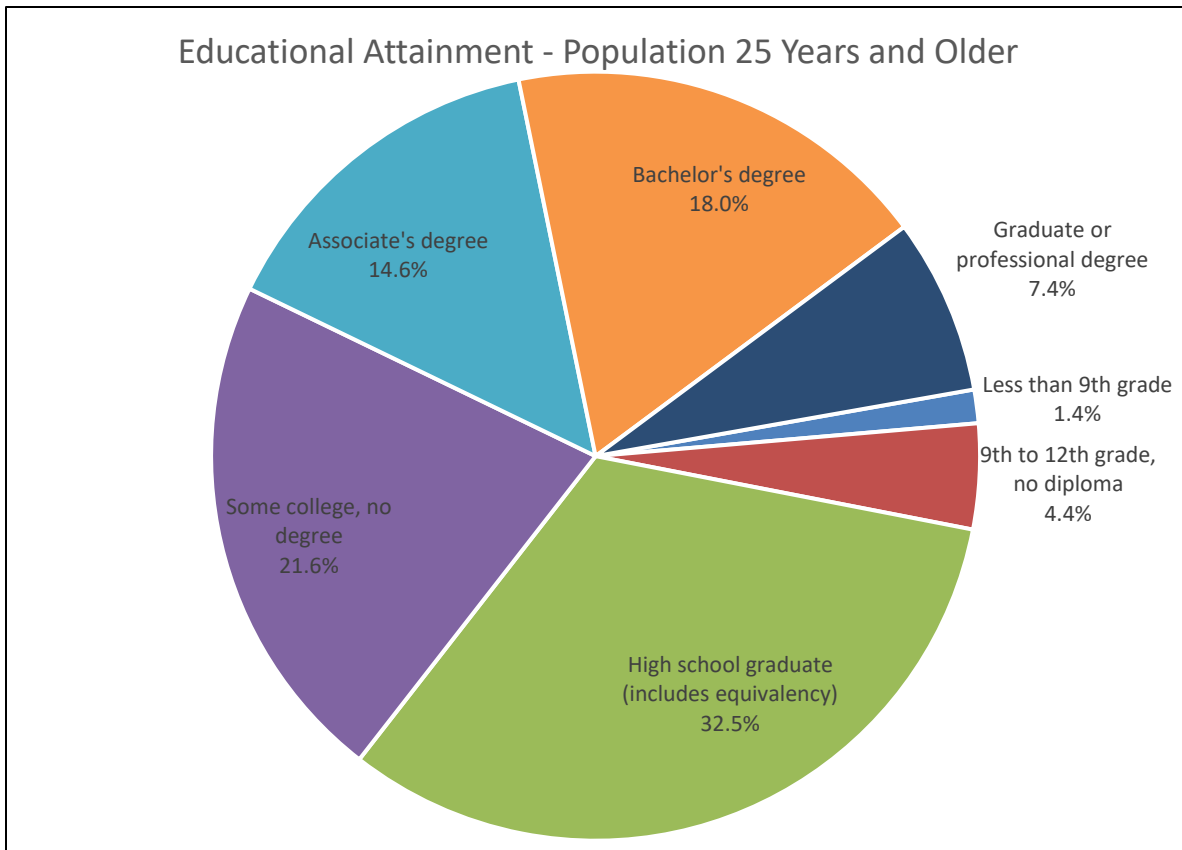


Figure 3.4 – Percentage of Population by Race  
Source: US Census Data

### Education

In 2020, approximately 62.7% of the county’s population, age 25 or older, had some college education or more. Only 5.4% of residents aged 25 or older had less than a high school education. Figure 3.5 illustrates the educational attainment for Boone County’s population age 25 and older.



*Figure 3.5 – Educational Attainment*  
*Source: 2020 US Census Data*

## SURVEY RESPONSES

Boone County has seen recent growth in population and income, but still lags behind neighboring counties. Polk, Story and Dallas counties have all seen large growth and advancement in median household income, population and diversity. According to the survey respondents, Boone County residents want to increase tax base and expand commercial areas while also maintaining the rural feel of the community. It is important for Boone County to balance changes to the county due to the proximity to high growth counties.

## 4. LAND USE

### OVERVIEW

The land use chapter of the plan provides direction and guidance for how land use, infrastructure, and related elements fit together within the geographic context of the county. This section also provides direction for how growth should be accommodated in the 2040 timeframe, including character, scale, and intensity. Additionally, it serves as a guide for new development proposals and investments for Boone County.

Boone County has many characteristics which make it an attractive place for residents to live. The overall goal of the county is to maintain the rural agricultural areas within the county, while finding areas for growth in residential, business, recreational, and industrial uses to serve the future needs of the community. The county must also balance its goals with those of the local municipalities that contain large portions of the county's population. This section also examines zoning designation, existing land uses, future land uses, and the differences between each of these categories.

### LAND USE GOALS

#### Goal 1: Modernize present land use and zoning designations

- Create an “Urban Fringe Residential” zoning district around existing cities to promote regional housing growth.
- Include public infrastructure and renewable energy such as wireless infrastructure, solar farms, and wind turbines as conditional uses within agricultural designations.
- Update ordinance language to allow for a wider variety of housing.

#### Goal 2: Continue to prioritize the protection of agriculture land

- Provide transition and buffer areas of development around existing municipalities.
- Promote efficient use of existing developed areas.
- Encourage the location and maintenance of local businesses in identified commercial and industrial areas.

#### Goal 3: Identify areas for future growth and development

- Focus commercial and industrial growth along the existing transportation network of railways and regional roadways.
- Locate higher density housing around existing municipalities.
- Designate land to accommodate a variety of uses in locations that are compatible.
- Consider investing in parkland near locations of residential growth.

### ZONING

A property's land use designation and zoning designation are two separate things. The present zoning is a classification that regulates what can and cannot be built on a parcel from the time the zoning ordinance is

passed until the zoning ordinance is changed or the specific classification in the ordinance is changed. The zoning of a parcel regulates the height, size, setback, and other development requirements of the property. Figure 4.1 shows an overall map of zoning within Boone County.

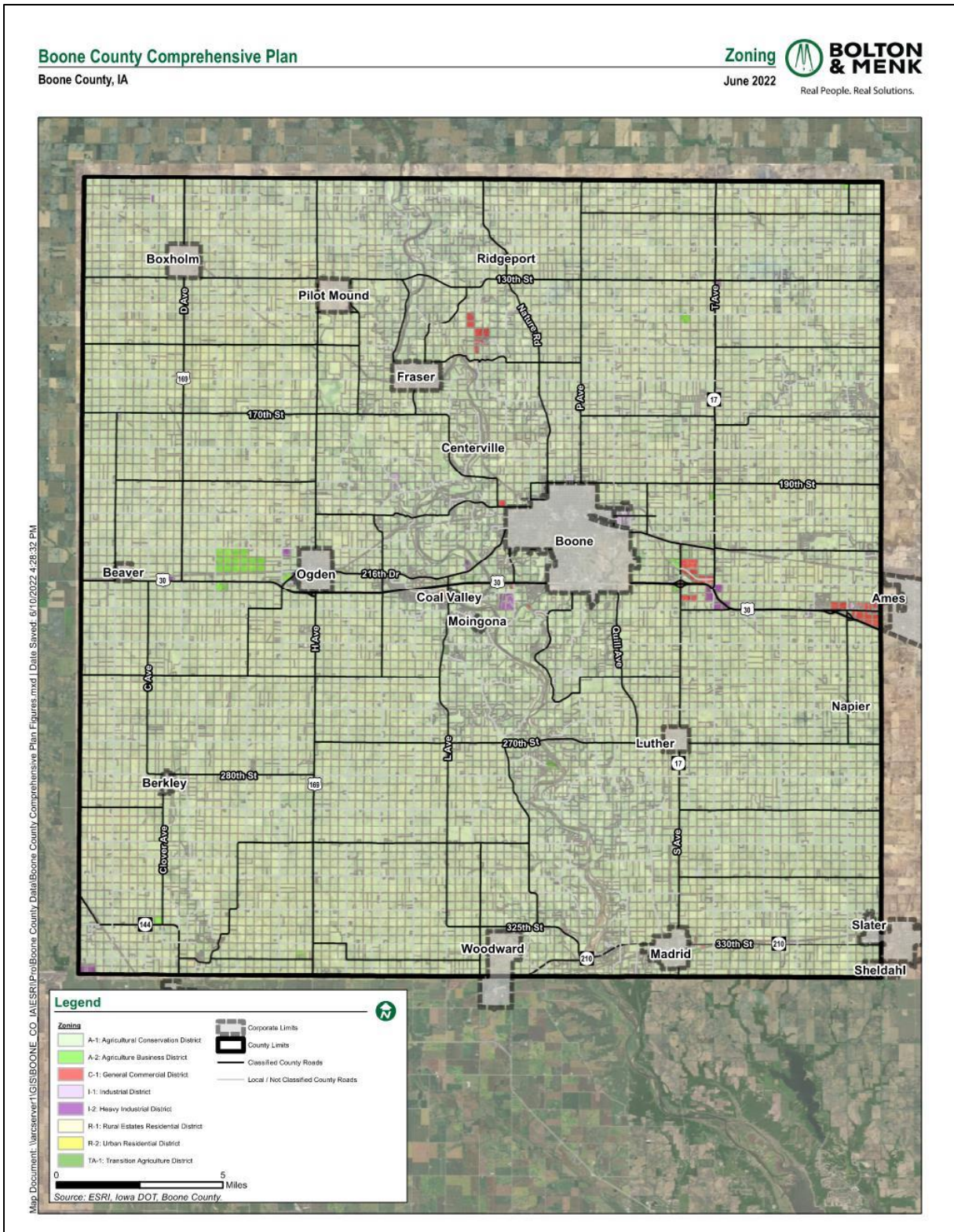


Figure 4.1 – Boone County Zoning Map

## Zoning Overview

The existing zoning map is primarily composed of the agricultural conservation district. There are concentrations of the general commercial district, industrial district, and agriculture business district in nodes near county highways.

Zoning District	Acres	Percent
A-1: Agricultural Conservation District	345146.63	98.43
A-2: Agricultural Business District	1157.35	0.33
C-1: General Commercial District	1178.51	0.34
I-1: Industrial District	301.57	0.09
I-2: Heavy Industrial District	603.5	0.17
R-1: Rural Estates Residential District	2130.46	0.61
R-2: Urban Residential District	7.82	<0.01
TA-1: Transition Agriculture District	139.22	0.04

Source: Boone County

## Zoning Definitions

The Boone County Zoning Ordinance defines the zoning districts as follows.

A-1: Agricultural Conservation District: Uses related to rural agricultural farming and related resources with the goal to restrict high intensity uses of the land.

A-2: Agricultural Business District: Uses interrelated to agricultural uses or that contextually fit with agricultural areas.

C-1: General Commercial District: Retail and service businesses which provide daily services to residents.

I-1: Industrial District: Heavy commercial and industrial uses with low water uses and limited amounts of emissions.

I-2: Heavy Industrial District: Heavy commercial and industrial uses with high water uses and large amounts of emissions. Often need to be located within close proximity to railroads or highways.

R-1: Rural Estates Residential District: Larger lot subdivisions and home on acreages that are primarily residential uses.

R-2: Urban Residential District: Rural high density residential home site and subdivisions with residential streets and utilities.

TA-1: Transition Agriculture District: Moderate density residential developments as the area transitions from low density agricultural districts to higher density residential.

# CURRENT LAND USE

The current land use map shows what the land is presently being used for. This can differ from the present zoning. In many cases there are legal nonconforming uses that existed prior to adoption of the existing zoning map and ordinance. This means the existing use can continue but cannot be expanded or changed unless it is changed to comply with the present zoning designation. Figure 4.2 is based on current tax information from the Boone County Assessor’s office and reflects the use classifications that are in place.

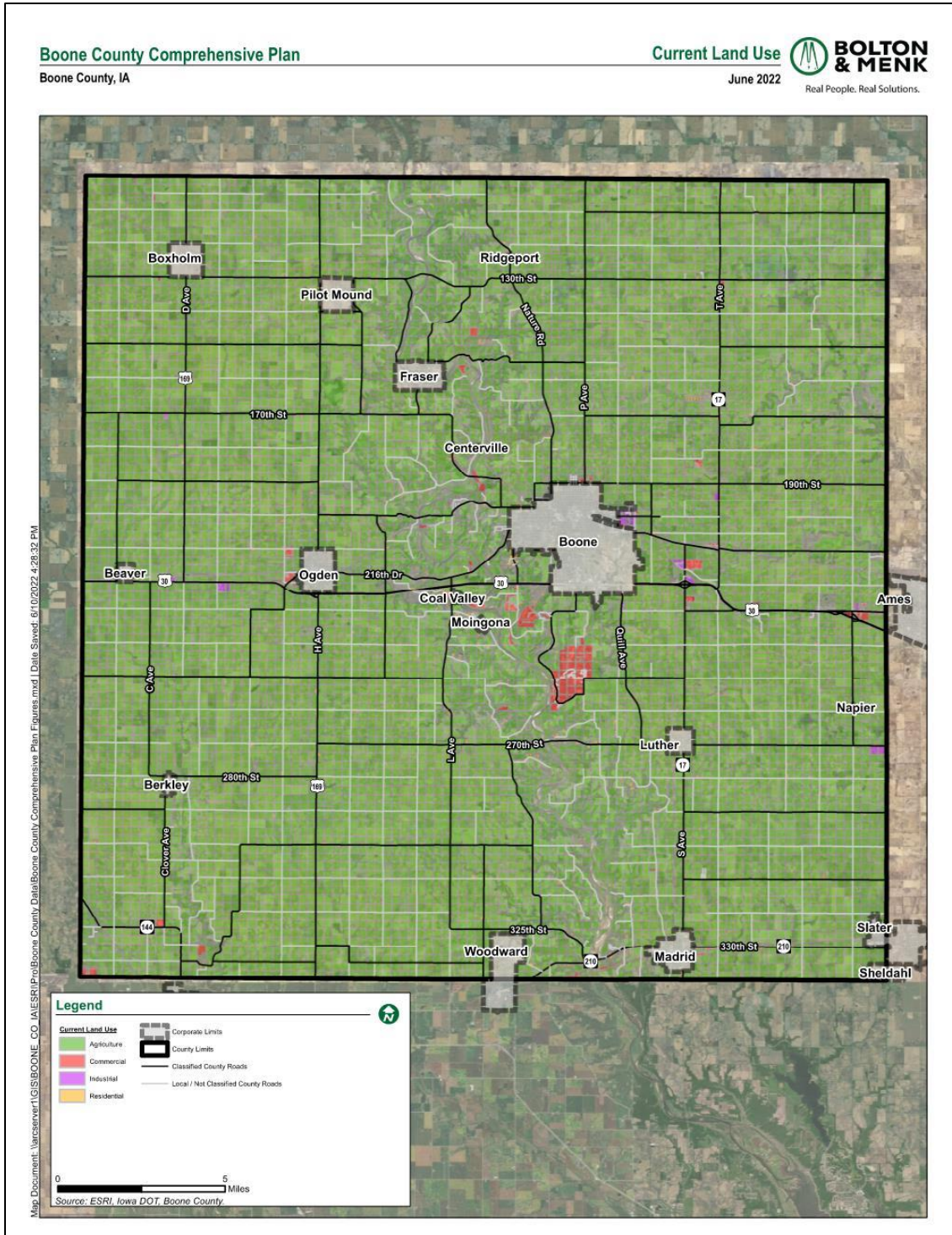


Figure 4.2 – Boone County Current Land Use Map

### Current Land Use Overview

Boone County is primarily made up of agricultural uses, with a small amount of commercial, industrial, and residential uses throughout the county.

Current Land Use	Acres	Percent
Agricultural	339,650.23	96.86
Commercial	3,329.4	0.95
Industrial	517.05	0.15
Residential	7,162.29	2.04

Source: Boone County

### Current Land Use Definitions

The Boone County Assessor defines the current land use designations as follows.

**Agriculture:** Open space that is currently in its natural state or being used for animal rearing, cultivation, or related uses.

**Commercial:** All types of services and retail establishments where goods and services can be purchased.

**Industrial:** Heavy commercial and industrial uses that typically produce raw goods or finished products with limited amounts of retail space.

**Residential:** Areas primarily used for housing that are generally one or two units per structure.

## FUTURE LAND USE

Future land use is the proposed designation that provides an idea of the type of use deemed most appropriate for an area. The future land use map takes careful consideration of social needs, demographics, housing and commercial trends, market information, and economic needs. The map is intended to be flexible and should be reviewed and updated periodically in response to changing conditions within Boone County. Ideally, the future land use map aligns with the existing zoning map, and the two should be used in tandem.

To determine what the ultimate future land use is, it is important to have a strong understanding of what the community's current and future needs and desires are. As indicated previously in the demographics section, Boone County is projected to slowly increase in population over the next twenty years. Boone County residents were given the opportunity to identify what they view as priorities through the comprehensive plan survey. Key findings included maintaining the rural lifestyle that many moved to Boone County for, but also providing increased opportunities for retail stores. Other priorities are to provide adequate and affordable housing for community members and to support the growth of the tax base.

Figure 4.3 shows an updated future land use map based on community goals and engagement.



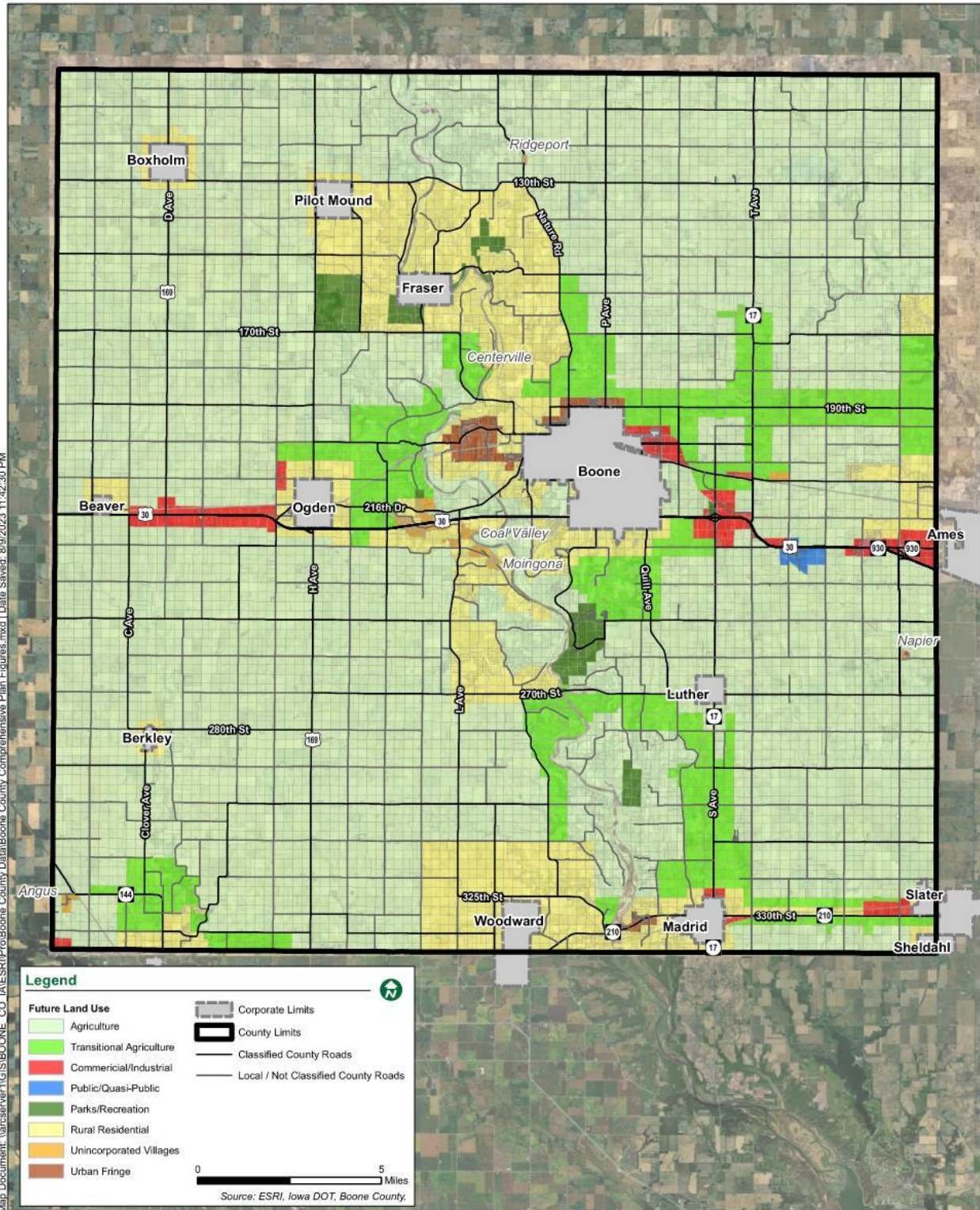


Figure 4.3 – Boone County Future Land Use Map

### Future Land Use Overview

The future land use map incorporates the desire to increase retail and commercial businesses, job opportunities, and the variety and availability of housing stock, while maintaining the rural aspects of the county. Residents agreed a rural and small town feel is what makes Boone County unique.

The future land use map is broken down into four quadrants for better comprehension as shown in Figures 4.4 through 4.7.

The majority of Boone County is designated as agriculture to maintain and preserve the green space and agricultural identity of the county. Transitional agriculture is located near arterial and collector roads to allow for small amounts of growth near already established routes. Rural housing is located only along paved county roads and around already established communities. There is development pressure on Highway 30, Highway 17, and Iowa 210, with the largest amount of pressure on the eastern half of Highway 30 between the City of Boone and the eastern edge of Boone County. A combination of transitional agriculture, rural residential, and commercial/industrial is designated along these corridors.

