

CITY OF  
*Johnston*



**2040 PLAN**

SEPTEMBER 2020

# ACKNOWLEDGEMENTS

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## CHAPTER 1

# INTRODUCTION

## **LOOKING BACK – A BRIEF HISTORY OF JOHNSTON<sup>1</sup>**

The Johnston area got its start in 1846 when Ezekiel Hunt “came west” with his family and established a sawmill near N.W. 58th Street and N.W. Beaver Drive at the present location of the Hawkeye Pallet Company. Over the years, the area had names such as Beaver Creek Settlement, Ridgedale, and Huntsville. In later years, the expanded area became known as Johnston Station, named after John Johnston, one of the station agents for the Inter-Urban Railroad developed in 1906.

In 1888 school was held in two locations. Valley School was located one mile east of the present Lawson Elementary School and Ridgedale School was across from the Hyperion Country Club. The Hyperion Field Club was organized in 1900 as a social club. The golf course and clubhouse were added later. The original clubhouse had sleeping quarters in the upper level, “so the gentlemen could enjoy a weekend in the country.”

In the 1920s, experiments with hybridizing corn, conducted by Henry A. Wallace, led to the beginning of Pioneer Hi-Bred Corn Company. By the middle of the 20th century, Pioneer was becoming the leading seed corn producer in the world. The company owned and maintained cornfields and utilized large



Camp Dodge Red Cross building - circa 1917



Camp Dodge hospital - circa 1917



Camp Dodge

portions of their land holdings for beef cattle. By the mid-1970s, Pioneer abandoned their beef operation and initiated a land development arm of the business. In the late 1970s, the Green Meadows Planned Unit Development established a mix of homes, businesses, and park and open space areas in central Johnston. In 1999, Pioneer Hybrid was purchased by DuPont, but the Pioneer campus remained and significantly expanded in Johnston over the next two decades. In 2019, through a merger between Dow and DuPont, the Pioneer brand became Corteva Agriscience, continuing the agricultural heritage of the area.

Johnston has a long history of neighborhoods. In 1908, Fruitland Drive (NW 55th Avenue and NW 57th Avenue) and Brennan Drive (NW 57th Avenue) were constructed. After the roadways were completed and houses were built, the Fruitland Brennan League was formed in 1915 as the first neighborhood association in the area. Scattered residential growth occurred over the next several decades and by 1960, the population in the Johnston area was estimated at 1,460.

Camp Dodge was established in 1909 as a training site for the Iowa Militia. It was named for Major General Grenville M. Dodge of Council Bluffs, Iowa's most famous Civil War commander. Originally constructed on a 78-acre tract of land, the post had been expanded to 570 acres by 1917. On June 15, 1917, a delegation from the U. S. Army Selection Board chose Camp Dodge as one of sixteen regional training camps for the National Army of the United States. Expanded, through lease options, to 6,400 acres, Camp Dodge provided initial military training to recruits (both volunteers and draftees) from Iowa, Nebraska, Minnesota, and North and South Dakota.

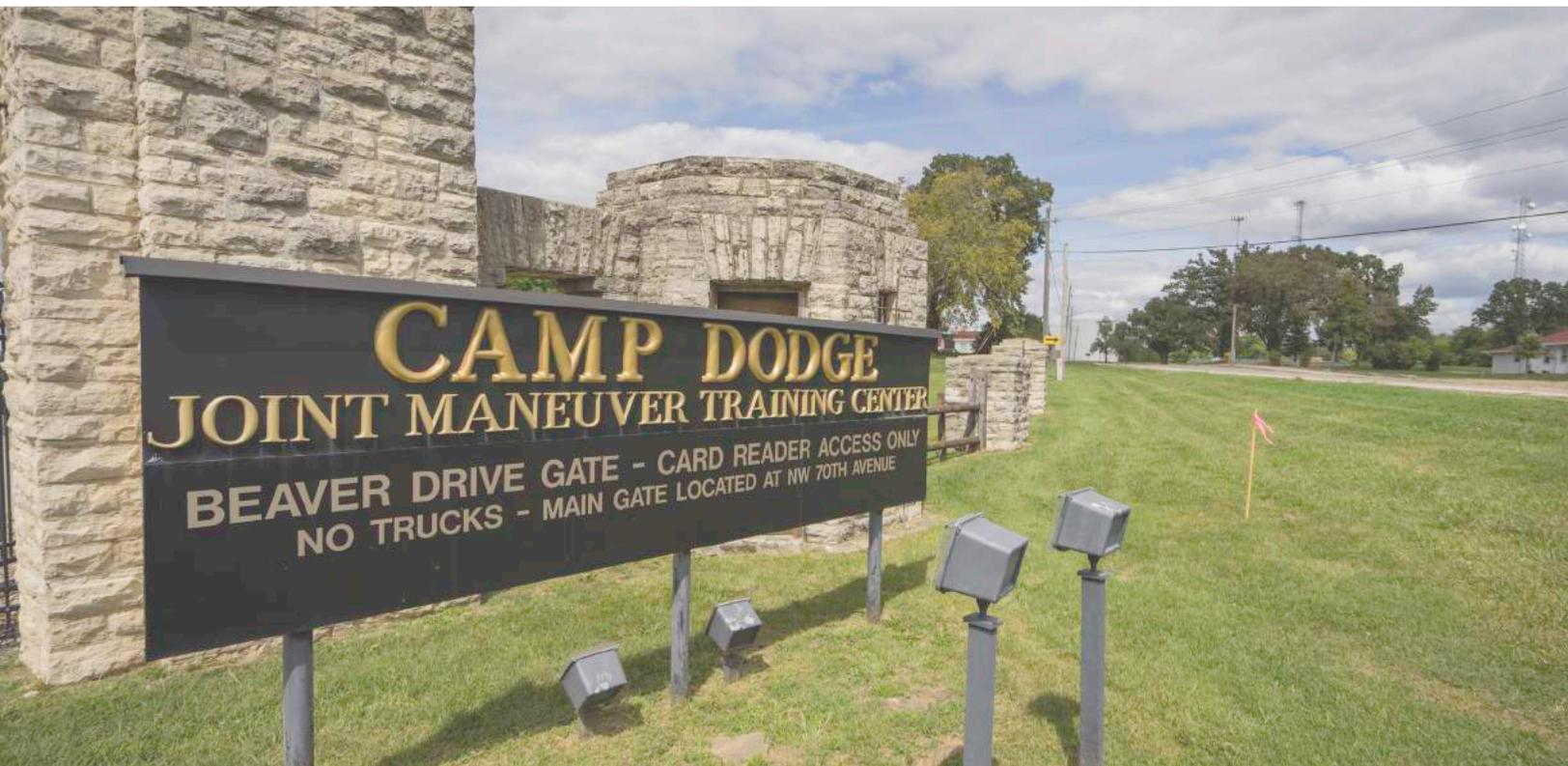
From July to November of 1917, 30 barracks were built, each a two-story building, 140 feet long, 43 feet wide, and able to accommodate 150 men. Each barracks included a mess hall and an assembly hall. Two headquarters buildings, a 3,000-seat auditorium, a base hospital, three fire stations, post offices, libraries, and railroad depots were also constructed. In addition, there were eight YMCA halls, a YWCA auditorium, a YWCA Hostess House, and centers for such organizations as the Knights of Columbus, the Lutheran Brotherhood, and the Jewish Welfare Service. At peak capacity, Camp Dodge was a self-sufficient community of approximately 40,000 people.

*1 Sources: History of Johnston, Johnston City Clerk -The Historical and Architectural Development of Camp Dodge, Iowa. Barbara Beving Long - Johnston (Station) Historical Society - The Building of Camp Dodge, History of The Iowa National Guard, CW2 David L. Snook*

With the end of World War I, Camp Dodge had outlived its purpose. Within a few months after the Armistice was signed, only Iowa National Guard members remained at the camp to utilize the facilities. In 1921, the federal government sold much of the camp to the Northwest Lumber and Wrecking Company from Minneapolis. The firm paid \$251,000 for approximately 1,200 buildings. Seven miles of hastily constructed barracks fell to the wrecking ball.

Since World War I, Camp Dodge has continued to serve as the headquarters for the Iowa National Guard. Currently, Camp Dodge is in the midst of another period of expansion. The 1990's saw the construction of the United States Army's National Maintenance Training Center, the State Area Command (STARC) Armory complex, a new direct support maintenance company training center, a physical fitness center, a 640-soldier battalion support complex, a new maintenance company armory, a regional equipment paint facility, and a new post exchange.

Today, Camp Dodge serves as a major troop training facility covering over 4,300 acres including recent acquisition of lands along Saylorville Drive. Because a substantial portion of Camp Dodge remains in a natural state, it doubles as the eleventh largest wildlife refuge in the State of Iowa.



Entrance to Camp Dodge



## **LOOKING FORWARD – JOHNSTON THRIVE 2040 - COMPREHENSIVE PLAN**

The comprehensive plan for Johnston confirms a vision for the community that has been carried forward for over 50 years. Established in 1969, Johnston has grown to a population of over 22,000. The growth of the community has been guided by a comprehensive plan since the first plan was drafted in 1974. That plan saw minor updates in 1984 and again in 1992 and then was rewritten in 1998. Minor updates to the 1998 plan occurred in 2003, 2006, and again a substantial update in 2010.

The Johnston Thrive 2040 Comprehensive Plan continues many of the community's past planning traditions and initiatives but also furthers new ideas and directions. The comprehensive plan serves as a guide for the ultimate growth and development of the community and it outlines the set of tools needed to move Johnston toward achieving consistency with its vision. The focus of Johnston's comprehensive plan is on the area defined by current boundaries and anticipated future annexation areas. It also recognizes Johnston's place in the Des Moines Metropolitan Region and reflects regional development objectives, policies, and investments. The plan is organized in the following manner:

1. Introduction – provides an introduction to the comprehensive plan, a brief look at Johnston's history, a discussion of Iowa Smart Planning, and information on the public's involvement in the planning process.
2. Johnston in 2040– presents Johnston's vision and guiding principles which serve as a basis for the remainder of the plan.
3. Community Context – provides a summary of the social, economic, and physical features and forces that influence land use and community development patterns.
4. Natural Resources – presents information on Johnston's land and water features.

5. Land Use - describes the community's desired land use and development patterns and looks in more detail as at specific focus areas located throughout the community.
6. Economic Development - provides an insight to the predicted economic growth of Johnston over the next decade.
7. Transportation - addresses road and transit improvements required to accommodate Johnston's next decade of growth.
8. Housing - presents information on Johnston's housing supply and plan recommendations to meet existing and future needs.
9. Parks and Recreation - presents an analysis of Johnston's park system with specific recommendations for future neighborhood and community parks.
10. Utilities - outlines needed improvements to Johnston's sanitary sewer, water, and storm water systems.
11. Implementation - identifies how the plan will be implemented to achieve the community's vision by identifying strategic actions.



### **Why is the Comprehensive Plan Important?**

As the primary guide for community growth, the comprehensive plan is the single-most important collection of policies and implementation initiatives that help guide local decisions. It is intended to be a dynamic document that is regularly reviewed and updated. The comprehensive plan:

- » Establishes a future vision based on a thorough community input process.
- » Influences the form, pace, and location of new development.
- » Protects property investments by ensuring consistency and compatibility of land uses and development policies.
- » Promotes the maintenance and enhancement of existing neighborhoods and commercial districts.
- » Determines and reinforces approaches for protecting natural resources and open space.
- » Guides the community in investment decisions for capital expenditures related to roads, utilities, and parks.
- » Provides the basis for zoning regulations, subdivision ordinances, and other land use and development related controls.



Community engagement 2019

## IOWA SMART PLANNING

### Comprehensive Planning Principles

The Iowa Smart Planning bill was signed into law in 2010. The bill articulates 10 Iowa Smart Planning Principles for application in local comprehensive plan development and public decision-making. It also provides comprehensive planning guidance for cities and counties. Included below are the ten principles and a commentary on Johnston's inclusion of the principles in the Johnston Comprehensive Plan

#### 1 Iowa Smart Growth Principle - Collaboration

Governmental, community, and individual stakeholders, including those outside the jurisdiction, are encouraged to be involved and provide comments during the deliberation of planning, zoning, development, and resource management decisions and during implementation of such decisions.

#### Johnston's Plan Addresses Collaboration

Johnston's comprehensive planning process actively sought input from a wide variety of stakeholders, both within and outside of the community. Additionally, key elements of the plan were reviewed with adjacent communities as well as county and state agencies. Input during the planning process was gathered in community meetings, online surveys, written comment cards, and communications involving social networking.

② **Iowa Smart Growth Principle – Efficiency, Transparency, and Consistency**

Planning, zoning, development, and resource management should be undertaken to provide efficient, transparent, and consistent outcomes.

*Johnston's Plan Addresses Efficiency, Transparency, and Consistency*

Johnston clearly articulated its vision for the future in the early stages of the comprehensive plan. The community's review and support of the vision and guiding principles was accomplished in a transparent process that allowed continuous review, input, and modification. The vision and guiding principles set the stage for the specific elements of the comprehensive plan. Collectively, these elements promote future development of the community in a manner that equitably benefits all residents and local businesses.

③ **Iowa Smart Growth Principle – Clean, Renewable Resources, and Energy Efficiency**

Planning, zoning, development, and resource management should be undertaken to promote clean and renewable energy use and increased energy efficiency.

*Johnston's Plan Addresses Clean, Renewable Resources, and Energy Efficiency*

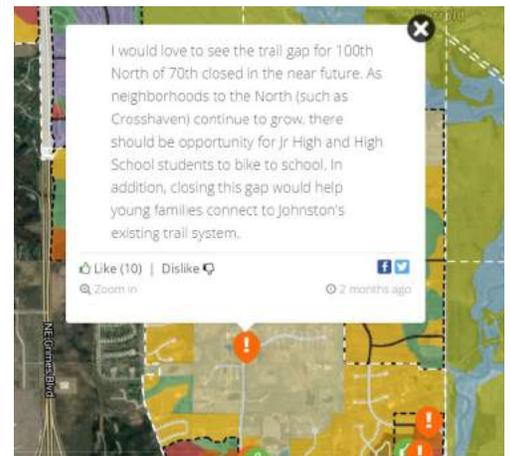
The Johnston Comprehensive Plan focuses on energy efficiency by seeking to establish a long-term land use pattern that efficiently connects the places where people live, play, and work. The plan advocates an efficient mix of future housing densities and the strategic placement of land uses interconnected by roads, transit, and non-motorized means of travel.

④ **Iowa Smart Planning Principle - Occupational Diversity**

Planning, zoning, development, and resource management should promote increased diversity of employment and business opportunities, promote access to education and training, expand entrepreneurial opportunities, and promote the establishment of business in locations near existing housing, infrastructure and transportation.

*Johnston's Plan Addresses Occupational Diversity*

Johnston supports and encourages occupational diversity. The comprehensive plan allocates land that is suitable in size and location for a variety of different types of businesses and services. Business locations are connected to residential areas by an extensive planned network of trails and walkways.



*Comments on the Johnston Comprehensive Plan Johnston Thrive 2040 project website*

⑤ **Iowa Smart Planning Principle - Revitalization**

Planning, zoning, development, and resource management should facilitate the revitalization of established town centers and neighborhoods by promoting development that conserves land, protects historic resources, promotes pedestrian accessibility, and integrates different uses of property. Remediation and reuse of existing sites, structures, and infrastructure is preferred over new construction in undeveloped areas.

*Johnston's Plan Addresses Revitalization*

Johnston's oldest commercial and residential neighborhoods lie along and east of Merle Hay Road. Revitalizing core commercial business areas and enhancing the vitality of older residential neighborhoods is a major initiative of this plan. Johnston will continue to focus on needed revitalization efforts while ensuring efficient development of vacant land.

⑥ **Iowa Smart Planning Principle – Housing Diversity**

Planning, zoning, development, and resource management should encourage diversity in the types of available housing, support the rehabilitation of existing housing, and promote the location of housing near public transportation and employment centers.

*Johnston's Plan Addresses Housing Diversity*

The Housing section of this plan clearly articulates the city's interest in maintaining a diverse base of housing that meets the needs of both existing and future Johnston residents. Since Johnston is only provided limited regional public transportation at the present time, the city will work with Des Moines Area Regional Transit (DART) to expand service as warranted by resident and employer/employee needs.



*Johnston Historical Museum and Simpson Barn*

7 **Iowa Smart Planning Principle – Community Character**

Planning, zoning, development, and resource management should promote activities and development that are consistent with the character and architectural style of the community and should respond to local values regarding the physical character of the community.

*Johnston's Plan Addresses Community Character*

Community character can be conveyed in a number of ways. Johnston's 1998 Comprehensive Plan identified themes for much of Johnston's public realm - entries, boulevards, medians, intersections, etc. Identified improvements draw from some of the elements of Johnston's history such as stone abutments at Camp Dodge and the agricultural heritage of the community represented by Pioneer Hi-Bred International's research fields. Policies in the current plan continue to emphasize and expand these community character elements. Johnston's Green Days celebration will also continue to serve as a reminder of the historic agricultural roots of the community.

8 **Iowa Smart Planning Principle – Natural Resources and Agricultural Protection**

Planning, zoning, development, and resource management should emphasize protection, preservation, and restoration of natural resources, agricultural land, and cultural and historic landscapes, and should increase the availability of open spaces and recreational facilities.

*Johnston's Plan Addresses Natural Resources and Agricultural Protection*

Two chapters of the Johnston Comprehensive Plan directly address this principle. The Natural Resources chapter contains background information and policies supporting the preservation and enhancement of natural resources. The Parks and Recreation chapter of the plan calls for expanded parks and open space as the community grows in the future.

9 **Iowa Smart Planning Principle – Sustainable Design**

Planning, zoning, development, and resource management should promote developments, buildings, and infrastructure that utilize sustainable design and construction standards and conserve natural resources by reducing waste and pollution through the efficient use of land, energy, water, air, and materials.



*Pointe Vista Park entry and walking trail*

### Johnston's Plan Addresses Sustainable Design

Policies and action steps in the Johnston Comprehensive Plan advocate sustainable design. Specific action steps address the use of new green building materials and technologies, promoting recycling, and sustainability evaluations addressing materials, energy use, operating costs, and life cycle replacement costs for new facilities.

### 10 Iowa Smart Planning Principle – Transportation Diversity

Planning, zoning, development, and resource management should promote expanded transportation options for residents of the community. Consideration should be given to transportation options that maximize mobility, reduce congestion, conserve fuel, and improve air quality.

### Johnston's Plan Addresses Transportation Diversity

The Transportation, Land Use, and Parks and Recreation chapters of the Johnston Comprehensive Plan work together to ensure development of a diverse transportation system. The plan highlights required roadway improvements to relieve congestion, addresses an expanded future transit system, and identifies approximately 26 miles of new trails that will connect to the over 40 miles of trails that exist in the community today. The plan also encourages expansion of Johnston's current 52 mile sidewalk system.



## Comprehensive Plan Elements

In addition to the 10 Iowa Smart Planning Principles, the legislation also outlines 13 elements that may be included in a comprehensive plan. The elements are:

- » Public Participation
- » Issues and Opportunities
- » Land Use
- » Housing
- » Public Infrastructure and Utilities
- » Transportation
- » Economic Development
- » Agricultural and Natural Resources
- » Community Facilities
- » Hazards
- » Intergovernmental Collaboration
- » Implementation

The Johnston Thrive 2040 Comprehensive Plan directly and/or indirectly includes all of these optional comprehensive plan elements.

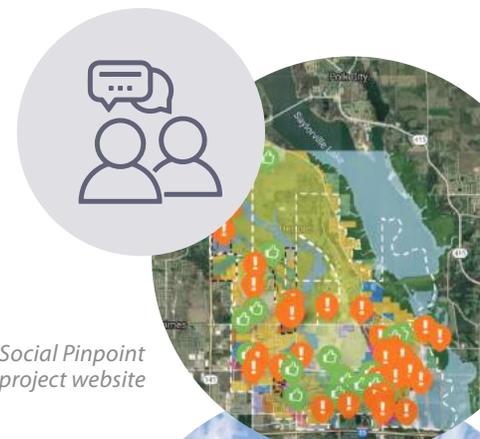


## JOHNSTON THRIVE 2040 PLANNING PROCESS

The Johnston Comprehensive Plan is as much about the planning process as it is the printed plan itself. Attitudes and opinions change over time as does the direction from political leadership. If the planning process has involved the full community, the comprehensive plan becomes stronger in its application. It is unrealistic to expect that every land use or development decision will receive complete agreement from all affected parties.

Because the planning process was all inclusive and included a wide range of opinions, the comprehensive plan becomes the unifying element for such decisions. The following is a brief overview of the planning process. The process to update Johnston's Comprehensive Plan began in Spring of 2019. The process was branded Johnston Thrive 2040 as a way of giving the project a specific identity and enhancing the transparency of the planning process.

Engagement efforts including a series of in person events and on-line interactive mapping tools that occurred throughout the course of the project. A summary of the engagement efforts was prepared and recorded with the City's files. Throughout the plan you will see quotes and key statistics that reflect outcomes from the engagement process where key policies or directions were directly influenced by community input.



*Social Pinpoint project website*



*2019 Kites On Green community engagement event*



### UNFORESEEN CHALLENGES:

Nearing the completion of the Johnston Thrive 2040 Comprehensive Plan, the COVID19 pandemic was starting to hit Cities across the globe, leaving many societal and economic questions in its wake. The pandemic quickly overturned the state of the economy and trends in work and technology demands. A number of text items within this document have been altered to address these changes. Due to these unforeseen circumstances, a number of planned engagement and review opportunities for this plan were moved online. These necessary changes to the planning process for the safety and welfare of the community may have affected the number of participants reached and overall comments/feedback received.

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## CHAPTER 2

# JOHNSTON IN 2040

## VISION AND GUIDING PRINCIPLES

Johnston's first vision statement and guiding principles were drafted as part of the 1998 Comprehensive Plan. They were the result of a significant community engagement effort. Public input was also critical to the assembly of the city's updated vision and guiding principles. In a concise set of statements, they articulate the thoughts and aspirations of Johnston's citizenry as well as its elected and appointed officials. They depict the essence of the community in the future and they serve as a fundamental framework for the preparation of this plan.



## Vision Statement

Johnston is a vibrant, sustainable community that uniquely blends urban, suburban, and rural qualities.

Johnston derives its sense of community from the very elements that define its rich heritage - the people, the neighborhoods, the schools, the businesses, the parks, agriculture, Camp Dodge, and open space. Johnston respects its natural setting, acknowledges the relevance of its history, and eagerly embraces future opportunities.

Community pride is evident everywhere in Johnston. It's known as an unparalleled place to raise a family, run a business, age in place, and enjoy recreation.



## Guiding Principles

### **An atmosphere that captures a spirit that is uniquely Johnston**

Johnston will set itself apart by promoting the use of land in a manner that uniquely blends development and natural areas. The community will maintain an economically and ecologically sustainable environment that appropriately places jobs, parks, schools, military, and public safety training facilities, and businesses in locations that are convenient and compatible with one another.

### **Housing that reflects a full range of choices**

Johnston will continue to offer a balance of housing choices that serve a broad range of incomes, lifestyles, and age groups. The community's housing stock will allow people to be life-long Johnston residents affording opportunities to move into alternative forms of housing as the needs of residents change over time.

### **A place for people to gather**

Johnston will provide a space and/or a series of spaces that accommodates and encourages gatherings of people.

### **A fiscally sustainable community**

Johnston will place a strong emphasis on fiscal sustainability by proactively investing in its future. The community will continue to support a diversified local economy including a vibrant local business sector, strong military and public safety training facilities, and high-quality jobs.

### **A proactive position on future growth**

Johnston will continue to maintain strong design standards and proactive planning. The comprehensive plan in tandem with the community's codes and ordinances will establish locations and rates of future growth and development. Future growth will be phased to maintain pace with the services and facilities necessary for its support.

### **An identity that reflects the place**

Johnston will present a clear community identity that includes a common "green" theme depicted in consistent, visible ways. Elements of the community's heritage including Camp Dodge, the Des Moines River, Saylorville Lake, Pioneer, and Johnston Station will be used to foster a distinctive and unique place.



*Multimodal transportation networks*



*A wide range of housing options*



*Creating accessible places for people to gather*



### **A built environment in harmony with the natural environment**

The built environment in Johnston will express integrity, quality, and diversity while respecting the patterns of the natural environment. Open space areas and stormwater systems will be integrated with development to preserve significant natural resources, provide habitat for wildlife, and utilize open space buffers as transitional areas to more intensive land uses.

### **Efficient infrastructure**

Johnston will maintain a high quality, efficient infrastructure system. Utility and service delivery systems will be designed to serve both the present and future needs of the community. Infrastructure expenditures will be made on the basis of long-term cost and benefit rather than initial cost.

### **Recreation opportunities for residents and visitors**

Johnston will provide a balanced system of parks and open spaces, connected by a trail network within the city with links to regional points of interest. Johnston's recreation system will promote individual wellness and fitness.

### **Made in Johnston**

Johnston will continue to accommodate the local production of goods and the provision of local services. Land use planning will allocate an adequate supply of land to accommodate the continued growth of existing businesses and the establishment of new business opportunities.

### **Transportation linkages**

The transportation needs of Johnston's businesses and residents will be supported by a local and regional transportation system that provides a variety of efficient, flexible transportation options. Roads, sidewalks, trails, and mass transit will be the basis of a system that provides safe, convenient connections throughout the community and the surrounding area.

### **Community involvement**

Johnston is an inclusive and welcoming community. The city values and promotes citizen involvement, it stresses open communication, and it encourages volunteerism.



## CHAPTER 3

# REPORT CARD

## INTRODUCTION

Whether it's by getting a top-notch education in our schools, meeting a friend for a run through a green city park, the friendly smiles at the grocery store, the feeling of security knowing we have strong police and fire departments, the family-friendly events held in our wide open spaces, a welcoming and innovative library, a strong and vibrant business community, and responsive city leaders... every aspect of Johnston is Thriving.

This report card shares local measurements in eight topic areas about what makes the City of Johnston, its residents, and its businesses thrive. Information here will prompt questions and discussions in an effort to create a more thriving Johnston now, and through 2040.



## Report Indicators

Each measurement is accompanied by a symbol that indicates whether the measure is increasing, staying steady, or decreasing as well as if it is potentially positive, neutral, or worrisome in relation to the thriving atmosphere of Johnston.



Increasing

When the arrow is pointing upwards, the measurement is increasing over time.



Staying Steady

When the arrow is pointing to the right, the measurement is staying steady through time.



Decreasing

When the arrow is pointing downwards, the measurement is decreasing through time.



Positive

When the circle is green, the measurement is positive in relation to the thriving atmosphere of Johnston.



Neutral

When the circle is yellow, the measurement is neither positive or worrisome in relation to the thriving atmosphere of Johnston.



Worrisome

When the circle is red, the measurement is worrisome in relation to the thriving atmosphere of Johnston.



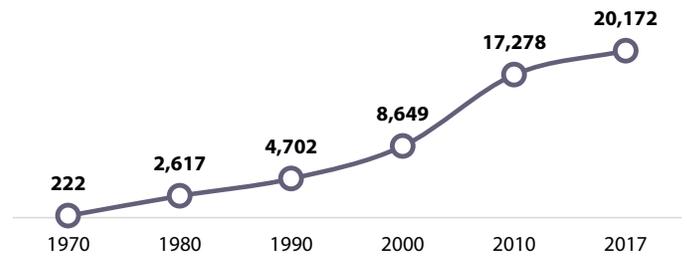
## DEMOGRAPHICS



### Population

Decade after decade, Johnston has experienced exponential population growth. There are over **100 TIMES MORE PEOPLE** in Johnston today than there were in 1970.

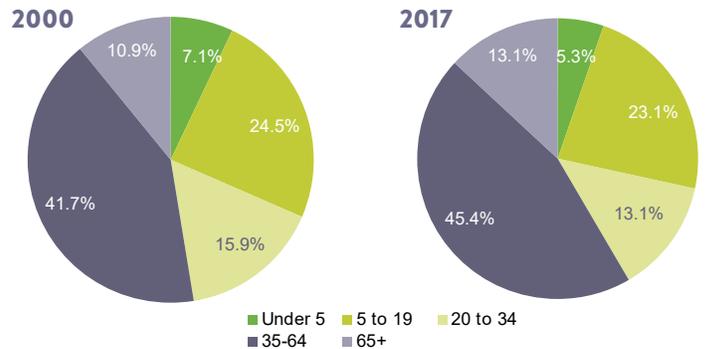
Source: U.S. Census; American Community Survey 5 Year Estimates, 2012-2017



### Age

Johnston's population is aging. Those who are 65 years and older now make up a larger portion of the population. The **MEDIAN AGE HAS INCREASED 10.7 YEARS** since 1980. The current median age of a Johnston resident is 40.7 years old, which is slightly higher than Iowa's median age of 38.1.

Source: U.S. Census; American Community Survey 5 Year Estimates, 2012-2017

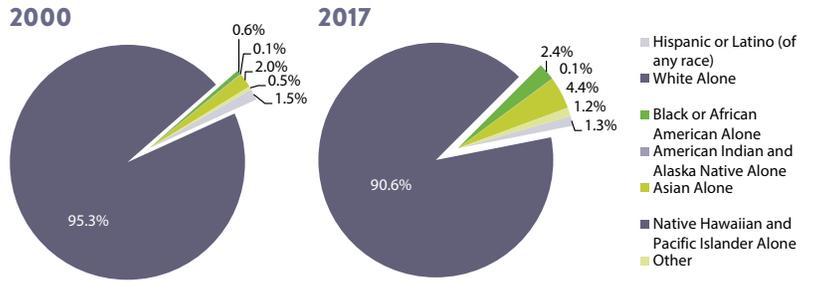




### Diversity

Johnston's population is becoming increasingly diverse. Almost **1 IN 10 JOHNSTON RESIDENTS IS A PERSON OF COLOR**. Iowa is slightly more diverse than Johnston with 13.5% of its population being non-white.

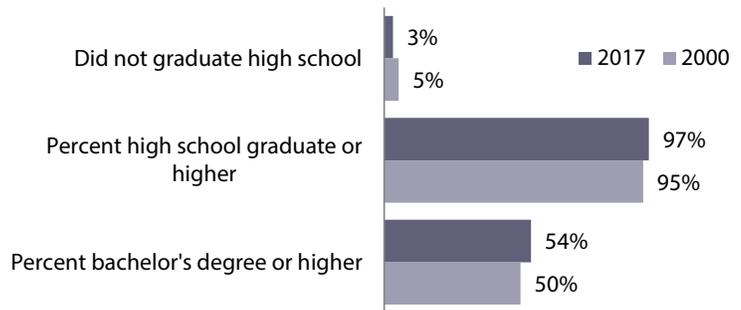
Source: U.S. Census; American Community Survey 5 Year Estimates, 2012-2017



### Education

Johnston's population is becoming more educated. Of adult residents age 25 years and older, more than **HALF HAVE A BACHELOR'S DEGREE OR HIGHER**. Only 18.7% of Iowa's population has attained a Bachelor's degree or higher.

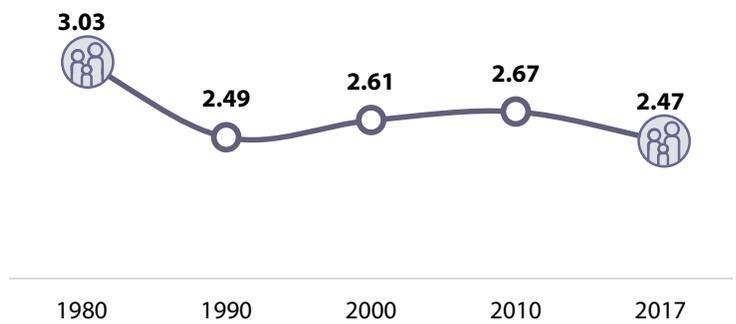
Source: U.S. Census; American Community Survey 5 Year Estimates, 2012-2017



### Household Size

Johnston's **MEDIAN HOUSEHOLD SIZE HAS GRADUALLY DECREASED** over the past 40 years. Household size in Johnston has decreased at a faster rate than Iowa, but Iowa's median household size is still smaller at 2.41 persons per household.

Source: U.S. Census; American Community Survey 5 Year Estimates, 2012-2017





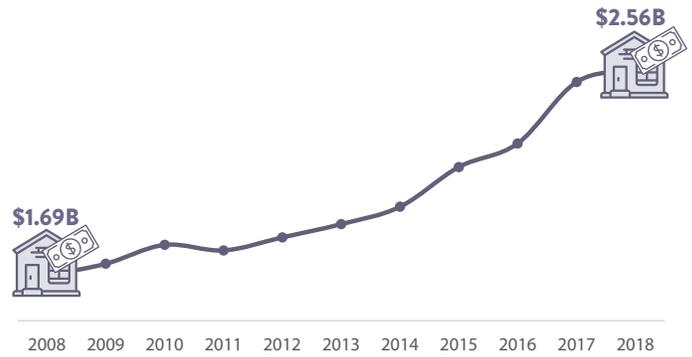
## ECONOMY



### Property Valuations

Johnston's overall property valuation has **INCREASED BY OVER 50% IN THE LAST TEN YEARS**. Residential properties account for 78% of Johnston's overall valuation and commercial and industrial properties account for 22%.

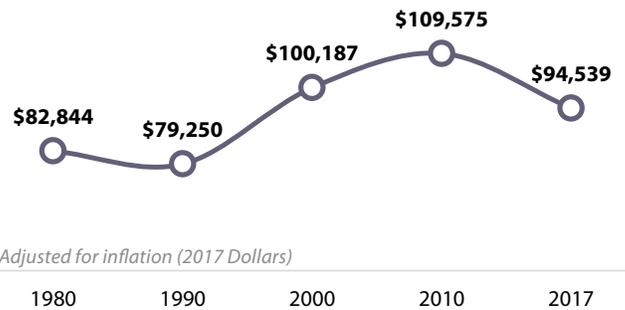
Source: City of Johnston



### Household Income

When adjusted for inflation, median household income in Johnston gradually increased by \$30k from 1990 to 2010, but has recently declined by \$15k in the last seven years. **MEDIAN HOUSEHOLD INCOME IS \$38K HIGHER THAN THE STATE** median.

Source: U.S. Census; American Community Survey 5 Year Estimates, 2012-2017



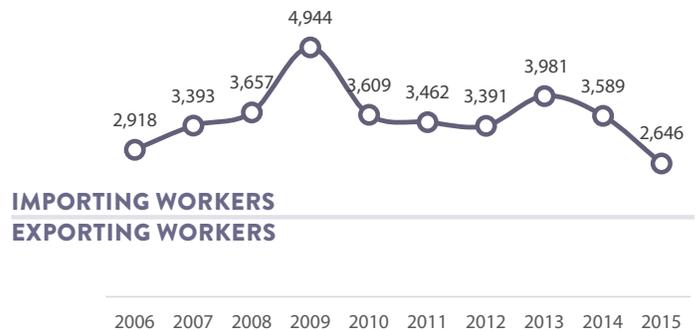
\*Adjusted for inflation (2017 Dollars)



### Job Inflow/Outflow

In Johnston there are more jobs in the city than there are workers living in the city. **GROWTH OF THE WORKFORCE HAS OUTPACED GROWTH OF JOBS IN THE CITY**, meaning Johnston is importing less workers than it did in years past.

Source: U.S. Census; LEHD Origin-Destination Employment Statistics (2006-2015). OnTheMap Application





## GETTING AROUND



### Commute Alone Trips

The proportion of Johnston residents driving alone to work has **DECREASED BY 5% OVER THE 15 YEARS**. More people are working from home, taking transit, and biking to work. Drive alone trips still account for 86% of all commuting trips. Over the last 15 years Iowa has seen a 2.5% increase in drive alone trips.

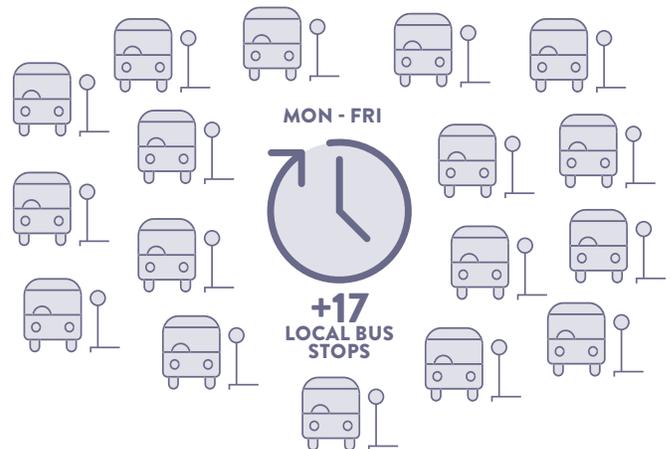
Source: U.S. Census; American Community Survey 5 Year Estimates, 2012-2017



### Transit Improvements

DART expanded Local Route 5 bus service along Merle Hay Road into Johnston to the Johnston Public Library on Oct. 1 2018. The extension brings **AN ADDITIONAL 17 LOCAL BUS STOPS WITH ALL DAY WEEKDAY SERVICE**, 6:00am to 8:00pm. Service frequencies range from 20 minutes to 1 hour depending on the time of day and peak traffic flow direction.

Source: Des Moines Area Regional Transit Authority (DART)



### Pavement Condition

Roadways within Johnston scored an average Pavement Condition Index score of 71 (good) out of 100 in 2017. This was a **6.5% DECREASE IN PAVEMENT CONDITION SINCE 2013**, but still better than the average pavement condition (65) of the MPO planning area. PCI measures the cracking, defects, surface type, and other roadway attributes.

Source: Des Moines Area MPO, InTrans



Percentages to be updated to reflect most current PCI data.



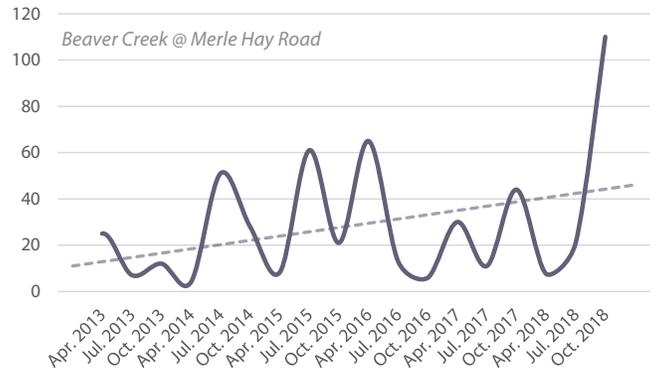
## NATURAL RESOURCES



### Water Turbidity

The **WATER TURBIDITY (HOW MURKY THE WATER IS) OF BEAVER CREEK HAS GRADUALLY INCREASED** over the past five years. Higher turbidity levels may indicate higher stormwater volumes, faster water velocities, and more stream erosion.

Source: City of Johnston, University of Iowa Hygienic Lab



### City Stormwater Utility Projects

The City of Johnston Stormwater Utility fee has **FUNDED ALMOST \$11.5 MILLION WORTH OF CONSTRUCTION PROJECTS** since its creation in 2012.

Source: City of Johnston



### Homeowner Stormwater BMPs

The Johnston Stormwater Homeowner Grant Program has allowed homeowners to incorporate **OVER 37 STORMWATER BEST MANAGEMENT PRACTICES (BMPs) SINCE 2016**. This includes rain barrels, erosion control, permeable pavers, rain gardens, soil quality restoration, etc.

Source: City of Johnston





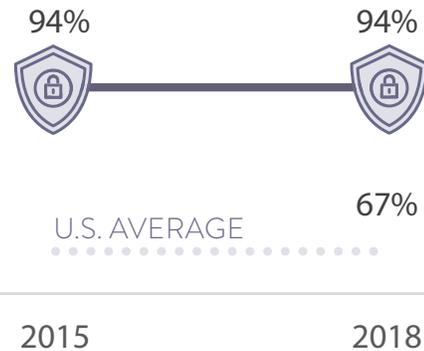
## UTILITIES AND SERVICES



### Feeling of Safety

Satisfaction ratings for the overall **FEELING OF SAFETY IN THE CITY REMAINED THE SAME BETWEEN 2015 AND 2018 AT 94%**. Satisfaction ratings for police services and fire and EMS services increased by 6%.

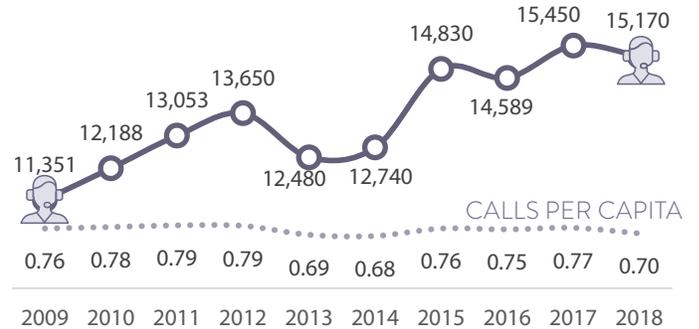
Source: 2018 City of Johnston Community Survey



### Police Activity

The **NUMBER OF CALLS FOR POLICE SERVICE HAS INCREASED BY 34%** in the last 10 years, but remained steady with population growth. The majority of calls are for property crimes followed by motor vehicle crashes and disturbance calls. The number of police staff has increased by 34% as well. There are 1.38 officers/1,000 people, well below the national average of 1.9/1,000 people.

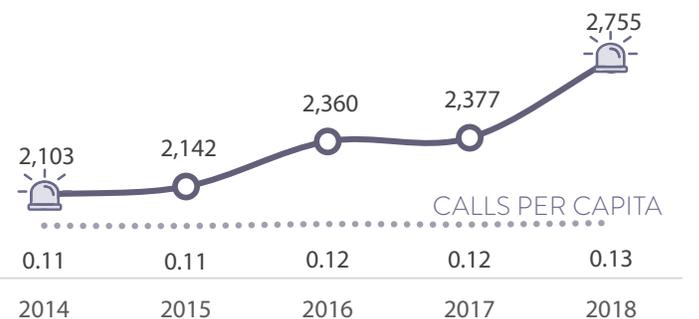
Source: City of Johnston Police Department



### Fire and EMS Activity

The **NUMBER OF CALLS FOR FIRE AND EMS SERVICE HAS INCREASED BY 31%** in the last four years, but has largely remained steady with population growth. The number of 2nd and 3rd out calls (multiple fire and ambulance units out at once) has significantly increased by 78%.

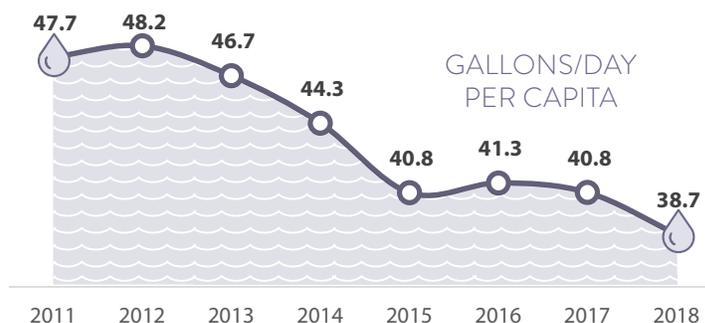
Source: Johnston-Grimes Metropolitan Fire Department



## Water Efficiency

Residential water usage per capita (gallons per day)\* has **DECREASED BY 19%** in the last 7 years. The month with the highest total water usage among all users and uses is typically August, followed by July and June. On average, 91.3 million gallons of water are used in August by all users.

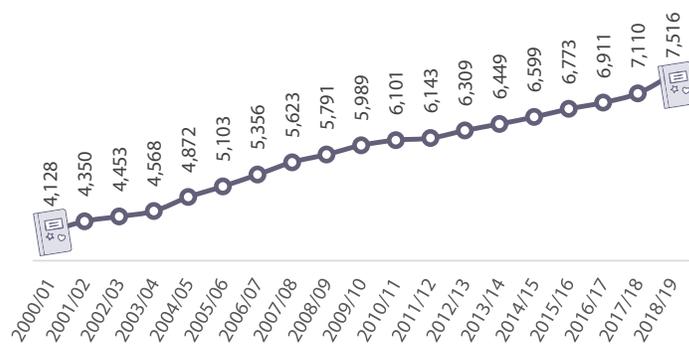
Source: City of Johnston  
 \*Residential water usage doesn't include water used for irrigation.



## School Enrollment

Enrollment in the Johnston Community School District has **INCREASED BY 82%** in the last 18 years. The largest class in the 2018-19 school year is the 8th grade class with 591 students. Newer housing inventory has increased enrollment, though new multi-family development has yielded fewer students than single-family development.

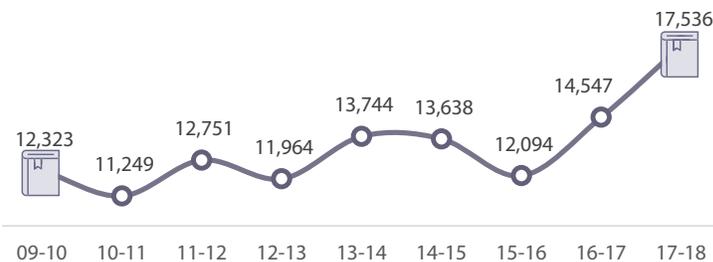
Source: Iowa Department of Education, Johnston Community School District, 18/19 RSP Enrollment Analysis

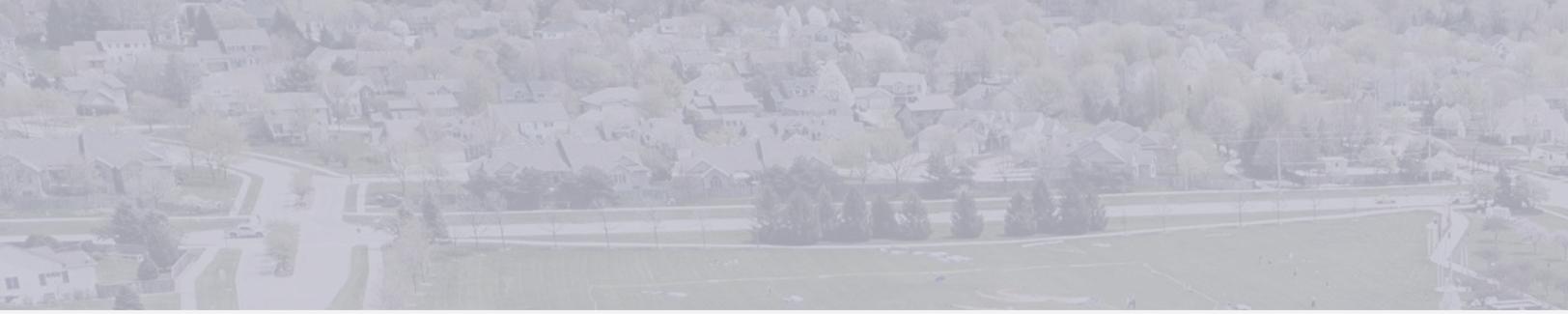


## Library Attendance

The number of people **ATTENDING LIBRARY PROGRAMS HAS INCREASED BY 42%** in the last 10 years. Total library circulation has increased by 35,627 items to 326,570 items.

Source: City of Johnston Public Library





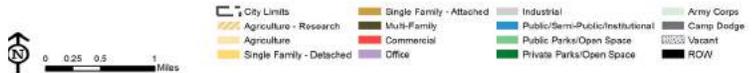
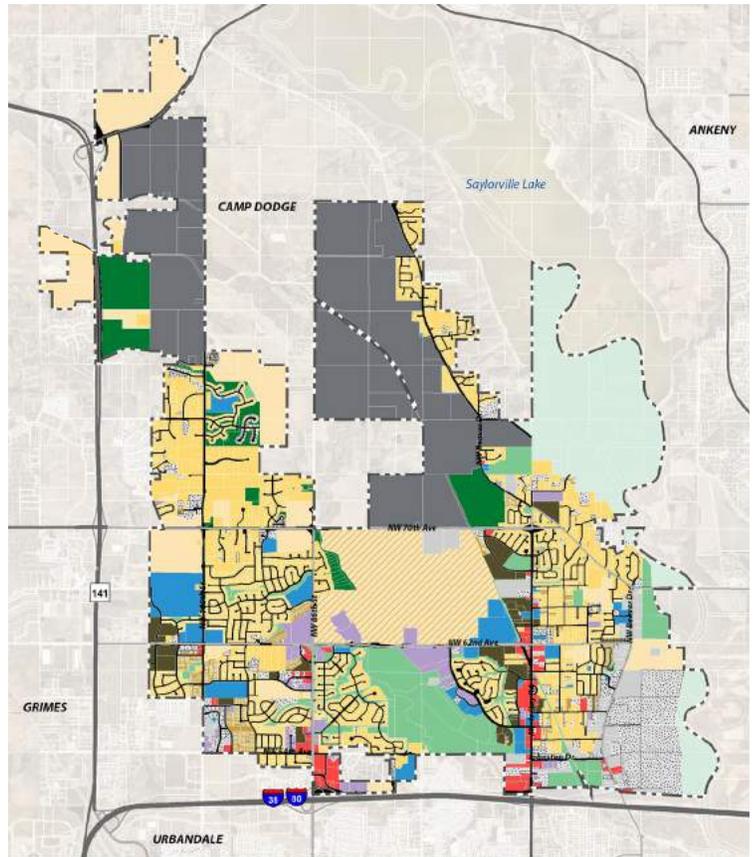
# LAND USE



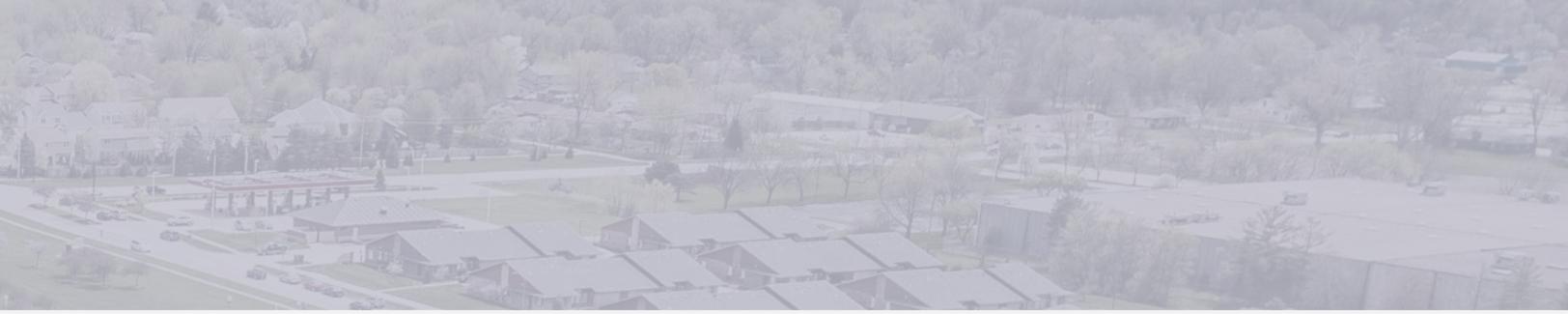
## Land Allocation

Federal and state government uses account for almost one-third of Johnston’s land area. **SINGLE FAMILY RESIDENTIAL ACCOUNTS FOR OVER ONE-QUARTER OF JOHNSTON’S LAND AREA.** There is just as much commercial land as there is Army Corps land.

Source: City of Johnston



HOUSING GROWTH (NEW PERMITS AS A PERCENT OF TOTAL)		
EXISTING LAND USE	ACRES	% OF TOTAL
Single Family Residential	3,408	26%
Multi-Family Residential	266	2%
Commercial/Office/Industry	1,495	11%
Parks & Open Space	371	3%
Public/Semi-Public	340	3%
Camp Dodge	2,564	19%
Army Corp	1,459	11%
Utility	15	0%
ROW	1,034	8%
Agriculture	2,146	16%
Vacant	74	1%
Total	13,173	100%



### Average Residential Density

There are 8,449 housing units spread across approximately 3,675 acres in Johnston. The **AVERAGE RESIDENTIAL DENSITY ACROSS THE CITY OF JOHNSTON IS 2.3 UNITS PER ACRE.**

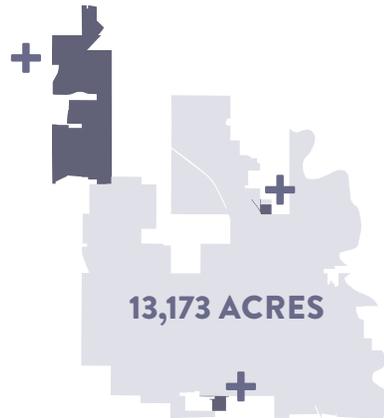
*Source: City of Johnston Existing Land Use Data, U.S. Census; American Community Survey 5 Year Estimates, 2012-2017*



### City Annexation

In the last 10 years, Johnston has **ANNEXED OVER 1,500 ACRES OF LAND** into its corporate limits. Over 13,100 acres of land now exist within the City of Johnston, the 19th largest city in Iowa.

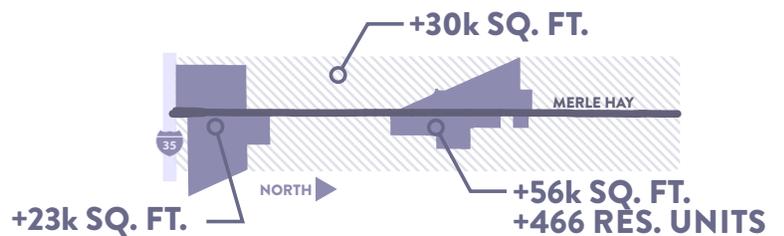
*Source: City of Johnston*



### Redevelopment Progress

Johnston has seen over **79K SQ. FT. IN COMMERCIAL INVESTMENT AND 466 RESIDENTIAL UNITS ADDED** in the Merle Hay Corridor redevelopment areas since the adoption of three redevelopment plans. Over 30k sq. ft. in commercial investment has happened along the corridor, just outside the redevelopment areas.

*Source: City of Johnston*





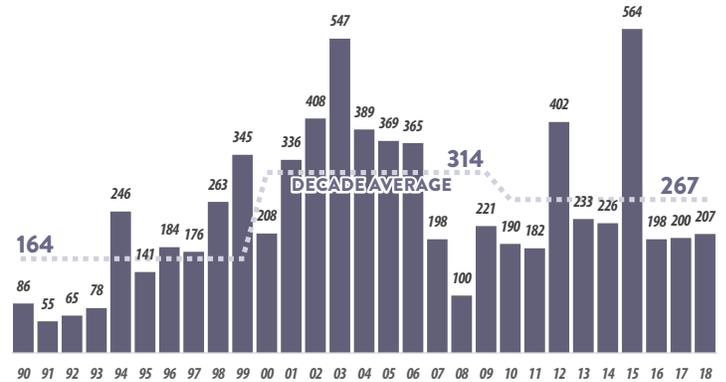
# HOUSING



## Housing Permits

On average, **THERE ARE 267 HOUSING PERMITS ISSUED EACH YEAR** in Johnston. The average number of permits issued per year peaked in the 2000s and, while slightly lower, has remained steady in the current decade.

Source: City of Johnston



## Housing Unit Mix

The **MIX OF HOUSING PERMITS ISSUED EACH DECADE HAS INCREASED AND BECOME MORE BALANCED.** Overall, single family detached homes still account for 59% of Johnston’s housing; similar to Ankeny (59%), less than Waukee (65%), and more than West Des Moines (46%).

Source: City of Johnston, U.S. Census; American Community Survey 5 Year Estimates, 2012-2017. \*As of Dec. 2018

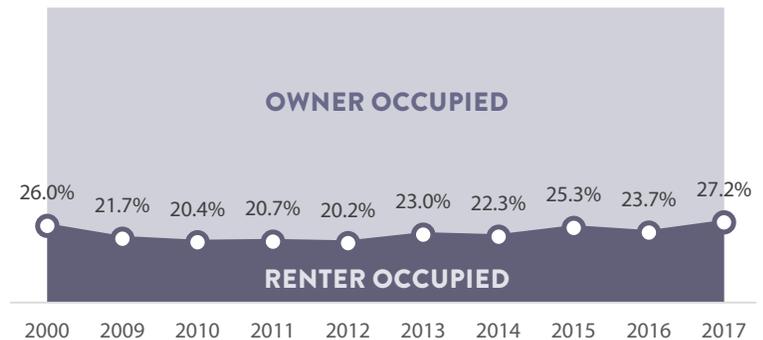


## Housing Tenure

**OVER TWO AND A HALF TIMES AS MANY PEOPLE OWN THEIR HOME IN JOHNSTON THAN RENT.**

The balance of renters to homeowners has only changed by 1.2% since 2000. Just under 33% of Polk County residents are renters, an increase of 1.7% since 2000. There are over 2,500 rental homes registered within the city. Multi-family units account for over 90% of rentals available in the city.

Source: City of Johnston, U.S. Census; American Community Survey 5 Year Estimates, 2012-2017





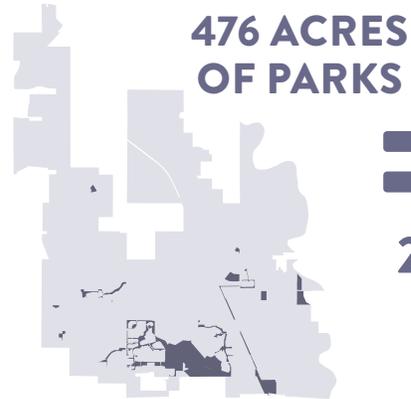
## PARKS AND RECREATION



### Parks

Johnston has **23.6 ACRES OF PARKLAND FOR EVERY 1,000 RESIDENTS**. Johnston has 14 more acres of parkland per 1,000 residents than the average community nationwide.

Source: City of Johnston, NRPA Park Metrics



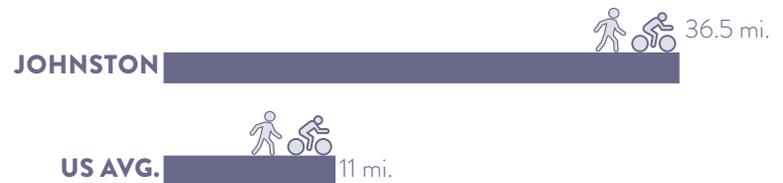
**23.6 ACRES/1K PEOPLE**



### Trails

Johnston contains **MORE THAN THREE TIMES THE NATIONAL AVERAGE** (36.5 miles compared to 11.0 miles) for paved trails in the community. There are seven miles of soft trails (grass or crushed limestone) in the community.

Source: 2019 NRPA Agency Performance Review, City of Johnston

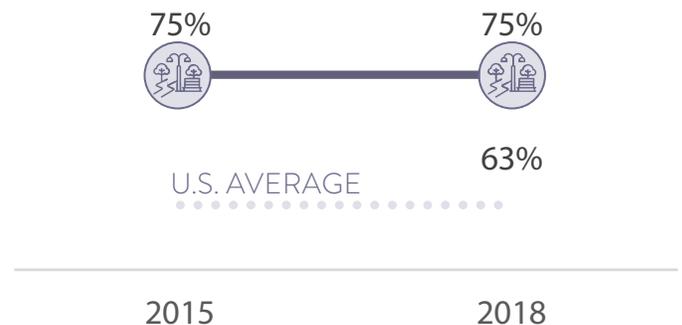


### Quality of Parks

Satisfaction ratings for the overall **QUALITY OF PARKS & REC PROGRAMS & FACILITIES REMAINED THE SAME BETWEEN 2015 AND 2018 AT 75%**.

Satisfaction ratings for Low Clarkson Park increased by 4%.

Source: 2018 City of Johnston Community Survey



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## CHAPTER 4

# **NATURAL** **RESOURCES**

## **VISION AND GUIDING PRINCIPLES**

The Natural Resources chapter begins to highlight some of the unique features that define Johnston’s landscape. These natural features continue to serve as important assets to the community and are valued by residents. As Johnston continues to develop, it is important to recognize these assets by finding an appropriate balance between the natural environment and the built environment. In doing so, it is possible to preserve natural resource areas and create a future living environment that integrates the man-made development patterns with the natural characteristics of the landscape.

To ensure that Johnston’s natural resources are protected, the comprehensive plan addresses a number of land use and environmental standards that should be maintained to prevent the degradation of these resources. In developing additional regulations, the city should consider the findings in the city’s Watershed Assessment and Stormwater Management Plan. In addition to this plan, the following goals, policies, and implementation initiatives have been established to protect and preserve Johnston’s natural resources.

## NATURAL RESOURCES:



The following methodologies guide the creation of the goals, policies, and implementation initiatives:

### GOALS:

Written as statements and expressions of desired outcomes ... "to which planned effort is directed." Goals should support one or more guiding principles – if it is an important goal and there is no logical supporting guiding principle – maybe consider a guiding principle revision. Consideration should be given to how it is measured. Metric may be subjective or objective (quantifiable).

### POLICIES:

Written as passive guidelines, general rules or explicit rules in some cases with heavy use of verbs such as: support, encourage, prohibit, protect, preserve, establish, require, etc.

### IMPLEMENTATION INITIATIVES:

Written as action statements that work towards achieving a defined outcome. They may have a definitive start and stopping point; or they may be on-going. They may be physical capital improvements or physical plans or they may be programs. Implementation Initiatives should respond to a specific goal. They require a specified set of resources (human, capital, and/or financial) that should be identified to some degree.

## Goals

1. Protect existing sensitive natural resources: including steep slopes, sensitive soils, and dense tree cover.
2. Improve water quality and limit or prevent pollutants from entering surface or groundwater resources.
3. Protect downstream receiving waters from further habitat loss, channel erosion, and streambank degradation.
4. Provide safe and stable conveyance of stormwater runoff from site outlets to regional stormwater facilities.
5. Protect public and private investments from damage due to flooding or the impacts of flooding.
6. Use the integrated stormwater management system as a resource to develop aesthetic enhancements and amenities
7. Preserve areas of habitat where wildlife and nature can thrive including steep slopes, sensitive soils, and dense tree cover.

## Policies

1. Seek to establish a balance between conserving key natural resources, floodplains, and future urban development through natural open space and greenway network techniques.
2. Encourage conservation subdivision design practices that incorporate natural resource and sensitive environmental areas into a connected greenway corridor network.
3. Facilitate development in areas with sensitive environmental resources to use site and building designs that embrace sustainable practices.
4. Promote strategies and best practices for energy conservation and preventing pollution of the land, water, and air.
5. Partner with and support environmental organizations that promote green building practices and standards, such as Leadership in Energy and Environmental Design (LEED).
6. Encourage tree planting on private and public property and along street rights-of-way within the city.
7. Assist in the preservation of prime agricultural lands to allow areas to be farmed as long as desired by property owners by designating agricultural reserve areas and other mechanisms.
8. Encourage efforts to preserve wildlife species including preservation of natural habitat areas where feasible.
9. Maintain compliance with federal, state and local wetland rules and regulations and compliance with air quality, water quality, and noise regulations.
10. Continue participation in the National Flood Insurance Program.

## Implementation Initiatives

1. To preserve trees, floodplain, steep slopes, water quality, select stands of timber, and other similar environmentally sensitive features, examine specific requirements for environmental protection, such as erosion control or limited development on steep slopes, that may be incorporated into the city's subdivision regulations.
2. Cooperate with the Wastewater Reclamation Authority (WRA) and other levels of Des Moines metropolitan government in promoting the use of innovative sewage treatment systems.
3. Consider public acquisition of select plant and wildlife habitat areas to ensure preservation.
4. Sand and gravel deposits are a natural resource. Future reclamation efforts for lands being mined for sand and gravel should be continually monitored and evaluated.



*Saylorville Lake*



*Entryway to Lakeview Recreational Area*



## EXISTING CONDITIONS

During the 1900s development patterns started to influence the landscape in and around Johnston. The development of Camp Dodge, the railroad, and the interstate system fueled development throughout the community. Land that was once rolling prairie hills or cultivated for corn, soybeans, and other agricultural goods now has assumed an urban development pattern. These landscape transformations represent fundamental changes to the area's historic natural landscape.

Development and natural events will continue to influence the landscape. The Land Use chapter provides the foundation necessary to understand how future growth will occur in the next twenty years. This chapter provides an inventory of natural resources (soils, water features, and natural open spaces) that will need to be considered as part of the land use plan. Findings in the City's Watershed Assessment and Stormwater Management Plan that was prepared by Nilles Associates in December of 2009 and other information was used as the basis for this natural resource inventory. The stormwater plan provides an in-depth look at the natural resources within the area, in addition to providing mitigation measures to address watershed and stormwater management issues.



### Soils

One of the most reliable and detailed data sets available for soils information is the Soil Survey Geographic Database (SSURGO) prepared by the National Cooperative Soil Survey. This data depicts information about the kinds of soils dispersed throughout the landscape. It is important to be cognizant of these characteristics as certain soil structures can be prone to flooding and erosion. Figure 4.1 highlights key soil conditions within Johnston and the surrounding area. The following soil properties were identified as part of the stormwater plan.

#### Fully Hydric Soils

These soils often have a shallow watertable and are often located near swales, depressions and flood plains. Special construction practices are often required to construct improvements such as streets, utilities, and structures in these areas. These soils may also indicate the presence of jurisdictional wetlands.

#### Depressional, Fully Hydric Soils

These areas often exist in shallow depressions and are often prone to seasonal shallow flooding. Many of these areas are located along floodplains or were once part of prairie pothole wetlands that were common in Iowa prior to agricultural development. These areas should be reserved from development and are candidates to be re-established as wetlands.

### Steep Slopes (14% or greater)

It is difficult to prevent erosion and re-establish stable vegetation on steep slopes disturbed by construction activities. Exposed slopes can be prone to erosion and slope failures potentially causing downstream siltation, erosion, and flooding. Structures constructed near the top of steep slopes can be impacted if sufficient separation is not maintained from the base of the structure to the toe of the slope. Construction in these areas can also harm the scenic character of these areas, especially if they are established with quality woodlands or native prairie flowers and grasses. These issues need to be addressed before allowing development on or near these slopes.

### Moderate Slopes (5 to 14%) Prone to Erosion

Some soils are more prone to erosion when disturbed than others. Preventing erosion and sediment loss and re-establishing vegetation on these areas when graded may require added silt fencing and other measures. Proper pollution planning and vegetation management will be needed in these areas.

The soil inventory shows a significant portion of the western edge of town to be fully hydric soils and moderate slopes of 5 to 14%.

These soil characteristics can be challenging for development. It is important to understand that these soils do not prohibit development, but require a more in-depth assessment to determine where development is most appropriately placed.