Future Land Use	Acres	Percent
Agriculture	260,164.88	74.14
Commercial/Industrial	4,606.89	1.31
Parks/Recreation	3,602.81	1.03
Public/Quasi-Public	450.90	0.13
Rural Residential	44,986.70	12.82
Transitional Agriculture	34,527.55	9.84
Unincorporated Villages	919.43	0.26
Urban Fringe	1,664.65	0.47

Source: Boone County

### Future Land Use Definitions

The future land use categories are defined as follows.

Agriculture: Space used for animal rearing, cultivation, or related uses.

Commercial/Industrial: Uses containing retail, services, or the creation of raw or finished products or goods.

Public/Quasi-Public: Uses generally characterized by public or institutional buildings or containing public infrastructure of civic needs.

Parks/Recreation: Open space that is primarily in its natural state and open to the general public for portions of the year.

Rural Residential: Residential uses that are often classified as single family detached housing on large lots.

Transitional Agriculture: Land that will transition from low intensity agriculture to higher density residential. The area will contain a mixture of agricultural uses, residential uses, and commercial uses.

Unincorporated Village: Unincorporated villages primarily made up of residential uses on smaller lots.

Urban Fringe Residential: Residential uses of higher density, primarily near the incorporated local municipalities.

## Northwest Quadrant Future Land Use

The northwest quadrant contains the communities of Beaver, Ogden, Centerville, Fraser, Pilot Mound, and Boxholm. The majority of this quadrant will remain agricultural, with rural residential located along Highway 169, 130<sup>th</sup> Street, and H Avenue where roadways are paved. The survey identified the area along Highway 30 between the western edge of Boone County and the Des Moines River as having the potential for growth. A combination of transitional agriculture, rural residential, and commercial is planned along the corridor.

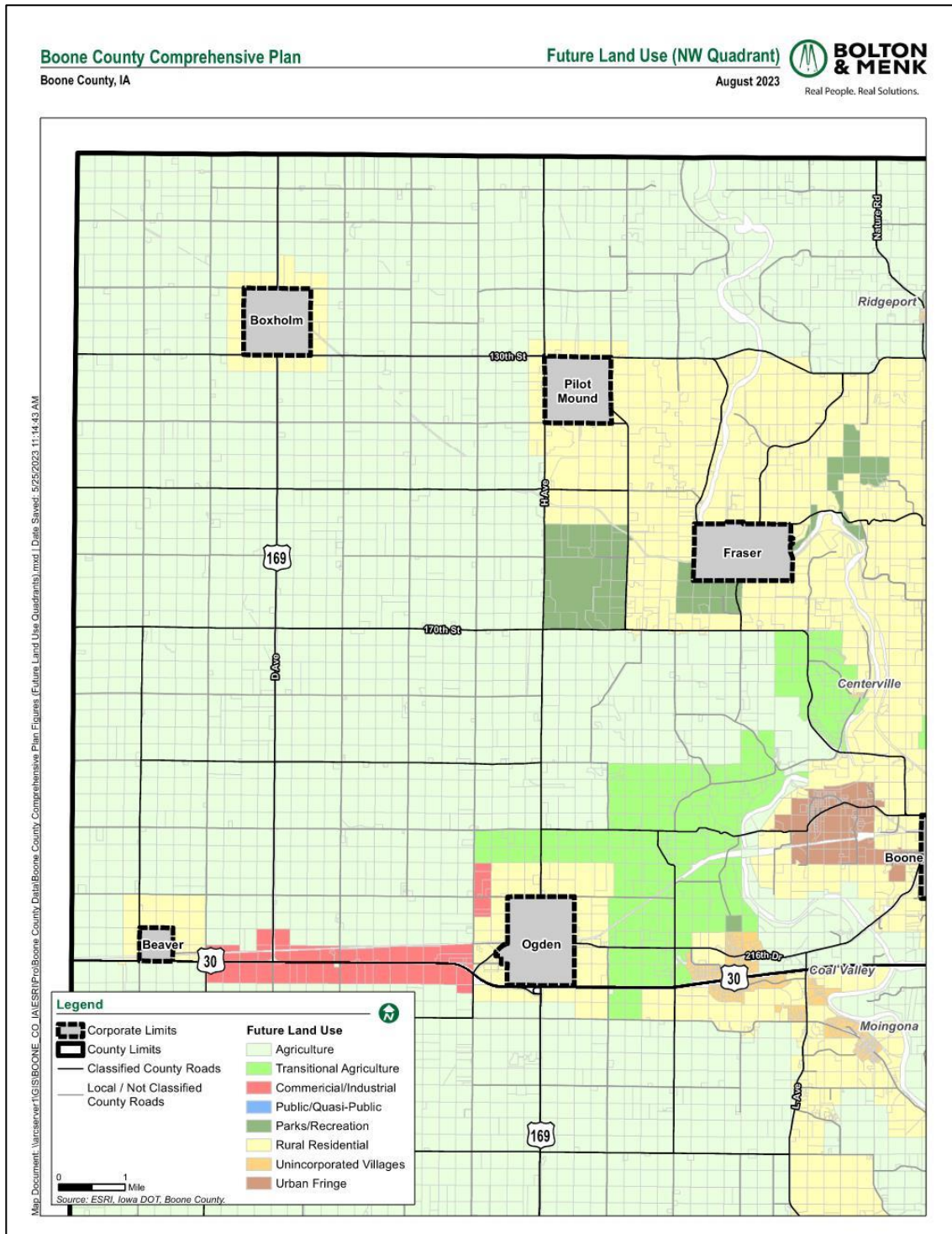


Figure 4.4 – Boone County Future Land Use, Northwest Quadrant

## Northeast Quadrant Future Land Use

The northeast quadrant contains the communities of Ridgeport and the City of Boone. The area at the eastern edge of the City of Boone, along active rail lines, highway corridors, and established commercial and industrial land, is designated for Commercial/Industrial. North and west of the City of Boone a combination of transitional agriculture and rural residential is planned near Highway 17, P Avenue, and 190<sup>th</sup> Street to accommodate the changing development pressures. Highway 30 between the City of Boone and eastern Boone County has small some established commercial and industrial uses. Parcels directly adjacent to the corridor are designated as commercial/industrial with transitional agricultural located directly outside these destinations.

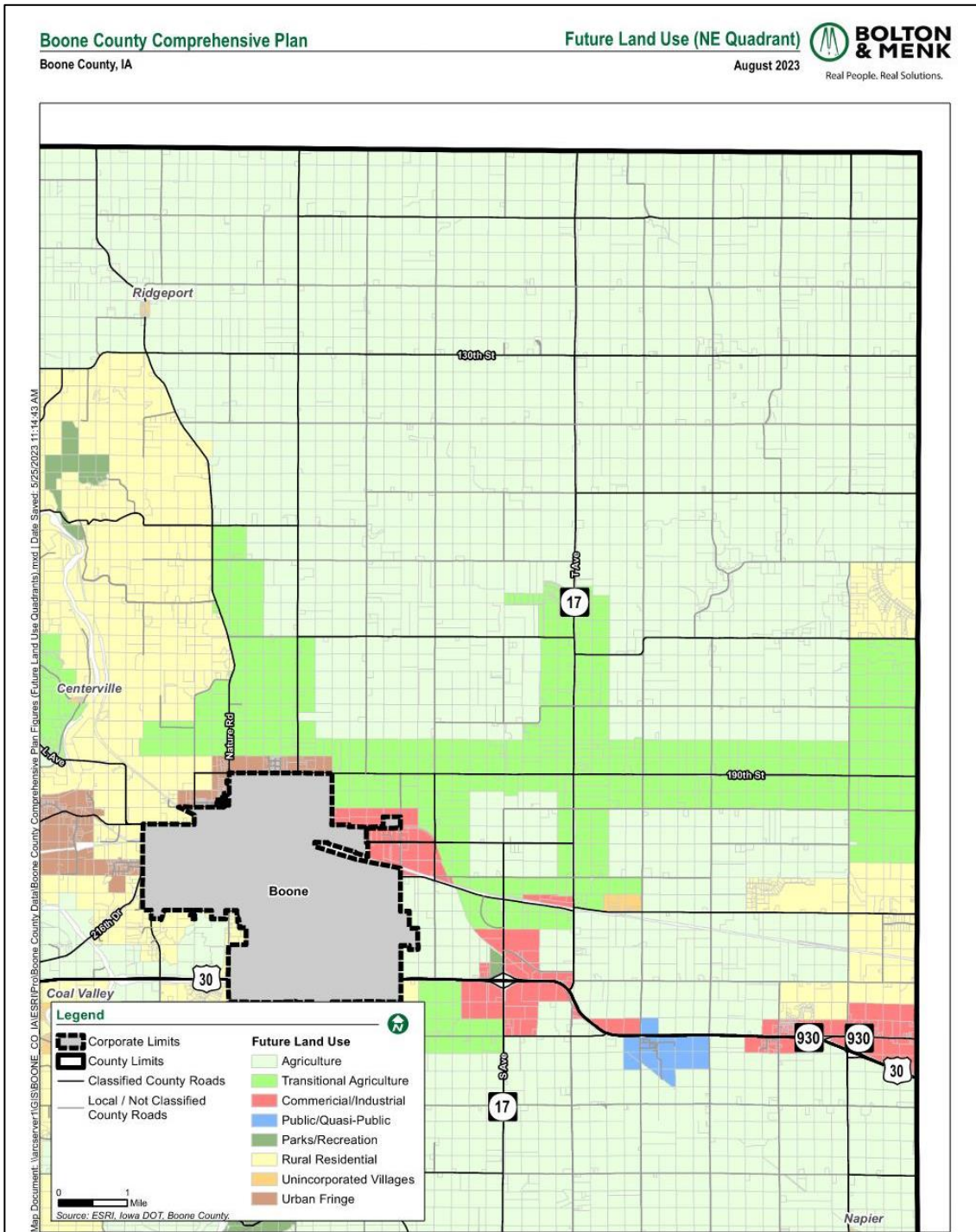


Figure 4.5 – Boone County Future Land Use, Northeast Quadrant

## Southwest Quadrant Future Land Use

The southwest quadrant contains the communities of Berkley, Coal Valley, Moingona, and Woodward. The majority of this quadrant remains agricultural, with rural residential placed along Highway 144, 270<sup>th</sup> Street, and H Avenue where roadways are paved. The area near Highway 144 has the potential for increased growth due to the proximity of the City of Perry to the south and its location near a major and arterial roadway.

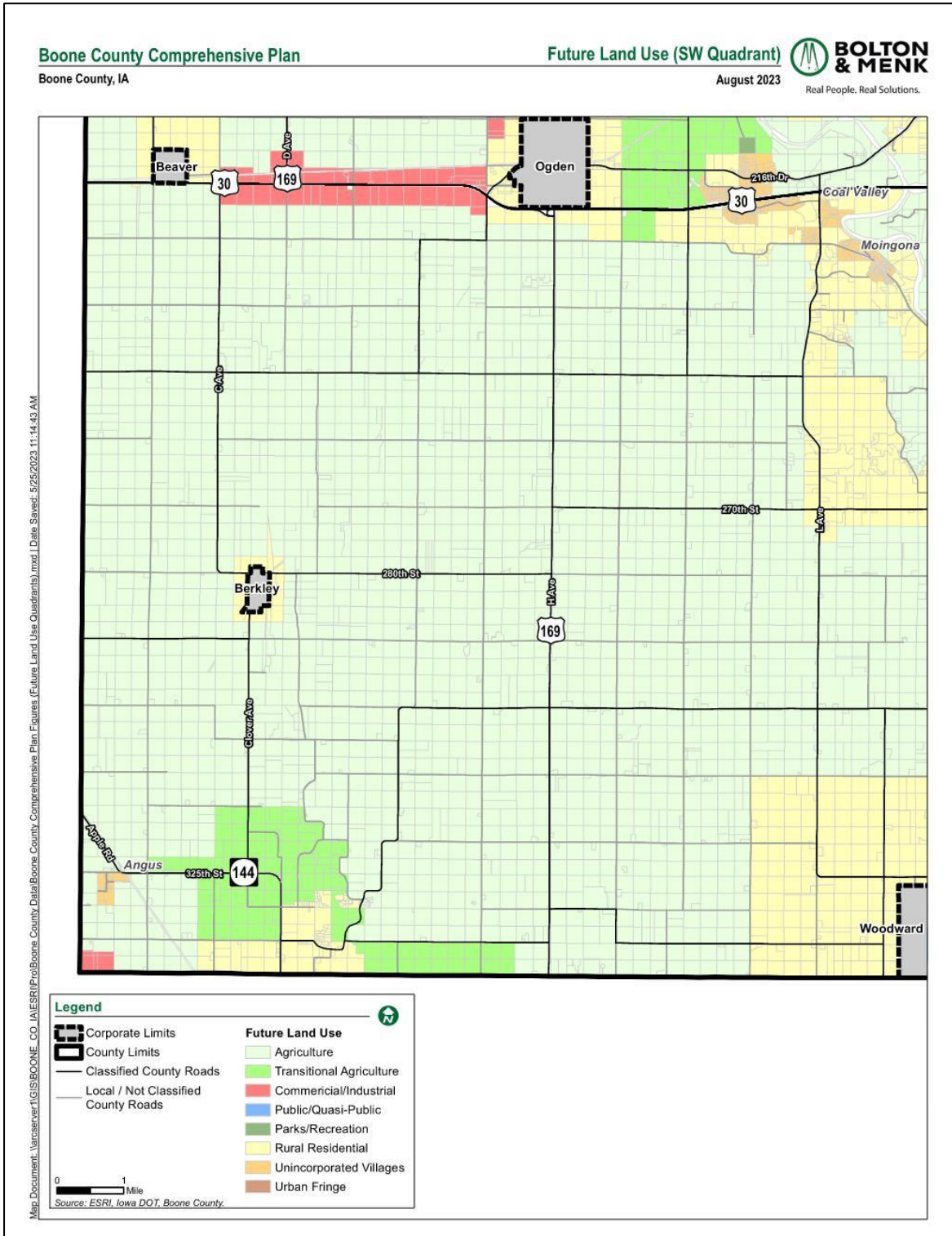


Figure 4.6 – Boone County Future Land Use, Southwest Quadrant

## Southeast Quadrant Future Land Use

The southeast quadrant contains the communities of Luther, Napier, Madrid, and Slater. The Highway 210 corridor was identified as an area for growth. Transitional agriculture is designated between Slater and Madrid, with commercial/industrial being placed on the eastern edge of Madrid. Highway 17 between Luther and Madrid would have a mixture of transitional agriculture and rural residential.

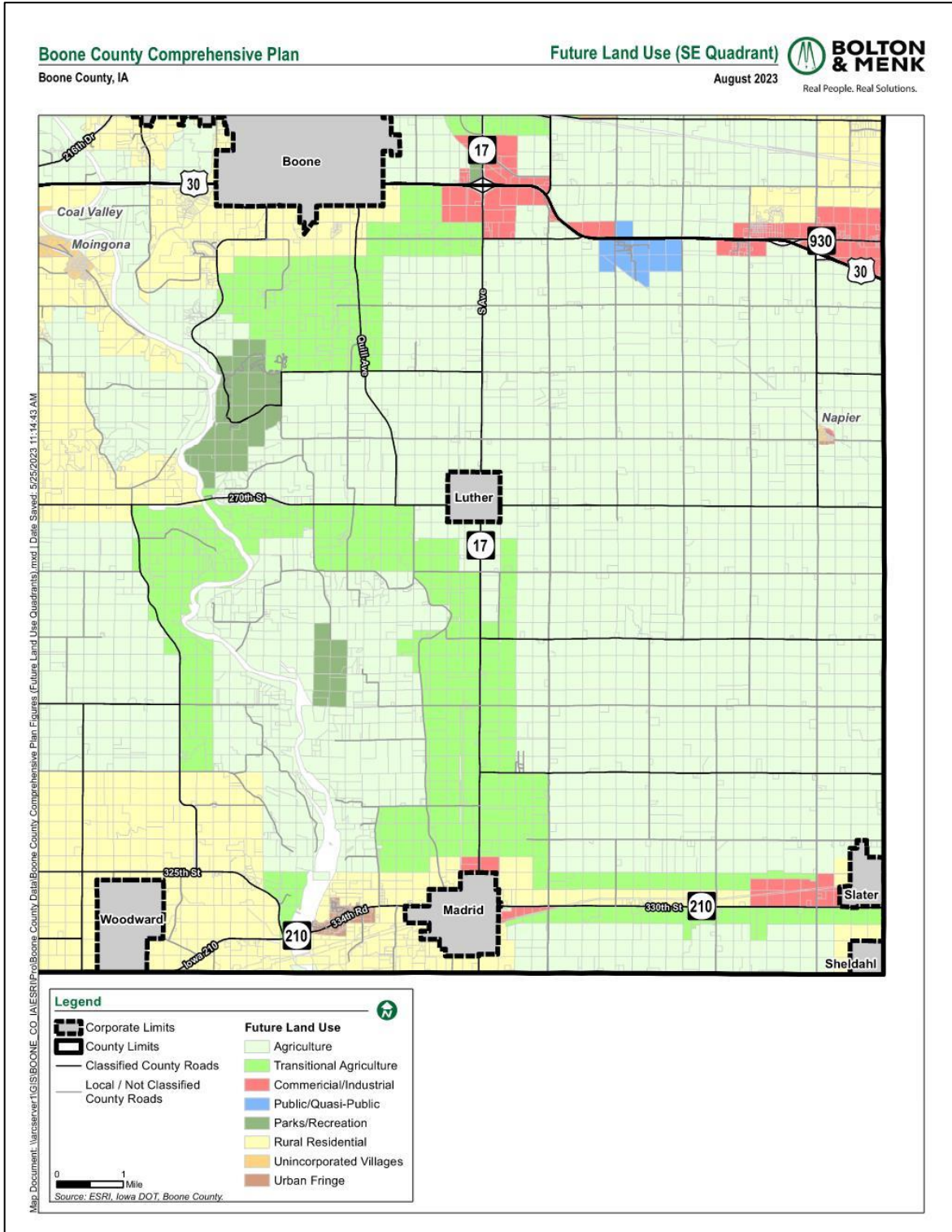


Figure 4.7 – Boone County Future Land Use Map, Southeast Quadrant

## 5. HOUSING

### OVERVIEW

Boone County is bordered by Story County to the west and is within commuting distance of the Des Moines metro area which makes Boone County an attractive location for many. The housing profile provides essential information in planning for the future. Knowing the current housing inventory along with historical trends will provide a roadmap for development. It is important to look at what types of housing are available, where the homes are located, and where the greatest demand is. Housing goes beyond the provision of shelter, safety, and accessibility. It is a means to foster stability needed for residents and the growth of the community. With the help of the community, the comprehensive plan identifies key areas in which the county should develop.



*Figure 5.1 – Single Family Housing  
Source: Boone County*

The housing goals not only reflect community needs and priorities, but also provide a sense of direction and purpose in making decisions about housing development. The goals focus on providing diverse, robust, connected and innovative solutions to housing needs.

### HOUSING GOALS

Goal 1: Plan for housing that is affordable to residents across income, age, and needs while locating areas within the county for new growth

- Encourage senior housing to allow people to age in place.
- Develop appropriate local land use laws to allow a larger variety of housing options to maintain affordability and increase choice.
- Create long-term county funding for affordable housing initiatives.
- Partner with local organizations to help create and preserve affordability.

Goal 2: Maintain the quality and character of existing housing

- Promote the weatherization of existing homes.
- Provide benefits to households that modernize their heating and cooling systems.
- Create financial assistance capabilities to repair older homes in disrepair.

**Goal 3: Preserve nature and rural communities**

- Cluster growth near transit and other rural communities and out of green space and agricultural land.
- Identify vulnerable ecological areas and review regulations to discourage development in these areas.
- Standardize subdivision laws throughout the county.
- Reduce reliance on septic tanks and wells near population centers.

**EXISTING HOUSING STOCK**

*Housing Units by Type*

Boone County’s housing is primarily single-family homes. In fact, Boone County has a larger percentage of single family homes and a lower percentage of all types of multi-family units than in the state of Iowa and the United States.

	Boone, CO	Iowa	United States
Total housing units	11,963	1,397,087	137,428,986
1-unit, detached	80.20%	73.10%	61.60%
1-unit, attached	1.80%	4.10%	5.90%
2 units	2.20%	2.30%	3.60%
3 or 4 units	1.90%	3.40%	4.40%
5 to 9 units	2.50%	3.70%	4.70%
10 to 19 units	2.50%	4.00%	4.40%
20 or more units	4.60%	5.80%	9.20%
Mobile home	4.30%	3.70%	6.20%

Source: US Census Data

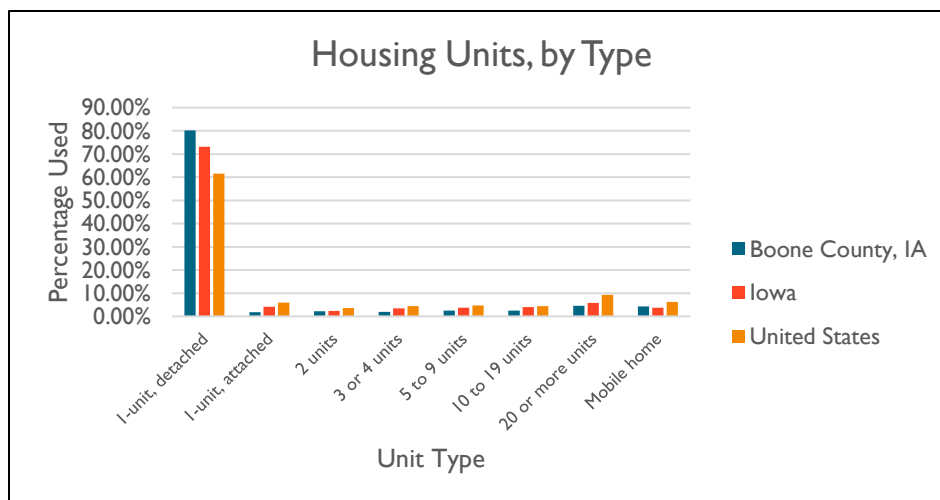


Figure 5.2 – Housing Units by Type

Source: US Census Data



### Date of Construction

Approximately 72.8% of Boone County’s housing was built before 1980, which is more than both the state of Iowa and United States. Approximately 37.1% of Boone County’s homes were built in 1939 or earlier.