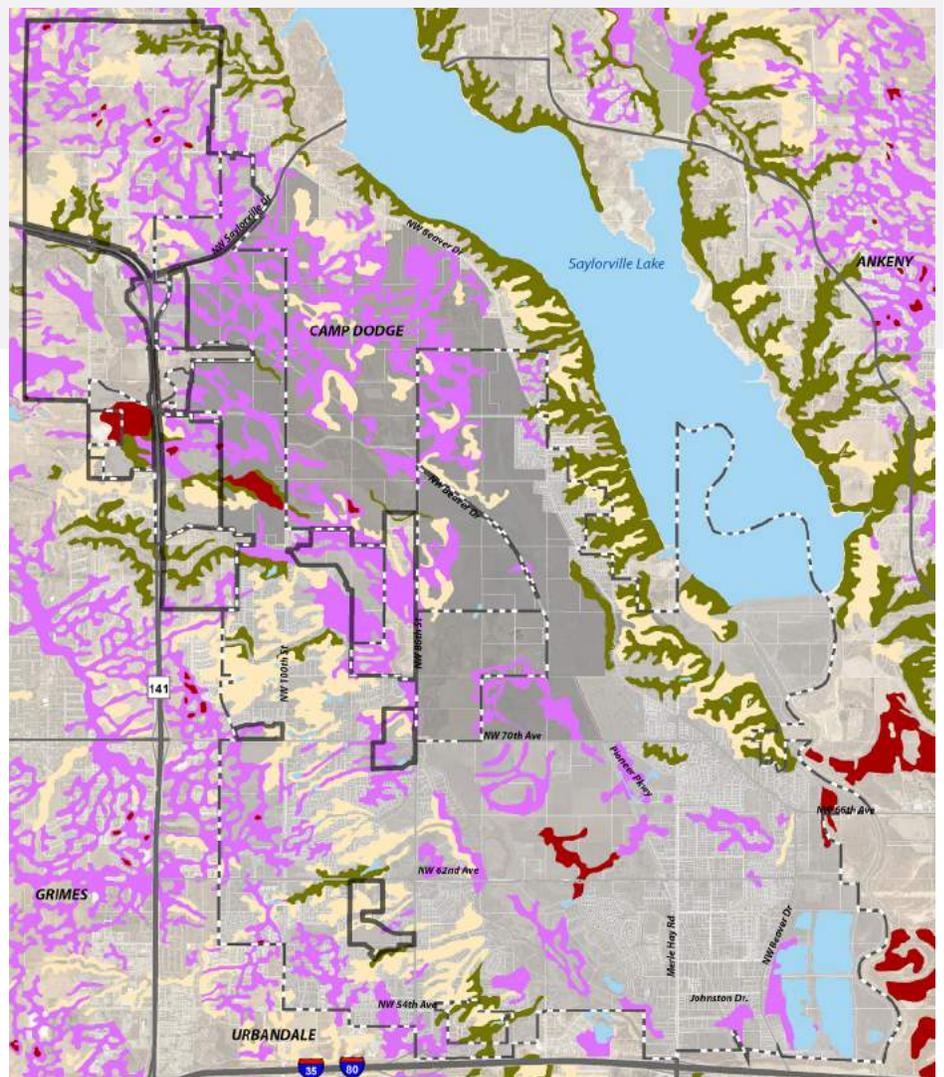


Figure 4.1 Soils



## Water Features

### Saylorville Lake

One of the most iconic water features in the area is Saylorville Lake. This reservoir plays an important role in the area as it provides capacity to prevent flooding downstream and river cresting along the Des Moines River. The lake is managed by the U.S. Army Corps of Engineers.

### Wetlands

An important part of Johnston's ecosystem is a series of wetlands that are dispersed throughout the community. This system supports wildlife habitat and spawning areas. Alteration of wetlands in the form of filling or draining can have an adverse effect on these systems and increase flooding and runoff in other areas. For this reason, they require special attention. Federal law also can protect wetlands under the regulations administered by the U.S. Army Corps of Engineers. It is necessary to consult with the city and the Army Corps of Engineers before developing near wetlands. Figure 4.2 depicts the National Wetland Inventory (NWI), which includes jurisdictional and non-jurisdictional water bodies.

### Rivers, Streams & Creeks

Johnston is part of a complex system of water corridors that includes the Des Moines River, Beaver Creek, and Little Beaver Creek. Each of these corridors feed into a number of smaller streams that contribute to a natural greenway system. This system is discussed in more detail under the Natural Open Space section.

These waterways play a vital role in capturing stormwater runoff thereby preventing flooding and enhancing water quality. Preserving these corridors is beneficial from a public investment standpoint as it reduces storm sewer and other capital improvement cost. The stormwater plan has identified three types of streams within the area and each is defined below. Each of these streams requires a different level of protection and maintenance. The plan provides guidance and mitigation measures on how to preserve and protect these natural waterways.

#### Benefit of water trails network

Beaver Creek is also part of the Greater Des Moines Water Trails network. The water trails initiative builds on the benefits of actions that protect water quality and prevent flooding by adding economic development, tourism, public health, recreation, and overall quality of life objectives.

#### Type I Streams

These streams include Beaver Creek, Little Beaver Creek, and the Des Moines River. Type I streams have established flood plains, established baseflows and watershed areas of a much larger scale than most other urban streams. Proper protection is a key concern for these streams.

#### Type II Streams

Type II streams do not usually have established floodplains, but often have established baseflows in urban areas. These streams often have watersheds of 40 - 2,000 acres and likely will require ongoing maintenance to prevent larger erosion issues from being created as development occurs. Such issues are difficult to handle by either a private homeowner or an association of local property owners.

### Type III Streams

Type III streams may or may not have established baseflows and usually have watershed areas of less than 80 acres. These corridors should be protected or enhanced through the site development process, but likely could be maintained by a private entity as long as maintenance access is available through appropriate building setbacks and required easements. Public or private ownership of these watercourses could be considered on a case by case basis at the site development stage.

### Floodplains

Like many communities along the Des Moines River, Johnston has suffered property damage from flooding. The last major floods occurred in 1993 and 2008. Flood events have primarily occurred along the Des Moines River and Beaver Creek during the early months of spring and summer. The most up-to-date Federal Emergency Management Agency (FEMA) and Flood Insurance Rate Maps (FIRM) should be consulted to identify properties that may be subject to flooding prior to development. In addition to these resources, zoning provisions have been set by the city to regulate development within the floodplains to ensure the public's safety and minimize future property damage.

### Watersheds

Water knows no jurisdictional boundaries and as such, it is necessary for all communities to take a watershed approach to managing stormwater systems. Johnston generally drains into three watersheds, the Des Moines River/Saylorville Lake, Beaver Creek, and Walnut Creek. The City of Johnston should continue to work collaboratively with other agencies and jurisdictions to plan for these watersheds through continued participation in the Beaver Creek Watershed Management Authority and Walnut Creek Watershed Management Authority including implementation efforts detailed in each of the Watershed Management Authority plans.

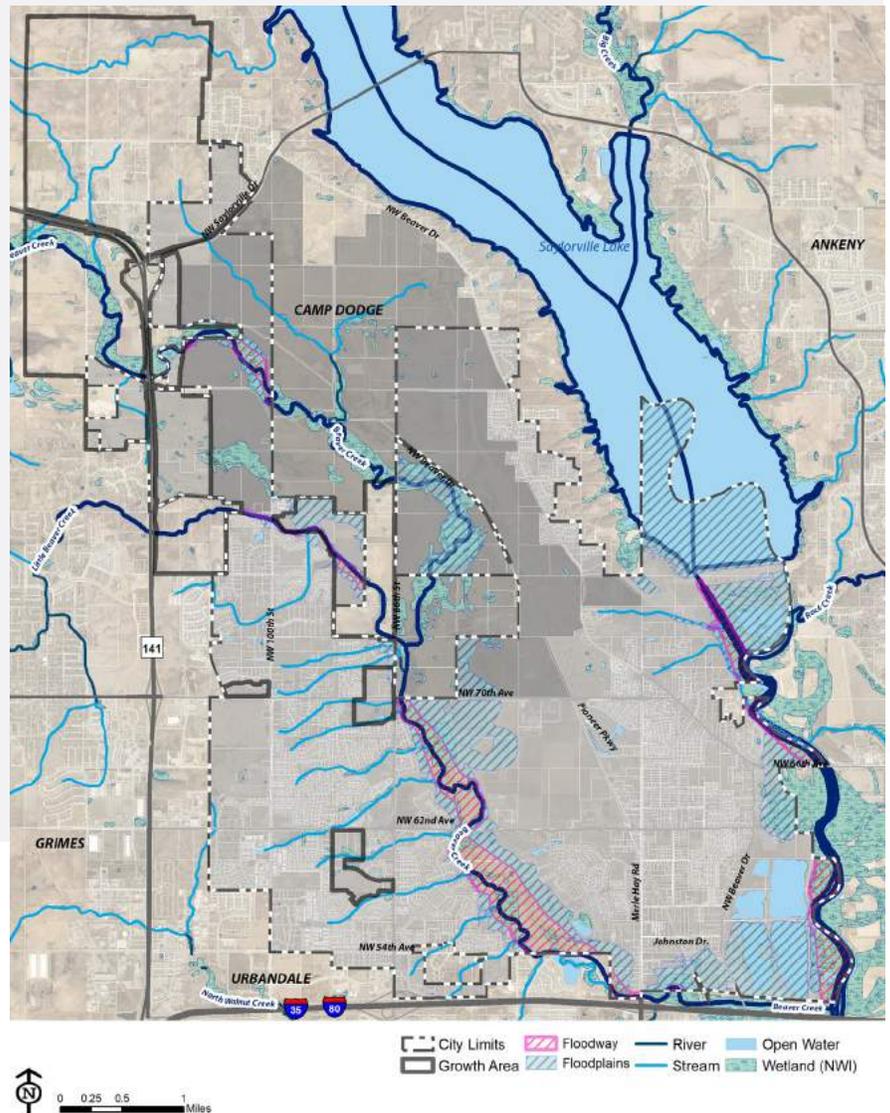


Figure 4.2 Water Features



## Natural Open Spaces

Open spaces and greenways are a valuable component for both functional and aesthetic purposes. They offer a range of opportunities to improve water quality, habitat, and recreation. Johnston's landscape already provides a number of interconnected waterways with open spaces, forming a natural greenway system (see Figure 4.3). The backbone to these systems is the Des Moines River and Beaver Creek. Intermingled along these corridors are pockets of vegetation, wetlands, and open spaces. Protecting these lands is important to ensure that the greenway functions as a corridor, not just as an assembly of isolated patches of natural areas. A fully interconnected system will require the coordination and collaboration between private landowners and public agencies. The following natural areas are identified in the stormwater plan and makeup the components of Johnston's greenway system.

### Quality Wooded Areas

Well-managed tree areas, especially those with mature native trees provide important habitat for a variety of birds, insects, and animals. Wooded areas reduce rainfall runoff and protect surface soils from erosion caused by rainfall.

### Prairie Remnants

Existing prairies can prevent erosion, absorb pollutants, and reduce stormwater runoff. They also provide a valuable seedbank for native flowers and grasses that can help to add diversity to any native planted areas constructed nearby. They also provide important habitat to a wide variety of species.

### Stream Corridors

Maintaining a healthy buffer along both small and large streams offer the following benefits:

- » Absorption and filtration of stormwater runoff.
- » Establishment and protection of wildlife habitat.
- » Reduced streamflow velocities and streambank erosion.
- » Provision for safe storage and conveyance of large storm runoff.
- » Moderation of downstream flooding.



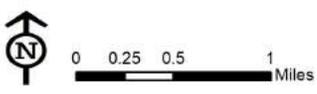
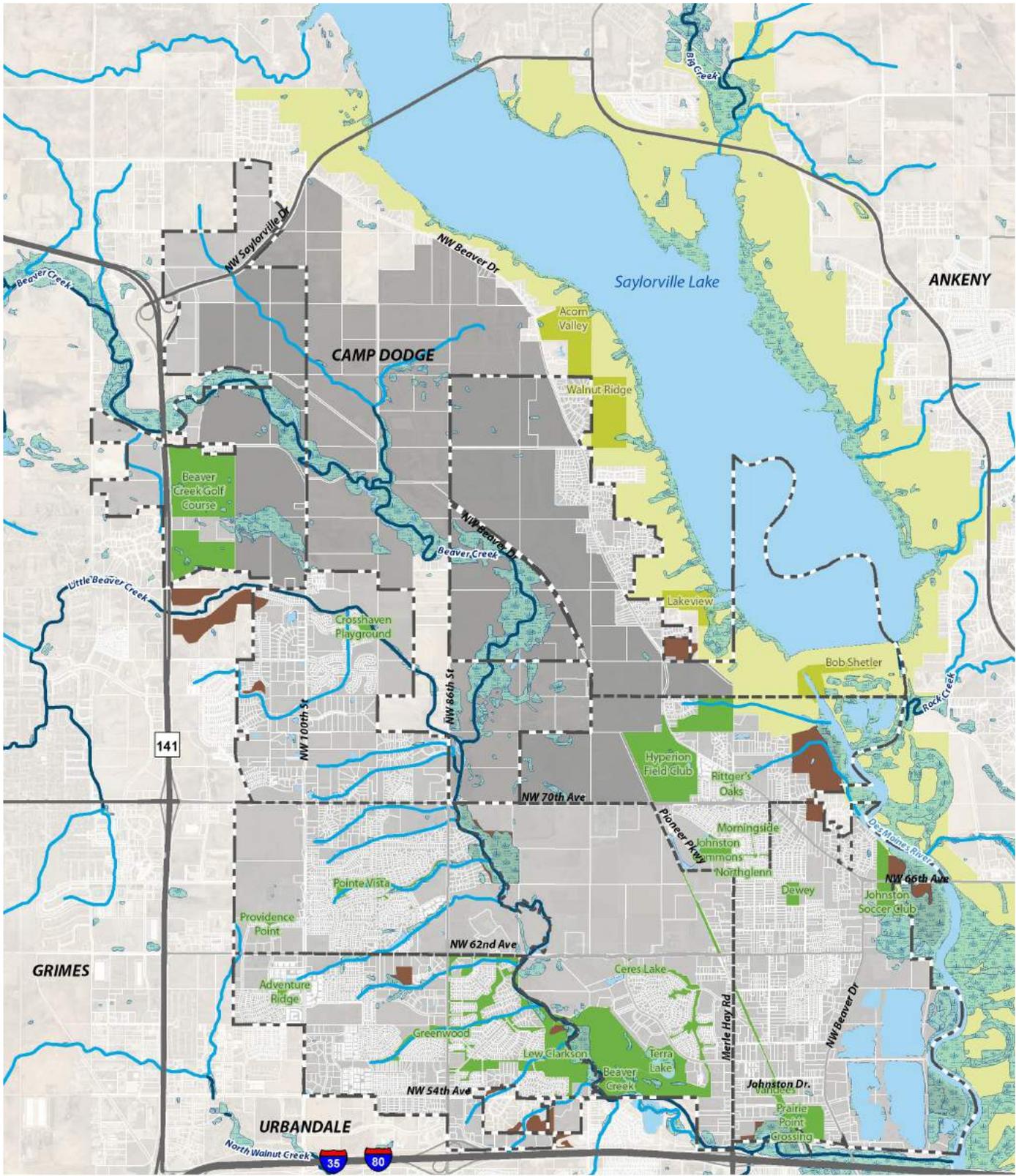


Figure 4.3 Quality Open Spaces

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## CHAPTER 5

# LAND USE

## INTRODUCTION

Johnston’s Vision and Guiding Principles found in Chapter 2 provide the foundation for the comprehensive plan and specifically, the Land Use Plan. The Land Use Plan provides the framework for the future use of land. It seeks to reinforce desirable land use patterns, identify places where change is needed, and it guides the location and form of future growth.

The Guiding Principles call for Johnston to take a “proactive position on future growth”. Proactively addressing future growth continues the approach that Johnston has taken over the past three decades. The Land Use Plan outlined in this chapter focuses on community growth over the next two decades, from now through 2040.

Johnston’s Land Use Plan was shaped by a number of factors including:

- » Vision and Guiding Principles described in Chapter 2.
- » Existing Community Context found in Chapter 3.
- » Community input gathered through community meetings, workshops and surveys.
- » Community and Stakeholder input and direction of the process.
- » Review and feedback from the City Council and Planning and Zoning Commission.
- » A careful examination and analysis of the physical landscape in and around Johnston.



## ORGANIZATION OF THE LAND USE PLAN:



The Land Use Plan outlined in this chapter includes the following:

- » Existing Land Use summarizes Johnston's existing land use pattern. It provides a breakdown of acreage by land use categories. It also looks at the important role of open space in Johnston and provides commentary on the challenges and opportunities created by some of Johnston's larger land users.
- » Future Land Use Map discusses the characteristics of each land use type and includes corresponding Policies and Implementation Strategies.
- » Future Land Use Categories provides general descriptions of the categories that are being used in the Future Land Use Plan.
- » Future Land Use Map shows the land uses assigned to each parcel of land. It is the basis for establishing subsequent zoning district boundaries and regulatory tools.
- » Focus Areas provide a more detailed discussion of the characteristics and plans for specific areas of the community. The focus areas were identified based on planning issues that have arisen since completion of the 2030 Comprehensive Plan as well as issues that were identified during the discovery portion of this planning process.

## A HISTORY OF RAPID GROWTH

Johnston's last comprehensive plan was completed in 2010. Since that time, the city has grown from a population of approximately 17,000 to almost 22,000, placing Johnston in the top 5 growing communities in the Des Moines Metropolitan Area. Employment growth has surged as well with the addition of new office and retail uses. Hometown business Corteva Agriscience, formerly Pioneer Hi-Bred International, Inc., continues to expand its operations in Johnston.

Since 2010, primarily new growth areas have been west of NW 86th Street and north of NW 70th Avenue, and a new high school was constructed with modern facilities and expansion potential. While the majority of new growth has occurred on the west side, growth on the east side has been significant as well, where new residential neighborhoods have been created on either side of NW 62nd Avenue. Residential growth has also occurred along NW Beaver Drive lying between Camp Dodge and Saylorville Lake.

In the last decade, the City has seen an increase in demand and thus construction of higher density multi-family units. This growth is a trend not unique to Johnston, as the millennial generation began entering the housing market and the baby boomer generation began downsizing. Both of these trends generally look for lower maintenance and less permanent housing options afforded by multi-family housing developments that are usually rental.

HOUSING GROWTH (NEW PERMITS AS A PERCENT OF TOTAL)			
DECADE	MULTI-FAMILY	TOWNHOME	SINGLE FAMILY
1990	12%	14%	74%
2000	20%	20%	61%
2010	52%	9%	39%

TABLE 5.1 HOUSING GROWTH 2010-2018

Will Johnston’s growth over the next twenty years match that of the past two or three decades? Indicators suggest that the city is likely to continue to see significant growth over the next 20 years, however, perhaps at a slightly less rapid pace and perhaps with a different shift in housing type as the multi-family housing market catches up in supply to that of other forms of housing. The city’s growth rate will ultimately be influenced by the economy, the desires of local land owners and developers and the city’s ability to extend municipal services to accommodate future growth. Multi-family housing growth will also depend on the ability of lower intensity uses and aging uses to redevelop. Generally, multi-family housing development is best suited to locations that already are developed and have a ‘place’ established. With higher density development, redevelopment and revitalization is more likely to occur with less public resources. Depending on these factors, the city could see a population growth of 15,000 to 20,000 by the year 2040.

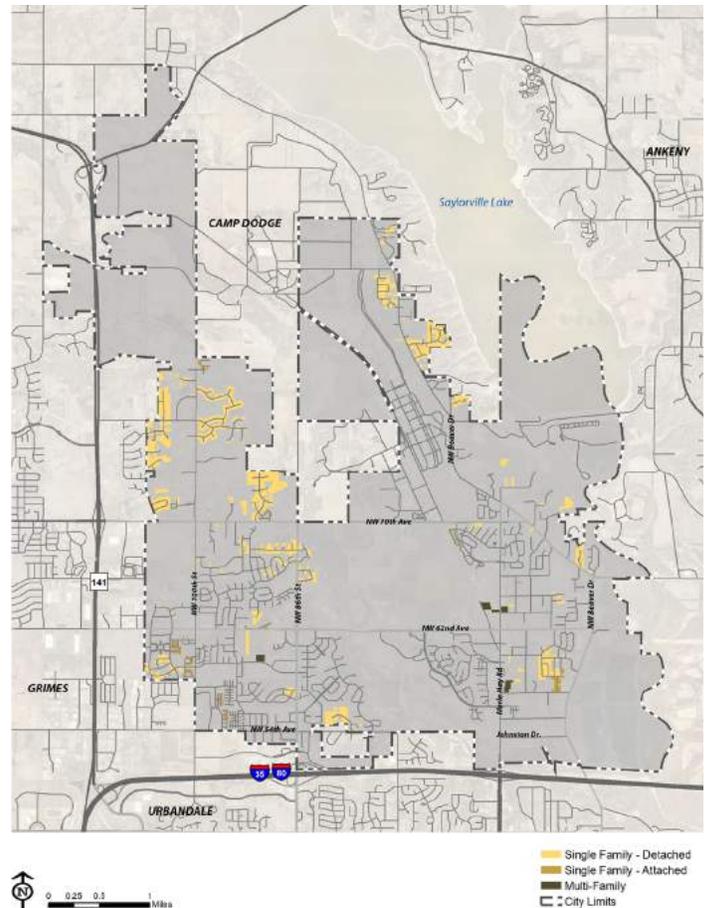
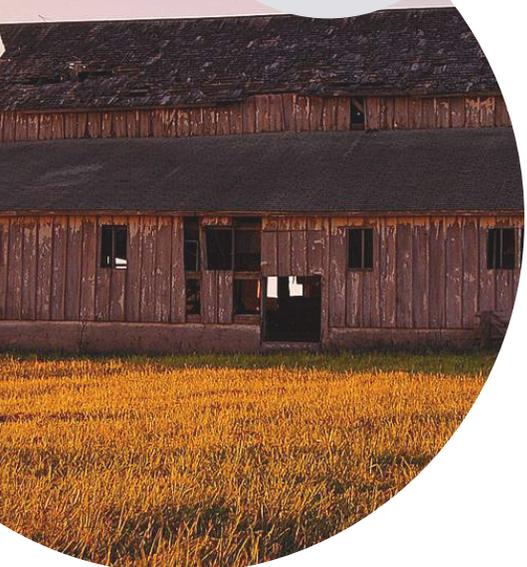


Figure 5.1 Residential Development from 2010-Current





## EXISTING LAND USE

To some degree, Johnston is landlocked with the presence of Saylorville Lake, Interstate 35/80, Camp Dodge and the Des Moines River. These features have influenced development patterns, infrastructure, and the transportation network; but they continue to serve as assets to the community. Johnston’s built environment has embraced these assets and they are reflected in the development patterns that exist today. Land area along Highway 141 and north of Saylorville Drive remains a logical extension of the City limits due to the ability to provide infrastructure systems to unincorporated areas of Polk County.

EXISTING LAND USE (2018)		
EXISTING LAND USE	ACRES	% OF TOTAL
Single Family Residential	3,408	26%
Multi-Family Residential	266	2%
Commercial/Office/Industry	1,495	11%
Parks & Open Space	371	3%
Public/Semi-Public	340	3%
Camp Dodge	2,564	19%
Army Corp..	1,459	11%
Utility	15	0%
ROW	1,034	8%
Agriculture	2,146	16%
Vacant	74	1%
Total	13,173	100%

TABLE 5.2 EXISTING LAND USE

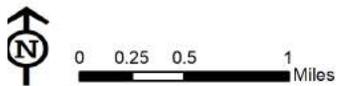
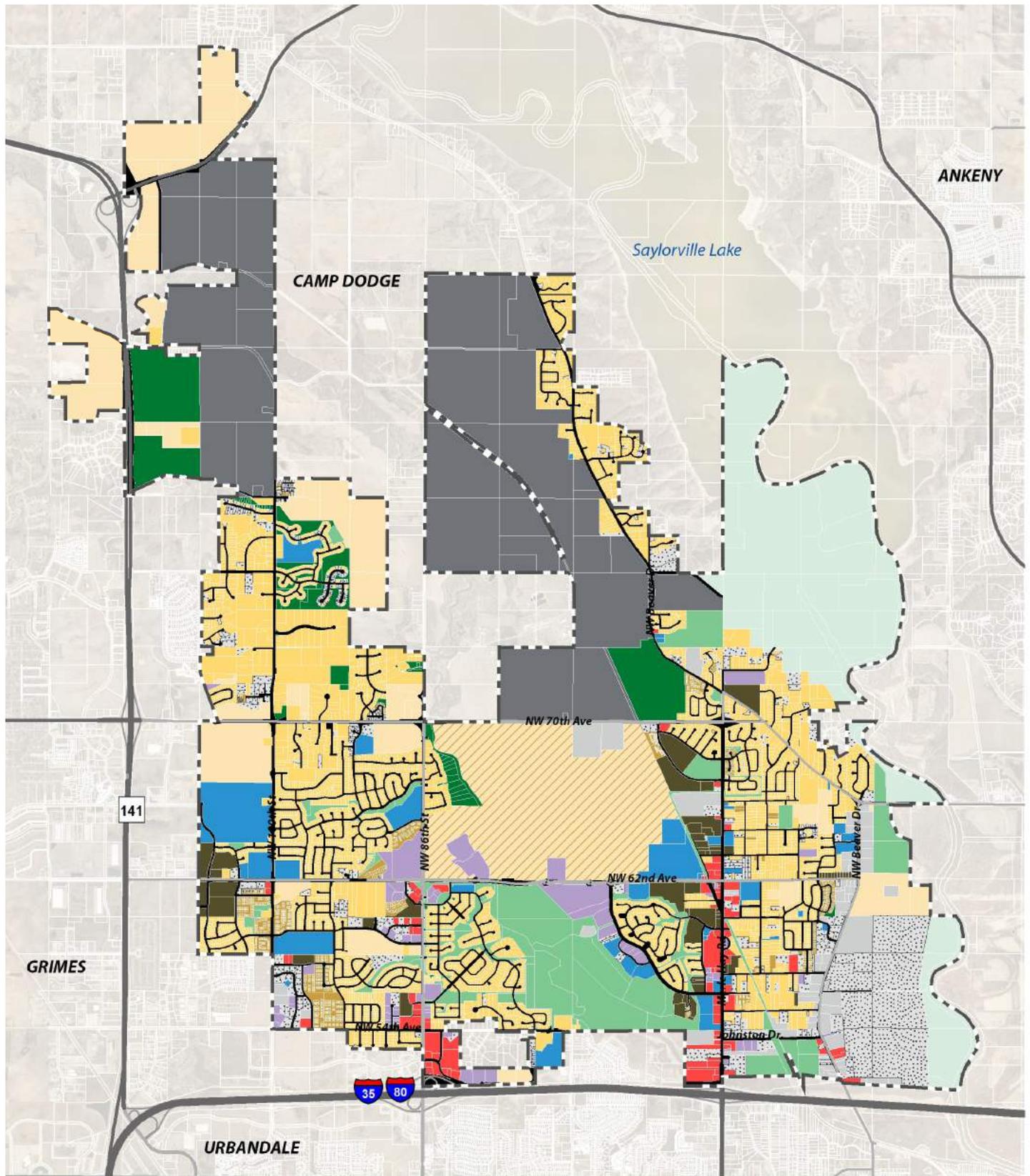


Figure 5.2 Existing Land Use 2018



### **Agricultural Uses**

Agricultural uses still make up a significant portion of Johnston's land area. Agricultural land uses are located on the western edge of town and north of NW 62nd Avenue. A significant area shown as agricultural today is owned by Corteva Agriscience (formerly Pioneer Hi-Bred International, Inc.) and used as part of their corporate crop research.



### **Residential Uses**

Single-family residential uses make up the single largest land use category in Johnston (see Figure 5.3). This development pattern primarily evolved since 1980. Between 1980 and 2017, over 80% of Johnston's single-family homes were built (see Figure 5.4). The remaining housing stock was primarily built between 1940 and 1980.

Housing that was before 1980 is largely located east of Merle Hay Road. Newer housing has occurred in this area, but larger residential developments have occurred on the western edge.

Multi-family and high density residential uses also have a presence in Johnston and typically consist of duplexes, townhomes, and multi-story apartment or condo buildings (see Figure 5.5). A majority of these uses were built in the last decade and are located generally north of NW 62nd Avenue along Merle Hay Road.



### **Commercial, Office & Industrial Uses**

Johnston offers a variety of employment opportunities and is home to Corteva Agriscience, John Deere Financial, Camp Dodge, and Iowa PBS. These industries have a large presence in Johnston, but are not the only sources of employment. Commercial and industrial uses include shopping centers, restaurants, hotels, a movie theater, asphalt plants, and warehousing (see Figure 5.6). A number of these uses are located along Merle Hay Road and NW 86th Street, both of which serve as commercial corridors connecting to Interstate 35/80 and the greater Des Moines region.



### **Parks, Greenways and Open Space**

Johnston has embraced its natural environment. A large percentage of the land in Johnston is dedicated to open space, parks, greenways, and open water bodies. Water bodies such as Beaver Creek have been incorporated into development patterns by preserving land around the creek to form greenways and connecting open spaces. This is clearly seen in the development patterns west of the Beaver Creek Natural Resource Area. The City supports collaboration with developers and Polk County Conservation to preserve open space areas and protect sensitive natural resources such as floodplains, creeks, and wetlands.

The Des Moines River and Saylorville Lake are unique Johnston assets. Land abutting the Des Moines River has been preserved by the city or is currently owned by the Army Corps of Engineers. These natural areas offer the community recreational amenities, aesthetic value, and a refuge for wildlife.

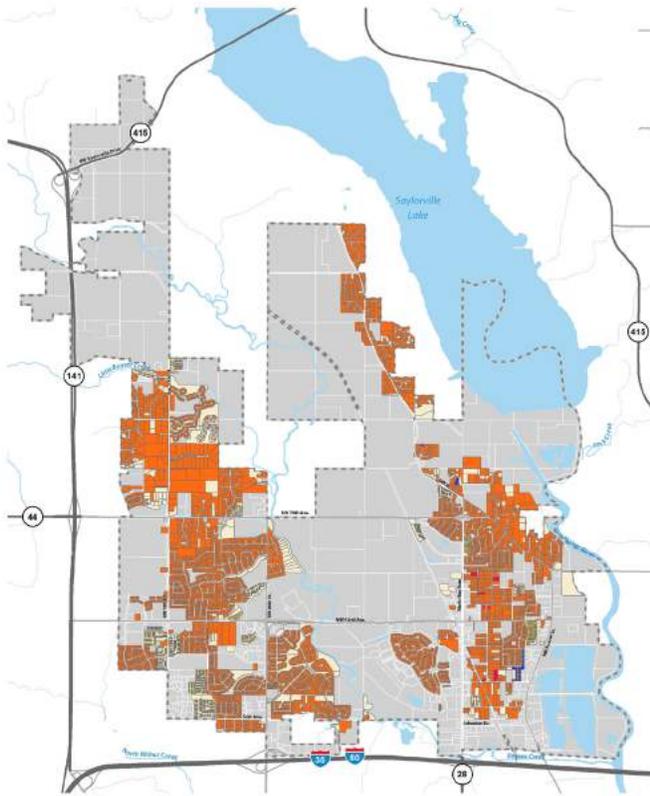


Figure 5.3 Residential Uses

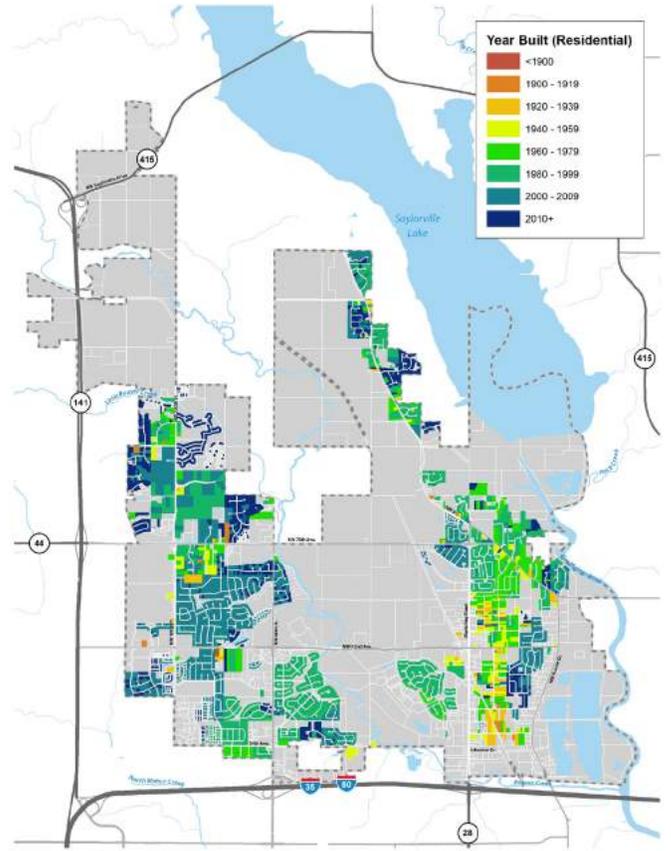


Figure 5.4 Year Built

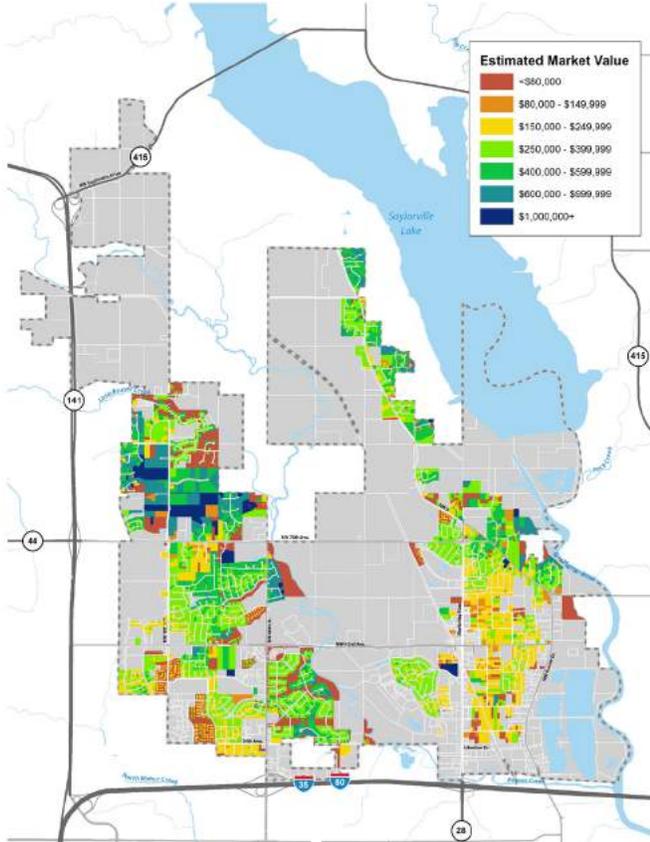


Figure 5.5 Market Value

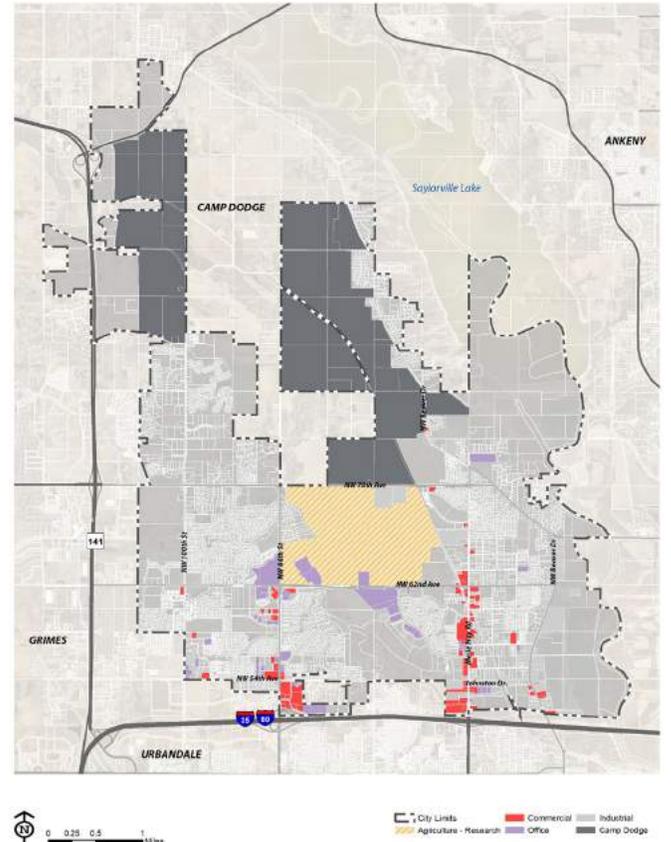


Figure 5.6 Commercial Uses



### Assets and Barriers

Johnston’s land use pattern has been and will continue to be influenced by a number of factors outside of the city’s direct control. The location of Camp Dodge, Beaver Creek, and large property holdings by Corteva Agriscience (see Figure 5.7), have created divisions in Johnston; Beaver creek creating an east/west divide and Corteva Agriscience and Camp Dodge creating a north/south divide. The largest single barrier is Camp Dodge which encompasses approximately 2,500 acres of Johnston’s land area and extends outside the city limits totaling approximately 4,775 acres in size. The majority of the Camp Dodge property is used to train military personal with some lands leased for agricultural uses. Despite its intense use, the Camp contains areas that are rich in natural amenities. Continued acquisitions by Camp Dodge, in conjunction with Little Beaver Creek, creates a bit of a north/south divide within the community.