	Boone County, IA	Iowa	United States
Total housing units	11,963	1,397,087	137,428,986
Built 2014 or later	1.20%	2.60%	2.50%
Built 2010 to 2013	1.90%	3.00%	2.70%
Built 2000 to 2009	8.70%	11.20%	14.00%
Built 1990 to 1999	8.50%	10.70%	13.90%
Built 1980 to 1989	6.90%	7.40%	13.40%
Built 1970 to 1979	14.70%	14.40%	15.20%
Built 1960 to 1969	8.30%	10.20%	10.60%
Built 1950 to 1959	8.20%	10.00%	10.30%
Built 1940 to 1949	4.50%	5.10%	4.90%
Built 1939 or earlier	37.10%	25.60%	12.60%

Source: US Census Data

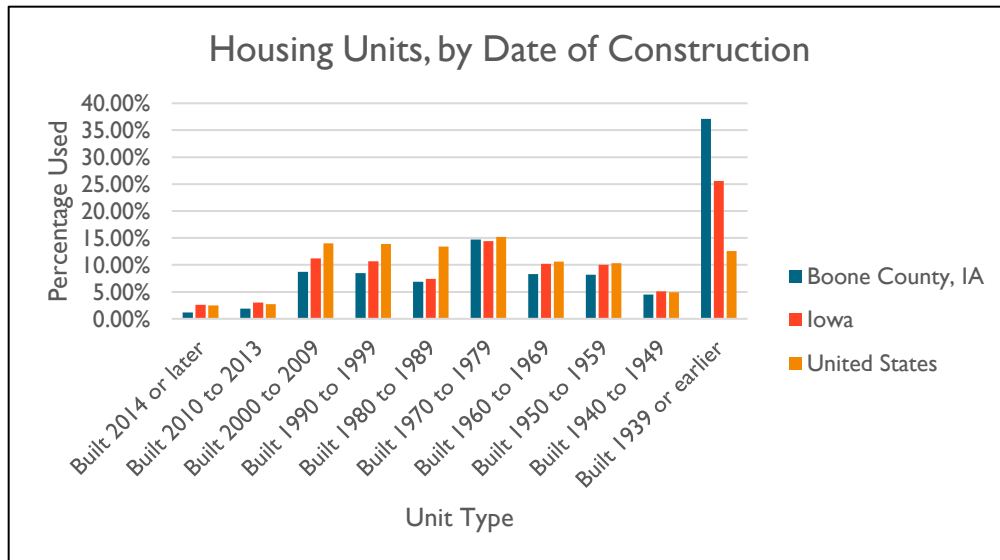


Figure 5.3 – Housing Units by Date of Construction  
Source: US Census Data

### Occupancy

Boone County has a slightly higher, but similar rate of occupancy as the state of Iowa and the United States with 91.6% of livable homes occupied.

	Boone County, IA	Iowa	United States
Total housing units	11,963	1,397,087	137,428,986
Occupied housing units	91.60%	90.60%	87.90%
Vacant housing units	8.40%	9.40%	12.10%

Source: US Census Data

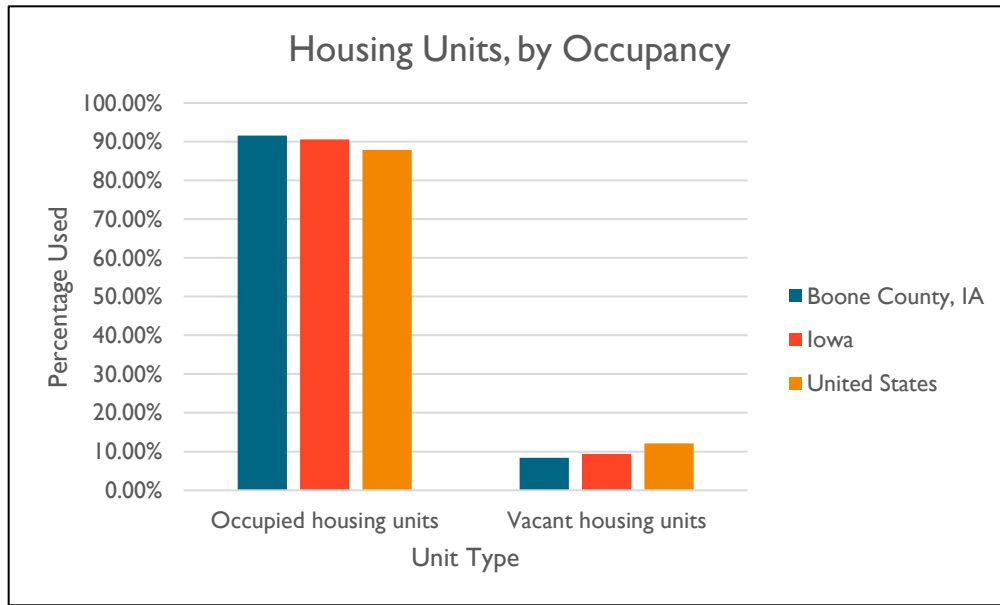


Figure 5.4 – Housing Units by Type  
Source: US Census Data

### Housing Tenure

Boone County has a higher rate of homeownership which is consistent with the higher than average number of single-family homes than both the state of Iowa and the United States. Roughly 31.1% of households have no monthly rent or mortgage payment, including those who own their home outright, or live for free in someone else's home.

	Boone County, IA	Iowa	United States
Occupied housing units	10,954	1,265,473	120,756,048
Owner-occupied	78.10%	71.10%	64.00%
Renter-occupied	21.90%	28.90%	36.00%

Source: US Census Data

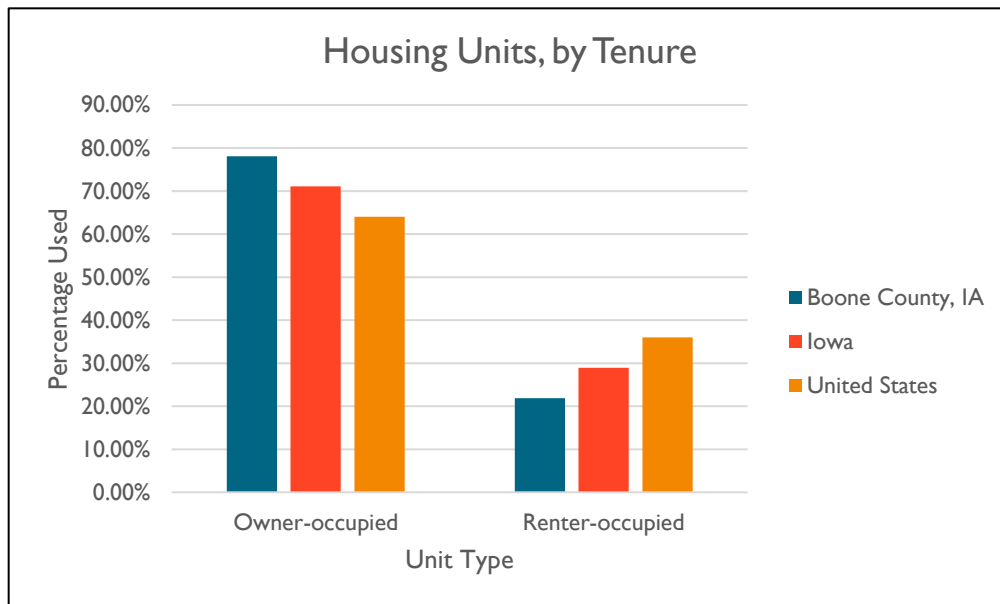


Figure 5.5 – Housing Units by Tenure

Source: US Census Data

### Cost Burden

Cost burden is defined as a household paying more than 30% of their pre-tax income in rent or mortgage payments. The rate of cost burdened households for Boone County residents with incomes in the \$20-34,999 range is similar to both the state of Iowa and the United States, but the County has a lower rate of cost burdened households at every other income level. There is a large difference in the percentage of cost burdened households between renters and people with mortgages. Nearly 36% of Boone County renters and 18.9% of Boone County homeowners with mortgages qualify as cost burdened.

	Boone County, IA	Iowa	United States
Less than \$20,000	6.50%	10.30%	10.60%
\$20,000 to \$34,999	8.00%	6.70%	8.20%
\$35,000 to \$49,999	2.40%	3.10%	4.90%
\$50,000 to \$74,999	1.30%	1.90%	4.00%
\$75,000 or more	1.00%	0.90%	3.00%

Source: US Census Data

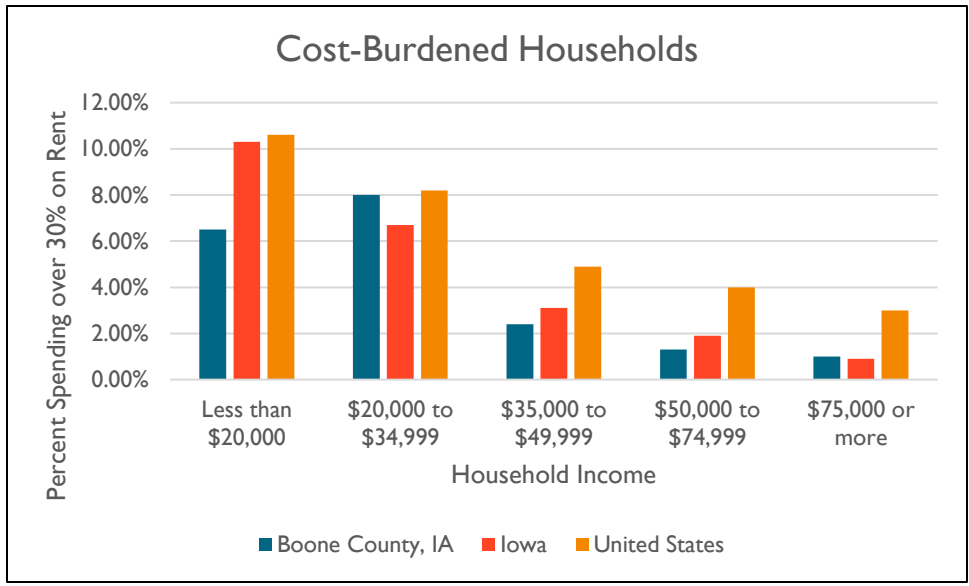


Figure 5.6 – Cost-Burdened Households  
Source: US Census Data

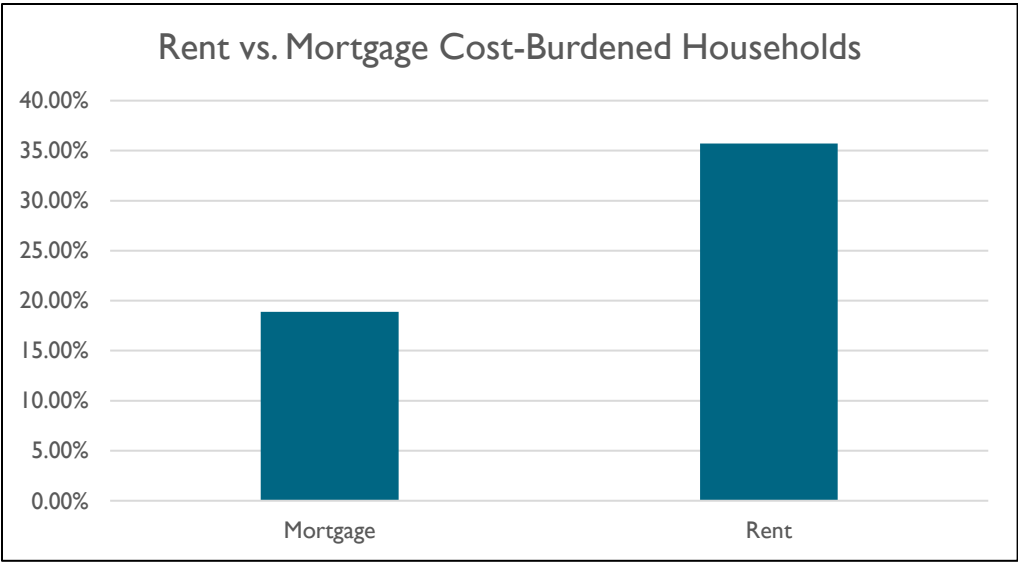


Figure 5.7 – Rent vs. Mortgage Cost-Burdened Households  
Source: US Census Data

*Monthly Costs*

Approximately 65% of Boone County residents pay between \$500 - \$1,499 a month in rent or mortgage payments.

Table 5.6: Monthly Housing Costs	
	Boone County, IA
Less than \$300	5.70%
\$300 to \$499	14.20%
\$500 to \$799	27.00%
\$800 to \$999	12.20%
\$1,000 to \$1,499	25.80%
\$1,500 to \$1,999	9.00%
More than \$2,000	6.10%

Source: US Census Data

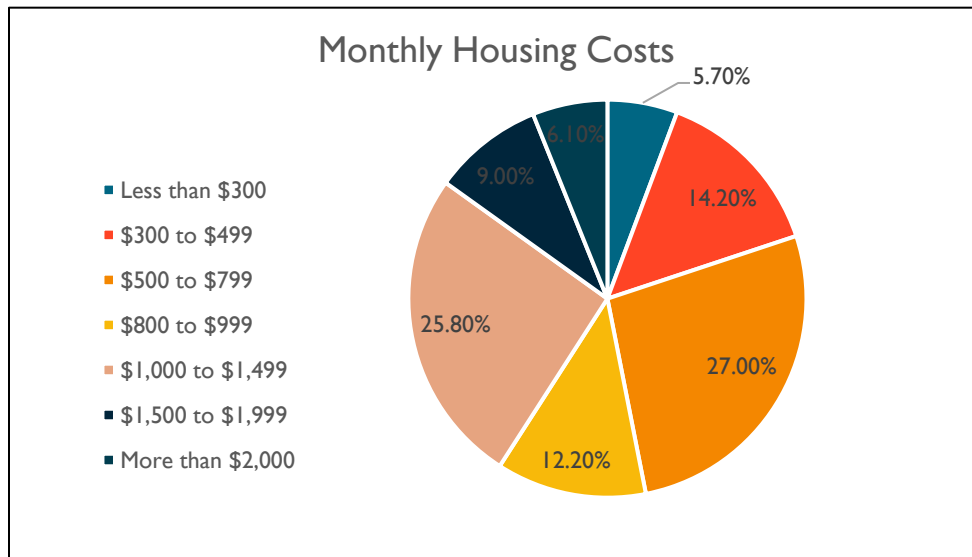


Figure 5.8 – Boone County Monthly Housing Costs  
Source: US Census Data

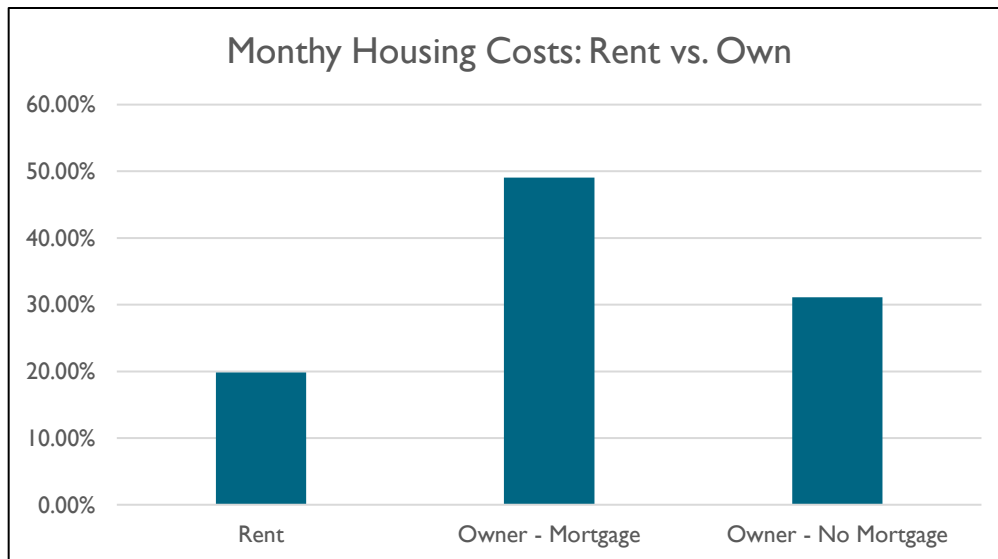


Figure 5.9 – Boone County Monthly Housing Costs, Rent vs. Own  
Source: US Census Data

## Housing Values

Approximately 71.2% of owner occupied homes in Boone County are valued at under \$200,000, with the median value being \$132,700. This shows a high affordability in the area and correlates with the median income of the county as well.

Less than \$50,000	8.30%
\$50,000 to \$99,999	22.30%
\$100,000 to \$149,999	27.80%
\$150,000 to \$199,999	12.80%
\$200,000 to \$299,999	16.50%
\$300,000 to \$499,999	8.60%
\$500,000 to \$999,999	3.10%
\$1,000,000 or more	0.50%
Median Value	\$132,700

Source: US Census Data

## SURVEY RESPONSES

The survey showed the top three issues facing Boone County housing are affordability, housing for all stages of life, and diversity of available housing types. When respondents were asked what the most significant factor that influenced their personal housing situation was, the most chosen response was affordability. Around 55.7% of respondents agreed more affordable housing options are needed compared to 10.9% of respondents who chose a different reason. The data shows 35.7% of Boone County renters and 18.9% of Boone County homeowners are cost burdened which is likely why affordability is the most common response. The census data coupled with the survey responses make affordable housing a top priority.

Approximately 59.2% of respondents agreed more single-family homes are needed compared to the 5.5% that disagreed. Only 23.5% of respondents agreed more multi-family homes are needed compared to 33% that disagreed. Roughly 80.2% of Boone County residents live in detached single-family homes, which may be why the preference is for more single-family homes over multi-family homes. The survey identified the most popular areas to live are near the cities of Boone, Ogden, or Madrid. The next three most popular answers included small communities, anywhere, or within current towns. Based on this information, Boone County seeks to focus housing near existing communities and preserve the green space in the county.

## 6. PARKS AND RECREATION

### OVERVIEW

Boone County has a variety of parks and natural areas within its boundaries. The county hosts regional attractions such as Ledges State Park and the Don Williams Recreation Area along with preservation areas for wildlife watching, fishing, hunting, and camping. Regional trails are a major part of recreation within the county, including the iconic High Trestle Trail Bridge located in the middle of High Trestle Trail. Each type of space allows residents to get closer to nature, benefits the local and regional economy, and provides areas for active recreation. This plan, and specifically this section, aims to enhance current parks, plan for expansion to new areas, and allow for more options in activities throughout Boone County.

### PARKS AND RECREATION GOALS

Goal 1: Encourage active and outdoor recreation opportunities

- Create unique areas and regional attractions.
- Identify areas without nearby parks.
- Host charrettes to identify activities community members want.
- Add more trails and trail connections between popular trails in Boone County and beyond.

Goal 2: Build recreation areas that accommodate different groups of different ages and abilities

- Setup workout equipment targeted towards the elderly.
- Invest in playgrounds that are ADA accessible.
- Identify locations for restrooms and drinking fountains.
- Explore and implement appropriate safety features for parks and trails.

Goal 3: Expand the focus on natural resources throughout the park system and promote the conservation of Boone County's natural amenities

- Expand programming to leverage the natural area and include nature-based recreation.
- Partner with soil, water, and other conservation groups to preserve the natural beauty of the county.
- Encourage the use of rain gardens and other low impact stormwater systems within the park system.

### EXISTING PARKS AND TRAILS

Boone County has high quality recreational areas, such as the iconic High Trestle Trail Bridge, that give the county a sense of pride and attract visitors from all around the region. Boone County currently has a wide range of local, county, and state parks, and wildlife management areas. Along with those amenities, Boone County also

has rivers, trails, and campgrounds that allow residents and visitors to explore its natural beauty. Figure 6.1 shows where existing open spaces, parks, and trails can be found in Boone County.