Corteva Agriscience owns approximately 780 acres south of Camp Dodge. Their property holdings extend from Camp Dodge to NW 62nd Avenue, and their offices and greenhouses are set among an extensive range of growing fields. Preservation of the agricultural fields is vital to Corteva Agriscience’s operations since they continue to monitor long-term growing conditions as part of their research efforts.

Beaver Creek runs along the western side of both Camp Dodge and Corteva Agriscience, along NW 86th Street and Foxboro Road meandering southeast through the community. The waterway and its associated floodplain areas further accentuate the east/west divide.

The combination of Beaver Creek, Camp Dodge, and Corteva Agriscience’s operations establishes a permanent green swath through the city of Johnston that creates a disconnect between the eastern, western, and northern portions of the community. Three major transportation corridors help bridge this divide.

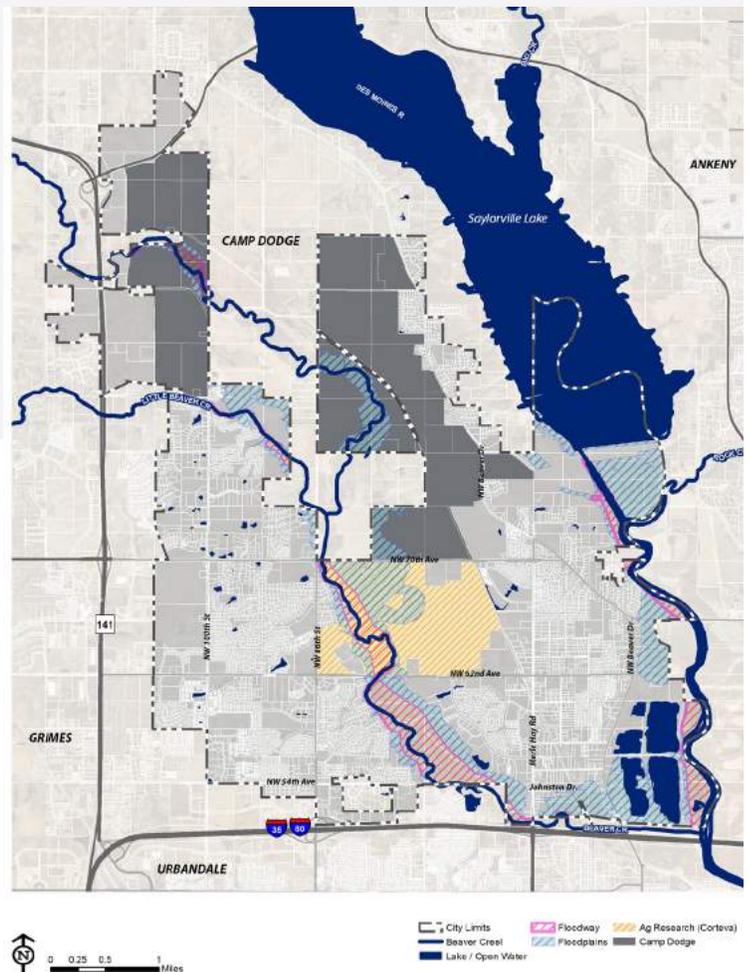
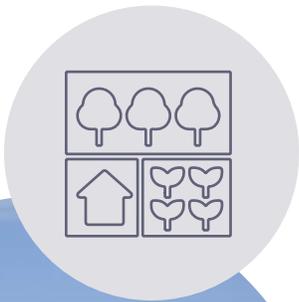


Figure 5.7 Assets and Barriers

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## FUTURE LAND USE PLAN

The following is a collection of goals, policies, and general implementation initiatives. These lists build off of the 2030 comprehensive plan by attempting to reduce duplication (although some still exists across categories), eliminating actions that have been completed or are no longer relevant, and incorporating new directions based on community input or best practices.

### Land Use Goals

1. Have a land use pattern that accommodates diversity and choice for how Johnston's existing and future residents live, work, play, and shop.
2. Ensure an adequate supply of land to support a diverse population base that in turn supports a robust economic environment.
3. Ensure adequate land is planned to manage a sustainable and responsible growth pattern.
4. Ensure future growth has adequate municipal infrastructure and transportation connectivity.
5. Preserve sensitive natural resources, habitat, and greenway corridors.
6. Provide for a transition of land uses where conflicting characteristics exist.
7. Maintain the rural character of existing estate housing areas.

## General Land Use Policies

1. Accommodate infill development that is consistent with existing development patterns and densities where existing topography and soils are appropriate.
2. Allow infill development in a manner that protects the character of existing residential neighborhoods.
3. Ensure that new development areas are compatible in size and scale with existing, adjacent neighborhoods.
4. Continue to design and fund sanitary sewer service and other capital improvements in planned growth areas. New development shall be served by municipal sanitary sewer and water systems.
5. Discourage non-residential and/or non-local traffic on local streets.
6. Maintain a circulation system that connects neighborhood areas while emphasizing a system of local and collector roadways to accommodate vehicular movements.
7. Encourage the incorporation of natural features such as woodlands, steep slopes, floodplain areas, and wetlands as connecting greenway links between neighborhood areas.
8. Require sidewalks and trails that provide pedestrian links to the community-wide trail system and the open space/greenway network.
9. Encourage consistent design standards that serve as a framework for both public and private improvements addressing streets, lighting, landscaping, building materials and building placement.
10. Require future development to set aside adequate land to meet the public service needs of the community (utilities, road rights of way, park and open space, etc).
11. Preserve land to accommodate future public service facility needs such as EMS, Police, Fire, and Public Works.
12. Support agricultural uses with an agricultural land use pattern where active agriculture is a viable economic enterprise or a vital part of the Johnston economy.
13. Allow agricultural uses on the edge of the community as a holding pattern until such time as urban services are extended to enable future development.



## FUTURE LAND USE:

The following methodologies guide the creation of the goals, policies, and implementation initiatives:

### GOALS:

Written as statements and expressions of desired outcomes ... "to which planned effort is directed." Goals should support one or more guiding principles – if it is an important goal and there is no logical supporting guiding principle – maybe consider a guiding principle revision. Consideration should be given to how it is measured. Metric may be subjective or objective (quantifiable).

### POLICIES:

Written as passive guidelines, general rules, or explicit rules in some cases with heavy use of verbs such as: support, encourage, prohibit, protect, preserve, establish, require, etc.

### IMPLEMENTATION INITIATIVES:

Written as action statements that work towards achieving a defined outcome. They may have a definitive start and stopping point; or they may be on-going. They may be physical capital improvements or physical plans or they maybe programs. Implementation Initiatives should respond to a specific goal. They require a specified set of resources (human, capital, and/or financial) that should be identified to some degree.



*Park in residential neighborhood*



*Residential sidewalks and trail connections*



*Aerial of an existing neighborhood*



*Neighborhood entry monument sign*

## Residential Land Use Policies

1. Support development patterns that create a quality living environment in harmony with the natural environment and establish connected patches and corridors of open space.
2. Encourage the placement of housing units in a manner that preserves significant natural resources through the use of cluster practices and other mechanisms.
3. Limit housing to predominantly single-family detached homes as infill in existing rural estate areas and allow for accessory dwelling units where adequate sewer and water services can accommodate such uses.
4. Allow accessory structures within existing rural estate areas consistent with rural residential and hobby farm principal uses.
5. Plan for a variety of housing forms and patterns in areas served by municipal sewer and water to support the diverse needs of the residential population.
6. Prohibit commercial or industrial uses in residential areas including home occupations that involve exterior storage.
7. Encourage residential densities that are related to the future capacity of utility systems and physical site characteristics and limitations.
8. Encourage master planned neighborhoods with amenities that establish a sense of identity that helps promote long-term value stability.
9. Require urban services for all new residential developments including sanitary sewer, municipal water, and storm sewer systems.
10. Encourage subdivision design that allows for a transitioning in density patterns and lot sizes when development is adjacent to existing rural residential or large estate lots.
11. Provide appropriate buffers to allow density transitions between incompatible uses or to allow for the integration of alternative housing types into existing neighborhoods.
12. Promote programs and enforce codes that encourage or require the maintenance of the existing housing stock to encourage rehabilitation of deteriorating housing.
13. Reflect the history and character of existing residential neighborhoods in future developments within those neighborhoods.
14. Ensure multi-family higher density housing developments integrate open space areas for recreation and gathering as part of individual developments.
15. Provide appropriate land use transitions at the edges of residential development areas to buffer noise and screen undesirable views from abutting roadways and incompatible land uses.
16. Require quality building materials for housing development that minimizes ongoing maintenance.



*Examples of non-residential establishments in Johnston*

**Non-Residential (commercial, industrial, institutional) Land Use Policies**

1. Provide commercial services convenient to neighborhood areas. Neighborhood scale commercial nodes should generally be less than 10 acres in size and have a greater emphasis on pedestrian systems and walkability.
2. Provide neighborhood commercial areas to supply convenience goods and services principally for adjoining neighborhoods.
3. Provide community commercial areas to supply goods and services that appeal to the community-at-large. Community commercial areas should typically be greater than 10 acres of contiguous land area.
4. Provide convenient shopping nodes that offer goods and services for visitors to the community including recreational traffic associated with Saylorville Lake or activities at Camp Dodge.
5. Encourage commercial developments to locate in areas with logical access and good visibility to major collector and arterial streets.
6. Encourage clustering of commercial uses as opposed to strip commercial development lining major roadways.
7. Provide safe and convenient pedestrian access within and connecting to commercial areas.
8. Require high quality, durable, and aesthetically appropriate building materials in commercial areas.
9. Create areas of office development to provide employment opportunities in the community and high-quality commercial land uses.
10. Create distinct office areas with direct access to the transportation network to minimize impacts on existing and future residential areas. In some cases, the designation of property as office may prolong the absorption rate compared to other possible land use designations.
11. Connect office areas to the community-wide trail network to encourage pedestrian movement from residential areas to employment locations.
12. Provide opportunities for new industrial development and expanded employment opportunities in Johnston.
13. Provide attractive, planned environments as means to induce employers to locate within the City.
14. Provide public services and infrastructure to encourage expansion and support the needs of existing and prospective employers.
15. Require that all storage be enclosed within buildings or screened from view from roadways.
16. Provide opportunities for new industrial development, expansion of existing uses, and the redevelopment of existing industrial uses to expand employment opportunities and to serve existing businesses in the community.
17. Continue to improve the appearance of existing industrial areas thereby improving the community's image and development potential.
18. Require appropriate land use transitions at the edges of residential neighborhoods through the regulation of setbacks, orientation of building entries and garages, and the placement of screening, buffering, and fencing.



Example of mixed use retail and residential



Bike facilities along local streets



Walnut Ridge Recreation Area entrance



Entrance to Camp Dodge

### Mixed-Use Land Use Policies

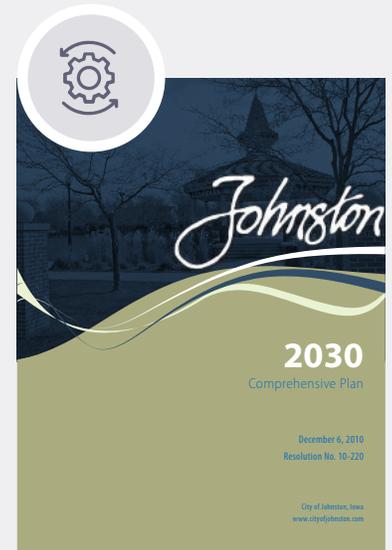
1. Limit commercial uses within mixed use developments to those that provide goods and services at a community or neighborhood scale.
2. Ensure a diverse mix of commercial, residential, public, and related uses across a site in either a vertical or horizontal pattern of development. Supporting a mix of uses limits the market exposure to downturns in the economy or consumer preferences (economic resilience.)
3. Encourage a vertical mix of uses with street level commercial uses that activate the street and residential or office uses on upper levels.
4. Promote a highly pedestrian oriented design pattern inclusive of street level amenities, bike facilities, clear wayfinding signage, and active street level uses.
5. Leverage opportunities for shared parking and where possible encourage parking under ground, within structures, or hidden behind buildings.

### Other Land Use Policies (Camp Dodge, Army Corp./Saylorville, Parks, Open Spaces, and Utilities)

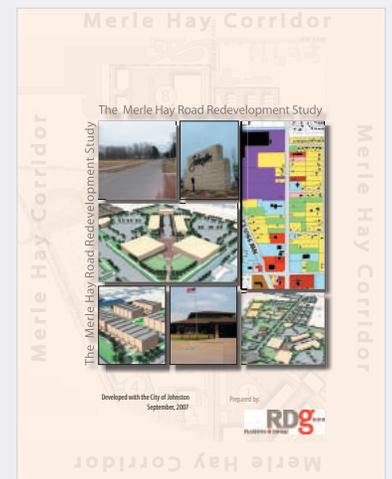
1. As part of the development process, require the identification of natural resources and environmentally sensitive lands and the integration of such lands into a connected greenway corridor where such opportunities exist.
2. Work collaboratively with adjoining communities and Camp Dodge to encourage compatible land use development.
3. Support continued operations at Camp Dodge. Maintain land use and zoning practices on surrounding land parcels that recognizes the uses of the Camp Dodge property including "buyer beware" notification.
4. Cooperate with Camp Dodge in coordinating required infrastructure to serve Camp operations including the roadway network and utility systems.
5. Collaborate with the Army Corps to ensure that existing recreational resources are operated in perpetuity.
6. Collaborate with the Army Corps on infrastructure improvements that benefit both parties.
7. Collaborate with the Johnston School District to ensure adequate land for school facilities.
8. Interconnect the city's most important public facilities including schools via open space corridors and trails.

## Implementation Actions

1. Work with Polk County to encourage preservation of agricultural lands surrounding the City of Johnston by exercising the City of Johnston's extraterritorial review authority to discourage or prevent premature development in planned growth areas.
2. Zoning Code Update
  - a. Update the zoning map to align with the new land use patterns and supporting policies, and to eliminate out dated or unneeded Planned Unit Developments (PUDs).
  - b. Review commercial zoning districts to ensure performance standards address adequate transitioning, screening, landscaping standards, lighting, and walkability provisions.
  - c. Review and update parking requirements to align with current parking demands, trends, and best practices.
  - d. Review commercial and multi-family residential districts to incorporate bicycle facilities.
  - e. Revisit the mixed use center zoning district:
    - i. Collaborate with the development, lending, and contractor community to understand the strengths and weaknesses of the district.
    - ii. Consider modifications that remove barriers and simplify standards.
    - iii. Consider two mixed use districts that distinguish between a neighborhood scale mixed use and the Merle Hay Road Corridor mixed use.
    - iv. Incorporate general assumptions regarding the desired mix of uses.
  - f. Incorporate recommendations from the proposed Recreational Amenities Report to ensure multi-family residential development projects have adequate gathering and recreational space for residents.
3. Continue to facilitate development and redevelopment in areas along Merle Hay Road consistent with the Merle Hay Road Redevelopment Plan and the future land use plan.
4. Work with property owners and other governmental jurisdictions in formulating and implementing a plan for the re-use of the gravel pit areas in eastern Johnston along the Des Moines River.



Johnston 2030 Comprehensive Plan



Merle Hay Road Master Plan, 2007

# Future Land Use Map

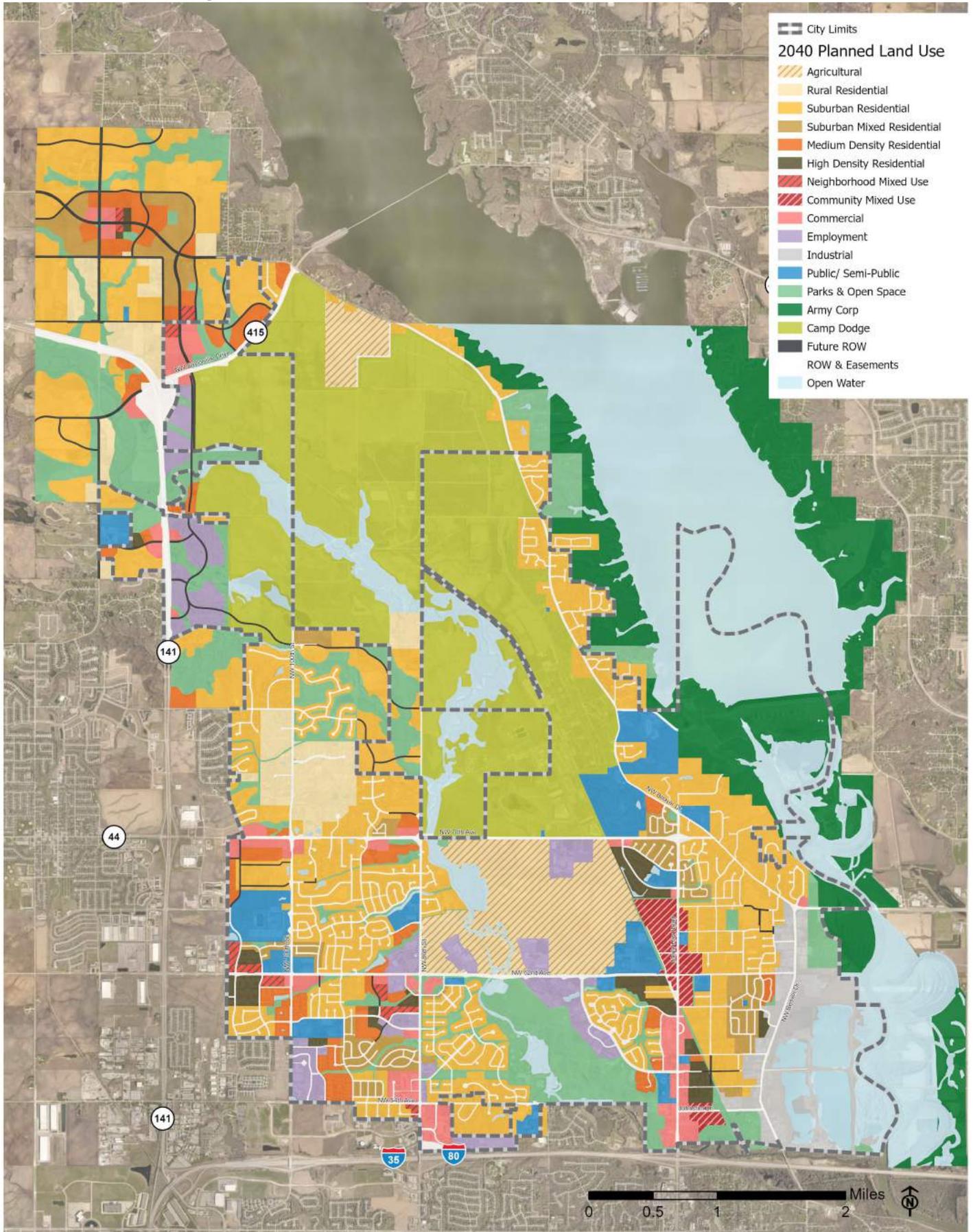


Figure 5.8 Future Land Use Plan

## Future Land Use Categories

The Land Use Plan contains a variety of categories to address the full range of land use types found in Johnston today as well as those envisioned to occur in the future. The land use categories include:

### Agricultural

This land use is intended to offer a rural setting and help protect the City's working lands and natural resources as well as support agriculture research.

### Rural Residential

Includes single-family detached housings at a density not to exceed two units per acre. Neighborhood areas classified as RR will typically consist of estate-type housing on lots generally 0.5 acres or greater in size. Uses typically have private on-site septic and well systems prior to the extension of municipal water and sanitary sewer. Limited agriculture and/or hobby farm uses may occur in land designated as RR.

### Suburban Residential

Includes housing with densities that generally range from two to four units per acre. Neighborhood areas classified as SR will typically be predominately single-family detached units on lots generally ranging from 0.25 acres to 0.5 acres in size. SR areas includes the potential for some single-family bi-attached units and other lower intensity attached housing options.

### Suburban Mixed Residential

Includes housing at densities that generally range from three to seven units per acre. Neighborhood areas classified as SMR will typically include a mixture of single-family detached units on lots generally 0.15 acres to 0.25 acres in size. SMR areas include the potential for single-family bi-attached units, townhouses, and accessory dwelling units.

### Medium Density Residential

Includes housing at densities that generally range from six to ten units per acre. Neighborhood areas classified as MDR will typically include single-family detached units on lots generally 0.25 acres or less in size, single-family bi-attached units, townhouses, and other multi-family housing options at a scale to blend into single-family neighborhoods.



*Agriculture*



*Rural residential*



*Suburban residential*



*Suburban mixed residential*



*Medium density residential*



High density residential



Neighborhood mixed use



Community mixed use



Commercial

### High Density Residential

Includes housing at densities exceeding ten units per acre. Neighborhood areas classified as HDR will typically include townhouses, row houses, apartments, condominium buildings, and other high-intensity multi-family housing options. Larger scale buildings will typically be located along major transportation corridors or in close proximity to commercial districts.

### Neighborhood Mixed Use

These nodes will generally be less than 10 acres in size and are assumed to have a street level land use mix of approximately 75% residential and 25% commercial (retail, services, offices). The orientation of uses may be vertical or horizontal in configuration. Where vertical mixed uses exist, the street level uses should be active uses that enliven the street level and make for a safe and attractive pedestrian environment at the street. Use of stoops, patios, and plazas at street level are emphasized. Residential densities are assumed to exceed 10 units per acre in this category. Parking is provided by a mix of on street and off-street parking facilities. Open space is limited to private realm areas with park areas provided in nearby neighborhood parks or community parks.

### Community Mixed Use

These nodes will generally be greater than 10 acres in size and are assumed to have a street level land use mix of approximately 60% commercial (retail, services, offices) and 40% residential. As with neighborhood nodes, the orientation may be vertical or horizontal. Where vertical mixed uses exist, the street level uses should be active uses that enliven the street level and make for a safe and attractive pedestrian environment at the street. Residential uses should be oriented as a transition to adjacent lower density residential uses. Residential densities are assumed to exceed 16 units per acre in this category. Parking is provided primarily via off street parking facilities. As these areas are more intense with a broad mix of activity, it is expected that these nodes would include gathering spaces in the form of plaza's or other public/semi-public areas that may be public or privately owned.

### Commercial

Includes retail and service commercial land uses that serve neighborhood, community and regional markets. Commercial areas are located to provide convenient access for customers via multiple modes of transportation. Community and regional commercial uses will typically be in proximity to major transportation corridors, and will typically create higher volumes of traffic. Neighborhood commercial uses will typically be in close proximity to housing.

### **Business/ Employment**

Includes uses that place a special emphasis on job retention and creation such as professional offices and services (medical, law, real estate, and financial businesses). Employment areas also include lots or parcels containing showrooms, warehousing, and light industrial uses with associated office functions. Larger business park developments are usually designed in a unified manner and feature landscaped open areas, consistent lighting, shared employee amenities, and entry monumentation.

### **Industrial**

The industrial category includes lots or parcels containing light manufacturing, goods movement, wholesale trade, storage, and similar uses. Industrial land uses differ from business/employment uses, generally due to scale and an emphasis on individual industrial sites rather than larger scale, planned office/industrial environments.

### **Public/Semi-public**

Public and quasi-public uses in Johnston include churches, schools, cemeteries, golf courses, local government facilities, and other parcels that are owned by a public or quasi-public entity. This category does not include parks and recreation areas.

### **Parks and Open Space**

The park and open space category includes lands generally owned by the city or where opportunities exist to coordinate with land owners during the development process to provide linkages and connections to or as part of a connected greenway corridor. Parks and open space are discussed in detail in the Parks and Recreation chapter of this plan.

### **Army Corps**

When Saylorville Lake was established, the Army Corps of Engineers acquired a substantial amount of land in and around Johnston. Property designated as Army Corps primarily includes recreational areas and open space on the periphery of Saylorville Lake.

### **Camp Dodge**

Camp Dodge is the single largest land use category on the future land use plan map. Camp Dodge has a major impact on the City of Johnston, both as a land use type and its benefits including employment opportunities and preservation of an expansive open space system with pockets of unique natural resources.



*Business/ employment*



*Industrial*



*Public / semi-public*



*Parks and open space*



*Army corps*



*Camp dodge*

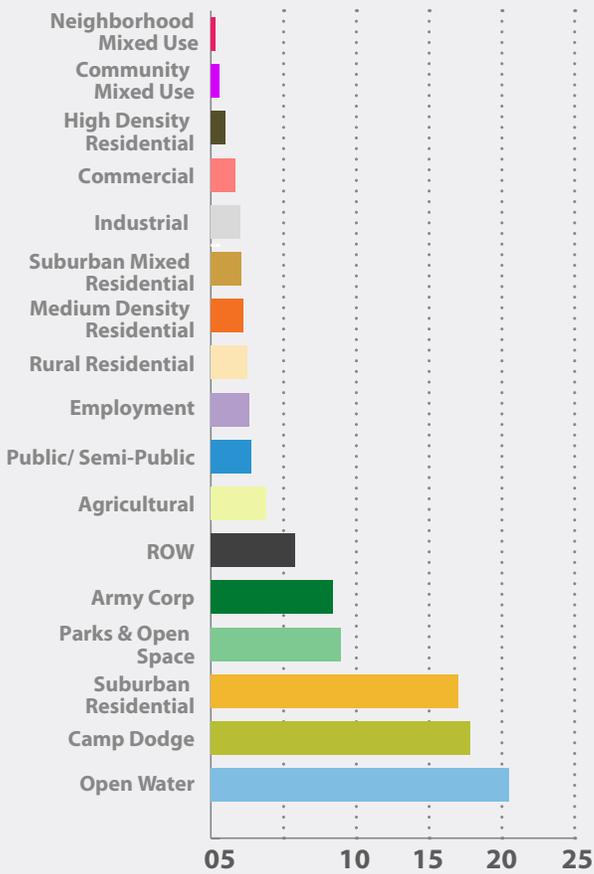


Figure 5.9 Future Land Use

### Land Use Plan Distribution

Figure 5.8 is Johnston’s Future Land Use Plan. The Future Land Use Plan depicts a pattern that is expected to evolve in and around the City of Johnston over the next twenty years. Future land use designations are the product of both past, present and anticipated future influences. The Future Land Use Plan is intended to serve as a guide for land use decisions and it provides the basis for establishing and modifying zoning district boundaries. Additionally, it is intended to help direct public investments in infrastructure including roads and utility system expansions. Any changes to the Future Land Use Plan map should only occur after careful analysis and examination against the broader community vision, guiding principles, and policies found within all of the sections of this plan.

COMPOSITE PLANNED LAND USE IN PLANNING AREA		
PLANNED LAND USE	GROSS ACRES	% OF PLANNING AREA
Neighborhood Mixed Use	76.6	0.3%
Community Mixed Use	146.6	0.6%
High Density Residential	231.1	1.0%
Commercial	412.6	1.7%
Industrial	473.9	2.0%
Suburban Mixed Residential	512.9	2.1%
Medium Density Residential	518.8	2.2%
Rural Residential	588.8	2.5%
Employment	630.0	2.6%
Public/ Semi-Public	663.5	2.8%
Agricultural	911.1	3.8%
ROW	1,394.6	5.8%
Army Corp.	2,010.0	8.4%
Parks & Open Space	2,140.2	8.9%
Suburban Residential	4,088.1	17.0%
Camp Dodge	4,274.2	17.8%
Open Water	4,921.9	20.5%
Total	23,994.9	100.0%

TABLE 5.3 FUTURE LAND USE

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Image Source: JEDCO



Enhancements to the pedestrian environment are key considerations in the 2040 comprehensive plan

## FOCUS AREAS

The Thrive 2040 land use plan includes a number of areas where there is a change in the pattern and form of land use from the 2030 comprehensive plan. In some places, the change is subtle while others the change is more dramatic. Growth and land use shown beyond Johnston's corporate limits is prefaced with "Northwest Area" in its title. These areas will require annexation into the City of Johnston. Annexation has occurred in Johnston on a voluntary basis as property owners request to be annexed. Actions by some property owners require the City to then encourage other property owners to consider annexation to ensure logical and efficient utility and road way connections. The Thrive 2040 Plan does not contemplate involuntary annexation. Future extension and annexation will be development driven.

The following section highlights the areas within the community where land use change is most pronounced.

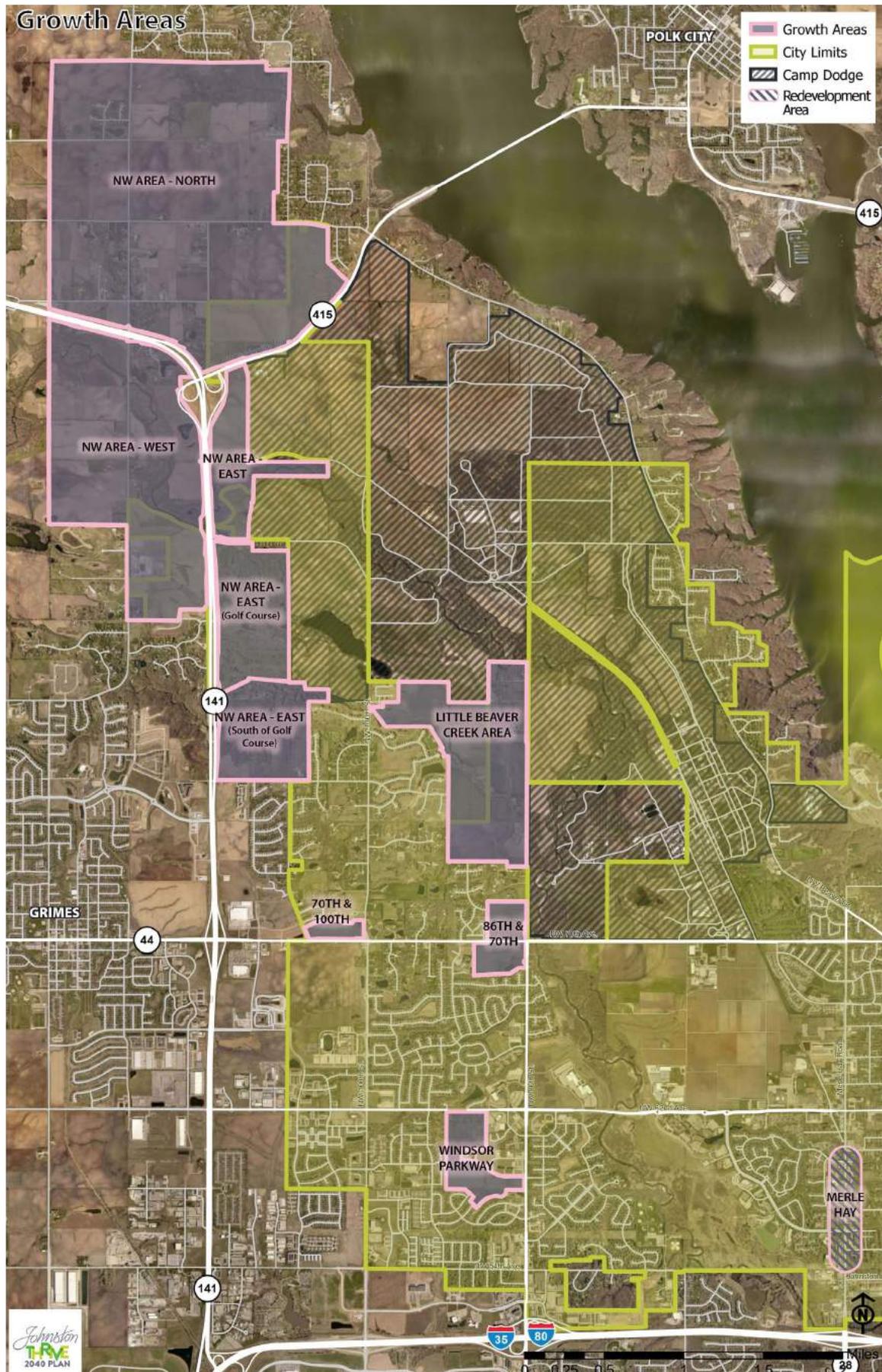


Figure 5.10 Growth Areas Diagram



### Northwest Area – North of Saylorville Drive (Highway 415)

There has always existed a recognition that the City of Johnston needs to plan for growth outside of its corporate limits. However, there were concerns expressed about future development encroachment and ‘involuntary’ annexation of property where owners do not want to develop in the near future. The challenge with planning for future growth is most often a timing and sequencing issue. Johnston is a desirable place to live and do business. The demand for growth will continue to happen and this will increase the need for municipal services to provide an environmentally sound and responsible growth pattern. The City of Johnston is best positioned to serve future growth in the northwest area north of Saylorville Drive. Since the 2030 Comprehensive Plan, the pressure and demand for growth on the edges of Johnston has reached this area.

Planning for growth in this area is not a new concept. Prior comprehensive plan updates explored in varying details how land uses might evolve and how sewer and water services could be extended to serve the area. Since the 2030 Comprehensive Plan was completed, the area has seen additional lands south of Saylorville Drive acquired by the Iowa National Guard for Camp Dodge, lessening land available for future development. Planning for improvements to Highway 141 continues. Rural residential development has continued in a very limited manner. All of these factors have helped shape the land use pattern for Thrive 2040.

The plan recognizes that some land owners desire to remain outside the city limits for the foreseeable future while others have expressed an interest to explore development possibilities under the right conditions. Annexation must occur in a logical manner with boundaries remaining contiguous where possible and based on the ability to provide transportation, sewer, and water infrastructure in a practical, cost effective, and sustainable manner. This further requires a collaborative approach between the City and property owners.

The proposed northwest area land use plan provides a framework and vision for how land use could evolve in this area. Key components are annotated on the diagram in Figure 5.12. The following principles are achieved with this plan direction.

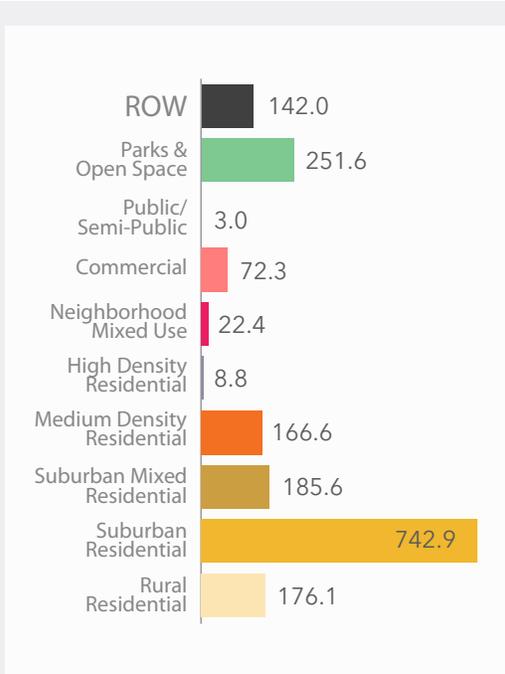


Figure 5.11 Northwest Area – North of Saylorville Drive Land Use Chart

- » The area provides major road corridors with connectivity to the existing transportation network.
- » A supporting network of roads help connect neighborhoods to the arterial roadway network.
- » A mix of land uses provide for neighborhood sustainability.
- » Density and diversity in land use supports a neighborhood node or center enabling creation of places to gather and create identity.
- » A variety of housing options enable residents to move through the housing life cycle, providing choice, affordability, and a diverse population base.
- » Greenway corridors that respect the landscape and offer opportunities for trail connection, recreation, and stormwater management.

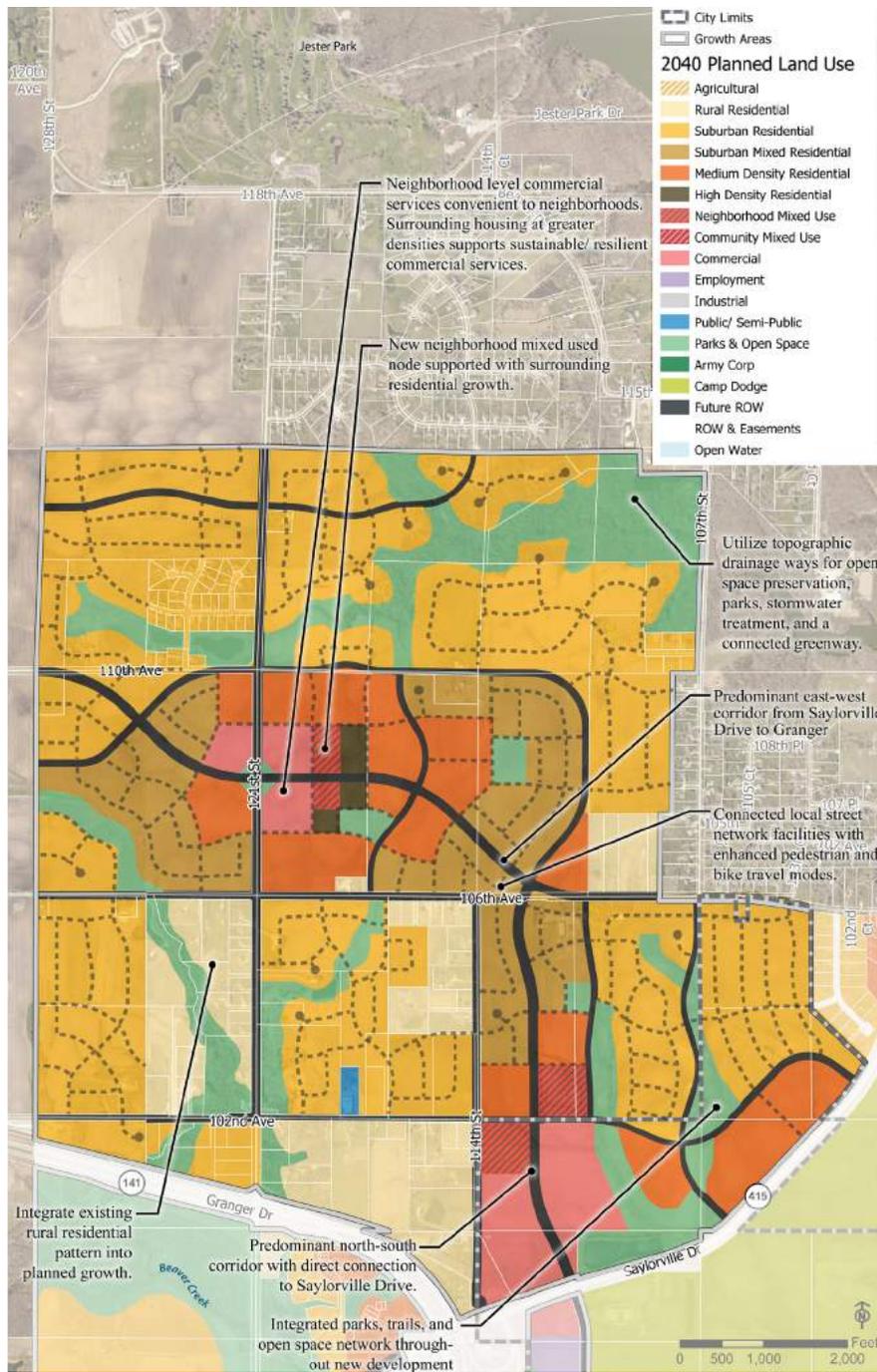


Figure 5.12 Northwest Growth Area - North to Saylorville Road



Diverse housing options



Diverse housing options



Neighborhood nodes or centers



Greenway corridors



### Northwest Area – West of Highway 141

Historically, Johnston has not planned for growth to occur west of Highway 141. However, voluntary annexation requests presented an opportunity for Johnston to explore the extension of utilities to an area that was not easily served by the City of Grimes. The land use pattern in this location extends a greenway corridor along Beaver Creek with opportunities to partner with Polk County Conservation to protect and preserve Beaver Creek. Concentrated areas of development are shown in locations where future access and highway visibility would suggest a more intense land use pattern. Other areas of existing low density residential are envisioned to fill in with a conservation-oriented development pattern respecting the abundance of lowlands and wetlands.

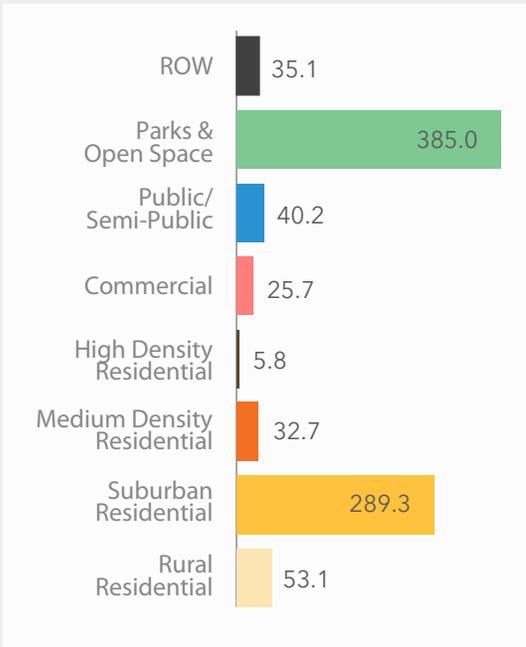


Figure 5.13 Northwest Area – West of Highway 141 Land Use Chart



Low density residential with respect to wetlands



Conservation-oriented development (Source: Hubbell)



Jester Park Nature Center

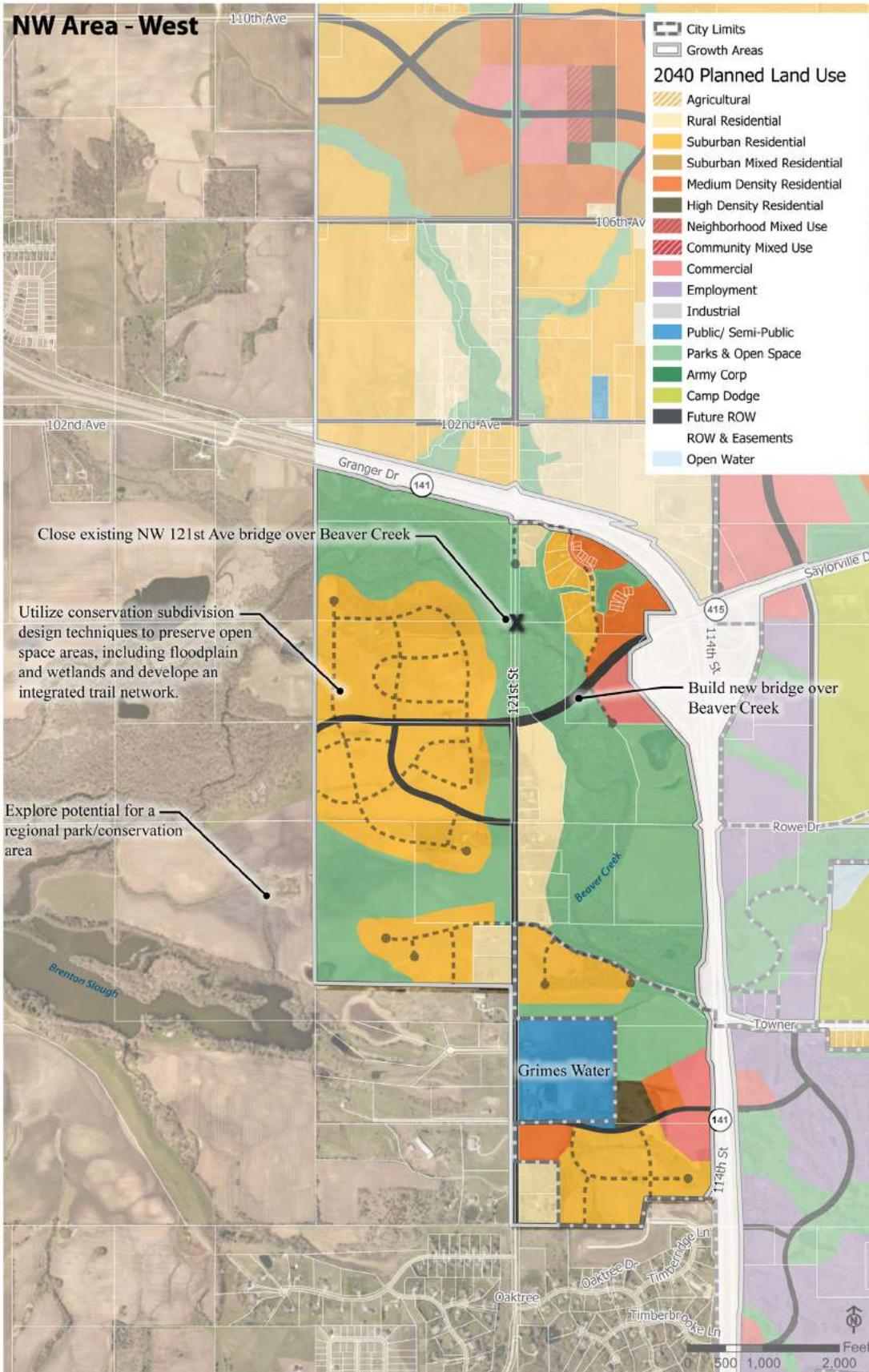


Figure 5.14 Northwest Area – West of Highway 141



### Northwest Area – East of Highway 141

The Northwest Area east of Highway 141 is characterized by lands currently occupied by the Beaver Creek Golf Club, the Beaver Creek and Little Beaver Creek corridors, and remnant lands stretching north to Syalorville Drive (west of Camp Dodge properties). Lands within this area are guided for employment related uses generally north of Little Beaver Creek with areas of moderate density residential adjacent to Little Beaver Creek. Small pockets of commercial uses provide opportunities to serve future employment uses in this area. Employment uses in this location take advantage of good access to Highway 141 and present a more compatible land use adjacent to Camp Dodge lands as opposed to residential development. Future development should be designed with a sensitivity to water resources given drainage patterns and proximity to Beaver Creek and Little Beaver Creek waterways.

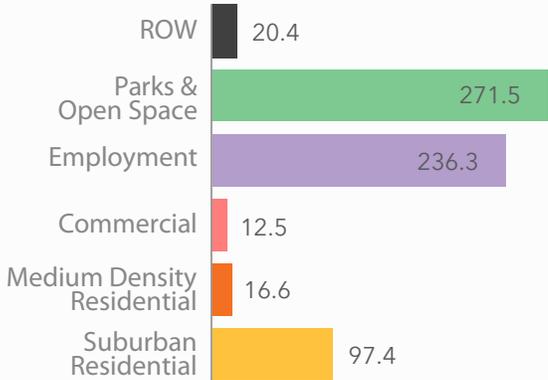


Figure 5.15 Northwest Area – East of Highway 141 Land Use Chart



Conservation-focused development



BMP and bioretention system



Small pockets of commercial use

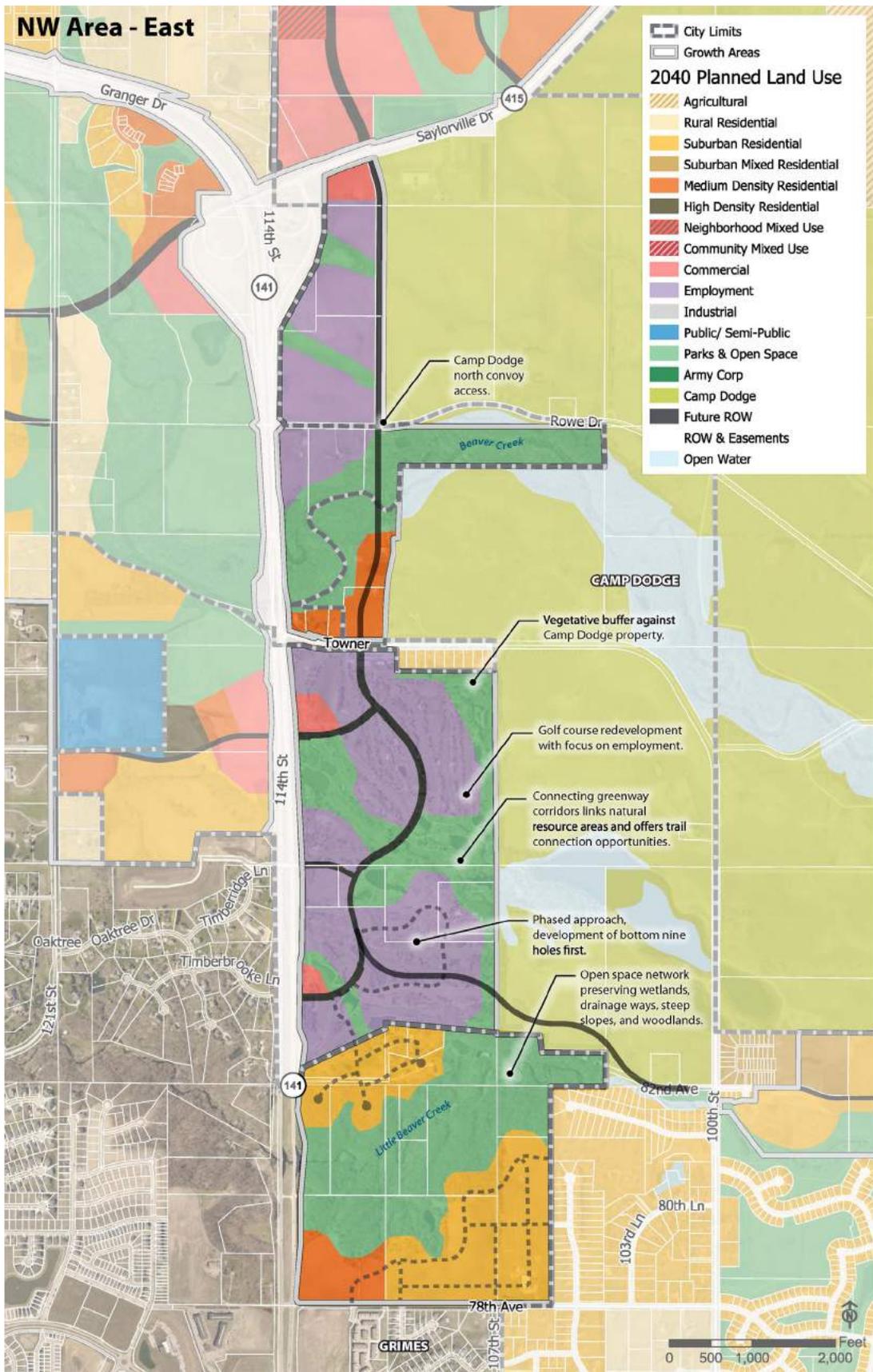


Figure 5.16 Northwest Area – East of Highway 141

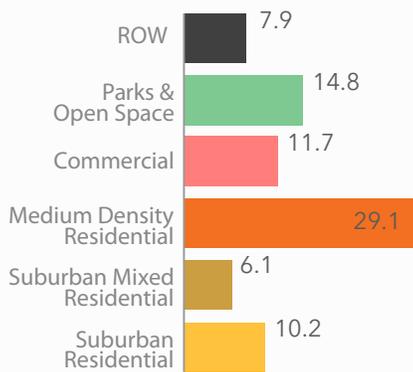


### NW 70th Avenue Corridor (nodes at NW 86th and 100th)

NW 70th Avenue is a prominent east west corridor spanning nearly the entire width of the City of Johnston. It connects Highway 141 on the west and Beaver Drive on the east. As a prominent road corridor that carries greater levels of traffic, key nodes along the corridor provide good locations for a mix of neighborhood commercial services and higher density residential uses. Vacant lands in these areas will ‘infill’ as most are surrounded by existing or platted development patterns. Key considerations for these nodes include:

- » ‘Right-sizing’ the neighborhood commercial nodes such that they enable a sustainable critical mass of commercial services and retail uses that serve the immediate surrounding neighborhoods.
- » Balancing the nodes with a mix of higher density residential to enable walk up/pedestrian traffic as additional support to vehicle traffic. The greater diversity and density of housing nearby provides for a stronger market and contributes to the potential for unique places that build off a neighborhood identity.
- » Ensuring managed access to the node such that major road corridors (NW 70th Avenue, 86th Street, and 100th Street) minimize individual driveways and can continue to serve a community and regional traffic function freely and safely.
- » Ensuring a logical local street function to provide access to individual businesses and to enable a street design that integrates pedestrian and bicycle facilities that maximize the pedestrian environment further contributing to identity and the ability to walk to neighborhood destinations.
- » Transitioning between new higher density development to existing lower density single family development through good site design in order to best blend new development with the old and mitigate concerns over traffic.
- » Striking the important balance of preserving environmental features such as natural drainageways and wetlands, established native tree canopy, and steep slopes. Where connected to a broader natural system, these areas should be planned to extend through the site as part of the city greenway system. They may also serve to help with transitioning between new and existing development.

NW 86TH STREET AND NW 70TH AVE



NW 100TH STREET and NW 70TH AVE



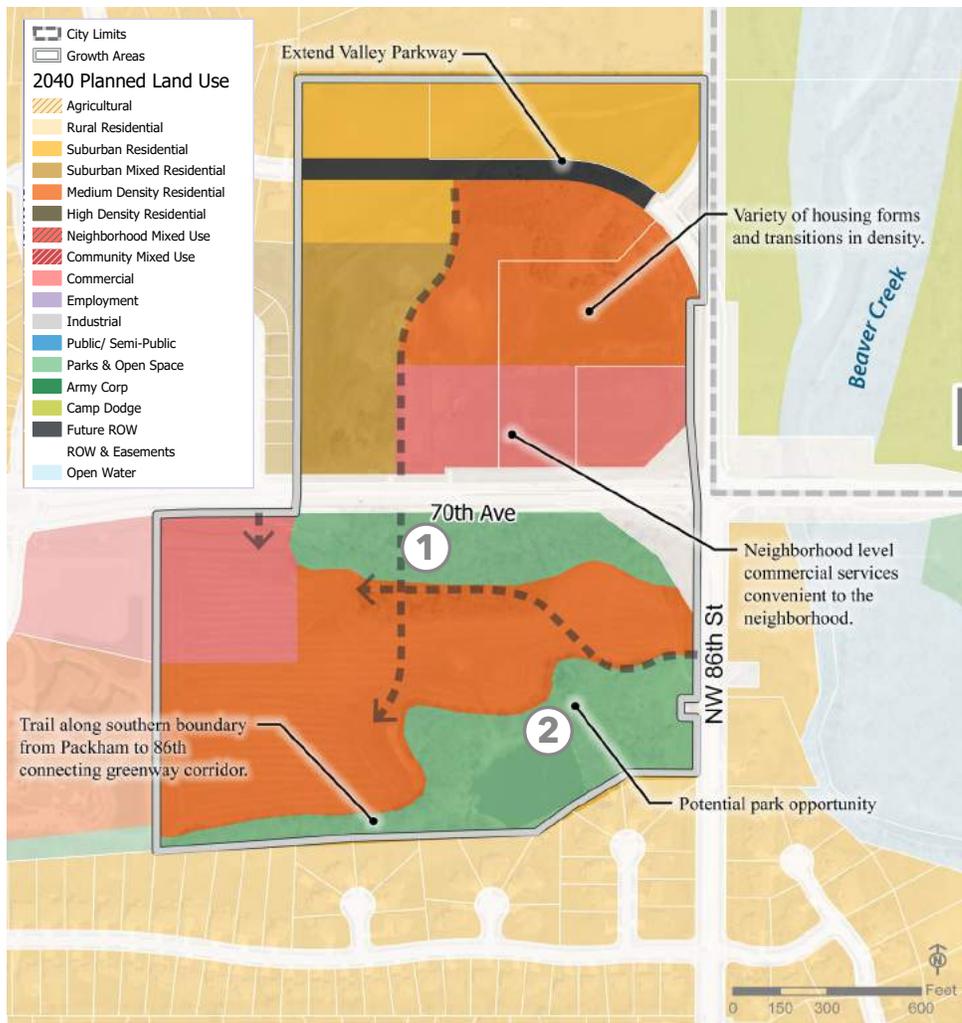
Figure 5.17 NW 70th Avenue Corridor (nodes at NW 86th and 100th) Land Use Chart



Housing diversity, mixed use residential



High-visibility crossings and well-planned connections to commercial uses



1 "Please preserve this wooded area."

2 "I'd like to see the city acquire some of this green space and the pond and turn it in to public use. We seem to be lacking in nice natural areas (not a manicured park) in this part of town that isn't flooded half of the year. Something that is not over developed such as non paved walking trails."

3 "I like the idea of commercial use here and in the surrounding areas. Gas stations, small retail, etc would be good here. I would love to see some sort of unique building structures in this area that compliment the housing and existing salon around it.."

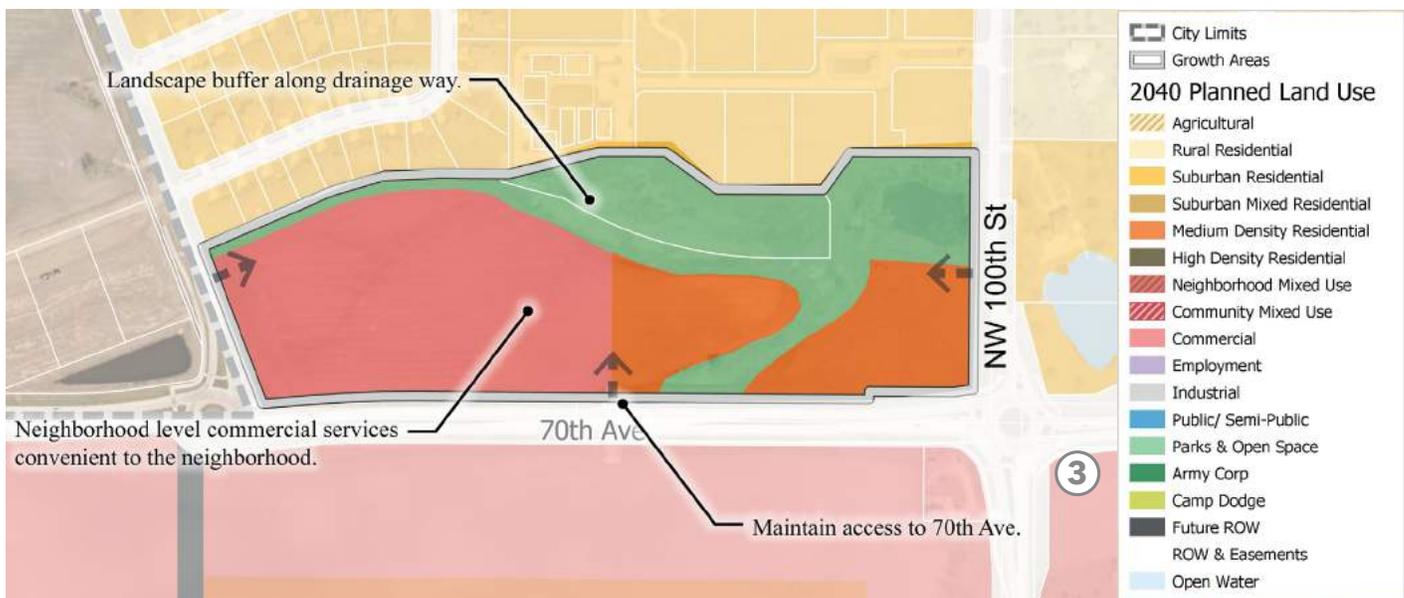


Figure 5.18 NW 70th Avenue Corridor (nodes at NW 86th and 100th)



### Windsor Parkway and NW 86th Street

The Windsor Parkway area is located generally on the southwest corner of two community corridors: NW 62nd Avenue and NW 86th Street. It also happens to be surrounded by existing single-family development, near Summit Middle School and Horizon Elementary School, and two major employers in the City (John Deere Financial and Corteva Agriscience). An existing presence of office and commercial services further strengthens the opportunity for this node to fill in with a rich diversity of uses.

- » Allowing for greater residential densities within this node further supports the existing and planned commercial and employment land uses.
- » Transitioning between new higher density development to existing lower density single family development through good site design in order to best blend new development with the old and mitigate concerns over traffic.
- » Windsor Parkway connects NW 86th Street to NW 100th Street. As such, it will draw increased traffic.
  - Traffic on Windsor Parkway will increase over time. The corridor should be improved with off street pedestrian and bike paths, a tighter urban design pattern with development oriented to the street, and traffic management strategies to control speeds and traffic flow.
  - Completion of an internal street network will help to direct traffic to major corridors and limit development generated traffic from flowing through neighborhoods.
  - More auto oriented uses should be pushed to the north and east of the site clustering around existing auto oriented uses.

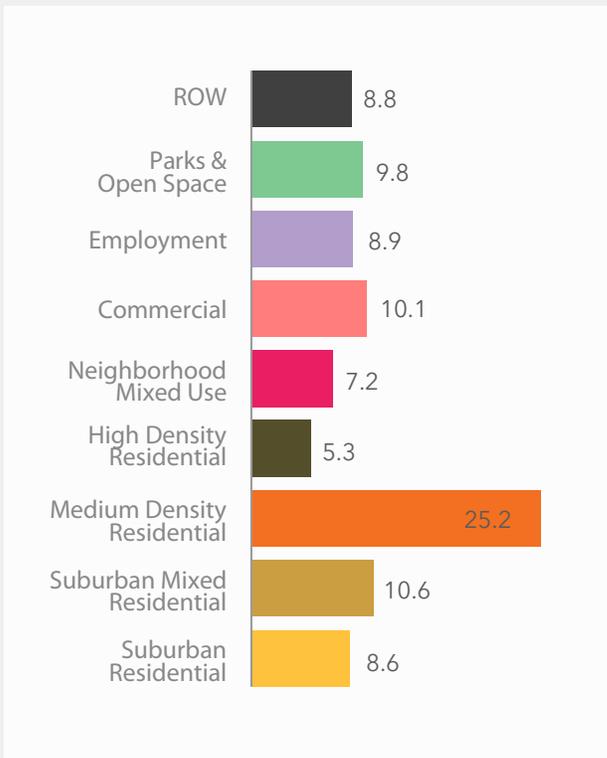


Figure 5.19 Windsor Parkway and NW 86th Street Land Use Chart



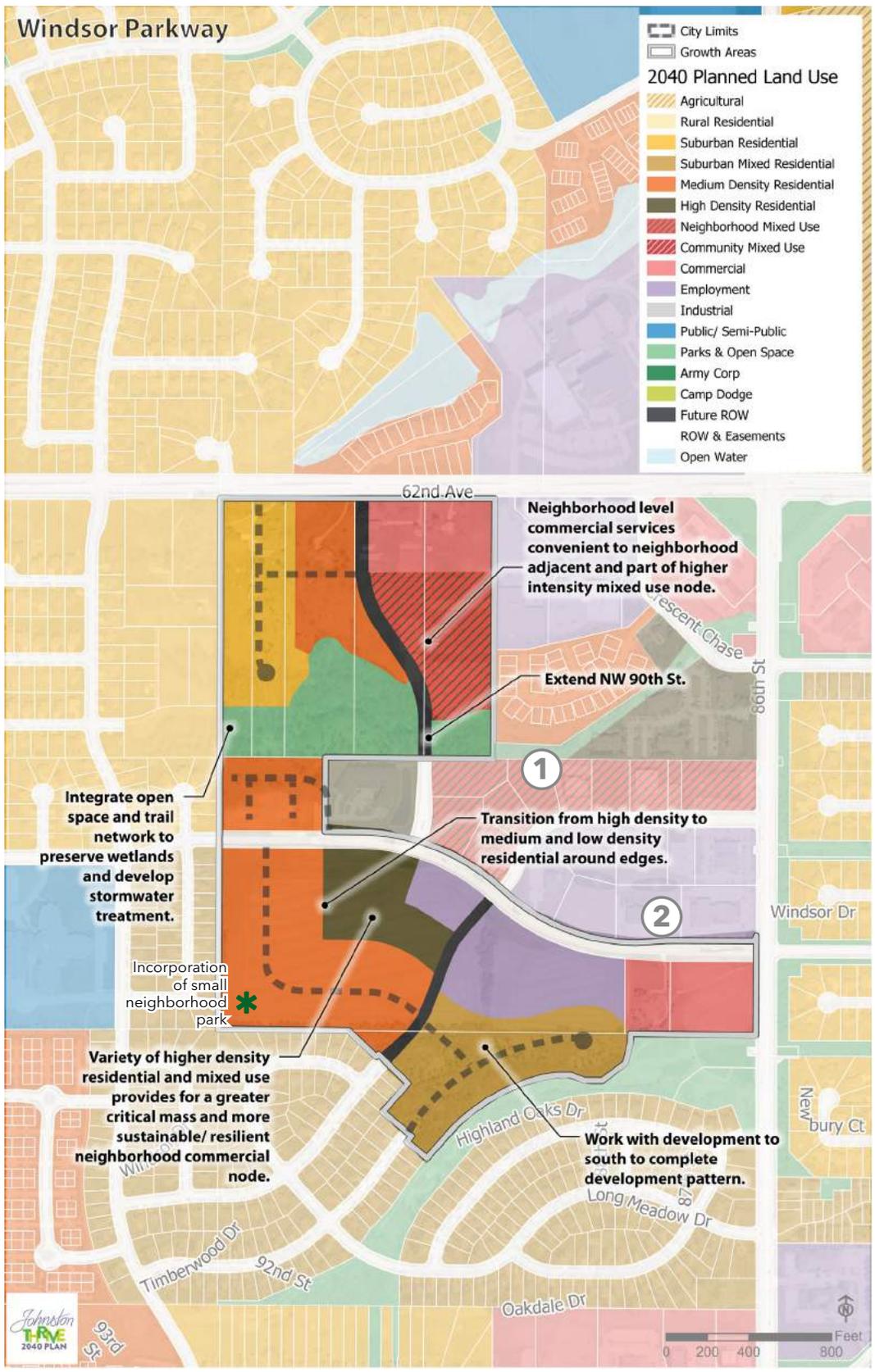
Bike and pedestrian facilities along a parkway



Blending commercial uses that support surrounding residential areas



Vehicle-oriented development example



1  
*"I'm excited to see what else goes in here. The development so far has been nice. Good businesses and aesthetically pleasing building structures."*

2  
*"This is the location of the JEDCO office. We like it here."*

Figure 5.20 Windsor Parkway and NW 86th Street



### Little Beaver Creek (West of NW 86th Street)

A large area of land remains undeveloped west of NW 86th Street along Little Beaver Creek. This area is envisioned as an extension of the conservation oriented single-family residential uses in the area. Of critical importance to development in this area are:

- » Understanding the flood plain boundaries.
- » Protection and restoration of drainage areas and Little Beaver Creek waterway.
- » Being cognizant of proximity to Camp Dodge and Camp Dodge activities.
- » The continuation of planned roadway corridors connecting neighborhoods to NW 86th Street.