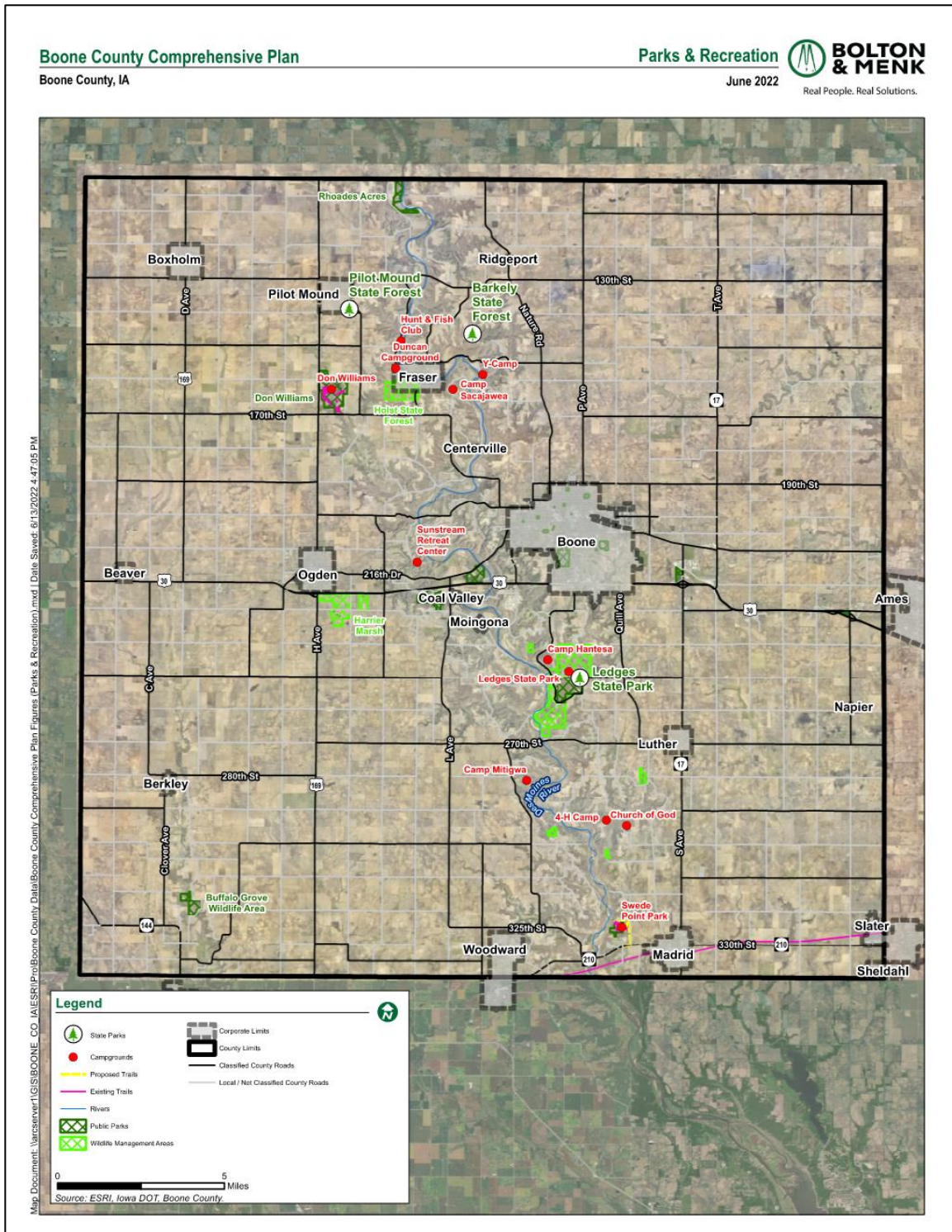


Figure 6.1 – Existing Parks and Recreation Areas  
Source: Boone County Data



### Barkely State Forest:

Barkely State Forest is 40 acres of greenspace used primarily for hunting and nature study. This state forest is located along the Elkhorn Creek, east of Holst State Forest.

### Beaver Creek Wildlife Area:

Beaver Creek Wildlife Area is one of many wildlife areas in the county. It is a 25-acre, year-round natural wildlife area that is open for public hunting. This area is located 1/2 mile east of Berkley at 315 Co Hwy E57 (280th St.), Perry, IA 50220.

### Buffalo Grove Wildlife Area:

Buffalo Grove Wildlife Area is a 127-acre, year-round natural wildlife area that is open for public hunting. Buffalo Grove Wildlife Area is located at 2200 Deer Ave Perry, IA 50220.

### Des Moines River Water Trail:

The Des Moines River Trail is 38 miles of river going north to south in the middle of Boone County. Along the river there are eight boat ramps into the water. The water trail is adjacent to Ledges State Park, Holst State Forest, and Rhodes Acres. Currently, no walking and cycling trail exists on this portion of the river.

### Dickcissel Park:

Dickcissel Park includes 38 acres with a 15-acre pond stocked with largemouth bass and yellow perch at the center. Fishing is allowed but hunting is prohibited. It is located at 1799 219th Ln Boone, IA 50036 near the Central Iowa Expo Center.



Figure 6.2 – Dickcissel Park  
Source: Boone County



Figure 6.3 – Don Williams Recreation Area  
Source: Boone County

### Don Williams Recreational Area

Don Williams Recreation Area is a 600-acre park featuring a campground, playground, several trails, and a 150-acre lake. Along the lake is a beach open for swimming, bait shop, and 9-hole golf course. This recreation area is located at 610 H Ave, Ogden, IA 50212.

### Grant's Woods:

Grant's Woods is a 28-acre, year-round nature area that is currently under development to add amenities for visitor use. It currently features a multi-use rock trail and a wildlife viewing area. For those looking to use trails in the area, Grant's Woods has one of the closest parking lots to the High Trestle Trail Bridge. These woods are located at 2335 Q Ln, Madrid, IA 50156.

### Harrier Waterfowl Production Area:

The Harrier Waterfowl Production Area is 420 acres of marsh and grassland containing pheasant, waterfowl, and doves. This beautiful marsh area is located at 700 230th St, Ogden, IA 50212.

### [High Trestle Trail:](#)

The High Trestle Trail is a 10-mile multi-use trail with a parallel natural trail, useful for equestrian riders, and the High Trestle Trail Bridge. This trail connects to over 100 miles of Iowa trails outside Boone County.

### [Holst State Forest:](#)

Holst State Forest is 313 acres of forest used primarily for research, vegetation studies, and nature experiments. This state forest begins at 614 Kale Rd, Boone, IA 50036.

### [Iowa Arboretum:](#)

Iowa Arboretum is 348 acres of land hosting a variety of trees, shrubs, and flowers, along with nature trails. The arboretum holds one of the largest collections of native Iowa vegetation in the state. It is located at 1875 Peach Ave, Madrid, IA 50156.

### [Jay Carlson Wildlife Area:](#)

Jay Carlson Wildlife Area is a 156-acre, reconstructed sand prairie and woodlands wildlife area with a 22-acre lake containing bluegill, catfish, crappie, bass, and rough fish. It is a highly sought after place for all forms of recreational fishing. Jay Carlson Wildlife Area can be found at 1168 Old Hwy 30, Boone, IA 50036.

### [Kate Shelley Trail:](#)

The Kate Shelley Trail is an 0.85-mile, shared-use trail that follows an abandoned rail corridor in Boone, IA. Along the trail are the following: Linwood Cemetery Stone Railroad Bridge, Geoppinger Field, Herman Park, and McHose Park.

### [Ledges State Park:](#)

Ledges State Park is a 1,000-acre state park featuring overviews of the Des Moines River, campgrounds, four miles of trails, and seasonal hunting locations. It is host to many wonderful wildlife views and is a common location for marriage proposals from native Iowans.

### [Mabaska:](#)

Mabaska is a 17-acre nature area with a large pond. Hunting and fishing isn't allowed in the area, but it is a common area for sight-seeing. It is located at 2200 230th St, Ames, IA 50014.

### [Ogden Community Trail:](#)

The Ogden Community Trail is a 1.1-mile trail located in Ogden, IA. Along the trail is the Leonard Good Community Center, Beaver Creek, Glenwood Cemetery, and Ogden High School.

### [Pilot Mound State Forest:](#)

Pilot Mound State Forest is 33 acres of forest used primarily as a nature area and hunting grounds. Within the forest is the mound which the City of Pilot Mound is named after.



Figure 6.4 – High Trestle Bridge  
Source: Boone County

### Rhoades Acres:

Rhoades Acres is 160 acres of public hunting land containing deer, turkeys, pheasants, rabbits, and squirrels. This land is host to all forms of seasonal hunting allowed in the state of Iowa.

### Swede Point Park:

Swede Point Park is a 128-acre park featuring a campground, hiking trails, shelters, a playground, and a volleyball court. It is commonly known for camping events and is located at 1601 322nd Lane Madrid, IA 50156 along the Des Moines River.

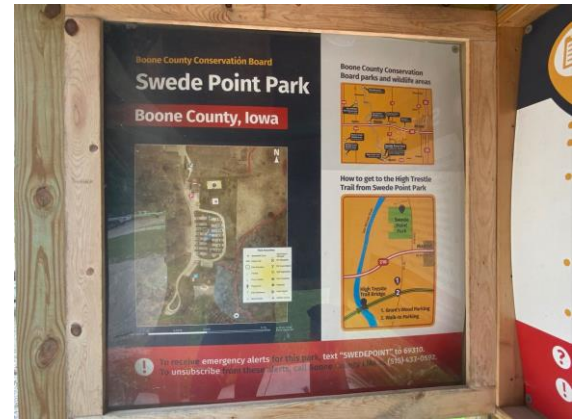


Figure 6.5 – Swede Point Park  
Source: Boone County

## PROPOSED PARKS AND TRAILS

### *Beaver Creek Trail*

This potential 36.5-mile trail would run along Beaver Creek. The trail would complete a necessary connection that would bring Boxholm, Beaver, and Berkley together.

### *Des Moines River Trail:*

This potential 38-mile trail would run along the Des Moines River corridor. The trail would connect communities of Fraser, Boone, and Madrid, and would also connect to the High Trestle Trail just west of Madrid.

### *Kate Shelley Trail Extension:*

This potential 7.6-mile trail would follow the already abandoned rail corridor. The trail would connect the City of Boone and Ogden to one another along with the proposed Des Moines River Trail.

## SURVEY RESPONSES

The survey found that 89.6% of respondents used Boone County’s parks at least a few times a year and that 83.6% used trails yearly within Boone County. The most popular responses in the survey concerned how Boone County could improve the park and trail system, specifically through additional trails, better connections, more restrooms, and updating current facilities. The survey results show that people often use the current facilities and desire a continuation of the trail system. All of these findings have been reflected within the parks and recreation goals.

## 7. TRANSPORTATION

### OVERVIEW

Transportation is critical for connecting residents with services, businesses, and activities within the community. It also helps support and connect local to regional markets. Traditionally, transportation is thought of as traffic origins and destinations; however, other factors such as rail lines, bridges, surface conditions, airports, and truck volumes also play vital roles when analyzing the quality of the current transportation system and what may be needed in the future. The primary goal of this section is to craft local policies, standards, and guidelines to guide major transportation investments and policy decisions for the future of Boone County.



Figure 7.6.1 – Rock Island Caboose  
Source: Boone County

### TRANSPORTATION GOALS

Goal 1: Ensure Boone County plans for proper growth and coordinates that growth with the Iowa Department of Transportation (IADOT) and local municipalities

- Continue to develop and coordinate local capital improvement plans with the Boone County roadway improvement plan while looking for state and federal funding.
- Encourage design and land use that support a wide range of transportation options, with careful thought regarding types of land use near major roadways.
- Guide future development to roadways capable of accommodating growing future traffic.
- Develop roadways and street systems with consideration for speeds, congestion, safety, impact, and noise.

Goal 2: Proactively assess current facility needs and evaluate future development

- Support an appropriate hierarchy of streets and facilitate the connectivity of adjacent land uses.
- Regularly evaluate roadway width and adjust roadway configurations as opportunities, funds, or needs arise.
- Establish a complete regional roadway network that balances local and regional needs and includes sustainable practices.
- Analyze current bridge and roadway surface conditions to assist in prioritizing future investment.

Goal 3: Promote financially responsible transportation investments

- Prioritize updating existing infrastructure over creating new.
- Create goals and check-ins for timely completion of major projects.
- Ensure all infrastructure is properly installed to required specifications.

## EXISTING CONDITIONS

### Traffic Volumes

Average daily traffic (ADT) volumes show how many cars travel on a road on an average day. Traffic volumes, and subsequent congestion, are one of the key indicators of a roadway's performance. Generally, traffic volumes are higher on the eastern edge of the county, closer to the urbanized areas, and lower on the west. The most recently collected traffic volume data is shown in Table 7.1.

The FHWA has a simplified way of measuring the capacity of different roadways. Table 7.2 shows the capacity thresholds. None of Boone County's major highways are approaching the FHWA threshold. This means no expansion is needed in the near term unless existing conditions rapidly change.

Figure 7.2 illustrates the ADT of the major corridors. Hwy 30 has the highest ADT of the county and traffic volumes are greatest in the eastern side of the county from Ames to the City of Boone.

Road Name	Segment	Roadway Type	Total Truck	ADT
210th St	Between S Ave & T Ave	Two-Lane Roadway	223	1780
230th St	Between X Ave & 500 <sup>th</sup> Ave	Two-Lane Roadway	241	5300
325th St / Apple Rd	Between A Ave & Clover Ave	Two-Lane Roadway	184	1850
330th St	Between T Ave & 500 <sup>th</sup> Ave	Two-Lane Roadway	152	2690
334th Rd	Between 325 <sup>th</sup> St & Madrid	Two-Lane Roadway	98	1980
D Ave	Between 325 <sup>th</sup> St & Southern County Boundary	Two-Lane Roadway	204	2122
H Ave	Between 220 <sup>th</sup> St & 270 <sup>th</sup> St	Two-Lane Roadway	423	3230
Hwy 17	Between Madrid & Southern County Boundary (NW 166 <sup>th</sup> Ave)	Two-Lane Roadway	348	6400
Hwy 30	Between Ogden & Boone	Four-Lane Divided Roadway	884	9365
Iowa 210	Between N Ave & 325 <sup>th</sup> St	Two-Lane Roadway	98	1210
S Ave	Between Luther & Madrid	Two-Lane Roadway	393	5360
T Ave	Between 100 <sup>th</sup> St & 210 <sup>th</sup> St	Two-Lane Roadway	282	2630

Source: Iowa DOT

Roadway Types	Volumes Approaching Capacity	Corridors Approaching Thresholds
Two-Lane Roadway	12,000-14,000	None
Three-Lane Roadway	14,500-17,000	None
Four-Lane Roadway	20,000-24,000	None
Four-Lane Divided Roadway	68,000-80,000	None

Source: Iowa DOT

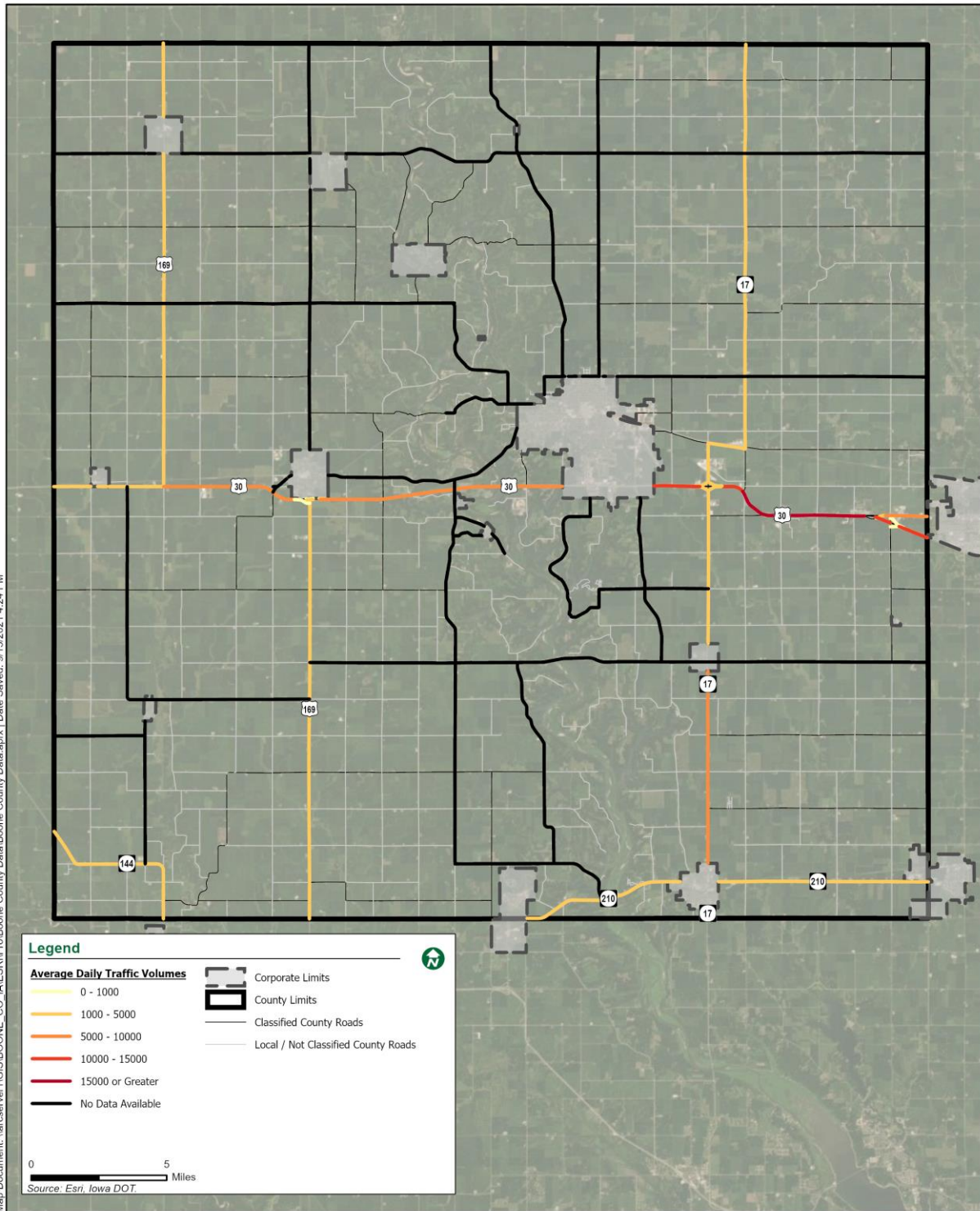


Figure 7.2 – Average Daily Traffic Volumes  
Source: Iowa DOT

## Truck Traffic

Roadways that connect farms to markets and have good connectivity often have high truck traffic. Truck traffic can decrease a roadway's performance because they have long stopping distances, long acceleration distances, and can degrade pavement conditions at a higher rate than other vehicles. Truck traffic on county roads ranges from 4.5% to 17.4% of the total traffic. Despite sizeable truck percentages, the actual truck counts are quite low but have a very wide range. This range for trucks goes from 98 to 1245 trucks a day. Figure 7.3 shows the ADT of all vehicles compared to that of only trucks. The truck traffic as a percentage of total ADT traffic is shown in Figure 7.4. The most recently collected truck traffic volume data is shown in Figure 7.5. Trucks do not make up the majority of traffic on any roadway, but are present on all roadways measured.