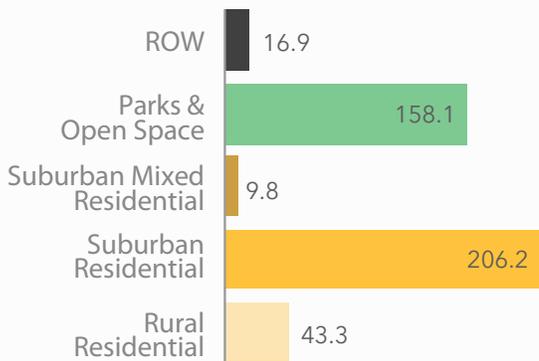


Figure 5.21 Little Beaver Creek (West of NW 86th Street) Land Use Chart



Identifying flood plain boundaries within residential uses



Conservation-oriented single family residential homes



Low density residential respecting and supporting natural environments

# Little Beaver Creek Area

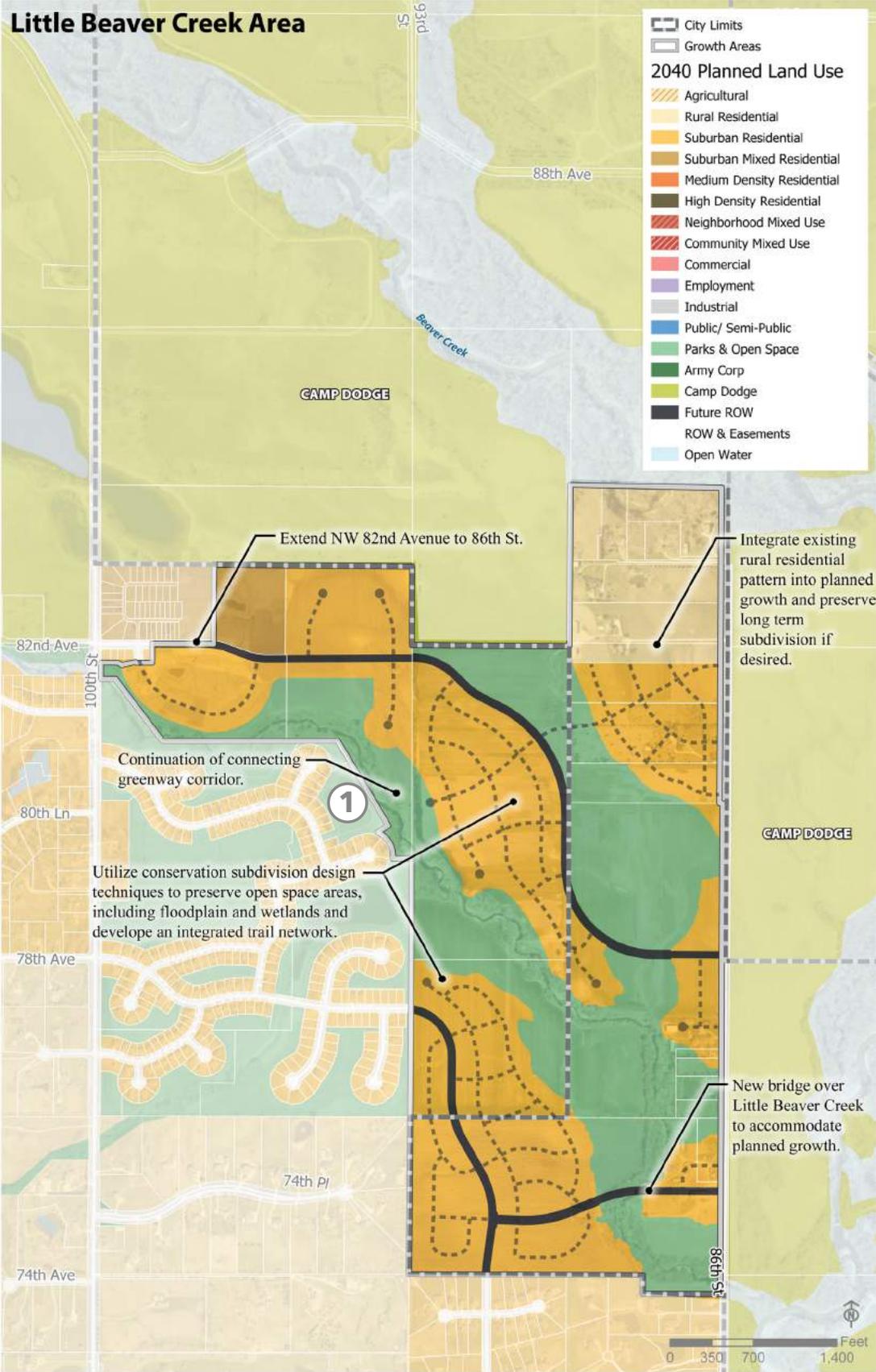


Figure 5.22 Little Beaver Creek (West of NW 86th Street)



## Merle Hay Road Corridor

Merle Hay Road is the prominent main street corridor in Johnston. Historically, it is where Johnston’s roots began. Today the corridor remains a prominent entrance into the community. Since the 1998 Comprehensive Plan, portions of the corridor have been studied and planned for potential redevelopment (see Merle Hay Road Redevelopment Study 2007 and Merle Hay Road Gateway Redevelopment Study 2013). These studies focused on portions of the corridor between NW 62nd Avenue and NW 66th Avenue and the area south of NW 55th Avenue. Both studies principally focused on land use and development character. The most prominent outcome of these two studies today is the development of the Johnston Town Center, under construction in 2020. Redevelopment takes time to overcome challenges related to market conditions, acquisition and assembly of land, alignment of financial sources, and gaining development approvals. The Town Center project took over 10 years to emerge. The Merle Hay Road Gateway area study completed in 2013 has not yet seen the level of interest and success as the Town Center project.

Thrive 2040 establishes broad land use patterns along the Merle Hay Road corridor based on the following key principles:

- » Active commercial uses are the preferred land use pattern fronting on Merle Hay Road, particularly south of NW 62nd Avenue. Experienced based retail and commercial services are a desired land use pattern with the corridor.
- » Over time, opportunities to fill in and intensify the corridor will strengthen the vitality and resilience of existing and future commercial land uses and will further support the investment in the corridor to improve the pedestrian environment. Pedestrian improvements including enhanced sidewalks, lighting, street furniture, landscaping, and wayfinding will be supported by a more populous development pattern.
- » Residential uses are appropriate as upper story uses and parcels off Merle Hay Road.
- » Higher density residential uses are a logical land use pattern that support redevelopment efforts and provide greater support for commerce and active retail /placemaking environments.
- » The East side of Merle Hay Road includes larger residential parcels of land that could be subject to future development intensification. The land use pattern envisions a transiting in scale and density as one moves off of Merle Hay Road.
- » A mixed-use land use pattern and higher densities will increase the possibility for private reinvestment and redevelopment within the corridor while lessening the need for public subsidies.

1

*“Like the redevelopment to encourage coordinated development/destination.”*

2

*“I appreciate that sidewalks are being installed along Pioneer. Much needed!”*

The two redevelopment studies continue to offer guidance and direction on future redevelopment within the corridor. A key implementation initiative will be to update these studies as projects occur and as property ownership and market demand shifts.

The physical design of Merle Hay Road and key cross streets (and particularly their approaches) is an important implementation strategy. Future street improvements should ensure the physical street and behind the curb elements (trail/sidewalk/lighting/utilities) support a multi-modal design pattern and complete street that gives preference to the pedestrian environment while ensuring safe bike and vehicular movement. As a primary transit corridor, considerations should also be given to bus stop amenities to ensure a convenient, comfortable, and safe transit user experience.

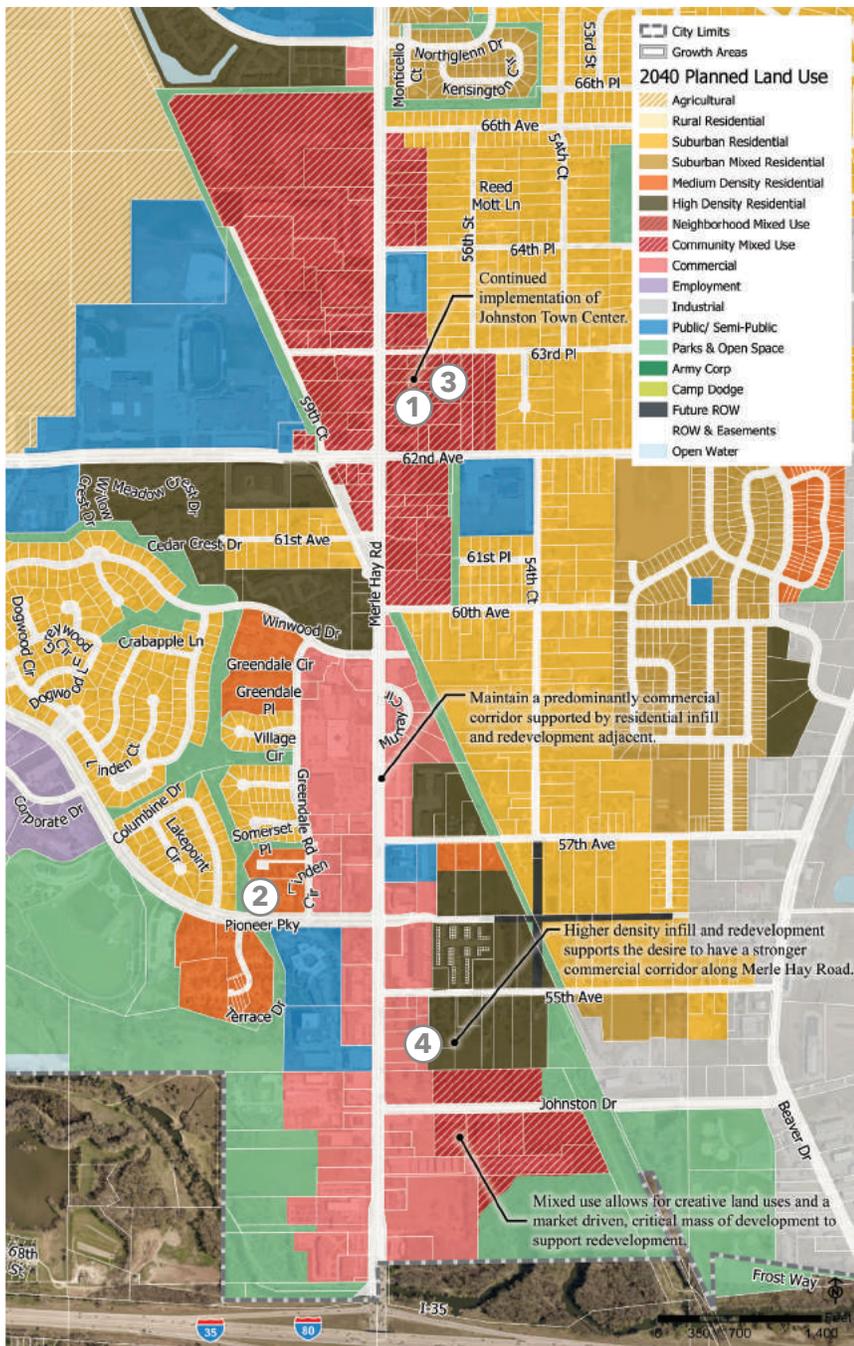


Figure 5.23 Merle Hay Road Corridor

4  
 "Johnston does not have a YMCA it would be nice to see something like that here."

3  
 "Excited for Johnston Town Center!"

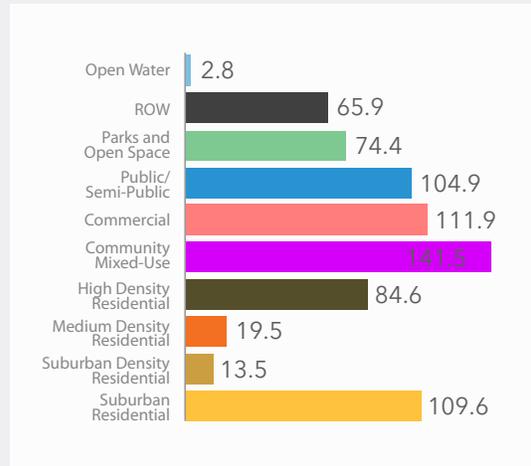


Figure 5.24 Merle Hay Road Corridor Land Use Chart



Street corridor (Source: Citylab.com)



A mixed use land pattern with residences above



Future enhancements to the pedestrian environment

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## CHAPTER 6

# TRANSPORTATION

## INTRODUCTION

As the City of Johnston continues to grow the demand placed on the transportation network will increase as well. The ability of the network to handle this increased demand will have a direct effect on the City's ability to provide a high quality of life for its residents. A well-maintained and connected transportation network provides a community with safe, efficient, and affordable travel. Johnston's transportation decision making must be cognizant of the travel demands throughout the community while at the same time consider linkages to the surrounding metropolitan area as many residents commute to work outside of Johnston.



*NW 70th Ave*

## TRANSPORTATION:

The following methodologies guide the creation of the goals, policies, and implementation initiatives:



### GOALS:

Written as statements and expressions of desired outcomes ... "to which planned effort is directed." Goals should support one or more guiding principles – if it is an important goal and there is no logical supporting guiding principle – maybe consider a guiding principle revision. Consideration should be given to how it is measured. Metric may be subjective or objective (quantifiable).

### POLICIES:

Written as passive guidelines, general rules or explicit rules in some cases with heavy use of verbs such as: support, encourage, prohibit, protect, preserve, establish, require, etc.

### IMPLEMENTATION INITIATIVES:

Written as action statements that work towards achieving a defined outcome. They may have a definitive start and stopping point; or they may be on-going. They may be physical capital improvements or physical plans or they maybe programs. Implementation Initiatives should respond to a specific goal. They require a specified set of resources (human, capital, and/or financial) that should be identified to some degree.

## Goals

The formation of relevant goals and policies that are embraced by the community will allow the City of Johnston to develop a successful transportation system.

1. Create a multi-modal transportation system that provides for the safe, efficient, and effective movement of people and goods.
2. Provide a local transportation system that is consistent with the overall growth policies of the City of Johnston.
3. Offer multi-modal choice: walk, bike, transit, and drive.
  - *Conform to Iowa Smart Planning Principle #10: Planning, zoning, development, and resource management should promote expanded transportation options for residents of the community. Consideration should be given to transportation options that maximize mobility, reduce congestion, conserve fuel, and improve air quality.*
4. Strengthen the transportation network, amenities, and land use pattern to make alternatives to driving desirable and economically viable.

## Policies

1. Ensure that new right-of-way acquisition has ample width for bicycle and pedestrian facilities (separate trails or shared bike lanes) and bus stop infrastructure.
2. Incorporate transportation right-of-way as part of future land use and growth corridor plans.
3. Residential areas and local streets should be protected from the impact of truck traffic by designating truck routes in the city that correspond to roadways that are classified as municipal arterials or higher.
4. Discourage the overuse use of cul-de-sac and loop street development, as these developments limit flexibility within a street network.
5. Driveways on collector and arterial streets should be discouraged or spaced to minimize hazardous traffic situations and maintain traffic carrying capacities.
6. Private streets should conform to the City of Johnston's adopted public street design standards and guidelines.
7. Unify major roadway corridors with appropriate design guidelines and consistent landscaping and signage improvements.
8. Encourage electric vehicle quick charging stations at retail/restaurant locations throughout the City, especially near statewide transportation corridors. Encourage AC level 2 electric vehicle charging stations at all major employers, including public and institutional.

9. Ensure signage is informative as well as aesthetically pleasing.
10. Utilize low maintenance landscaping techniques that will not interfere with drivers, cyclists, and pedestrian's ability to safely travel.
11. Restrict vehicular parking to one side of the roadway on all City owned streets. The City will determine which side of the street is best suited for parking needs and will clearly sign areas where no parking is allowed.
12. Coordinate with regional agencies to plan for future arterial and collector roadway corridors within future growth areas of Johnston.
13. Ensure intersections are well marked, clear of visual clutter, and are designed to ensure the safety of vulnerable road users.

### Implementation Initiatives

1. Implement recommendations from the 2018 Walkability Study. Using the Johnston Walkability Study as a guide, implement and fund a plan for sidewalks and trails that provides safe pedestrian and bicycle circulation for both commuter travel and recreation.
2. Retrofit all non-ADA compliant pedestrian infrastructure to be consistent with the latest Public Rights-of Way Accessibility Guidelines (PROWAG).
3. Identify the types (occasional riders, commuters, and all-purpose riders) and locations of transit riders within Johnston and plan for their transportation needs.
4. Evaluate bicycle and pedestrian connections, local infrastructure such as bus shelters, benches, bus bike racks, updated route information, signage, and ensure access to neighborhoods with concentrations of affordable housing.
5. Update standard roadway sections as needed to preserve significant resources such as wooded areas and incorporate elements of complete streets as appropriate.
6. Establish access management and urban design standards for all new development along collector and arterial streets.
7. Explore corridor connection possibilities between north/northwest growth areas and the core area of Johnston in collaboration with Camp Dodge.



## MERLE HAY ROAD CORRIDOR STUDY:

### GOALS:

Enhanced identity and placemaking, improved pedestrian environment and streetscaping, traffic flow and safety, business and development sustainability.

### KEY COMPONENTS OF A COMPLETE CORRIDOR:

- » Sidewalks
- » Bike facilities
- » Landscaping
- » Street furniture
- » Signage/wayfinding
- » Lighting
- » Intersection treatments (enhanced crosswalks/ped environment)
- » Access management
- » Traffic lane and turn lane configuration
- » Transit facilities
- » Utility locations/placement/design



Rendering (Source: Bascom)



*Existing NW 100th Street  
Pedestrian Crossing*

## EXISTING CONDITIONS

### Federal Highway Functional Classification

The U.S. Department of Transportation identifies a functional classification system for all highways, roads, and streets according to the character of service that they provide. The classification of streets and roads in each county is periodically updated by the state to maintain consistency with city boundary changes and functional changes in streets. The classification system serves as a basis for determining future priorities, funding distributions, and jurisdiction over certain roadways.

Functional classification information has limited application to Johnston and is contained in this plan for informational purposes only. The system is based on how particular roadways function in relation to the community and surrounding metro area. Figure 6.1 illustrates the existing Federal Functional Classification system for Johnston.

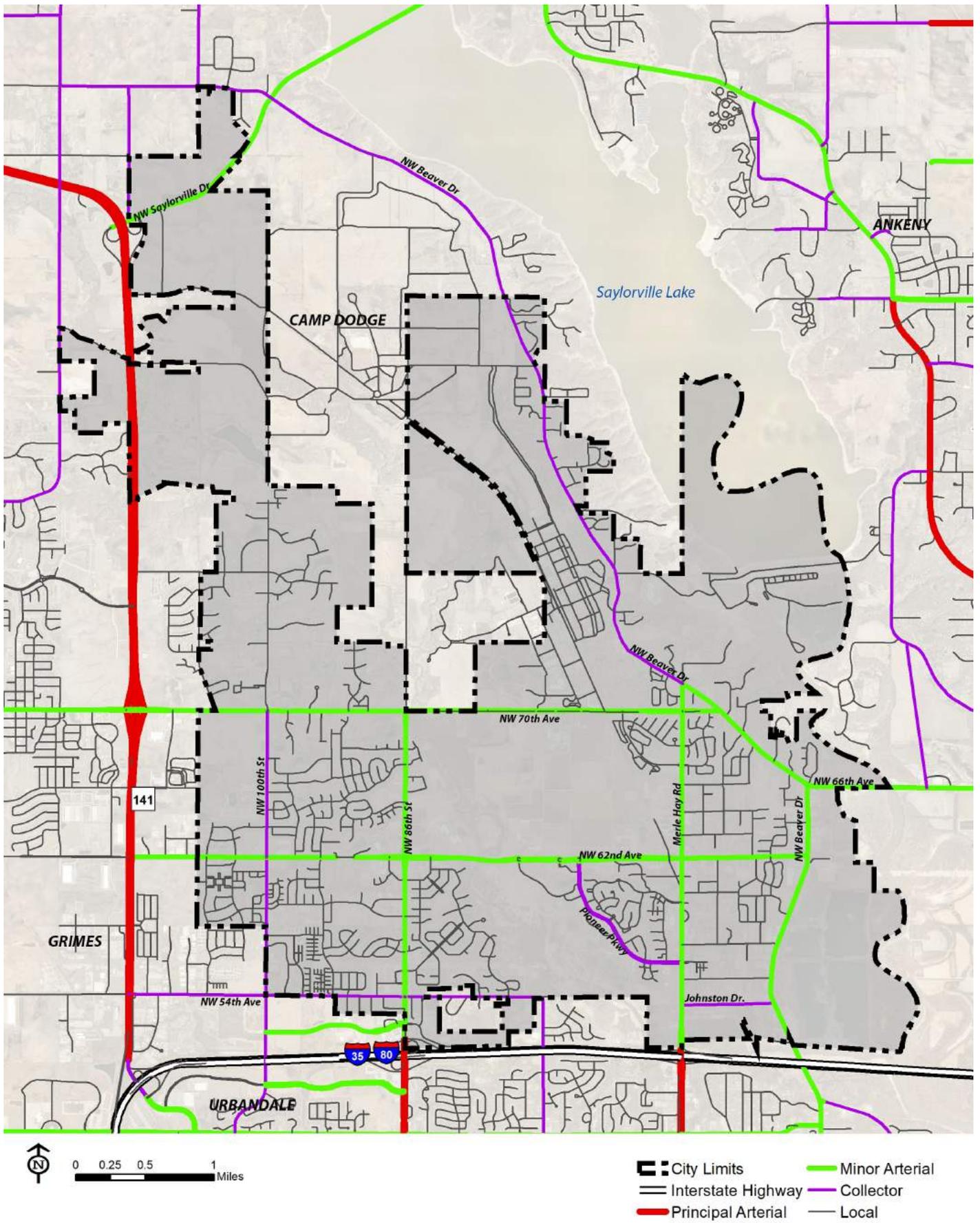


Figure 6.1 Existing Federal Highway Functional Classification

Roadways in Johnston are classified into five (5) categories depending on their function. Classifications of various roadways include the following:



**Interstate**

The interstate system includes roads connecting and serving the major urban and regional areas of the state with high volume and long distance traffic movements. On the southern border of Johnston, I-80/I-35 is functionally classified as part of the federal Interstate System.



**Principal Arterial**

The principal arterial system contains facilities that place an emphasis on land access and provide a high degree of traffic mobility. Johnston currently has only one such facility, Iowa Highway 141, which runs along it's western edge connecting from Sioux City to Des Moines.



**Minor Arterial**

The minor arterial system includes facilities that place more emphasis on land access and offering lower levels of traffic mobility than a principal arterial roadway. Johnston has a number of routes that are designated as minor arterials including Merle Hay Road, NW 66th Avenue, NW Beaver Drive (south of NW 70th Avenue), NW 86th Street, NW 62nd Avenue, and NW Saylorville Drive.



**Collector**

The municipal collector system includes those streets that collect traffic from the municipal service system and connect to other systems. Municipal collectors in Johnston include Pioneer Parkway, NW 54th Avenue, Johnston Drive, NW 100th Street, and NW Beaver Drive.



**Local Street System**

The local street system serves primarily to provide direct access to abutting land and access to higher order systems. These streets offer the lowest level of mobility and usually do not have bus service. Through traffic movements are possible, but often deliberately discouraged.

**Future Highway Functional Classifications**

As roadway capacity and connection improvements occur, it is appropriate to periodically revisit the designated functional classifications to confirm that the future roadway function aligns with the designated classification. In Johnston, major street improvements will occur that suggest future capacity and connectivity improvements will require such a reevaluation (see Major Street Improvement Plan in this chapter).

## Traffic Generators

The link between traffic generation and land use has been well-documented. Studies have shown that type and intensity of development will dictate the scale of transportation infrastructure needed to provide an adequate level of service. Likewise, higher traffic volumes that originate from traffic generators that increase the demands on the roadway system require a greater degree of access management along with additional capacity to ensure that traveler mobility and safety is not compromised.

### Residential

Traffic generated by residential uses can vary greatly dependent on characteristics of the housing type, density, and the nature of the development pattern. Low density single family residential units typically have larger family sizes, more cars per household and thus more trips per unit. Deliveries are made on a house by house basis and thus more frequent. Higher density multi family housing generally has smaller households, fewer cars per unit, and thus fewer trips per unit. Deliveries can be consolidated to a degree. Less dense development patterns also will have fewer trips that are done through walking, biking, or transit because of the spread out nature of development and need to drive to destinations. Whereas higher density developments are generally more proximate to services and offer more opportunities for walking, biking, and transit.

### Commercial

Depending on the type and character of commercial development, the number of trips generated by commercial use can vary widely. Uses such as drive through coffee shops, gas stations, and supermarkets often generate high volumes of traffic. Single-tenant office buildings, small specialty service shops, or highway related commercial typically generate less traffic. Given the wide variation in traffic generation between commercial uses changing technology and consumer behavior, the City of Johnston must carefully analyze each new commercial development to ensure the segments of the current and future transportation network is not unduly stressed.

### Industrial

Industrial land use traffic generation is closely related to the level or intensity/density of employment. The number of trips generated by an industrial use is often lower than commercial or residential land uses. However, Industrial land uses create very



Merle Hay Road



NW 100th Street Roundabout



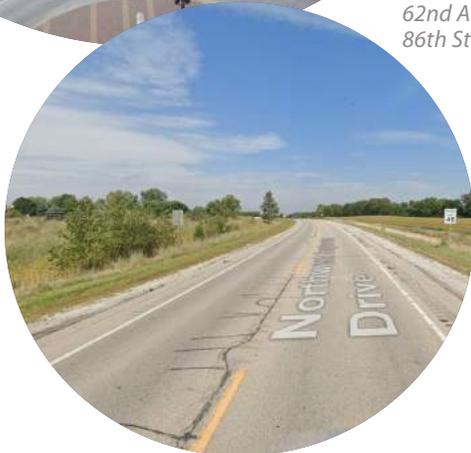
Merle Hay Road

FUTURE FUNCTIONAL CLASSIFICATION	AVERAGE ANNUAL DAILY TRAFFIC (AADT)
LOCAL SERVICE	Less than 1,500
COLLECTOR	1,500-2,500
MAJOR COLLECTOR	2,500-5,000
ARTERIALS / HIGHWAYS	5,000 and over

TABLE 6.1 AVERAGE ADT BY FUNCTIONAL CLASS



*Aerial image of NW 62nd Avenue and NW 86th Street*



*Google Street View: Saylorville Drive*

high levels of traffic over short specific times of day, most often at the beginning and end of work shifts. These sharp peaks are capable of creating more serious traffic problems than commercial or residential land uses. The City of Johnston must properly plan and design a road network around industrial land uses to safely and efficiently disperse traffic during these peak periods.

### **Existing Traffic Volumes**

The most heavily traveled roadways in Johnston include Merle Hay Road, NW Beaver Drive, NW 86th Street, NW 62nd Avenue, Pioneer Parkway, NW 100th Street, and NW 70th Avenue. Major traffic generators creating traffic flow in the city include Interstate 80/35 on the southern boundary, commercial developments along NW 86th Street and Merle Hay Road, and local traffic traveling to and from the Des Moines and Urbandale areas. Recreational traffic using Saylorville Lake also generates seasonal traffic along NW Beaver Drive, Merle Hay Road, and NW 66th Avenue.

Figure 6.2 illustrates the most current (2019) average annual daily traffic (AADT) volumes in Johnston. Forecasted traffic volumes are illustrated on Figure 6.3. These traffic volumes were prepared in 2017 by Des Moines Area Metropolitan Planning Organization (DMAMPO) for the [Mobilizing Tomorrow](#) (Long Range Transportation Plan Update) using updated land use data provided by the City of Johnston. Traffic growth is evident along the major corridors in Johnston, notably NW 86th Street, NW Beaver Drive, NW 62nd Avenue, NW 100th Street, and NW 70th Avenue.

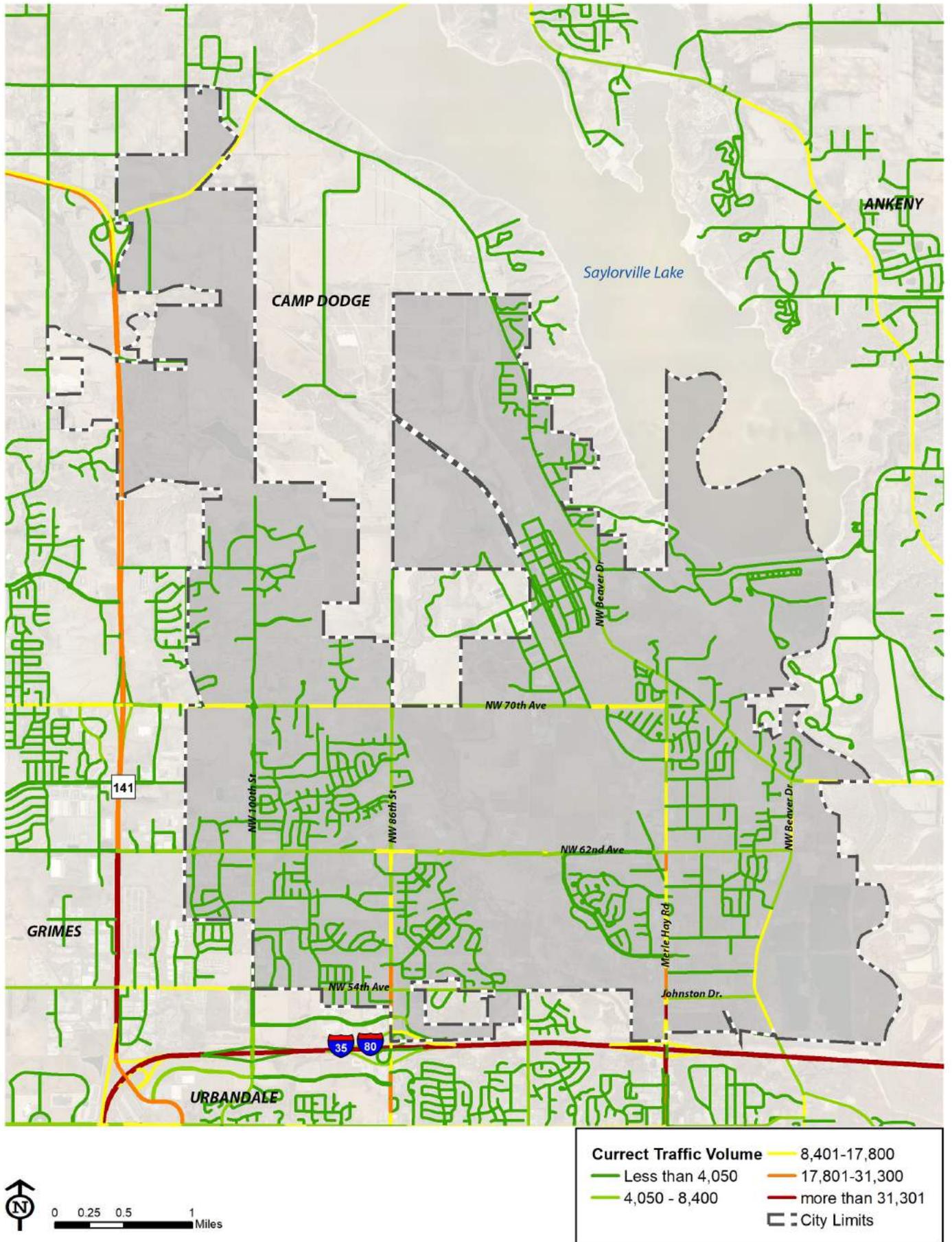


Figure 6.2 Current Traffic Volumes - Average Annual Daily Trips (2019) Source: IDOT

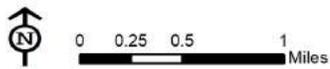
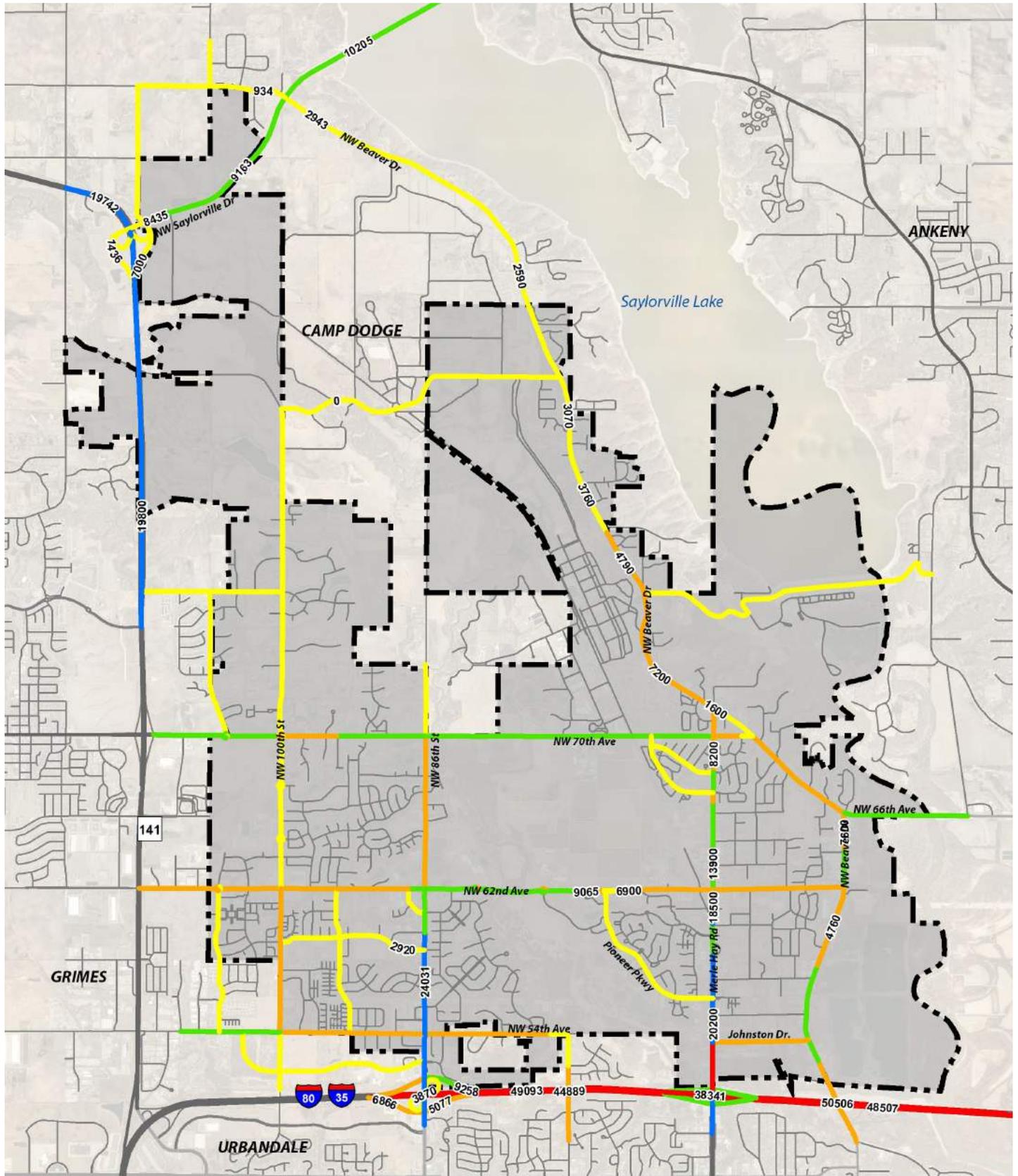


Figure 6.3 Future Traffic Volumes - Average Annual Daily Trips Source: MPO Tomorrow Plan



## SYSTEM IMPROVEMENTS

### Capacity and Safety

Since the 2010 Comprehensive Plan, the City of Johnston has implemented a number of roadway improvements to address capacity issues. Capacity issues were mostly a result of two-lane roadways that have seen increased volumes. With the exception of NW Beaver Drive north of NW 66th Avenue, capacity improvements have been made or are programmed. NW Beaver Drive, because of its existing land use patterns and ownership, will remain as a rural two lane roadway with improved pedestrian facilities. Safety concerns arise when excessive points of private property access is permitted on a higher traffic volume roadway or when roadway or intersection design issues that can be corrected are found to be a contributor to vehicular crashes. Safety concerns also arise from bicycles and pedestrians that use undesignated facilities (such as shoulders or edge of pavement) for access.