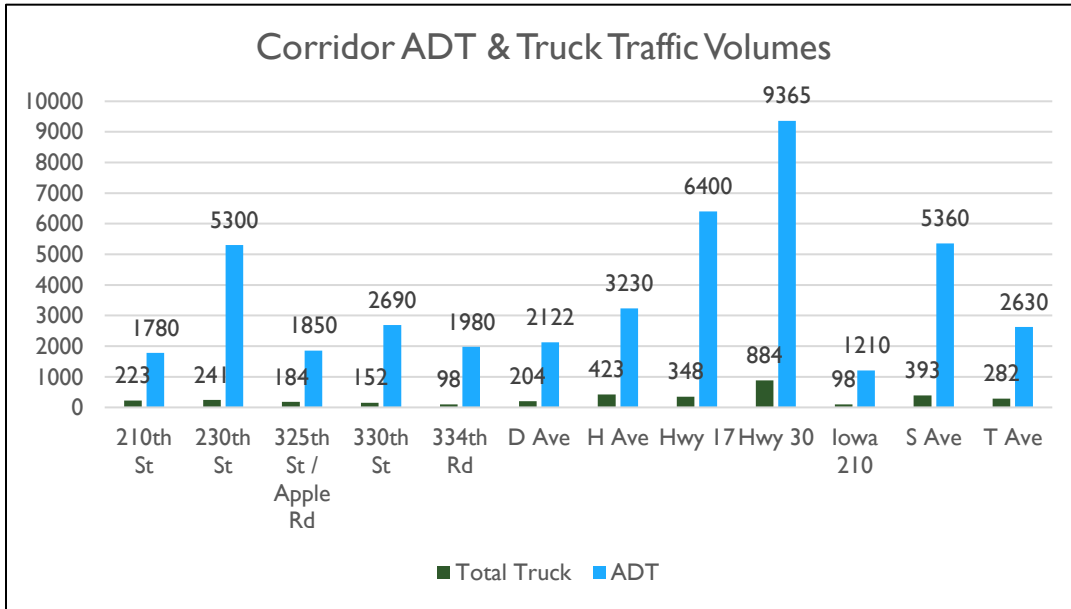


Figure 7.4 – Corridor Average Daily Traffic Volumes  
Source: Iowa DOT

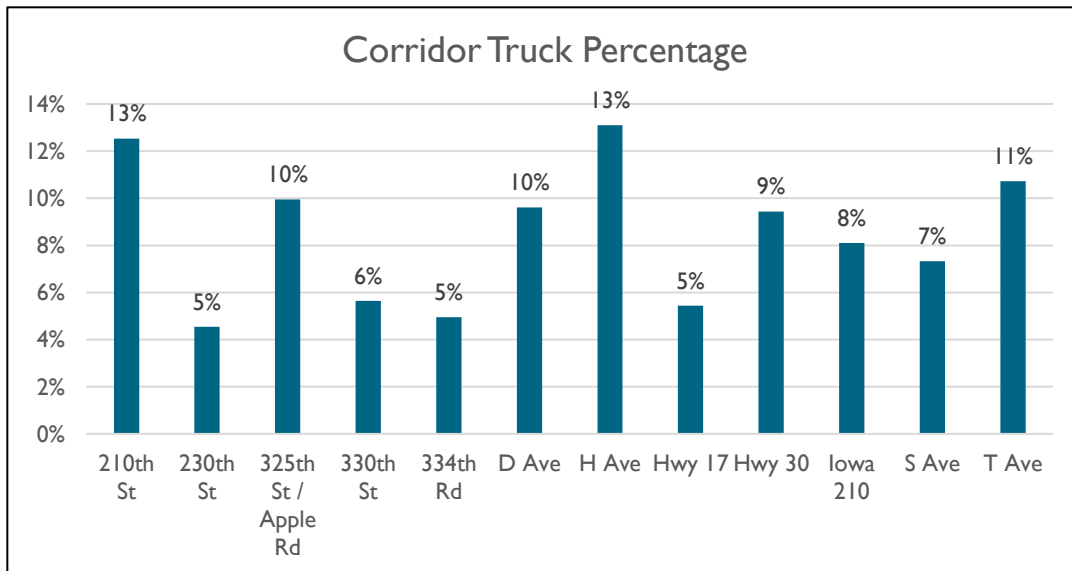
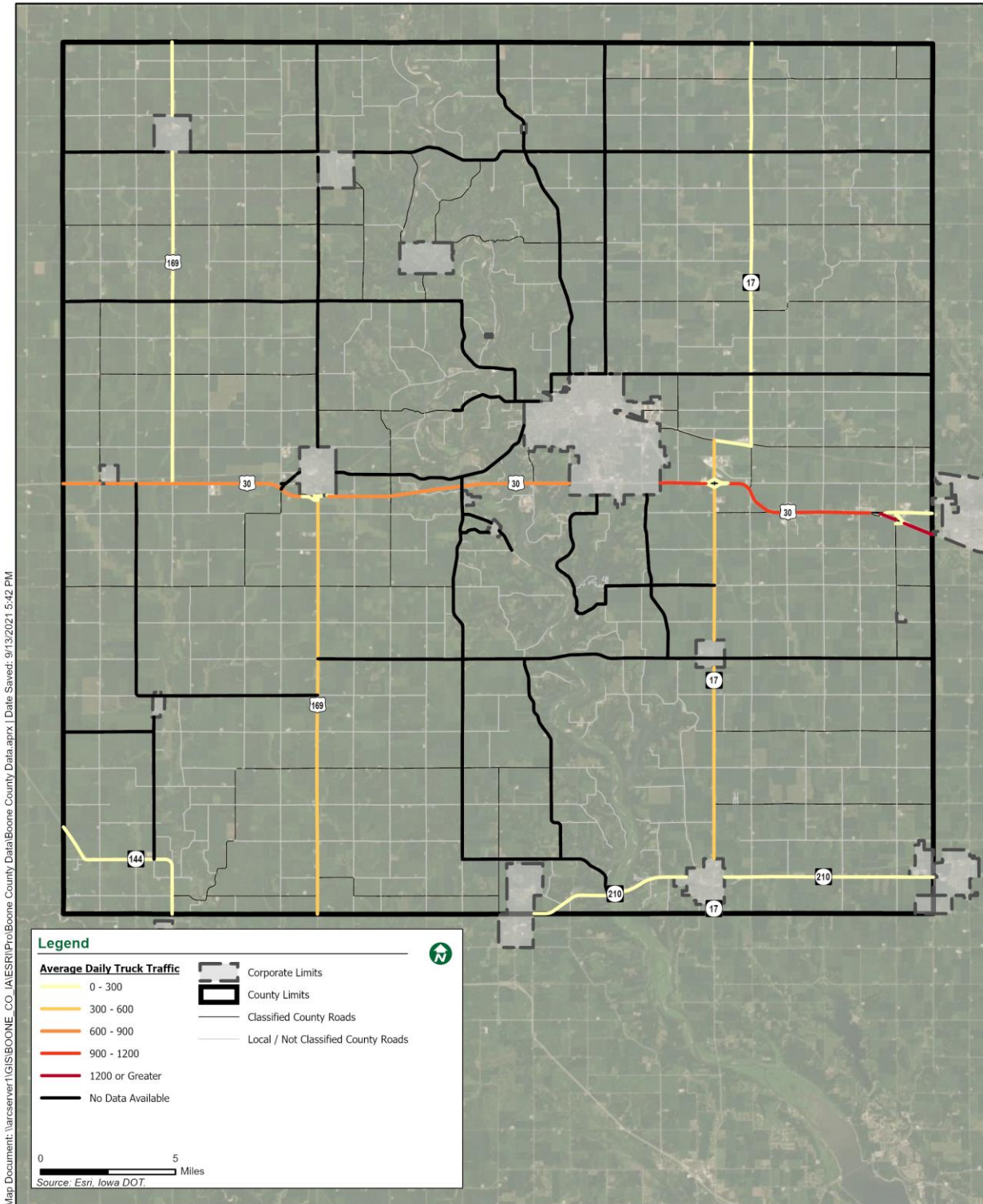


Figure 7.3 – Corridor Percentage of Truck Traffic Volume  
Source: Iowa DOT



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Figure 7.5 – Average Daily Truck Traffic  
Source: Iowa DOT



## Functional Classification

The functional classification system is used to create a roadway network that efficiently collects and distributes traffic from individual properties and neighborhoods to the state or federal highway system. A successful system coordinates and manages several components within transportation including mobility, roadway design, and route alignment. It also seeks to match current and future access and land use with the adjacent roadway's purpose, speeds, and spacing. The functional classification system is comprised of principal arterials, minor arterials, major and minor collectors, and roadways. Each classification has a different function, with interstates or freeways prioritizing mobility with very strict access controls while a local road prioritizes property access over mobility, as shown in Figure 7.6. Most travel relies on a network of roads at multiple classification levels.



Figure 7.6 – Functional Classification Access vs. Mobility Flow Chart  
Source: American Planning Association

In Boone County, US 169 and US 30 are the only principal arterial roads and are under the jurisdiction of the Federal Highway Administration. Highway 144, Highway 17, Highway 210 are the only minor arterials and are under the jurisdiction of the Iowa Department of Transportation. Many county highways are listed as major or minor collectors, including P70, R21, R27, E18, E26, R18, E57, P54, and more. Roadways listed as major collectors are eligible for state and federal funding. All functionally classified roadways within Boone County are shown in Figure 7.7.

Class Name	Total Mileage	Percent of Type	Federal Recommendation
Principal Arterial – Other	67.8 Miles	5.80%	2%-6%
Minor Arterial	54.9 Miles	4.70%	2%-6%
Major Collector	176.1 Miles	15.1%	8%-19%
Minor Collector	153.8 Miles	13.2%	3%-15%
Local	715.8 Miles	61.3%	62%-74%

Source: Federal Highway Administration

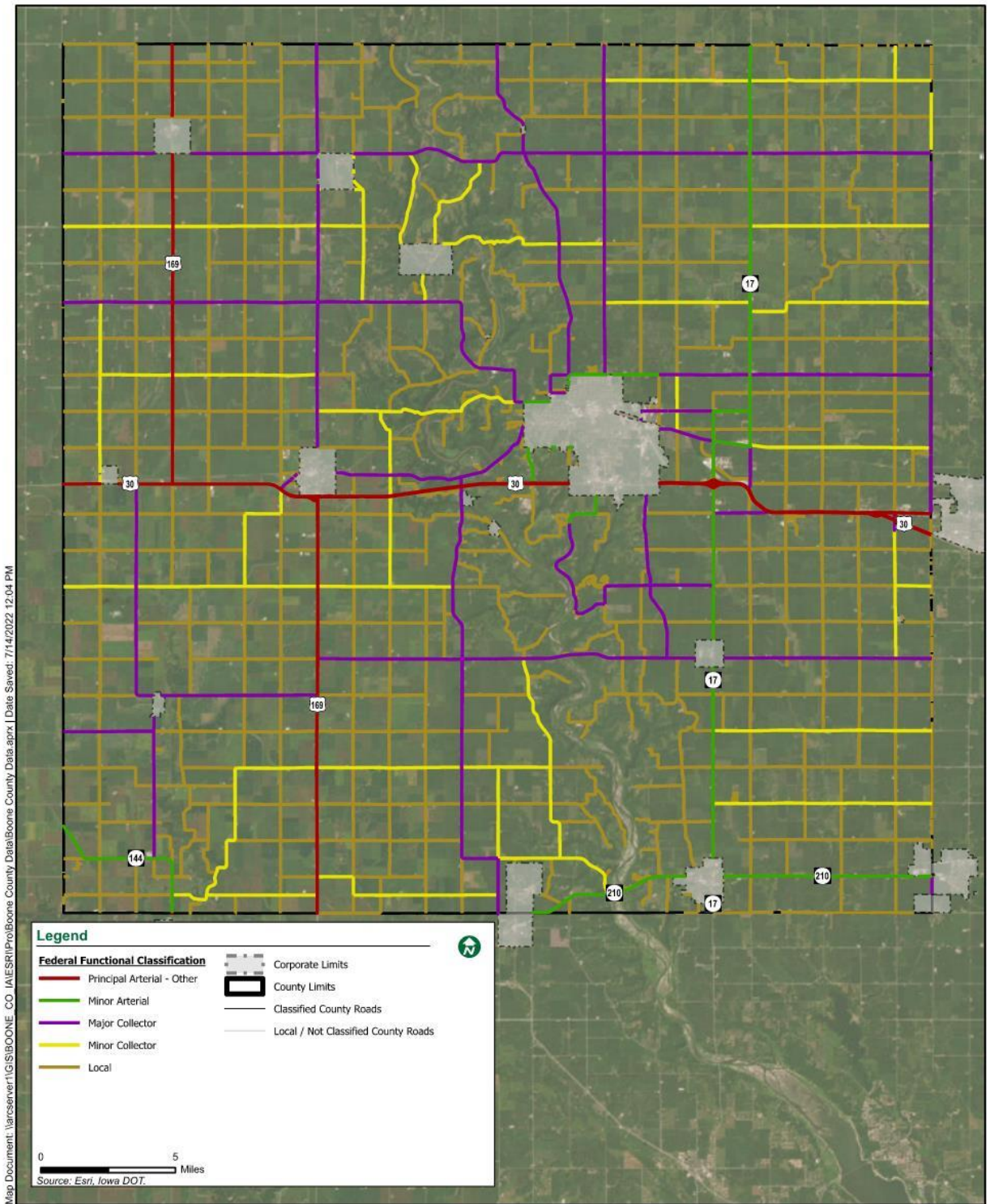


Figure 7.7 – Federal Functional Classification  
Source: Iowa DOT

## Traffic Safety

Traffic safety is a high priority for all agencies responsible for managing transportation facilities. Reviewing historic crash information can help identify existing deficiencies and assist the county in prioritizing transportation funds over the next 25 years. Crash records from 2016 through 2020 were collected from IADOT. Crashes that occurred within municipal boundaries and on federal highways (US 169 and US 30) and state highways (Highway 210, Highway 930, Highway 17, and Highway 144) were excluded.

Between 2016 and 2020, 417 crashes occurred on county roads. This included two fatalities and 17 major injuries. There were no reported bicycle or pedestrian crashes on Boone County roadways. The major crash trends identified in Boone County are shown in Figure 7.8. Locations of crashes are shown in Figure 7.9 in the form of a heat map of reported accidents along with locations of injuries and fatalities. The map shows crashes occur more often in the areas closest to the population centers. Figure 7.10 identifies the posted speed limits in the county.

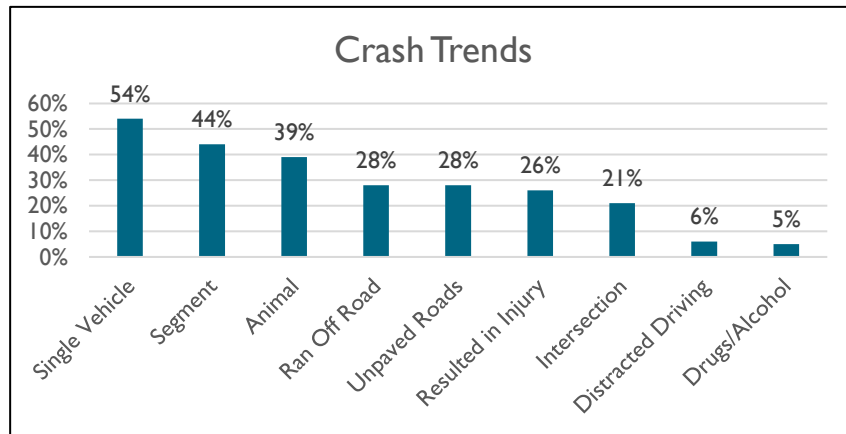


Figure 7.8 – Boone County Crash Trends  
Source: Boone County Data

In addition to the trend analysis, a density analysis was completed to identify where there are clusters of crashes. These segments were reviewed to identify any trends that could be tied to the information. Around 40% of all crashes were single vehicle crashes, often involving an animal such as a deer or smaller animal. Distracted driving and alcohol were involved in approximately 5% of crashes. Table 7.4 lists the major trends that have occurred on each major crash corridor.

Corridor/Count	Total Crashes	Animal Involved	Fixed Object	Vehicle	Single Vehicle	Other
Co Rd E18/130TH ST	24	14	2	1	6	1
Co Rd E26/170TH ST	17	9	2	1	4	1
Co Rd E41/216TH DR	30	13	11	0	6	0
Co Rd E57/270TH ST	12	6	4	2	0	0
Co Rd P70/H AVE	18	14	0	1	3	0
Co Rd R18/L AVE	19	7	2	5	5	0
Co Rd R21/NATURE RD	17	8	1	0	8	0
Co Rd R38/500TH AVE	27	22	0	1	4	1

Source: Boone County Data

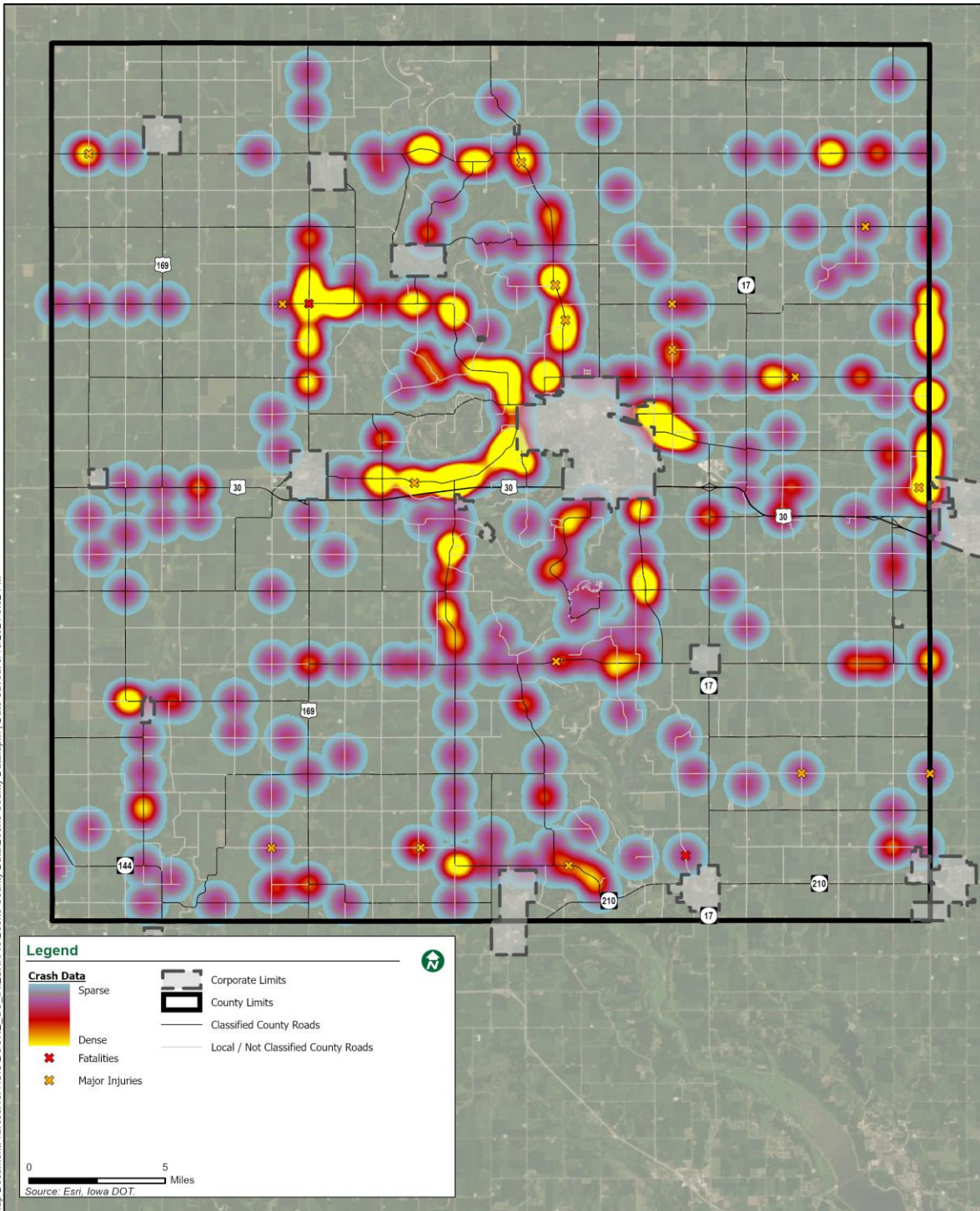


Figure 7.9 – Boone County Crash Data  
Source: Boone County Data

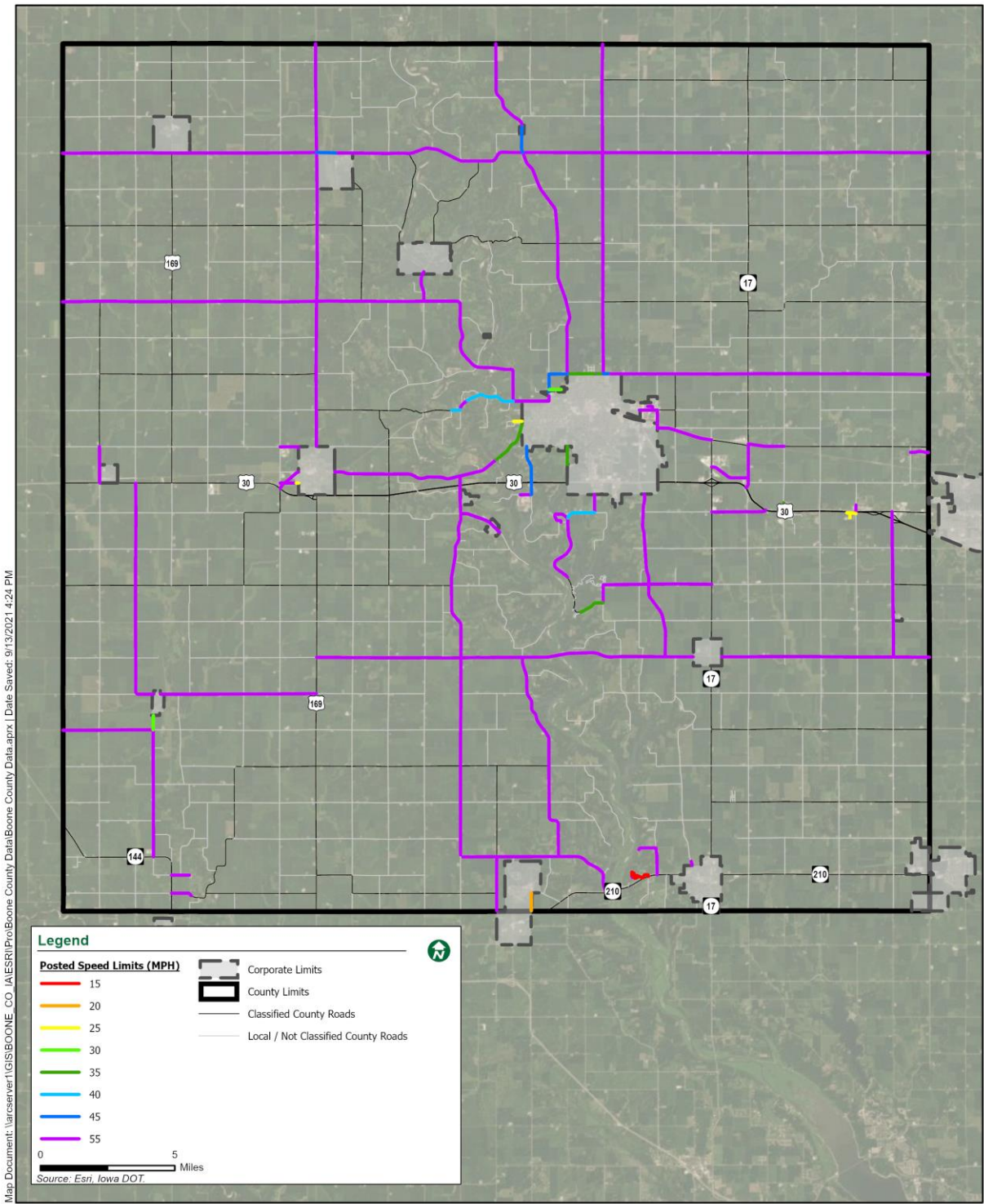


Figure 7.10 – Posted Speed Limits  
Source: Boone County Data

### Surface Type and Condition

The 980.7 miles of county roadways (excluding federal, state, township, and municipal roadways) are split between paved (concrete, asphalt) and unpaved/gravel surfaces. Paved roadways are typically found on higher traffic corridors or corridors with good connectivity to economic centers, while gravel roadways are typically found in low volume corridors.

Roadway surface type is shown in Figure 7.12, with a breakdown by surface type and mileage in Table 7.5. Figure 7.11 identifies the pavement condition of Boone County roadways. As of 2021, approximately 83.5% of these roadways are in either “Good,” “Very Good,” or “Excellent” condition with the overall largest grouping of roadways being in very good condition within Boone County. Improvements have been made to the existing county roads; however, the pavement condition data will not be updated until later in 2023. Figure 7.13 shows the condition of each of the major roadways which are under the jurisdiction and maintenance of the county.