### Connectivity

Roadway connectivity has historically been an issue in Johnston due to the large expanses of land that are owned or operated for public or research uses. Natural and human environment barriers create challenges for connecting the roadway network in Johnston. The location of Camp Dodge, Corteva Agriscience's research fields, and significant natural resources limit options to extend and connect roadways in Johnston, including limited options to add or connect new north/south or east/west arterial roadways. At the present time, NW 62nd Avenue and NW 70th Avenue are the only continuous east/west arterials that traverse the length of the community. NW 100th Street, NW 86th Street and Merle Hay Road are the only continuous north/south arterials in the community, although NW 100th and NW 86th Streets currently end and are truncated from extending northward by Camp Dodge property.



*Existing road construction*



### **Conceptual Streets**

The City of Johnston will encourage street connections and logical termini when reviewing site plans so that appropriate connections between streets, bicycle and pedestrian, and transit facilities can be facilitated.

### **Street Design Standards**

In Johnston, in addition to designing new streets according to current standards, there is also a need to reconstruct older neighborhood streets using the same standards. To ensure safety, proper right of way width, as well as uniformity within the City of Johnston, the metropolitan region, and the State of Iowa, it is important that Johnston consistently follow the street design standards set forth by the Iowa Statewide Urban Design and Standards Manual (SUDAS). SUDAS standards primary consideration is that all new roadways and major reconstruction of existing corridors provide for safe, efficient, and economic transportation throughout the design life of the roadway. The values contained in the SUDAS manual are to be considered basic design guidelines which will serve as framework for satisfactory design of new street and highway facilities. The SUDAS standards are found on the internet at <https://iowasudas.org/>

An illustration of the current SUDAS standards that the City of Johnston uses is shown in Figure 6.4.

### **Complete streets**

Complete streets are mode inclusive ‘transportation’ corridors that include facilities for pedestrians, bicyclists, motorists, and transit riders of equal quality, convenience, and connectivity. They take advantage of the entire right-of-way and are designed to facilitate the safe and easy movement from place to place for users of all ages and abilities. Complete streets are safe, attractive, easy to cross, well connected, and easy to navigate. They improve connectivity and efficiency by providing users with a wider range of choices for how they get to the places they live, work, shop, and recreate. They create vibrant and attractive corridors that encourage people to get out of their cars and interact with the environment around them. By design, a complete street’s improvements and amenities can go a long way to establishing the ‘identity or brand’ of an area by creating or reinforcing the character of the places it connects.

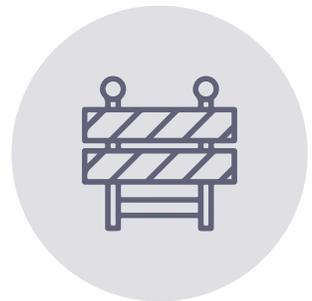
The desire for a stronger pedestrian system in Johnston is an important driver for the implementation of more complete street design initiatives as development occurs and roadways are replaced or expanded. In particular Merle Hay Road, with its mix of commercial and residential uses, represents a near term opportunity for the City to provide a complete street pilot project in a high impact area as redevelopment occurs.



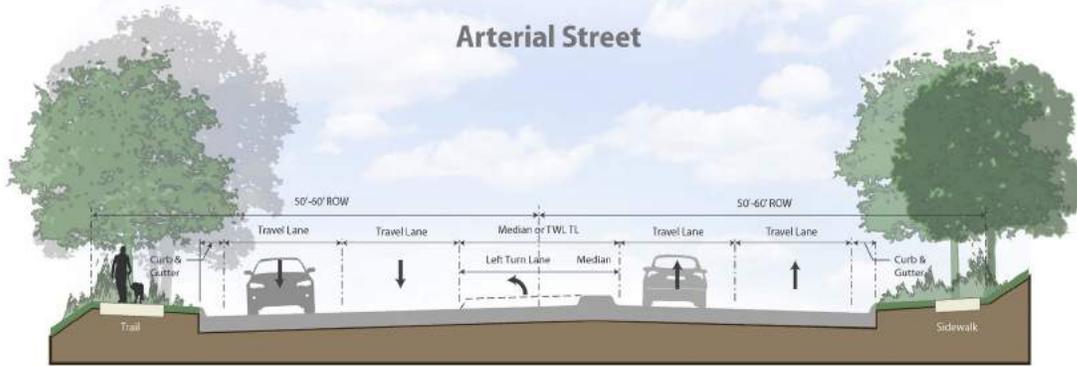
## MAJOR STREET IMPROVEMENT PLAN

Since the 2030 Comprehensive Plan, many of the planned roadway improvements have been completed or are underway. The Thrive 2040 plan update includes an update to the future functional class system of roads pertaining to new growth areas, as well as identification of limited new roadway connections.

The major street improvement plan contains a number of recommendations for future improvements to collector and arterial roadways in Johnston with a focus on future growth areas where new corridors are expected to be added and where additional traffic on existing corridors might suggest expansion or redesign. Figure 6.5 illustrates major roadway improvements and connections anticipated based on future land use and development.



# Typical Roadway Sections



**Figure 6.4 Roadway Design Standards**



### NW Beaver Drive

NW Beaver Drive is a rural roadway, serving the community of Johnston well over the years. It is a unique roadway in the Des Moines Metropolitan Area, located adjacent to Saylorville Lake and the Des Moines River. Much of NW Beaver Drive historically provided access for military vehicles and today provides both mobility and access for motorists, bicyclists, and pedestrians. However, its current design does not reflect modern standards due to deficient shoulders, drainage, horizontal and vertical curvature.

Because of the physical constraints of Camp Dodge and Saylorville Lake, all adjacent residential development must use NW Beaver Drive for private property access. This duality of uses, access, and mobility on NW Beaver Drive creates a potentially dangerous conflict situation between driver turning and through movements. NW Beaver Drive's location relative to Saylorville Lake also requires that the road service seasonal recreational travel. This recreational travel leads to peaks of large vehicles pulling trailers and boats especially during the weekends. Additionally, NW Beaver Drive is a common route for bicyclists, especially in the summer months and on weekends. Recent improvements include a bicycle facility that closes an important gap in the regional recreational trail system. This bike lane located on the east side of NW Beaver Drive is an example of some of the design challenges associated with this corridor.



*Northwest Beaver Drive trail retrofit project*



*Saylorville spillway*



### NW 100th Street

Since the 2030 Comprehensive Plan, significant improvements have been made to the NW 100th Street corridor, including the construction of an interchange with I 35/80, reconstruction of the intersection at NW 54th Avenue and reconstruction from NW 62nd Avenue to NW 70th Avenue adjacent to the Johnston High School. Future consideration needs to be given to reconstruction between NW 54th Avenue and NW 62nd Avenue and north of NW 70th Avenue as these stretches remain a two lane rural section and lack adequate pedestrian facilities.





### NW Saylorville Drive Expansion Area Streets

The installation of new streets and the upgrading of existing roadways will occur as the NW Saylorville Drive Expansion Area develops. As development proposals are considered, it will be important to consider functional classification map amendments and discussions on the impact of these needs with neighboring jurisdictions, including Granger, Polk City, and Polk County. The Highway 141 corridor will be a vital transportation corridor for this area, and as such the City should work with the Iowa DOT, Polk County, Grimes, and Granger on an improvement and access management plan prior to significant development occurring in this area. The Des Moines Area MPO added this area to the regional travel demand model for the 2030 Johnston Comprehensive Plan using land use forecast assumptions and the Mobilizing for Tomorrow Plan utilized Johnston Land Use data in updating its analysis on the regional roadway system. As future growth and development occurs in this area, Saylorville Drive will need to be planned for improvements that increase capacity and ensure safe travel.

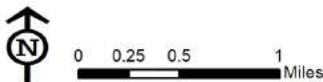
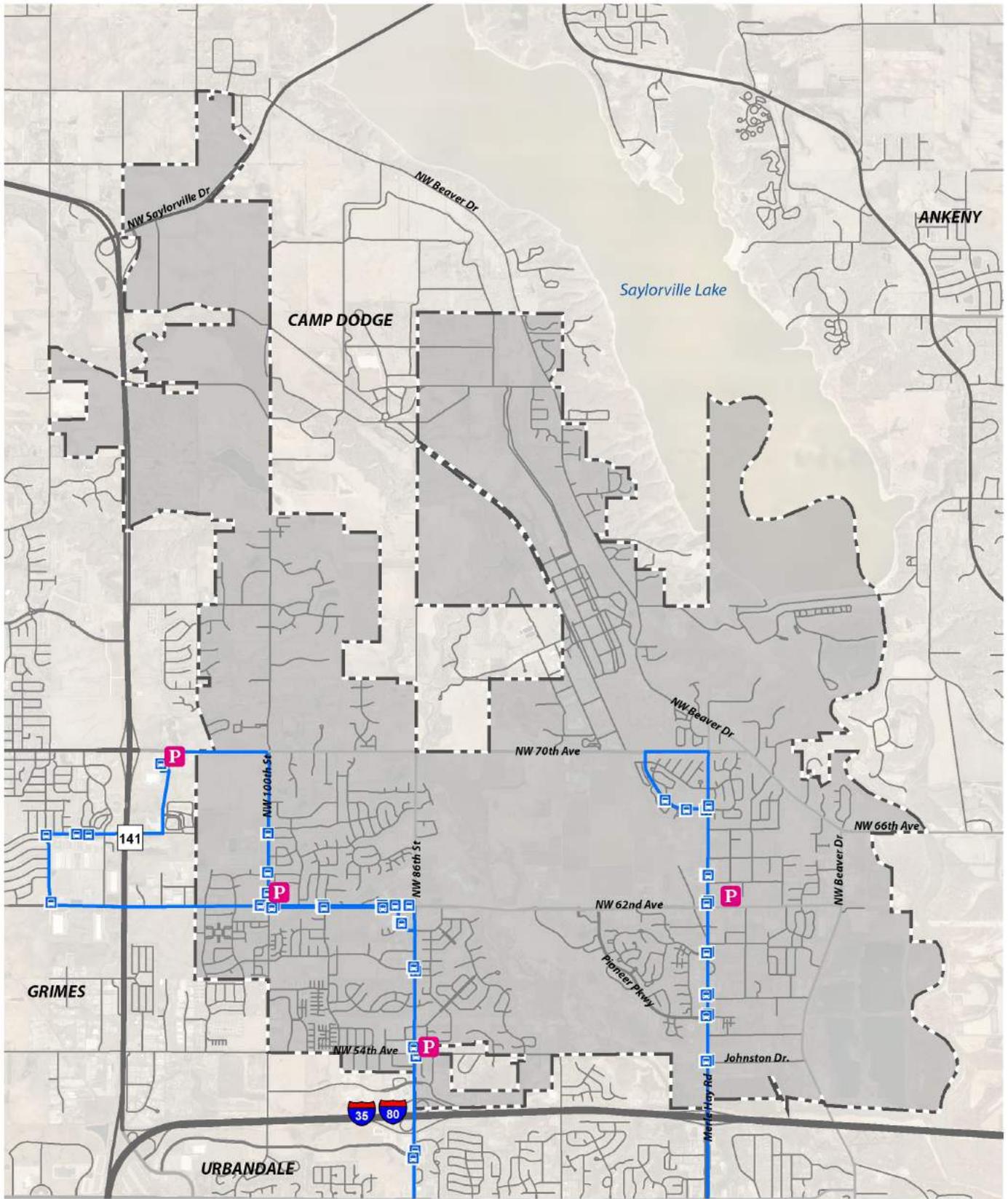


### NW 100th Street Connection

Recent acquisitions by the Iowa National Guard for Camp Dodge operations and buffer lands further complicates the idea of creating a connection of NW 100th Street to NW Saylorville Drive. Providing a corridor connecting to the northerly growth area of Johnston has always been a desire for mobility as well as infrastructure and utilities. The area between Highway 141 and Camp Dodge land holdings is positioned for future development. The Thrive 2040 planning process explored a future planned roadway connection as a major collector street through this area. The corridor would achieve the following:

- » Provide a critical corridor connection to NW Saylorville Drive.
- » Provide an alternative travel route for local/community trips relieving Highway 141 from non-regional trips.
- » Provide important street access to future employment areas and coordinated connections to Highway 141 consistent with IDOT spacing standards.
- » Provide additional access opportunities for Camp Dodge fleet operations.
- » Present an additional opportunity for an off street trial connection to the northerly growth area and regional destinations beyond.

Improvements and ROW needs for this corridor would be further planned and coordinated with future development in the corridor.



- P Potential Park & Ride Locations
- Bus Routes
- B Bus Stops
- City Limits

Figure 6.6 Other Transportation Methods Improvement Plan

## Other Transportation Modes

According to Iowa's smart planning legislation, planning... "Should promote expanded transportation options for residents of the community. Consideration should be given to transportation options that maximize mobility, reduce congestions, conserve fuel, and improve air quality." According to the American Public Transportation Association, public transportation... "Enhances personal opportunities, reduces congestion, provides economic opportunities, and reduces gasoline consumption."

Des Moines Area Regional Transit Authority (DART) is the transit service provider for the City of Johnston. DART also provides demand responsive paratransit and on-call service for senior citizens and persons with disabilities. Currently, fixed route service is provided to areas along Merle Hay Road and in western/southwestern Johnston. Regular and Express routes and current/potential park and ride locations are illustrated in Figure 6.6.

With officials at DART, the City of Johnston will continue to monitor transit mobility needs of the community and partner on opportunities to introduce transit-friendly developments in appropriate areas of the community. Needs and opportunities in the future may include new or revised transit service routes (regular and express), paratransit and senior services, new locations for carpool/park and ride facilities and infrastructure, and multimodal connections such as linkages between bicycle and pedestrian facilities.

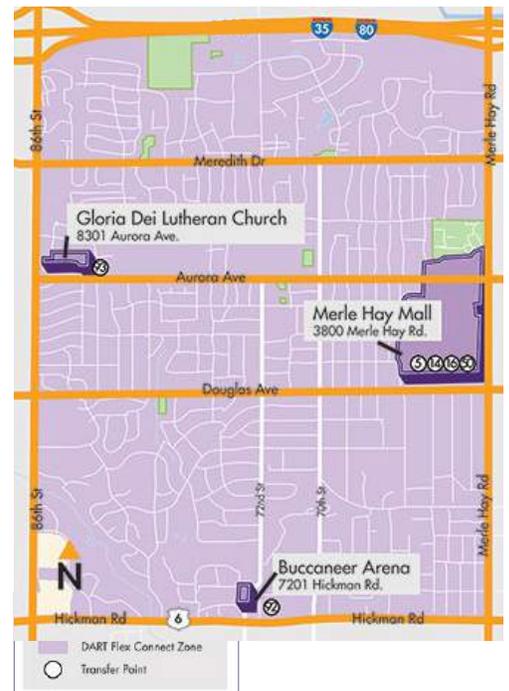
### DART Flex Connect Program

Currently Johnston is served by transit lines which run north to south, limiting east/west transit options for visitors and residents. To bridge this gap, the City is currently exploring the expansion of DART's Flex Connect rider share program currently being evaluated in Urbandale and northwest Des Moines.

The program utilizes taxi and rideshare services to make connections within a designated 'zone' served on the edges by transit. The program offers vouchers to transit riders for use on taxi or rideshare services to get to/from their transit stop to one of a handful of designated drop-off points within the zone.

The program can provide a supplemental solution to provide enhance east west transit connections in areas where the ridership doesn't fully support a sustainable fixed route system. For more information on DART's pilot program please visit:

<https://www.ridedart.com/flex-connect-demand-service>



Map of DART's Flex Connect program currently under evaluation in Urbandale and northwest Des Moines

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## CHAPTER 7

# ECONOMIC DEVELOPMENT

## INTRODUCTION

A critical part of the Thrive 2040 vision for Johnston is a healthy, sustainable, and resilient business community. A diversity of businesses provide opportunity for all Johnston residents to work and live in the same community. Business development provides services and amenities to the residents and employees who live and work in Johnston. Businesses also provide property tax revenue and other forms of benefits to the City by being active participants within the City: volunteering, shopping and patronizing local businesses for example. Likewise, in order for businesses to thrive in Johnston, they need a diverse labor pool. For this reason, it is critical that Johnston's economic development efforts are also focused on making sure there is a diversity of housing and neighborhood options so people can chose to live close to where they work.

### GUIDING PRINCIPLES: >>

- » Efficient infrastructure
- » A fiscally sustainable community
- » A proactive position on future growth
- » A built environment in harmony with the natural environment
- » Transportation linkages



**WHAT WE HEARD:**

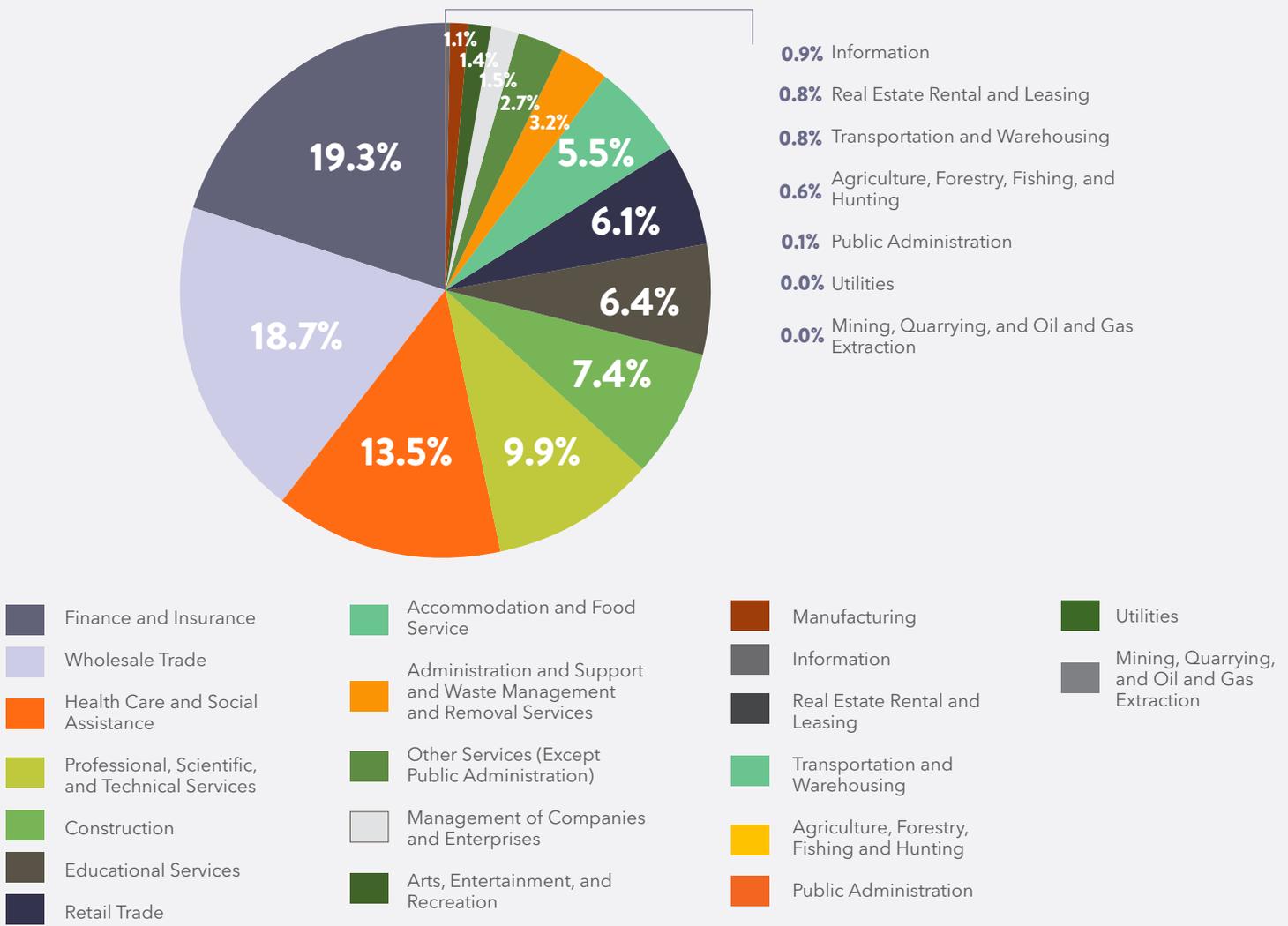


“Eighty percent (80%) of the residents surveyed would like to see casual dining in Johnston. The other types of retail and restaurant options that residents would most like to see in Johnston are: specialty shops (56%), fine dining (42%), and clothing stores (39%).”

Through the engagement process, the community of Johnston expressed the desire for a more robust commercial environment that offers great places to gather, dine, or enjoy the unique features and characteristics afforded by the Johnston Community.

For these reasons, the Thrive 2040 has added a chapter on Economic Development reinforcing the need to be intentional about growth and development within Johnston.

**Total Workers for City of Johnston, IA By Industry**



**Figure 7.1 Distribution of Workers in Johnston by Industry. Source: JobsEQ®, <http://www.chmuraecon.com/jobseq>**



## JOHNSTON ECONOMIC DEVELOPMENT APPROACH

Johnston is not just a fantastic place to grow your business, it's a place where you will find helpful and invested partners in the process. City leaders work together with a public-private partnership known as the Johnston Economic Development Corporation ([JEDCO](#)) and with the [Greater Des Moines Partnership](#). Both of these groups collaborate with city officials and city community and economic development staff to identify opportunities to recruit or grow new businesses and to retain and expand existing ones. Additionally, JEDCO assists the city in finding ways to improve the business climate, whether it is in providing services that support local businesses, or offering incentives to attract the kind of businesses desired by the Johnston community. JEDCO and the City have successfully partnered on economic development initiatives since 1987. JEDCO helps developers find the ideal property, plat, or building in which to invest, while city leaders ensure a smooth development process.

The City of Johnston frequently collaborates with the private development community on projects such as the extension of critical sewer and water infrastructure systems that support proposed developments but also helps the existing community by building in redundancies in the system or funding critical maintenance needs. These efforts help contribute to a resilient and sustainable future Johnston.



### WHAT WE HEARD:

*“Through the engagement process, the community of Johnston expressed the desire for a more robust commercial environment that offers great places to gather, dine, or enjoy the unique features and characteristics afforded by the Johnston Community.”*



## TOWN CENTER SNAPSHOT:



The City of Johnston owns 17 acres of land primarily consisting of mixed use zoned property at the intersection Merle Hay Road and NW 62nd Avenue. In spring 2018 the development community was solicited to propose development concepts for the area into the commercial Town Center for the City of Johnston. Six development teams responded, a team was selected, and the City and chosen development team is carrying out the implementation of the Town Center. The property is anticipated to generate more than forty million dollars in new commercially assessed value. Graphic courtesy of Confluence.



*Johnston's plan addresses clean, renewable and energy efficiency. A green-roofed bus shelter concept will help to support Johnston's commitment to clean energy. (Source: Pinterest)*

The Iowa National Guard is another example of collaboration and partnerships. The National Guard has acquired significant land holdings in the central areas of Johnston for Camp Dodge operational needs and as buffers to their uses. This action presents infrastructure and roadway connectivity challenges to the City. Recognizing the value that Camp Dodge brings to the city and vice versa, the City and the Iowa National Guard are working together to explore solutions to these challenges.

Redevelopment is tricky and often a challenging task. The City of Johnston has partnered with local developers to successfully redevelop an area along Merle Hay Road into a Town Center that includes commercial services, a new city hall, and a gathering place for community members. Without this partnership and collaboration, the success of this project would have been much longer to realize if ever realized.

The economic strength of Johnston is enhanced by the ability of multiple players to collaborate in working towards a common goal, to promote Johnston as a great place to do business as well as a great place to live and play.

The City maintains an Economic Development Strategic Plan to carry out its purpose to optimize economic development opportunities. This chapter reflects broadly the intent of the strategic plan. Johnston recognizes that economic development is more than jobs, services, and tax base. The City strives to foster an attractive environment for economic development by retaining existing businesses, assisting businesses with start-up operations or expansion needs, attracting new businesses to the community, and enabling the reuse, rehabilitation, and/or redevelopment of existing commercial areas within the City that are tired or economically obsolete. The City's economic development efforts will thus focus on supporting a strong community that offers great neighborhoods to live in, a strong park and recreation system, quality infrastructure (including communication technology), a safe and connected transportation system, and sustainable/efficient government.

A key part of the City's economic development approach will continue to be collaboration and leveraging of its greatest assets such as a high quality k-12 school district, Camp Dodge and the Iowa National Guard, Corteva Agriscience and other corporate partners, great local and regional park amenities, great local and regional government partners, and the many local businesses and residents.



## Goals

1. Create a business environment that will enable Johnston businesses (existing or new) to thrive.
2. Present Johnston as a great place to do business at the local, regional, national, and global scale.
3. Create and maintain an outstanding quality of life for residents and the business community.
4. Revitalize, rejuvenate, or redevelop aging (or economically obsolete) commercial/industrial properties.

## Policies

1. Ensure supply of quality industrial and commercial property is available for development and that information on site availability is accessible to prospects.
2. Align public investment with identified economic development opportunities.
3. Ensure development property has affordable access to sanitary sewer, water, electric, gas, public roads, and high-speed internet/broadband or other communication technology.
4. Ensure zoning and building permitting process and regulatory rules are reasonable and do not present barriers to desired economic development.
5. Encourage preservation of the agricultural and open spaces that support key employers such as Corteva Agriscience and Iowa National Guard.
6. Encourage reinvestment in aging commercial and industrial properties or districts.
  - *Encourage or actively participate in aggregation of small parcels along arterial roadways to facilitate organized redevelopment.*

The following methodologies guide the creation of the goals, policies, and implementation initiatives:

### >> GOALS:

Written as statements and expressions of desired outcomes ... "to which planned effort is directed." Goals should support one or more guiding principles – if it is an important goal and there is no logical supporting guiding principle – maybe consider a guiding principle revision. Consideration should be given to how it is measured. Metric may be subjective or objective (quantifiable).

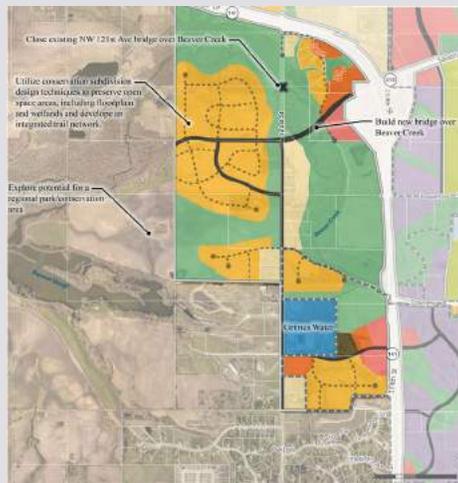
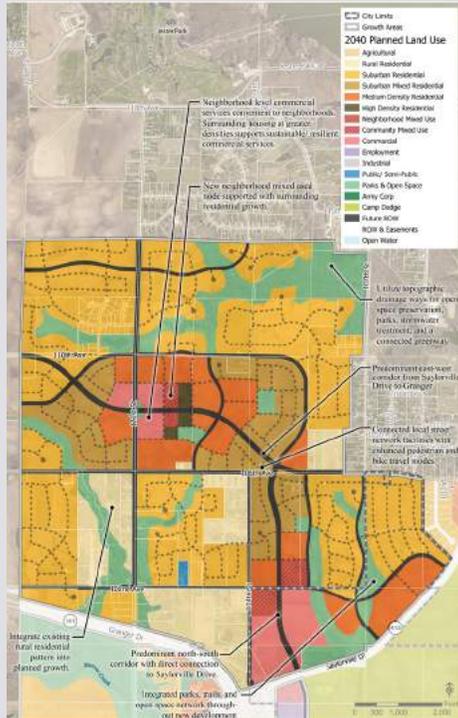
### >> POLICIES:

Written as passive guidelines, general rules or explicit rules in some cases with heavy use of verbs such as: support, encourage, prohibit, protect, preserve, establish, require, etc.

### >> IMPLEMENTATION INITIATIVES:

Written as action statements that work towards achieving a defined outcome. They may have a definitive start and stopping point; or they may be on-going. They may be physical capital improvements or physical plans or they maybe programs. Implementation Initiatives should respond to a specific goal. They require a specified set of resources (human, capital, and/or financial) that should be identified to some degree.

## NW ANNEXATION AREA:



See land use chapter for greater detail

- Explore and enable creative reuse opportunities for existing buildings (i.e. makers spaces, co-working spaces, business incubators, live/work art studios, etc.)
- Consider acquisition of key redevelopment properties in targeted areas as they become available (i.e. redevelopment plans or development proposals.)

7. Collaborate with industry experts in exploring ways to bring desired businesses and services including dining and entertainment (experience based) to Johnston.
8. Ensure a diverse mix of business sectors to maximize resilience and lessen impacts from industry specific economic shifts.
9. Support entrepreneurship and encourage the formation of locally owned businesses and startups.
10. Support and promote the development of work force housing.

### THE REGIONAL IMPACT OF CAMP DODGE, FEBRUARY 2015:

When combining all Camp Dodge normal operations activities with all spending by visitors to the facility, the total annual and ongoing economic impact was projected at \$203.9 million in total regional economic output resulting in \$139.7 million in value added for the regional economy. Value added is the equivalent of Gross Domestic Product and the standard indicator for the worth of economic activity in a region.

## Implementation Actions

1. Continue to meet and coordinate with property owners and prospective developers in support of ongoing infrastructure planning for future growth areas. Coordinate with Iowa DOT and property owners adjacent to Highway 141 road connectivity through properties to provide alternative access options for residents traveling to the northern and south portions of Johnston.
2. Conduct biannual community surveys to identify economic development priorities.
3. Work with Johnston Economic Development Corporation (JEDCO), Iowa Economic Development Authority (IEDA) and Greater Des Moines Partnership (GDMP) to attract businesses to Johnston's business park areas and effectively educate the public about economic development.
4. Maintain a competitive financial incentive policy and "economic development toolbox" identifying tax incentives or other economic tools to attract target industries, assist with business development and encourage high quality development.
5. Develop an outdoor recreation action plan and marketing strategy in collaboration with local and regional agencies and organizations that leverages Johnston's outdoor recreation assets as economic development drivers (Beaver Creek Recreation Corridor, Saylorville Lake, regional trail access, Camp Dodge, etc.)
6. Continue acquisition of floodplain properties along Beaver Creek for inclusion in the recreation corridor.
7. Develop a façade and sign replacement program to encourage bringing storefronts and signs up to code.
8. Invest in the development of iconic commercial districts such as the Johnston Town Center and Gateway that will attract users from across the metro.
9. Continue Master Planning for Merle Hay Road and redevelopment within the corridor where existing plans do not exist. Short term implementation includes development of the Gateway and Johnston Town Center with longer term implementation steps including burying powerlines, creating a unified streetscaping, and accessibility.
10. Develop a strategy that creates reasons for large and small groups visiting the community for businesses to dine, stay, and shop in Johnston.
11. Build on and continue to invest in the City's current marketing plan and further enhance the community brand to promote the city of Johnston to local, regional, and national business leaders.
12. Continue to enhance Johnston's business retention and expansion program to ensure regular outreach and marketing efforts to the business community. Conduct as part of this outreach Business Retention visits to key basic businesses identified in partnership with IEDA and Mid-American Energy.