Surface Type	Miles	% of Total Roadways
Paved	196.2	20%
Gravel	784.5	80%
Total	980.7	100.0%

Source: Boone County Data



Figure 7.11 – Pavement Condition  
Source: Boone County Data

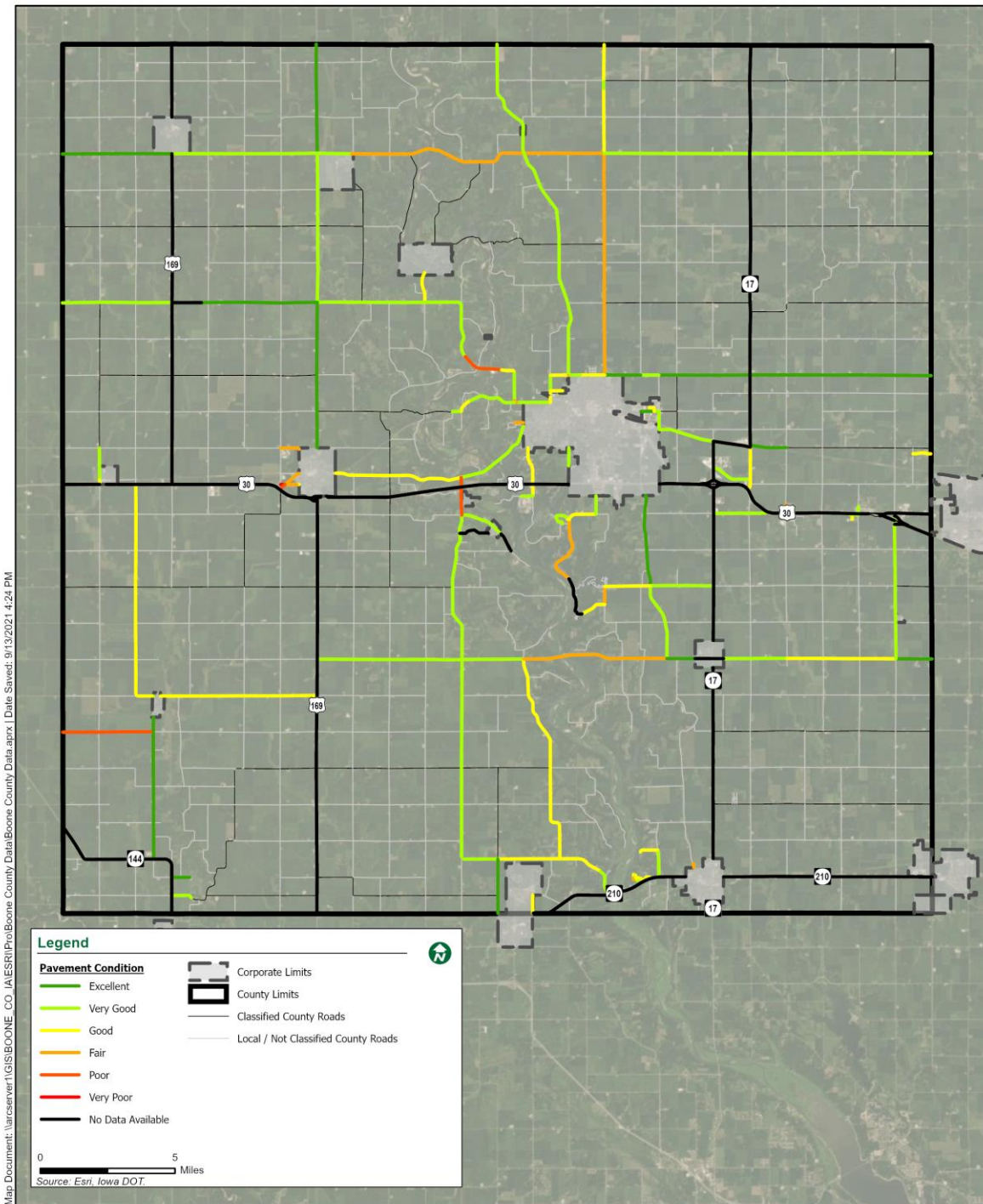


Figure 7.12 – Roadway Surface Condition  
Source: Boone County Data

## Bridge Conditions

Boone County maintains 139 bridge structures and culverts, including multiple bridges that span more than 20 feet. Of these structures, 2.2% were built before 1960. Bridges built before 1960 are often functionally obsolete due to width, height, and weight restrictions. Obsolete does not necessarily mean they need replacement or rehab; it means the existing configuration does not meet the current design standards and may have restrictions, clearance issues, or narrow lanes. There are 33 bridges that are structurally deficient and 3 that are obsolete in Boone County. Approximately 48.9% of the bridges in Boone County have a sufficiency rating of 80 or greater and 32.4% have a sufficiency rating between 50 and 80. Just 26 bridges, or 18.7% have a sufficiency rating below 50. A breakdown of bridge sufficiency by range is shown in Figure 7.14. Bridge location and sufficiency is shown in Figure 7.16

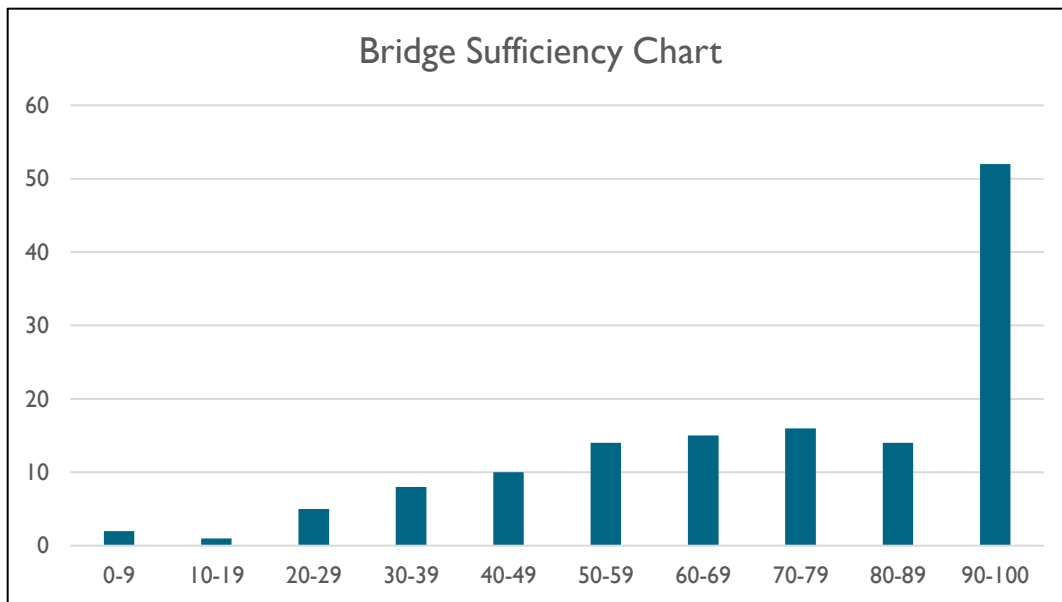


Figure 7.14 – Bridge Sufficiency Chart  
Source: Boone County Data

## Bridge Evaluation and Investment Review

A major component of this plan is to identify and prioritize bridge investments across the county. A bridge prioritization process was performed based on the county's existing inventory of structures related to existing national bridge inventory data sheets. For the purposes of this analysis it was assumed existing bridges in the 5 year program would remain the highest priorities for future investment. Future investments were then prioritized based on sufficiency rating, posting limit, and average condition of the structure.

- Bridges were analyzed and allocated to one of four sufficiency groups: those with sufficiency ratings less than 50, those between 50 and 75, those between 75 and 90, and those greater than 90.
- Within each quartile ranking, bridges were prioritized based on three primarily planning level data inputs: sufficiency rating, posting limit, and average condition of the structure.
- Condition average was developed based on a combination of inputs involving the superstructure, substructure and deck rating.
- Analysis and prioritization within each sufficiency group was completed based on posting values (scaled between zero and five) and the condition average of greater than or less than six. This matrix was used to determine the final ranking.



This evaluation and the accompanying map should be used to assist the county in developing future investment priorities; however, it is intended to be flexible. External factors like funding availability, coordinated road construction, environmental, and political factors may result in changing priorities. The chart in Figure 7.15 shows the condition of each of Boone County’s bridges. Roughly 26.6% of bridges are in good condition, and 42.4% are in fair condition. Forty bridges (28.8%) are in poor/deficient condition. The location of these bridges are mapped in Figure 7.16. Although the FHWA no longer uses the terms “obsolete” and “deficient” we believe these terms are still relevant in the context of determining future priorities.

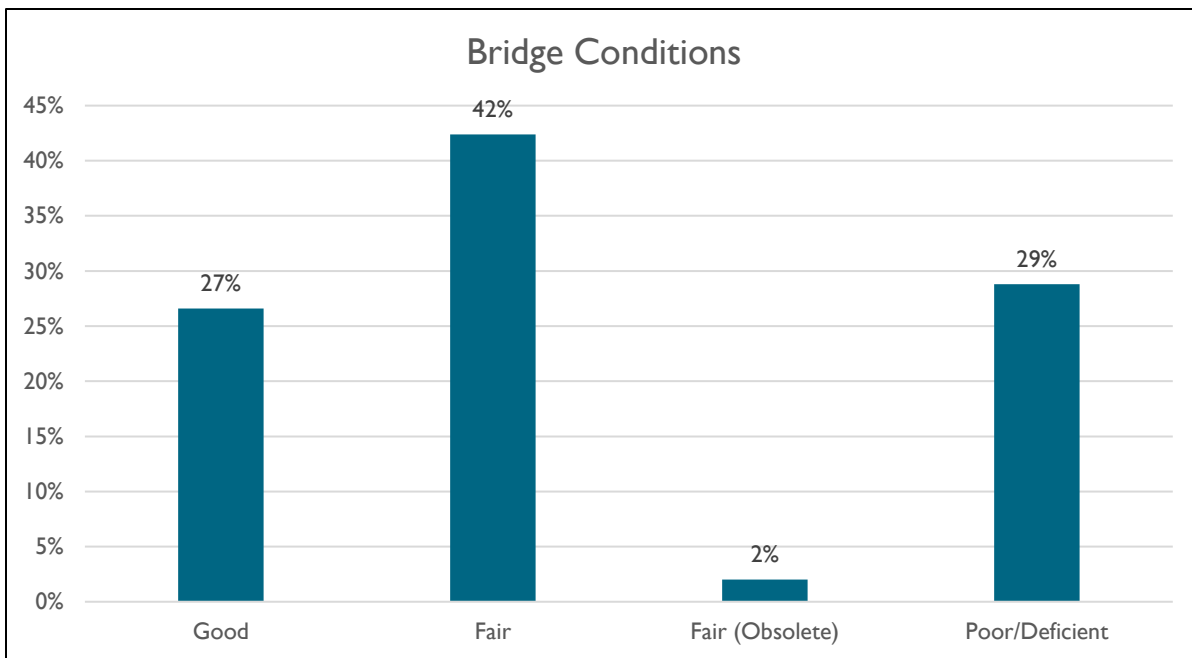


Figure 7.15 – Bridge Conditions  
Source: Boone County Data

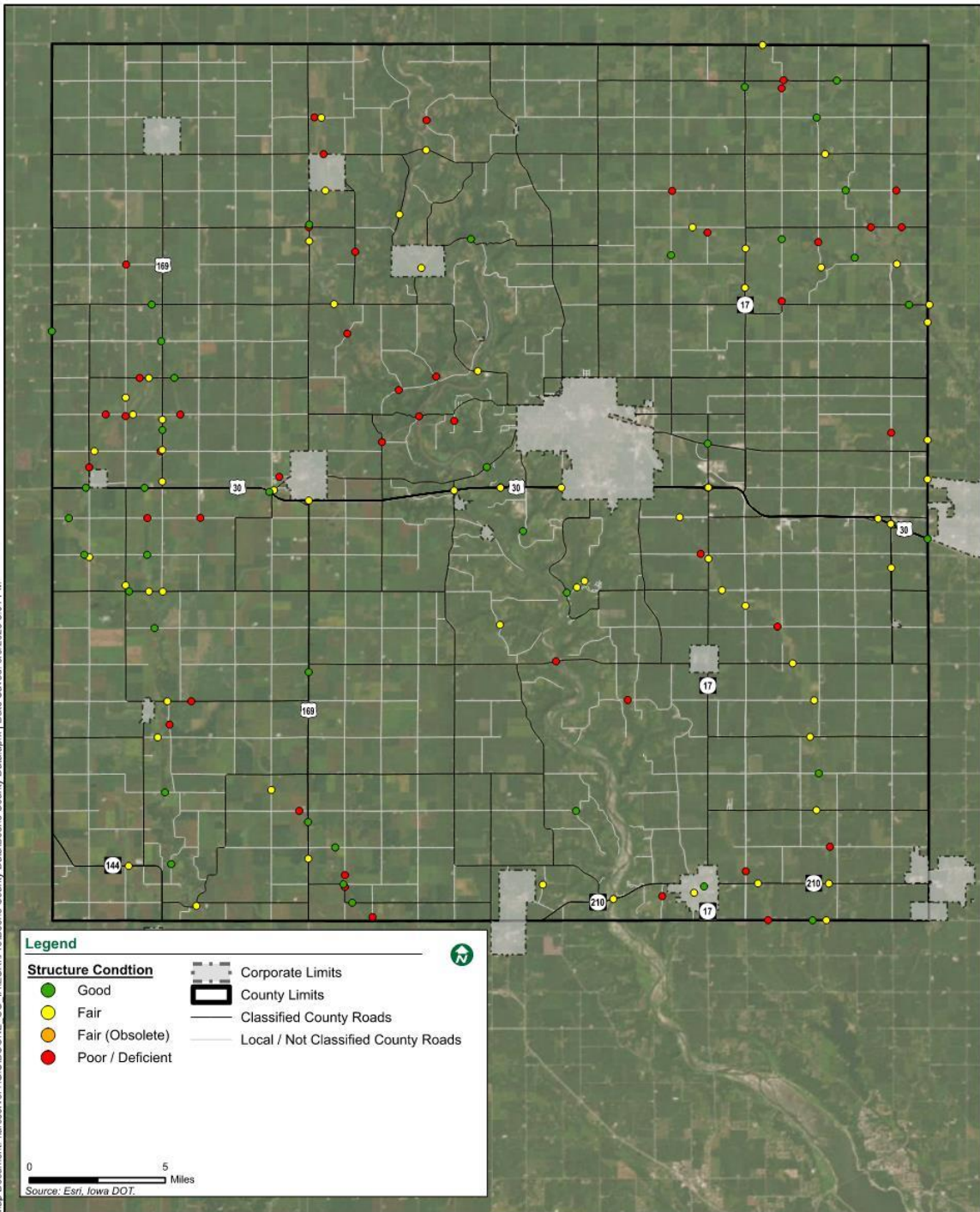


Figure 7.16 – Bridge Conditions Across Boone County  
Source: Boone County Data

# RAIL LINES AND AT-GRADE CROSSINGS

Union Pacific Railroad provides freight services to and through Boone County. The Boone and Scenic Valley Short Line Railroad is a heritage railroad within the county and operates freight and passenger excursions. The Union Pacific Railroad and the Boone and Scenic Valley Short Line rail lines create 59 railroad crossing locations with roadways, most of which are within the cities of Boone and Ogden. All but 7 rail crossings are at-grade crossings. The public crossings are shown in Figure 7.17

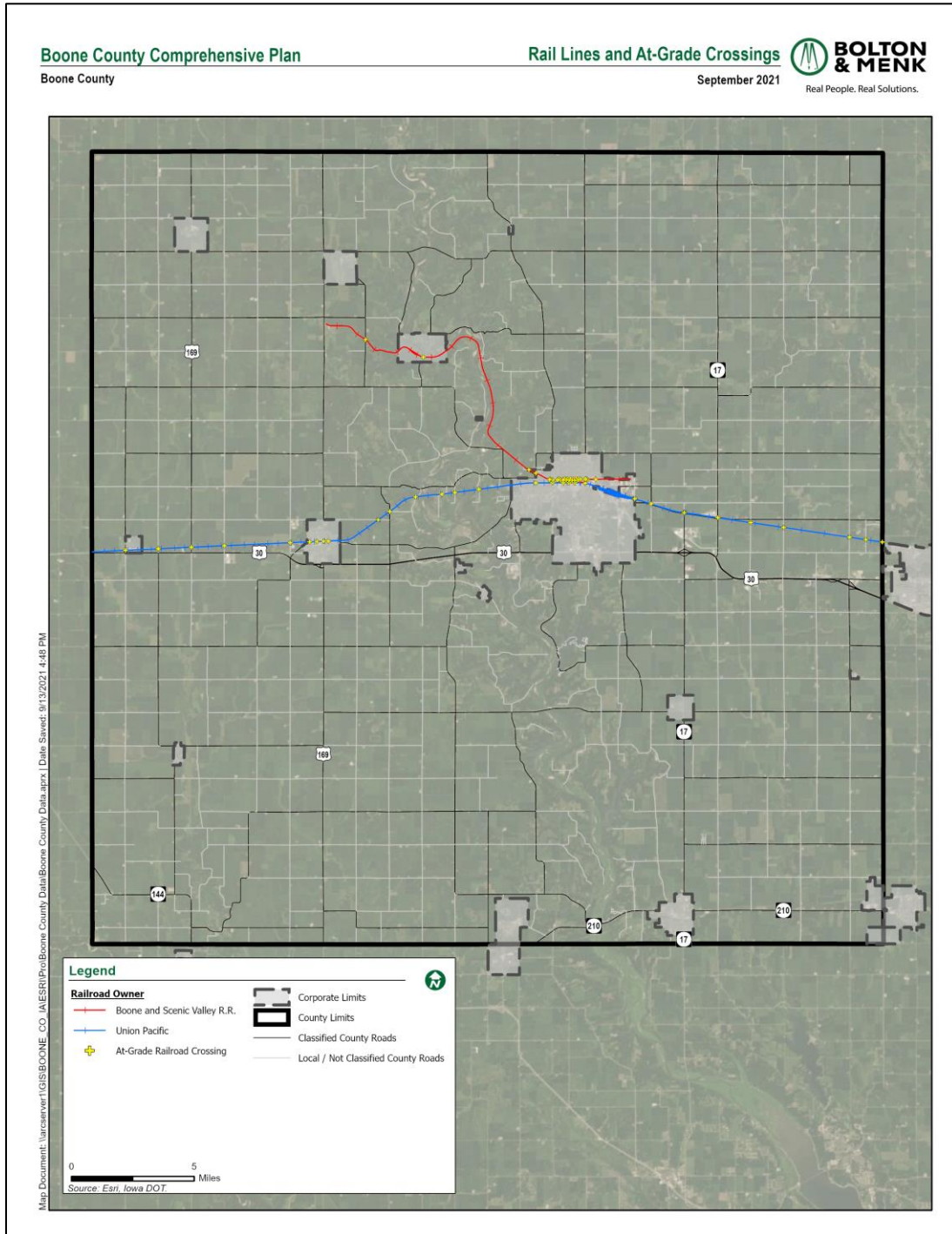


Figure 7.17 – Rail Lines and Crossings  
Source: Boone County Data

## AVIATION

Boone Municipal Airport, officially known as Galen Wiley Field, is located on the east edge of town, approximately two miles from downtown Boone and one mile north of US Highway 30. The airport is a public airport located within the city limits of Boone, owned by the City of Boone and managed by Farnham Aviation Services, LLC. The primary runway is an asphalt runway, 4,807 feet in length. While the airport is primarily utilized by general aviation aircraft, it is also frequently used for corporate jets and spray planes. Army National Guard helicopter operations are also located at the Boone airport. Approximately 50 aircraft are based at this field.

The closest airport with scheduled commercial flights is Des Moines International Airport, located about 52 miles southeast of the Boone Airport.



*Figure 7.18 – Boone Municipal Airport  
Source: Google Earth*

## SURVEY RESPONSES

The survey showed mixed responses to current roadway conditions with 31.7% thinking they were in good condition, 30.6% remaining neutral, and 37.7% not believing they were in good condition. Only 20.3% of respondents believe there are adequate transportation options for all community members, with 42.3% disagreeing with that statement. The top priorities for transportation in Boone County were gravel, paved, and winter roadway maintenance. The transportation goals focus on maintenance, coordination with state and local governments, and responsible investments.

## 8. INFRASTRUCTURE

### OVERVIEW

The infrastructure chapter delves into the existing utility systems and future planning efforts for aging infrastructure within Boone County. Water and sanitation systems are essential for community life and future development. Maintaining these structures and addressing growth needs with primarily using septic tanks and wells is often the best way to handle infrastructure in rural areas. Commercial and industrial needs also must be mindfully planned so demand for utility services does not exceed the supply.

Counties traditionally have a more complex relationship with utilities, as they often work with multiple municipalities which have a wide variety of needs and currently established systems. This chapter analyzes existing conditions, existing capacity, and assesses future needs of the water, sewer, storm water, internet, and electric utilities in Boone County. The primary goal of this chapter is to create and solidify guidelines and standards to guide major utility investments.

### INFRASTRUCTURE GOALS

Goal 1: Ensure adequate infrastructure to provide a high level of service for existing service areas and future expansion areas

- Update guidelines on monitoring and inspecting existing infrastructure.
- Work to guide moderate intensity or high intensity development to areas contiguous to cities or along existing service areas.
- Encourage design and land uses that support an efficient system.
- Explore ways to increase access to high-speed internet.
- Develop trunk utility service corridors to support planned future land uses.
- Consolidate the aging surplus maintenance facilities into two primary facilities.

Goal 2: Review current policies and codes relating to utility standards

- Encourage the use of energy and water conservation practices.
- Utilize best management practices to reduce total utility load and to reduce surface water runoff and erosion.
- Add storm water management requirements for rural developments, including sump pumps and sewer outlets.

Goal 3: Solidify partnerships and policies regarding sanitation and water systems

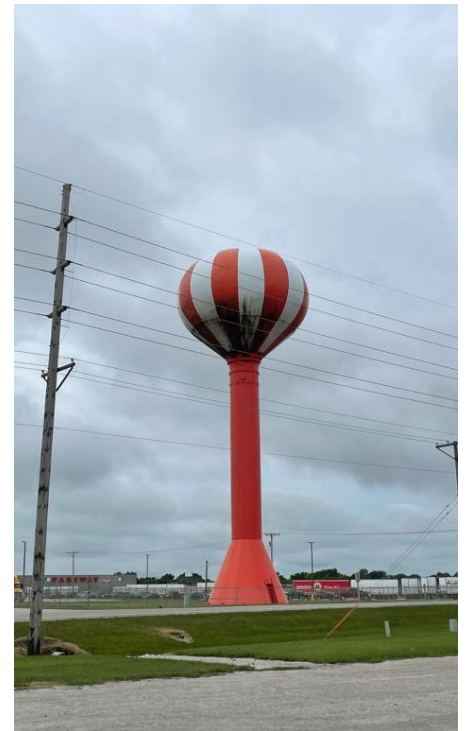


Figure 7.1 – Water Tower/Utility Lines  
Source: Boone County

- Analyze current watersheds within drainage districts and work with trustees to improve current drainage plans.
- Assess Boone County Landfill’s long-range capacity to hold solid waste.
- Expand partnership with Keep Boone County Beautiful to increase outreach programs.
- Review the Don Williams Lake Watershed Improvement Plan to examine if sediment build up was reduced and if additional modifications are needed.

## UTILITY PROVIDERS

There are a variety of utility providers in Boone County. Many utilities, such as water electric, gas, and waste removal, are available to most of the county, but sewers and storm water systems are primarily available only within incorporated areas. Broadband internet providers are inconsistent throughout the county, depending on location. The infrastructure needed to receive this service is not available in many areas. Table 8.1 lists the utility providers in Boone County. Figure 8.2 is a map of the electrical service area boundaries.

Utility	Provider	Locations
<i>Water System</i>	Xenia Rural Water	Entire county
	Boone Water Works	City of Boone
	Ogden Municipal Utilities	City of Ogden
	Madrid Water	City of Madrid
	Woodward Water	City of Woodward
<i>Electrical</i>	Boone REC	Unincorporated areas
	Midland Power	Unincorporated areas
	Ogden Municipal Utilities	City of Ogden
	Interstate Power and Light Company (Alliant)	Incorporated areas
<i>Internet</i>	CenturyLink	Along Hwy 30
	Rise Broadband	Along Hwy 30
	HughesNet	Satellite
	Viasat	Satellite
<i>Natural Gas</i>	Black Hills Energy	Entire County
	Interstate Power and Light Company (Alliant)	Entire County
<i>Sanitary Sewer</i>	No rural sewer system	Unincorporated areas
	Municipal	Incorporated areas <sup>5</sup>
<i>Storm Water</i>	Municipal	Incorporated areas <sup>6</sup>
<i>Solid Waste Disposal</i>	Boone County Landfill	Entire County
	North Dallas County Landfill	Entire County

Source: Boone County Data

<sup>5</sup> Some incorporated communities, including Luther and Fraser, do not have municipal sanitary sewer services.

<sup>6</sup> Some incorporated communities, including Luther and Fraser, do not have municipal storm sewer services.

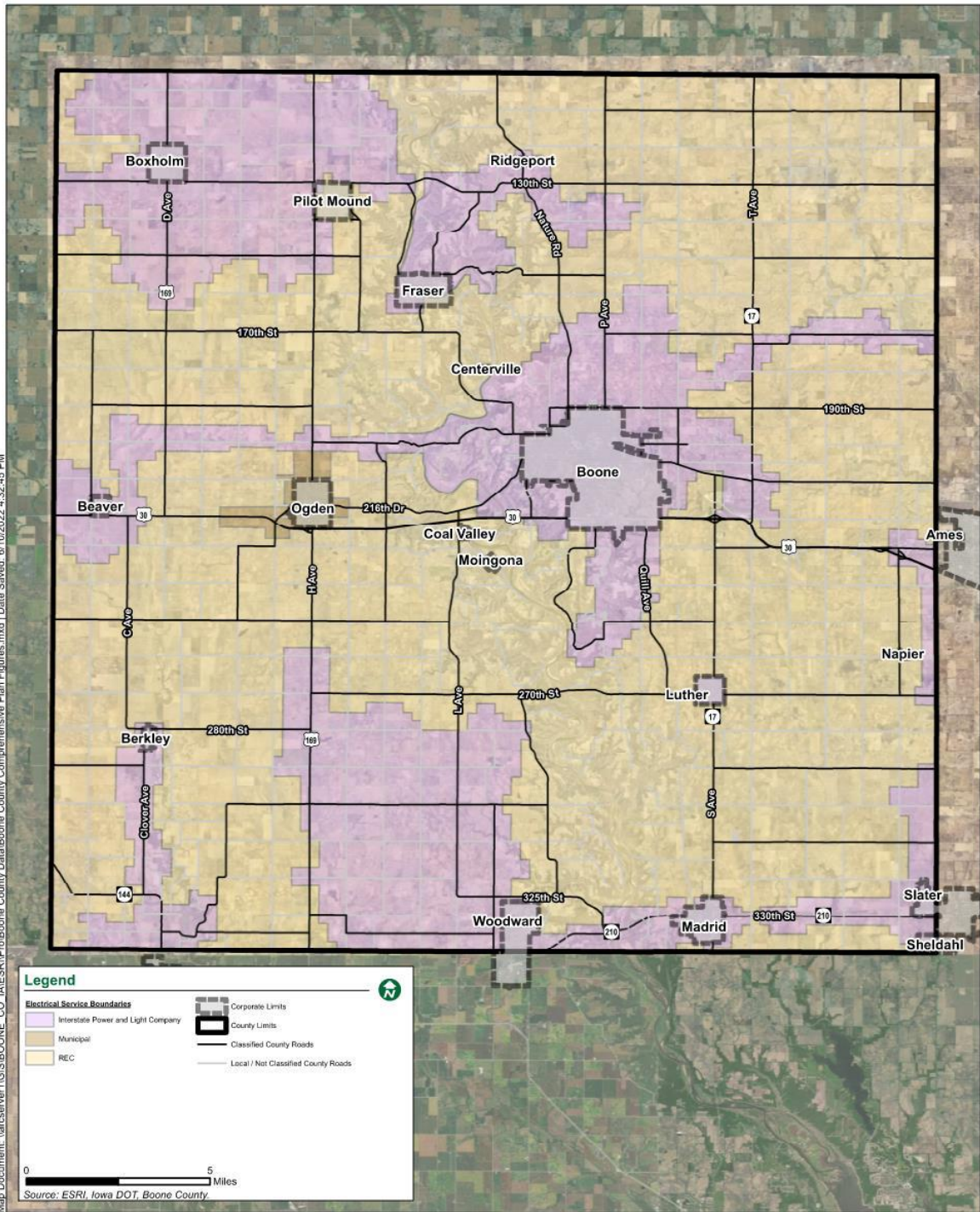


Figure 8.2 – Boone County Electrical Service Areas  
Source: Boone County Data

## FACILITIES

Boone County maintains a system of public infrastructure, buildings, and equipment through the Boone County maintenance division of the engineering department. There are major maintenance facilities located in the cities of Boone, Ogden and Madrid. Satellite shops are located in Berkley, Boxholm, Mackey, and Luther. Many of these facilities were built by the Works Progress Administration during the mid-1930s to early-1940s. New, updated facilities are planned at the existing locations in Boone, Ogden and Madrid. With current funding and facilities, approximately two major projects are completed each year by the Boone County engineering department.

## SANITARY SEWER & WATER

Rural Boone County generally does not have access to a sanitary sewer collection system. As such, most new development located outside of incorporated communities utilize septic tanks and systems. Sanitary sewer is provided by local municipalities within incorporated areas. There are currently no plans to expand sanitary sewer into rural portions of the county.

Rural water is provided by Xenia Rural Water and by wells. The Cities of Boone, Ogden, and Madrid each run their own water system.

## STORMWATER

Stormwater runoff increases nonpoint source pollution, flooding, siltation, stream temperatures, and stream bank erosion. Section 8.13 of the Boone County Zoning Ordinance established stormwater management standards for Boone County. This ordinance requires developments disturbing one or more acres, or resulting in more than four developable lots to design, construct and maintain a stormwater management system to prevent flooding, minimize stream channel impacts, and protect water quality. The ordinance references the design standards in the Iowa Stormwater Management Manual, which require volume controls and stormwater quality treatment.

## INTERNET

Rural access to the internet has rapidly shifted from a useful luxury to a required utility. Agricultural equipment sales, schools, and communication have broadened use of the internet, increasing the need for reliable internet services. Within Boone County, hard-wired internet is not consistent to the west of Highway 17. Throughout the county, the internet primarily comes from phone lines (digital subscriber line) or from satellite internet. These sources rarely provide adequate speeds for modern use, such as streaming videos, that cable and fiber can provide.

## SURVEY RESPONSES

According to the survey, 88.7% of respondents found publicly provided services to be fair or better quality, 94.4% found the waste management services in Boone County to be fair or better quality, and 86.8% found their electricity services to be fair or better quality. The goal for infrastructure is to maintain the high quality of service for existing services, while exploring different opportunities to provide additional services, such as internet, to residents of Boone County.



## 9. ECONOMIC DEVELOPMENT

### OVERVIEW

The economy and employment within Boone County are essential to its future and the future of its residents. Economic development is commonly understood to be the attraction of new investment and job creation as well as the retention of existing business and jobs. Boone County must work with the cities within its boundaries to guide businesses to appropriate locations, while also being mindful of population centers and where current developmental pressure is occurring. The county's regulatory climate can have an impact on the attraction, expansion, and retention of businesses. Zoning regulations can provide development standards which ensure business developments contribute to the quality of life and the overall community enjoyed in Boone County. These standards can protect businesses from negative images and nuisance complaints. Along with that, zoning can protect agricultural and rural areas of the county and maintain the current quality of life. The comprehensive plan works in unison with Boone County's ordinance to provide standards to ensure land uses are compatible and create stability to attract businesses to the county.



Figure 9.1 – Business Park Corridor  
Source: Boone County

### ECONOMIC DEVELOPMENT GOALS

Goal 1: Maintain and expand the county's existing economic base with an emphasis on attracting high-quality jobs and supporting retention

- Communicate with local municipalities when updating future land use plans to ensure that county and city plans adhere to one another and have orderly expansion.
- Work with existing businesses to remain or expand on current sites or to be relocated to more appropriate sites within the county.
- Evaluate land use development codes and regulations to make sure they conform with future land use and comprehensive plan ideals.
- Review permitting and developmental processes and make sure they are easy to understand and follow.

Goal 2: Attract new retail and commercial services

- Verify there is an adequate amount of property zoned for business locations and target new areas for businesses in the future land use plan.

- Establish sensible incentive policies to attract wanted services.
- Analyze areas where sewer, water, and broadband would be most cost-effective to be located, such as near local municipalities, to create optimal infrastructure.

**Goal 3:** Leverage and increase industrial land and infrastructure assets

- Study and update limited industrial district and heavy industrial district zoning designations to maintain high levels of urban design, while also being development friendly and encouraging growth.
- Update the future land use and zoning maps to identify where future industrial businesses should go.
- Revise the county zoning code and other plans to determine and streamline the process for solar energy and wind farms when deemed appropriate.

**Goal 4:** Preserve nature and rural agricultural uses

- Conserve greenspace and farmland and focus growth near rural communities.
- Identify vulnerable ecological areas and review regulations to discourage development.

## CURRENT CONDITIONS

### Employment

As of 2020, Boone County had an unemployment rate of 2.2 percent. Boone County has had a lower rate of unemployment than the United States as a whole for the past ten years. Boone County and Iowa have similar rates of unemployment, but Boone County has recently seen a larger drop in unemployment.

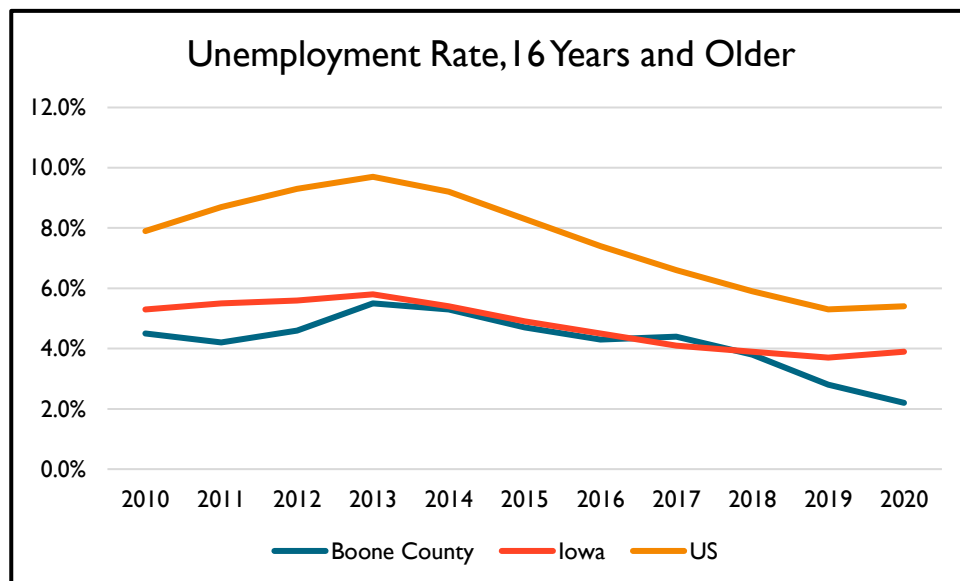


Figure 9.2 – ACS 5-Year Unemployment Rate  
Source: US Census Data

## Occupations

People living in Boone County are most likely to be employed in the healthcare or social assistance industry with 16% working in the field. Retail trade is the second largest with 13.6%, and third is manufacturing at 12 percent.

Industry	Employed	Percent
Total	10,536	
Agriculture, forestry, fishing, and hunting	438	4.2%
Mining, quarrying, and oil and gas extraction	72	0.7%
Construction	936	8.9%
Manufacturing	1,268	12.0%
Wholesale trade	345	3.3%
Retail trade	1,437	13.6%
Transportation and warehousing	614	5.8%
Utilities	133	1.3%
Information	112	1.1%
Finance and insurance	469	4.5%
Real estate and rental and leasing	112	1.1%
Professional, scientific, and technical services	330	3.1%
Management of companies and enterprises	10	0.1%
Administrative and support and waste management services	322	3.1%
Educational services	1,120	10.6%
Health care and social assistance	1,688	16.0%
Arts, entertainment, and recreation	48	0.5%
Accommodation and food services	186	1.8%
Other services, except public administration	402	3.8%
Public administration	494	4.7%

Source: 2020 ACS 5-Year Occupation Type, US Census Data

## Industry

Table 9.2 shows the number of businesses in Boone County, what sector of the economy they are in, and number of workers that are employed by them. Healthcare and social assistance has the largest number of employed workers at 1,532, while construction has the largest number of businesses in the county at 89 total.

Table 9.2: Boone County Industries & Employees			
NAICS code	Meaning of NAICS code	Number of establishments	Number of employees
00	Total for all sectors	595	6,826
22	Utilities	5	119
23	Construction	89	692
31-33	Manufacturing	32	503
42	Wholesale trade	31	331
44-45	Retail trade	63	1,037
48-49	Transportation and warehousing	27	744
51	Information	12	267
52	Finance and insurance	40	175
53	Real estate and rental and leasing	25	49
54	Professional, scientific, and technical services	43	157
56	Administrative and support and waste management and remediation services	28	123
61	Educational services	7	73
62	Health care and social assistance	53	1,542
71	Arts, entertainment, and recreation	19	185
72	Accommodation and food services	42	498
81	Other services (except public administration)	76	326

Source: 2020 ACS 5-Year Industry Type, US Census Data

### Job Location

Figure 9.3 shows the concentration of employment centers as a heat map. The highest concentration of jobs within Boone County is centered around the City of Boone. There is also a large concentration of jobs near the communities of Madrid and Ogden. Other areas with elevated clusters of jobs are near Boxholm, and the eastern edge of Boone County near Ames.

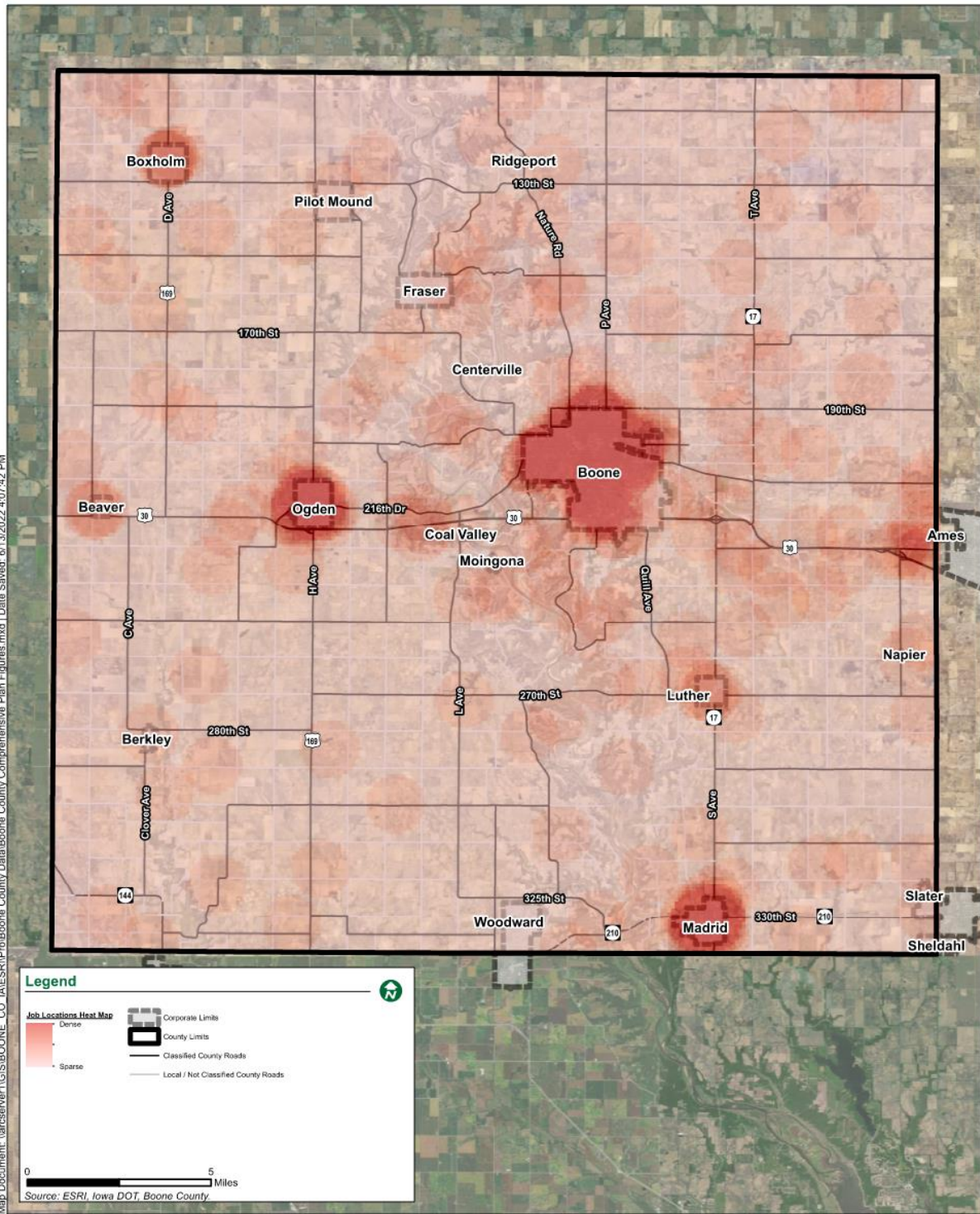


Figure 9.3 – 2019 On the Map Job Locations  
Source: Boone County Data

### Employment Inflow/Outflow

According to the 2020 Census inflow/outflow analysis, 2,342 people live and work in Boone County, 3,867 people commute into Boone County to work, and 6,050 people who live in Boone County work outside of the county. Figure 9.4 illustrates the inflow and outflow of workers in Boone County. The arrows don't reflect the actual pattern of movement, but the amount and volume of people commuting in and out the county. Figure 9.5 shows this information in a different way, with the circles showing where people live and the number of people who commute to a different county to work.

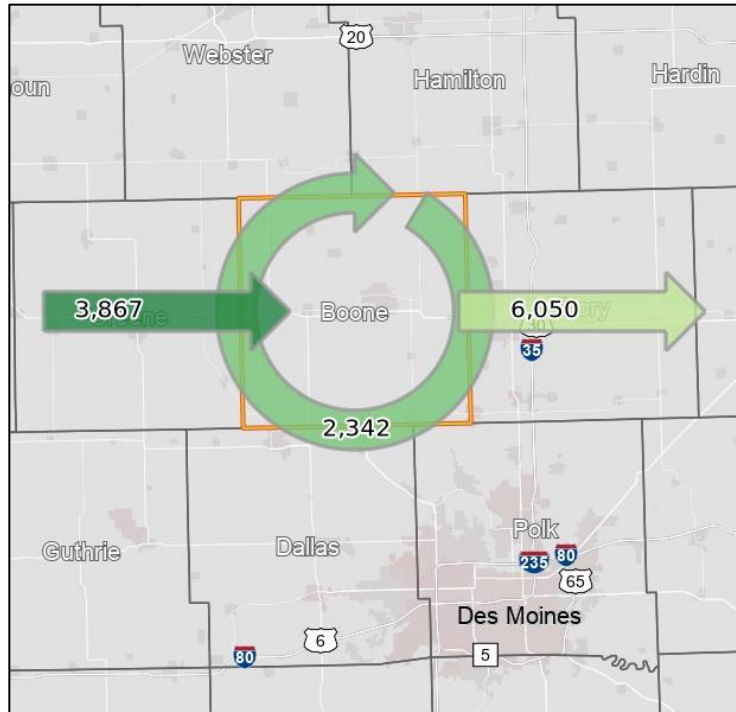


Figure 9.4 – 2020 On the Map Inflow/Outflow  
Source: US Census Data

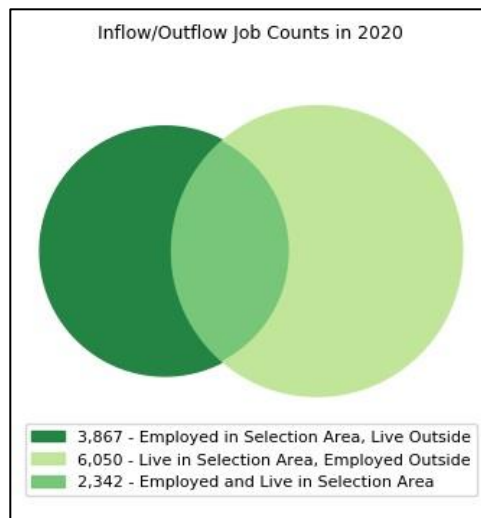


Figure 9.5 - 2020 On the Map Inflow/Outflow  
Venn Diagram

The radar chart in Figure 9.6 shows the direction people within Boone County travel to jobs. Figure 9.6 shows a large amount of Boone County residents travel towards the south, southwest, and east for jobs. This makes the Des Moines or Ames metro areas the most likely destinations for people commuting from Boone County

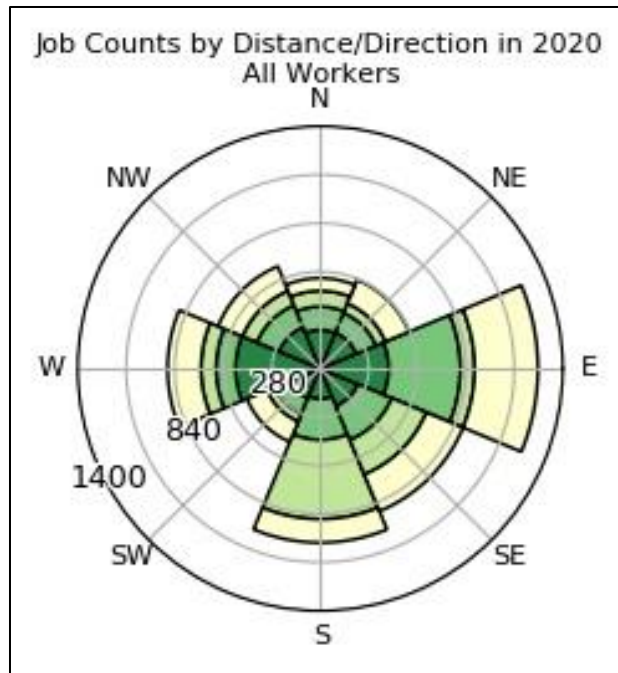


Figure 9.6 – 2020 On the Map Job Direction & Count  
Source: US Census Data

### Commute Time

Approximately 72.5% of Boone County residents have a commute of under 30 minutes. On the other hand, 23.3% of Boone County residents commute between 30 and 60 minutes and another 4.3% commute over 60 minutes.

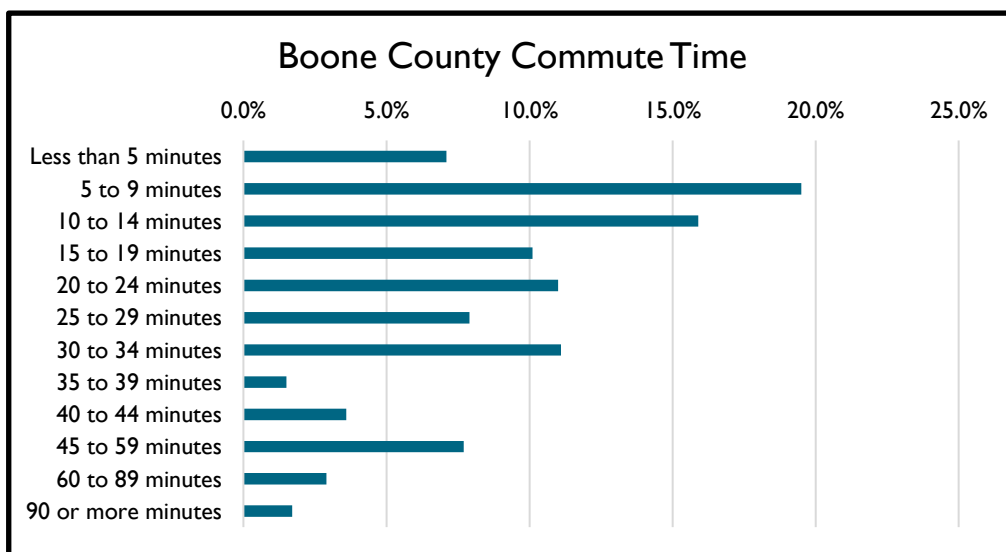


Figure 9.7 – 2020 ACS 5-Year Commute Time  
Source: US Census Data

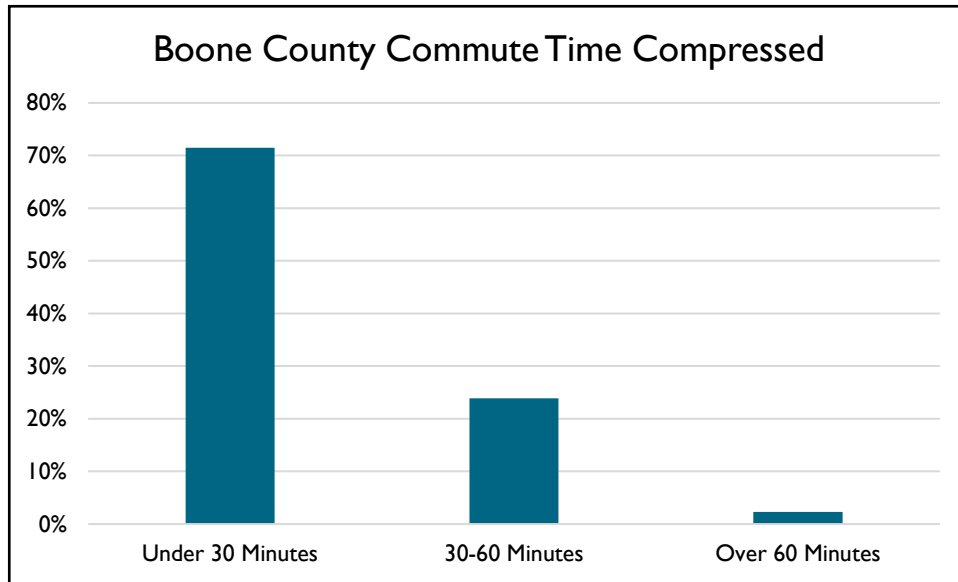


Figure 9.8 – 2020 ACS 5-Year Commute Time Compressed  
Source: US Census Data

### Poverty Status

Boone County has an overall poverty rate of 7.2 percent. The poverty rate for those age 65 or older is slightly lower at 6.1 percent. The rate for those under 18 years old is 7.3%, and 7.4% for people between 18 and 64 years old. As seen in Table 9.3 and in Figure 9.9, Boone County has a lower poverty rate at all age ranges in comparison to both Iowa as a whole and to the United States.

Age	Boone County Percent in Poverty	Iowa Percent in Poverty	United States Percent in Poverty
Under 18 years	7.30%	13.3%	17.5%
18 to 64 years	7.40%	11.4%	12.1%
65 years and over	6.10%	7.0%	9.3%

Source: 2020 SCS 5-Year Poverty Rate, US Census Data



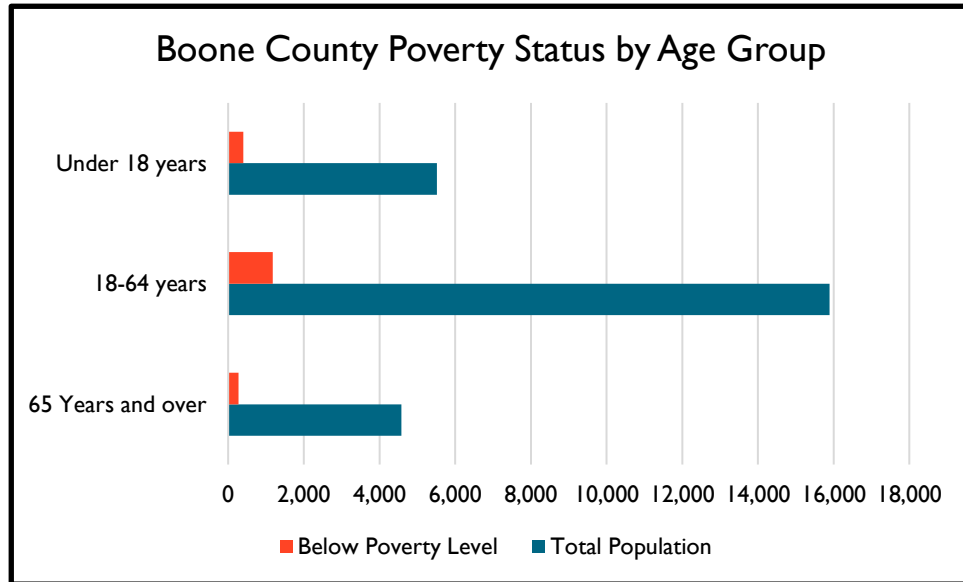


Figure 9.9 – 2020 ACS 5-Year Poverty Rate  
Source: US Census Data

## SURVEY RESPONSES

The economic development goals of retaining and expanding businesses and attracting commercial and retail businesses aligned with resident responses. The survey found that the restaurants and retail were the types of services residents would most like to see added or expanded upon in Boone County. Approximately 25.4% of residents agreed Boone County should provide assistance with the acquisition of property, 57.1% agreed Boone County should provide assistance for the extension and/or upgrade of infrastructure, and 73.9% agreed Boone County should partner with other organizations to assist with business recruitment and retention.

## 10. IMPLEMENTATION

### OVERVIEW

The comprehensive plan combines the vision of the community with a systemic analysis of existing conditions to create a list of ideals that they will strive to follow. However, the vision can only be realized if the plan is used. Tools to implement the plan include an implementation matrix which states the goals, objectives, and timelines for Boone County's improvements. It also has a list of the county's roadway improvement program, and the updates to the Boone County zoning and subdivision ordinance. This will help to guide private development within the county. To achieve the goals and objectives of the Boone County comprehensive plan, the current zoning, subdivision of land, and ordinances should be updated to reflect these goals.



*Figure 10.1 – Boone County Landscape  
Source: Boone County*

### OFFICIAL CONTROLS

#### *Zoning*

The Boone County zoning code regulates land use to promote the health, safety, order, convenience, and general welfare of all citizens. The county takes careful consideration of each respective municipality within its boundaries when updating these regulations. While Boone County does not regulate individual city's zoning, it regulates the area directly around cities. Zoning regulates topics like location, size, use, height of buildings, the arrangement of buildings on lots, setback, and density within unincorporated Boone County. The county's zoning districts effectively guide development within the county.

Abbreviation	District Name	Corresponding Land Use
A-1	Agricultural Conservation District	Agricultural
A-2	Agricultural Business District	Agricultural
TA-1	Transitional Agricultural	Agricultural
R-1	Rural Estates Residential District	Low Density Residential
R-2	Urban Residential District	Medium Density Residential
R-3	Residential Mobile Home	Medium Density Residential
C-1	General Commercial	Commercial
I-1	Industrial District	Industrial
I-2	Heavy Industrial District	Industrial
CO	Conservation Overlay District	Agricultural
PUD-1	Planned Unit Development	Corresponding Land Use

Source: Boone County Data

### Subdivision of Land

The subdivision ordinance regulates the subdivision and platting of land within the county. This establishes the orderly, economic, and safe development of land and facilitates the adequate provision for transportation, water, sewage, storm drainage, electric utilities, streets, parks, and other public services and facilities essential to any development. Many of the rural developments within Boone County are far from water and sewer services, so it is critical that dense developments are developed near cities with already established water and sewage systems. The county controls how to regulate subdivision of land, including the application and approval process through the Planning and Zoning Commission. The subdivision of land promotes the public health, safety and general welfare of the people and assists in achieving the vision of this comprehensive plan by providing standards in the development of the land.

### Ordinance Amendments

The county will evaluate land use controls and consider amendments to eliminate inconsistencies with the comprehensive plan. It will also conform to state and federal regulations, and support overarching community goals identified through this plan update.

The future land use map generally guides developed land uses aligned with current uses while providing future land uses for future development. The county should update the zoning ordinance to adhere to the future land uses outlined in the plan and update as necessary in the future.

The county should also review the current zoning map and zoning district requirements for compliance with the comprehensive plan. If there are any discrepancies, or changes needed to meet the county's goals and objectives, then an amendment to the zoning and/or subdivision ordinances may be appropriate.

### Amending the Plan

To keep the comprehensive plan current, it will be necessary to make amendments to the plan as the need arises. The comprehensive plan is still the foundational document to guide development and the amendments should occur through a comprehensive effort to address changes that happen in the community over time. The action plan, described below, is a tool that can and should be amended more frequently as action steps are completed, funding changes, new technologies can be applied, or if new issues arise.

## Funding Mechanisms

### Roadway Improvement Program

The county's roadway improvement program, shown in Table 10.2, lists future major projects within Boone County. The roadway improvement program is a budgeting plan which lists five years of needed roadway projects and the means of financing. Projects included in the roadway improvement program are intended to meet the county's short, medium, and long-term goals.

Project Name	Project Type	Fund	FY '22	FY '23	FY 24'	FY 25'	FY 26'
Bridge #40	Bridge Replacement	FM	\$385,000				
200th St. Paving	Grade and Pave	FM	\$1,600,000	\$450,000	\$450,000		
Bridge #74	Bridge Replacement	SWAP	\$1,000,000				
Bridge #92	Bridge Addition	SWAP	\$400,000				
Water Works Hill Paving	Pavement Rehab	SWAP	\$600,000				
R-18 Paving	Pavement Rehab	FM		\$2,000,000			
Moingona Road Recycle & Re-surface	Pavement Rehab	Local		\$330,000			
Bridge #10	Bridge Addition	SWAP		\$620,000			
Various FM resurfacing	Pavement Rehab	FM		\$900,000			
E-57 East of Luther	Pavement Rehab	FM		\$2,500,000			
Bridge #11	Bridge Addition	SWAP		\$350,000			
Swede Point Rd.	Pavement Rehab	Local			\$350,000		
Bridge #138	Bridge Replacement	SWAP			\$500,000		
Bridge #22	Bridge Replacement	SWAP			\$500,000		
Linn St. Paving Phase I	Pavement Rehab	FM				\$2,575,000	
Bridge #126	Bridge Addition	SWAP				\$500,000	
Linn St. Paving Phase 2	Pavement Rehab	SWAP					\$2,575,000

Source: Boone County Data

### Grants

Grants are an essential tool for counties to fund projects that enhance the communities within its boundary or to renew an existing program or initiative that is at the end of its programmed lifespan. A government grant is a financial award granted by the federal, state or local government to an eligible grantee. Government grants are not expected to be repaid, but are usually allocated for a specific need or purpose, and may go through a competitive application process. Boone County can pursue grant application opportunities to help the county or

help bolster individual communities with- in the county. Boone County often assists the federal or state governments in distributing some of these grants.

## ACTION PLAN

Implementing the vision and goals of the comprehensive plan requires an action plan, and the coordination and investments of many stakeholders. This gives citizens and officials clear goals and steps to completing what is outlined in the comprehensive plan. The action plan’s implementation matrix presents a concise summary of the goals along with specific action steps, organized by chapter. The table includes:

Goals: A restatement of the specific goal.

Action Steps: Specific action items intended to help meet the goals.

Timeline: The timeline is divided into 4 categories: short-term, mid-term, long-term, and ongoing. The applied categories indicate when the action item might begin and is advisory in nature.

Short-Term: Actions that should be initiated within 1-2 years.

Mid-Term: Actions that should be initiated within 3-5 years.

Long-Term: Actions that should be initiated within 5 years or more.

Ongoing: Actions that should be initiated immediately and that will require constant periodic attention.

The Action Plan will be updated regularly as part of other county processes, such as annual budgeting or project prioritization sessions. The Implementation Matrix Worksheets are intended to be flexible and adaptable over short periods, so changes to these sections do not require a formal amendment to the comprehensive plan. The goals, however, are high-level, long-term goals. Changes to the specific goals will require an amendment to the overall plan.

## IMPLEMENTATION MATRIX

<i>Table 10.3: Implementation Matrix</i>		
<b>Goal</b>	<b>Action Steps</b>	<b>Timeline</b>
<b>Land Use</b>		
Goal: Modernize present land use and zoning designations	Create a “Urban Fringe Residential” zoning district around present cities for regional housing growth.	Short-term
	Include wireless infrastructure, solar farms, and wind turbine uses into agricultural designations.	Short-term
	Update ordinance language to allow for a wider variety of housing types.	Mid-term
	Remain flexible and update definitions and allowed uses to include emerging technologies and ideas.	Long-term

Goal: Continue to prioritize the protection of agriculture land	Promote efficient use of existing developed areas.	Ongoing
	Encourage the location and maintenance of local businesses on identified commercial and industrial areas.	Mid-term
	Create development standards to ensure new development is located, designed, and built to avoid environmental impacts that would negatively affect natural space.	Long-term
	Continue administrating mineral extraction and industrial regulations.	Ongoing
Goal: Support identified areas for future growth and development	Update the Future Land Use map to indicate areas for growth.	Mid-term
	Support rezoning for areas identified for growth.	Ongoing
	Streamline development standards to remove barriers to construction.	Long-term
<b>Housing</b>		
Goal: Plan for housing that is affordable to residents across income, age, and needs	Support the preservation current affordable housing within the County.	Short-term
	Create zoning map amendments consistent with newly proposed future land use maps.	Mid-term
	Support affordable housing programs and initiatives.	Ongoing
	Establish partnerships with local developers, nonprofits, banks, and others to create and preserve a range of housing choices.	Short-term
Goal: Maintain the quality and character of existing housing	Develop programs that increase the quality of housing such as weatherization or housing rehabilitation.	Mid-term
	Adopt and enforce a housing maintenance code.	Mid-term
Goal: Preserve nature and rural communities	Support property owner efforts to enhance homes and rural subdivisions.	Ongoing
	Encourage new housing in areas with existing infrastructure and utilities.	Mid-term
	Cluster growth near rural communities and out of greenspace and agricultural land.	Long-term
	Adopt standards to preserve historically and architecturally significant homes in the County.	Long-term

Transportation		
Goal: Ensure that Boone County plans for proper growth and coordinates with Iowa DOT and local municipalities	Maintain local connections and align capital improvement plans with the Boone County roadway improvement plan.	Long-term
	Stay up to date with state and federal funding initiatives.	Ongoing
	Coordinate with county and state departments for all traffic improvements.	Ongoing
Goal: Improve safety for all roadways within the City	Make the streets maintenance program easily and readily available to the public.	Mid-term
	Prioritize safety improvements on roadways with elevated crash rates.	Long-term
	Continue budgeting for and completing maintenance and structural updates to reduce the number of bridges in poor/deficient condition.	Long-term
Goal: Promote financially responsible transportation investments	Create goals and check-ins for timely completion of major projects.	Ongoing
	Maintain the roadway improvement program.	Ongoing
Parks		
Goal: Offer high quality parks and recreation	Inventory scheduling of maintenance of current parks, bathrooms, and trash receptacles.	Short-term
	Identify areas without nearby parks.	Short-term
	Host charrettes <sup>7</sup> to see what activities communities want or want to see improved.	Mid-term
	Update parks to accommodate different age groups and people with disabilities.	Ongoing
	Refresh the County's website with maps and information of all parks, trails and open spaces.	Short-term
	Create unique areas and regional attractions.	Long-term
Goal: Expand the focus on natural resources throughout the park system and promote natural amenities and conservation	Partner with soil, water, and other conservation groups to preserve the natural beauty of the county.	Mid-term
	Encourage the use of rain gardens and other low impact stormwater systems within the park system.	Long-term
	Expand partnership with Keep Boone County Beautiful to increase outreach programs.	Mid-term
	Strengthen the existing trail system by planning for and expanding the system.	Long-term

<sup>7</sup> The National Charrette Institute (NCI) defines a charrette as a multiday community engagement event where stakeholders and decision makers work alongside experts to co-develop solutions to built-environment problems using design.

	Identify areas with unique and naturally sensitive environments that need protection or are being endangered.	Ongoing
<b>Public Infrastructure</b>		
Goal: Ensure adequate infrastructure to provide a high level of service for existing area and future expansion areas	Audit and document existing electric and water capacity.	Mid-term
	Develop trunk utility service corridors to support planned future land use.	Long-term
	Assess Boone County Landfill's long-range capacity.	Short-term
	Analyze current watersheds within drainage districts and work with trustees to improve current drainage plans.	Mid-term
	Explore ways to increase the access to high-speed internet.	Ongoing
	Update current maintenance facilities.	Long-term
Goal: Review current policies and codes for utility standards	Work with the Boone County Soil and Water Conservation District to implement the 5-year soil and water resource conservation plan.	Ongoing
	Utilize best management practices to reduce total utility load and to reduce surface water runoff and erosion.	Mid-term
Goal: Review current policies and codes for utility standards	Review the Don Williams Lake Watershed Improvement Plan to examine if sediment build up was reduced and if more projects are needed.	Mid-term
<b>Economic Development</b>		
Goal: Maintain and expand the County's existing economic base with an emphasis on attracting high-quality jobs and supporting retention	Communicate with local municipalities when updating Future Land Use plans to ensure that County and city plans adhere to another and have orderly expansion.	Ongoing
	Work with existing businesses to remain or expand on current sites or to relocated to more appropriate sites within the county.	Ongoing
	Utilize zoning, grants, and transportation plans to support development.	Ongoing
	Evaluate land use development codes, and regulations to make sure they conform with Future Land Use and comprehensive plan ideals.	Mid-term
	Maintain active communication with Boone County Chamber of Commerce.	Ongoing
	Review permitting and the developmental processes and make sure they are easy to understand and streamlined.	Mid-term
Goal: Attract new retail and commercial services	Verify there is an adequate amount of properly zoned land for business locations and target new areas for businesses in the Future Land Use Plan.	Short-term
	Analyze areas where sewer, water, and broadband would be most cost-effective to be placed in the County near local municipalities to create a trunk of infrastructure.	Long-term



	Establish sensible incentive policies to attract wanted services.	Mid-term
Goal: Leverage and increase industrial land and infrastructure assets.	Study and update Limited Industrial District and Heavy Industrial District to maintain high levels of urban design, while also being development friendly and encourage growth.	Long-term
	Update Future Land Use and Zoning maps to reflect where future industrial businesses should go.	Mid-term



# BOONE COUNTY

— Something for Everyone —



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