*Example of city branding and identity (Source: CivicBrand)*

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## CHAPTER 8

# HOUSING

## INTRODUCTION

Housing is the dominant form of development in Johnston and will continue to be over the Thrive 2040 planning horizon. The housing supply plays an important role in shaping the community. To a large degree, the size, form, and type of housing units determines who lives in Johnston. The quality and character of Johnston’s neighborhoods plays an important role in shaping the identity of the community and its stature as a place to live in the greater Des Moines Metropolitan Area.

Including housing policies and initiatives in the comprehensive plan is appropriate for two reasons. First, the housing needs of a community are not completely met by private market forces, land use planning, and land use controls. Community plans and ordinance controls create the framework for private land development; land development that is almost universally driven by market demand and the ability to generate a profit. Private market forces need to be supplemented by programs and funding sources that bridge the financial gaps of providing housing for segments of the community that can’t afford market-rate housing. Accordingly, this chapter can help identify housing needs and provide a foundation for local decision making to guide residential development and redevelopment efforts in Johnston.

The second reason that housing is addressed in this plan is to meet the intent of Iowa Smart Planning legislation enacted by the Iowa Legislature. The Smart Planning legislation defines components that are suggested content for comprehensive plans. These components are presented as ten Smart Planning principles, one of which addresses housing. The housing principle addresses housing diversity. It states, “planning, zoning, development and resource management should encourage diversity in the types of available housing, support the rehabilitation of existing housing, and promote the location of housing near public transportation and employment centers.”

The legislation further states that when developing or amending a comprehensive plan, “objectives, policies, and programs to further the vitality and character of established residential neighborhoods and new residential neighborhoods and plans to ensure an adequate supply of housing that meets both the existing and forecasted housing demand. The comprehensive plan or land development regulations may include an inventory and analysis of the local housing stock and may include specific information such as age, condition, type, market value, occupancy, and historical characteristics of all the housing within the municipality. The comprehensive plan or land development regulations may identify specific policies and programs that promote the development of new housing and maintenance or rehabilitation of existing housing that provide a range of housing choices that meet the needs of the residents of the municipality.”



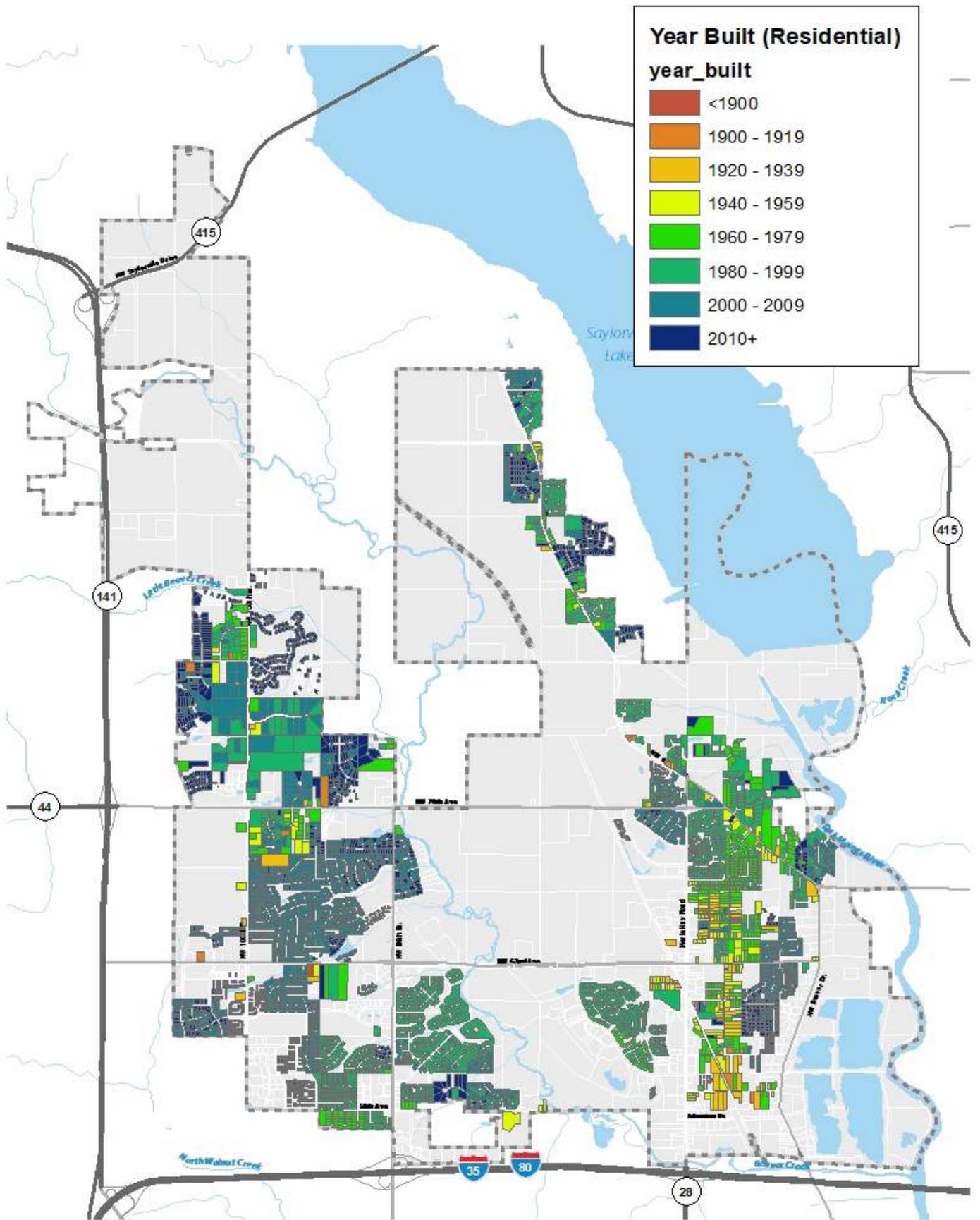


Figure 8.1 Housing - Year Built





## CHARACTERISTICS OF THE EXISTING HOUSING SUPPLY

### Assessed Value

Table 7.1 shows the assessed value of residential properties in Johnston according to 2019 Polk County Assessors data. In most cases, the assessed value of a given home closely correlates to its age of construction. Residential units lying west of Merle Hay Road have generally higher assessed values than properties lying east of Merle Hay Road. Residential units with the highest assessed value are concentrated north of NW 70th Avenue, west of NW 86th Street, and along NW Beaver Drive in the northern portion of the city. Since the 2010 Comprehensive Plan update, Johnston has experienced an increasing valuation in its housing stock. Housing stock in the lower value brackets (those below \$250,000) have decreased, while the number of units valued in the higher bracket ranges have increased rather significantly. This is a result of a combination of factors including new construction generally being higher value and older homes being improved and maintained, and continuing to grow in value due to demand.



*“In many cases, the assessed value of a given home closely correlates to its age of construction.”*

ASSESSED VALUE (LAND AND HOME)	HOUSING UNITS		PERCENT OF TOTAL	
	2019	2010	2019	2010
<\$75,000	11	131	0.2%	2.6%
\$75,000-149,999	243	707	3.8%	14.0%
\$150,000-\$249,999	2,178	2,270	34.5%	45.1%
\$250,000-\$349,999	2,059	1,241	32.6%	24.7%
\$350,000-\$499,999	1,294	495	20.5%	9.8%
\$500,000-\$999,999	502	175	7.9%	3.5%
>\$1,000,000	29	15	0.5%	0.3%

TABLE 8.1 ASSESSED VALUE OF HOUSING (DOES NOT INCLUDE APARTMENT OR CONDOMINIUM VALUES - DATA AS OF SUMMER 2019)

YEAR BUILT	HOUSING UNITS	PERCENT OF TOTAL
<1900	3	0.0%
1990-1919	17	0.3%
1920-1939	59	0.9%
1940-1959	143	2.3%
1960-1979	454	7.2%
1980-1999	1,783	28.2%
2000-2018	3,855	61.1%

TABLE 8.2 HOUSING YEAR BUILT (DOES NOT INCLUDE APARTMENT OR CONDOMINIUM VALUES - DATA AS OF SUMMER 2019)

HOUSING TYPE	UNITS	PERCENT
1 Story	2,341	37%
1.5 Story	366	6%
2 Story	3,268	52%
2+ Story	5	0%
Split Level/Entry	321	5%
Manufacture Home	1	0%
Under Construction	25	0%

TABLE 8.3 HOUSING STYLE (DOES NOT INCLUDE APARTMENT OR CONDOMINIUM VALUES - DATA AS OF SUMMER 2019)

### Year Built

Johnston's housing stock is relatively new with nearly 90% of the total units being constructed since 1980 (see Table 7.2). Less than 4% of the total housing stock was built prior to 1960. Figure 8.1 shows the distribution of housing units in the community by year of construction. Although the total number of homes constructed prior to 1960 is relatively small, units of this vintage will require increasing amounts of ongoing maintenance. The city will need to continually monitor overall housing quality to ensure the long-term integrity of existing neighborhoods.

### Style of Housing

Housing styles change with the times. For the past couple of decades, two story homes have been a strong form of new housing. Two story structures account for over half of Johnston's housing stock and can be found throughout the community (Table 8.3 and Figure 8.2). As the population continues to age, some residents will seek other housing choices that offer one level living. Anticipated decreases in family size as well as the preferences of younger buyers may also impact the future marketability of this common form of housing.

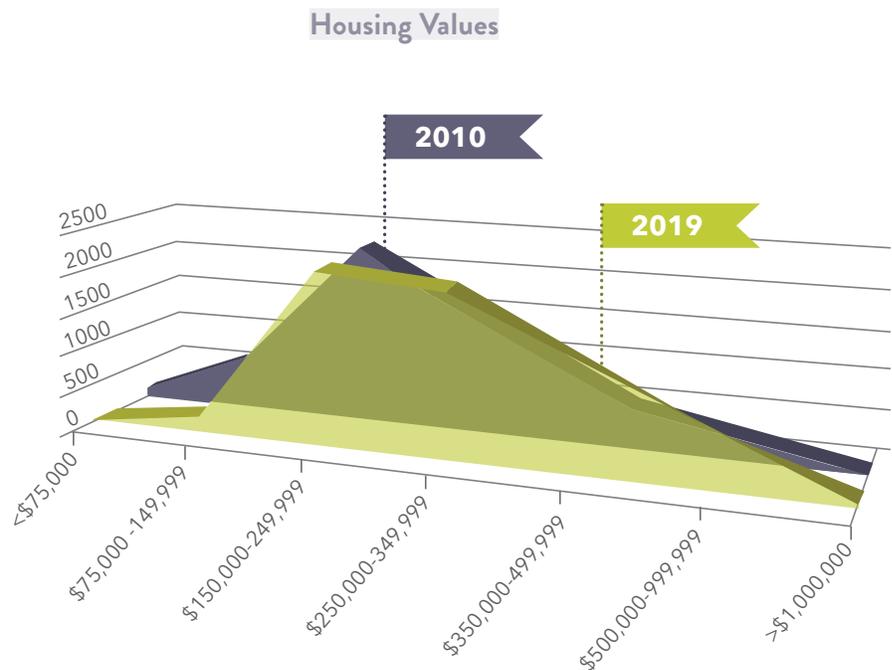


Figure 8.3 Change in assessed value of houses 2010-2019

In 2019 – there are approximately 9,700 housing units in Johnston distributed roughly as follows:

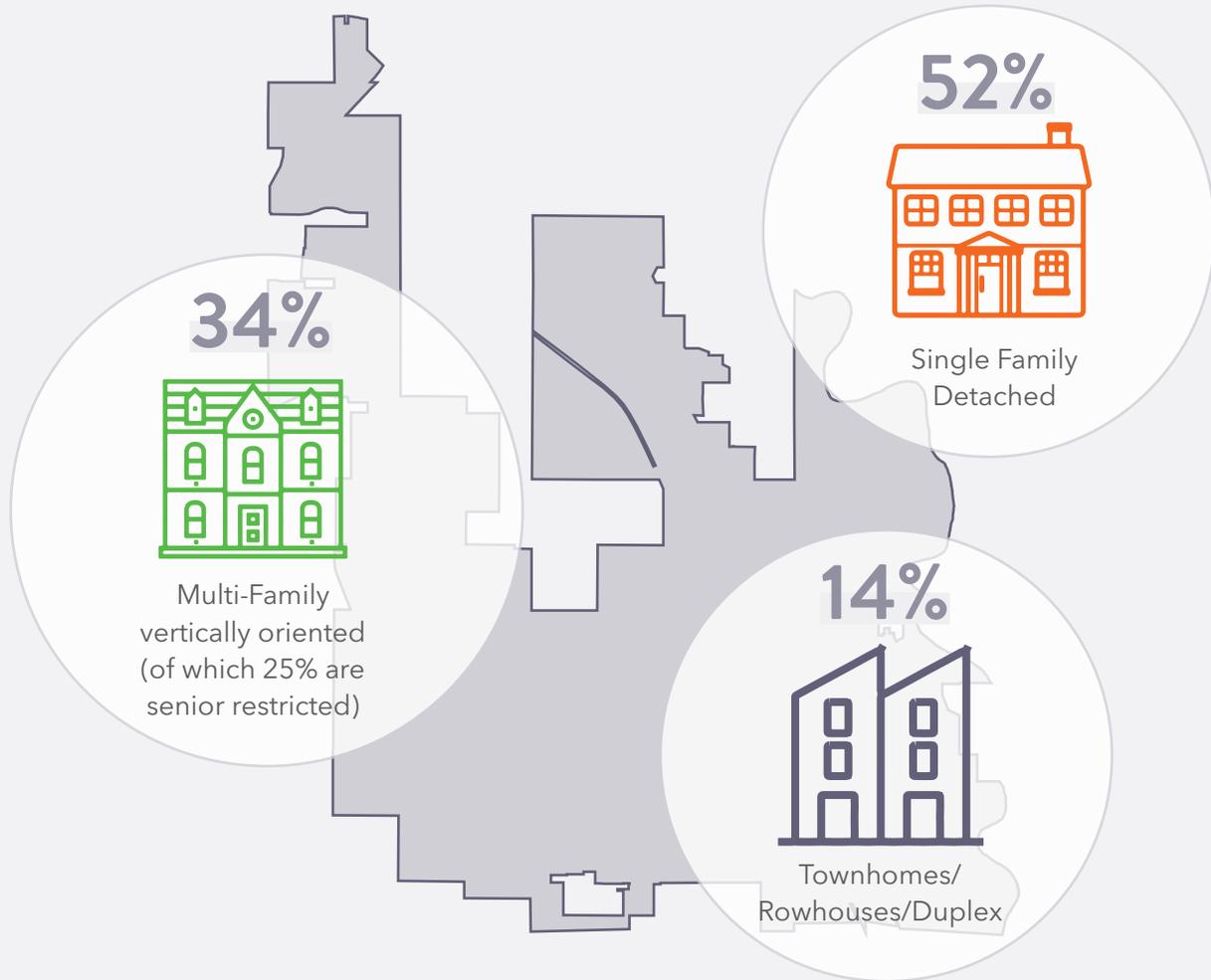


Figure 8.4 Existing Housing Form

### Housing Form

During the Thrive 2040 planning process, many comments were offered through community engagement process indicating that Johnston has enough high-density multi-family housing. Concerns over higher density housing were expressed relative to crime, school impacts, traffic, and image. Comments were expressed to preserve the single-family detached housing character of Johnston. It is also clear through the comments collected during the engagement process, community members desire Johnston to be a sustainable, vibrant, and resilient community. In order to the achieve this, Johnston must continue to support a diversity of housing choices in the right locations. In the last decade, and particularly in the last few years, Johnston has seen a significant demand for and growth in high density housing development. This trend is similar to national trends as the millennial and baby boom generation drive housing demand.



### GOALS:



Written as statements and expressions of desired outcomes ... “to which planned effort is directed.” Goals should support one or more guiding principles – if it is an important goal and there is no logical supporting guiding principle – maybe consider a guiding principle revision. Consideration should be given to how it is measured. Metric may be subjective or objective (quantifiable).

### POLICIES:

Written as passive guidelines, general rules or explicit rules in some cases with heavy use of verbs such as: support, encourage, prohibit, protect, preserve, establish, require, etc.

### IMPLEMENTATION INITIATIVES:

Written as action statements that work towards achieving a defined outcome. They may have a definitive start and stopping point; or they may be on-going. They may be physical capital improvements or physical plans or they maybe programs. Implementation Initiatives should respond to a specific goal. They require a specified set of resources (human, capital, and/or financial) that should be identified to some degree.

## HOUSING GOALS, POLICIES, & IMPLEMENTATION INITIATIVES

The following is a collection of goals, policies, and general implementation initiatives. These lists build off the 2030 Comprehensive Plan by attempting to reduce duplication (although some still exists across categories), eliminating actions that have been completed or are no longer relevant, and incorporating new directions based on community input or best practices. The following methodologies guide the creation of the goals, policies, and implementation initiatives:

### Goals

1. Maintain a balanced housing supply with housing available for people at all income levels and unit types that meet the varying life-cycle needs of Johnston residents.
2. Establish a housing pattern that respects the natural environment while striving to meet local housing needs and the community’s share of metropolitan area housing growth.
3. Establish a community of well-maintained housing and neighborhoods including ownership and rental housing.
4. Improve access and linkages between housing, employment, retail centers, parks, and civic/cultural institutions.

## **Housing Policies**

1. Promote ongoing maintenance of owner occupied and rental housing units.
2. Promote the development of multi-family housing in areas that are proximate to jobs, services, multi-modal transportation, parks, and civic institutions.
3. Require the thoughtful integration of usable open spaces within residential developments in order to maintain a living environment that is consistent with the city's vision and guiding principles.
4. Require housing to be built outside of floodways and with adequate flood protection.
5. Integrate transparency into the development review process to increase community awareness of the benefits of new development regardless of development type.
6. Encourage owners and managers of multi-family and rental housing to be active participants in the Crime Free Multifamily Housing Program.
7. Encourage the integration of affordable housing as a part of development projects rather than an entire project being affordable.
8. Collaborate with regional agencies, the for profit, and not for profit housing development community to implement new approaches to provide affordable and workforce housing.
9. Encourage the formation of low cost and inclusive neighborhood associations to address long-term maintenance of landscaping and other neighborhood improvements.

## **Implementation Initiatives**

1. Update zoning and subdivision regulations to consider new and emerging housing forms and the wide variety of housing types.
2. Develop a housing study to identify affordable and workforce housing needs unique to Johnston.
3. Use GIS and other data sources to monitor conditions and trends in the housing stock, including ownership status, values, sales, improvements, and consumer trends.
4. Organize and facilitate community conversations to help build trusting relationships between the development community and Johnston residents.
5. Build partnerships with lending institutions to provide grants or low interest or zero interest loan programs aimed at modernizing, improving, or maintaining older housing stock in Johnston.



## HOUSING ISSUES

Given the fact that most of Johnston’s housing has been built since 1980, the community has not experienced many of the general housing issues that older communities have seen. Maintenance concerns will continue to be present and will grow over time as Johnston’s housing supply ages.



### Maintenance

The city has a housing maintenance code in place that was adopted as an implementation effort from the 2010 plan; however, housing maintenance continues to be a priority. Johnston works with Polk County Housing Trust to provide financial assistance for lower or moderate-income households; however, Johnston property values (assessed values) often disqualify a homeowner who needs assistance from the program.



### Housing Plan

Community input gained through the Thrive 2040 planning process identify a number of issues and needs associated with housing. These issues and needs form the basis for the housing plan.



### **A Balanced Supply of Housing**

The City of Johnston strives for a balanced mix of housing to sufficiently provide for the needs of current and future residents and existing residents' housing needs as they move through different stages of the life cycle.

As the population of Johnston continues to age and young buyers seek different forms of housing, the demand for multi-family housing is likely to continue to be strong. As a result, over the next ten to twenty years, the amount of multi-family housing in the community as a percentage of total housing may continue to increase but at a lesser rate than recent years. In response to maintaining a balance of housing in the community, the future land use plan designates land to accommodate a variety of housing types and densities.



### **A Variety of Housing Types**

The city has a variety of types and styles of housing including traditional single-family, large lot single-family, duplex (twinhome), townhomes, condominiums, and apartments. In addition, recent development has added several different styles of townhome units to the housing stock. In the future, Johnston is likely to see interest in developing small-lot single-family homes. This product type is being designed to appeal to mid-age and older adults with no children as well as young seniors seeking to downsize from a larger single-family home. Such smaller housing is also an attempt at maintaining a more affordable option for housing. The majority of the city's housing stock remains newer, having been built after 1980. As such, Johnston has fewer issues with housing stock renewal and replacement than older communities, but more issues with maintaining the balance of the housing stock as it pertains to intensity of land use and product design for lifestyle needs.

Development in Johnston over the past ten years has resulted in a mixture of housing types that were built in response to market conditions. Traditional single-family detached housing has always been a strong component of the community's housing stock. Because of market interest and tax and finance issues, multi-family housing complexes have been built at different times. During the 1980s and into the 1990s, Green Meadows established itself as a large scale planned unit development with a variety of housing types and densities. As the community looks forward to the next two decades, this comprehensive plan assumes that efforts will be made to maintain housing diversity.

Future housing constructed in Johnston will either occur as infill housing in the developed portion of the community or new housing in the developing, west and northwest area of the city. In infill situations, housing types will be dependent on compatibility with surrounding housing types and lot sizes. In the developing area, more flexibility exists. The land use pattern in the community promotes housing diversity. The area around the Johnston Town Center at Merle Hay Road and NW 62nd Avenue will contain higher density housing within a development pattern that also accommodates small scale retail commercial and offices oriented around a central green space. The Johnston Thrive 2040 land use plan introduces a wider range of land uses to allow for housing diversity accommodating market demand and supporting broader economic development needs of the city. This density range allows the integration of townhouse developments with traditional single family detached housing neighborhoods.



### **A Community of Well Maintained Housing**

Although the number of deteriorating housing units remains relatively low in Johnston, it is possible that some deteriorating housing units may be located in prominent locations. Johnston, like many communities, has areas that are zoned commercial but currently contain residential uses. In such areas, the residential structures are non-conforming and can typically only be maintained rather than expanded or significantly improved. In such cases, owners of property sometimes defer required maintenance because the use is intended to change in the future. The future in such cases, however, may be ten, twenty, or thirty years away. As a result, such properties sometimes deteriorate and negatively impact the image of the community.

Communities have a limited number of alternatives in order to minimize deterioration as a result of zoning practices. They can enforce the non-conforming use provisions of the applicable code which typically allows normal maintenance such as painting, roofing, etc. or they can take an active role in facilitating development and redevelopment that will result in desired long term uses thereby minimizing the amount of non-conforming situations. They could also monitor housing needs within the community and work with lenders, remodeling, or other home improvement contractors/vendors and agencies focused on preservation of affordable housing to provide low interest or zero interest loan programs directed towards home improvements. Improvements could go beyond basic maintenance needs and cover more aesthetic purposes such as kitchen or bath remodels.

Johnston should continue to provide for ongoing monitoring of the housing stock to identify issues with physical deterioration of specific units or in specific areas of the city. In the near future, these issues are likely to be minimal. Efforts should also concentrate on property maintenance. Neighborhood deterioration due to abandoned vehicles, peeling paint, junk storage, etc. is addressed through the Johnston Property Maintenance Code.



### **Housing Development that Respects the Natural Environment**

The City of Johnston has topography that provides unique physical features including slopes, woodlands and wetlands. Environmental regulations in addition to public consensus strives to protect these features as distinct benefits for "quality of life." In addition, a significant amount of land lying northwest of the city is slated to be developed with large-lot single-family housing, designed in a manner to preserve and protect natural features. This rural residential area is expected to remain substantially less dense than the rest of the city, in part, because of the excessive costs associated with extending utilities to this area in the future. Also, the city is committed to preserving the existing character of the estate area through less intensive land development.

Natural features need to be considered in the design of all densities of housing in Johnston. The fingers of open space that are part of the Beaver Creek corridor will extend and become linking elements in many of the future housing areas in the community. These open space corridors and trails within them can be strong physical and visual connections that can tie together different neighborhoods and even different land uses.



## Improvement of Linkages Between Housing and Employment and the Provision of Services to Residents

Johnston is a community with strong north-south transportation corridors. Merle Hay Road, NW Beaver Drive, NW 86th Street, and NW 100th Street are all significant north-south roadways. Most of the commercial uses in the city have located along Merle Hay Road. Industrial employment is scattered along NW Beaver Drive. Concentrations of office employment occur along NW 62nd Street, west of NW 86th Street, and along Merle Hay Road.

East-west connections across the city are more limited and relatively undeveloped. Most traffic is oriented north-south which tends to divide Johnston and cause a portion of residents to funnel out of the city for retail goods and services. Additional north-south connections are challenged by the land holdings of Camp Dodge and Corteva Agriscience. The City must continue to work with these important institutions to manage this connectivity challenge.

Johnston Thrive 2040 continues to emphasize efforts to improve east-west connections throughout the city in order to enhance through traffic and create better linkages between employment, services, and transportation. As additional housing development continues, NW 70th Avenue, NW 62nd Avenue, and NW 54th Avenue will enhance linkages and access between housing, employment, and services.

Because of the existing land use pattern as well as the natural characteristics of the community, it is difficult to integrate employment and housing in Johnston on a large-scale basis. Because the highest residential densities are scattered throughout the community and the employment growth will be predominately in the western section of the city, the roadway system and local and regional trails will be the primary means of linking the residential population to the employment base. The transportation section of the comprehensive plan seeks to establish an adequate roadway system to ensure appropriate access to local businesses. Additionally, creative approaches to transit service (such as DART's Flex Connect pilot program) <https://www.ridedart.com/flex-connect-demand-service> access to some employment destinations in the future.

At the time of this planning process, cities around the world are seeking innovative changes in technology to allow more employees to work from home. Over the course of the next 10 to 20 years advances in technology, changes in employment practices, or national and global events are expected to continue to increase the need for remote work accommodations.

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## CHAPTER 9

# PARKS, TRAILS, & RECREATION

## INTRODUCTION

A robust park, trail, and recreation system is a foundational element in crafting and maintaining a community that is an attractive place to live, work, and play. Johnston's park system is essential in maintaining the community's high quality of life and provides a key draw for new residents and visitors. The system provides a number of services to the community by facilitating active lifestyles, promoting interactions with nature, improving mental and physical health, providing ecosystem services, increasing property values, and above all by creating places for the community to play, explore, create, and relax.

Johnston is a rapidly growing community in the Des Moines Metropolitan Area, and is centrally positioned around a number of high quality local and regional recreational resources, providing the community with a wide variety of recreational options tailored to fit their needs. In order to maintain the quality and variety of these resources, the City must continue to maintain, protect, and where needed, add additional resources to the system. This chapter will identify those resources currently serving the community, analyze where gaps and improvement can and should be made, and make recommendations for the long-term support and expansion of one of the City's most

*"I love the bike trails, especially the new one on Beaver Drive. I would love to see more connections to trails within Johnston so they may be used to reach the library, parks, and hopefully other recreational activities."*

~Johnston Resident~

foundational community resources. These recommendations are guided by national recreational standards developed by the National Recreation and Park Association (NRPA) and the NRPA's yearly review of emerging national recreational trends. These national guidelines and trends along with the feedback collected during the Plan's community engagement process will ultimately inform the vision, goals, and initiatives that will set the framework for the City's park, recreation, and trail system through 2040.

## TRENDS IN PARKS AND RECREATION

One method for evaluating the health and robustness of the City's park and trail system is to compare Johnston's system to that of other communities nationally. The NRPA collects park and recreation information from communities across the nation, on a volunteer basis, in order to provide standardized comparison metrics between park systems from community to community. While it should be acknowledged that this information has its limitations, it provides one of the best and most consistent sets of measurements against which we can evaluate the City's recreation features.

Currently the City has 16.2 acres of park land per 1,000 residents and one park per 1,377.5 residents. Comparing this to the national average of 10.1 acres of park per 1,000 residents and 1 park for every 2,181 residents the City of Johnston has a surplus of park land when compared to other communities, a testament to the importance placed on parks and recreation by its residents.

Another trend in community recreation is the arrival of private park and recreational facilities tailored to meet a specific community need such as team sports, fitness, aquatic, or in some new development areas even playground features. While these amenities provide an important resource to the community, it is important to draw a distinction between a public resource, and one that is 'pay to play'. A cornerstone tenet of any successful park system is that it should be open and accessible to all members of a community.

The second relevant evaluation tool provided by the NRPA is an inventory of emerging national recreational use and activity trends. These trends, combined with the input received during the community engagement process, can help the City anticipate and plan for changing community recreational needs, both in facilities and programs, as it grows, matures, and evolves as a community. The following is a summary of current trends and their potential impact on the City's recreational system.



### Healthy Living, Aging in Place, and Active Living

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People are living longer today than ever before, and many seniors have a desire to stay active as they grow older. Activities, such as pickleball, swimming, walking, and biking, are popular among seniors.



### Disconnection from Nature

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Digital devices, such as mobile phones, tablets, and laptops preoccupy people and prevent them from venturing outdoors. Parks and recreation need to stay relevant to ensure youth and adults engage with the outdoors.



### Accessibility and Inclusive Universal Design

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There is a need for public services, such as parks and recreation facilities, to be designed to meet the needs of all citizens in terms of accessibility and usability.



### Safe and Comfortable Facilities

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Residents are more concerned about safety in parks and open spaces. Desired features include lighting in parks and along trails, security cameras, and open spaces with long sight lines.



### Increasing Demands on Time

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Changes in employment patterns and more structured activities are altering patterns of parks and recreation use and are creating more demand at new times. Use of parks during day hours by parents with toddlers has decreased, but evening park use by young families has increased. Also, during the summer, children typically have fully programmed activity schedules rather than free unstructured time to play outside in the parks.

Future changes in light of national and global events may continue to dramatically effect time demands as more employers offer remote work options and schools move towards online learning opportunities. The possibility of increased remote employment and education schedules may offer more flexibility to be outdoors.



### Destinations and Place-Making

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Destination parks and special facilities, such as event spaces, amphitheaters, bars/restaurants in parks, and unique facilities have been popular developments in recent years as communities try to attract visitors and provide memorable experiences for their residents. Placemaking is a multi-faceted approach to the planning, design and management of public spaces. Placemaking capitalizes on a local community's assets, inspiration, and potential, with the intention of creating public spaces that promote people's health, happiness, and well-being.



### Specialty Facilities and Non-Traditional Activities

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There is more interest today in unique and non-traditional recreational activities as people are constantly discovering and learning about new ways to recreate. These include: disc golf, challenge courses, dog parks, splash pads, archery, and pickleball, among others.



### Sustainable (Financially and Environmentally) Alternatives

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Changing weather patterns, increased flooding, larger rainfall events, and increased development have brought attention to smart stormwater design and best practices for protecting the environment. Implementation of rain gardens, prairie restoration areas, and native landscaping along shorelines have become popular ways to improve the local landscape.



### Rising Trail Use

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In many communities, trails are the most requested facility. As the popularity of walking, running, biking, and dog-walking have continued to increase, people are looking for trails that are safe and provide high quality experiences, including loops, off-road paved surfaces, and natural corridors.



### Changes in Weather Dependent Programs

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As winter temperatures have varied in recent years, many communities are finding it difficult to maintain outdoor ice rinks, ski trails, and sledding hills. Refrigerated ice rinks and snow making have been used to provide reliable outdoor winter recreation facilities. Other flexible outdoor winter activities, such as fat tire biking, have become popular.



### Destination Athletic Facilities

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Artificial turf fields are becoming more popular. They provide reliable and flexible multi-use athletic fields. These fields require little maintenance compared to natural turf fields. Tournament complexes with multiple features and amenities, such as covered dugouts, concession stands, permanent restrooms, shaded viewing areas, and warm-up spaces are also high in demand.



### Families are on the Move

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In order to relocate for a job, better schools, or up-size or down-size, people are moving more often now than in past decades. In order to keep local residents informed of offerings, parks and recreation departments should provide ample information through multiple outlets, such as the City's website, social media, and mailed/print publications.



### Aquatic Recreation Resources

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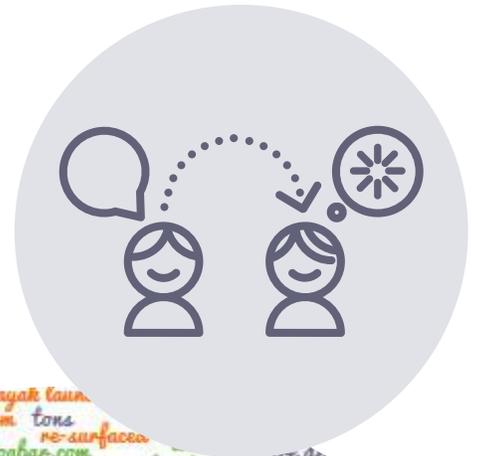
Many communities provide or are being asked to provide high-quality indoor and outdoor aquatic facilities and community or recreation centers that include options for all ages: senior center, teen center, preschool, meeting rooms, event facilities, indoor pool, indoor children's play area, and fitness center.



# COMMUNITY ENGAGEMENT

Taking the pulse of the community is a critical facet in planning for the City's future, and the input received during the community engagement process is one wall of the Plan's 'foundation'. It's a window into what is working and what is not, and illuminates a range of perspectives on how the community can improve over time. Across the engagement process a set of themes began to emerge, informing the Plan's decision making and recommendations. These themes are:

- » Enhance, expand, and maintain the City's sidewalk and trail network.
- » Connect the trail and sidewalk network to more of the City's schools, destinations, and other recreational resources.
- » Improve access to water resources like lakes and rivers for fishing, kayaking, and water recreation.
- » Provide an aquatic center, pool, or water centric recreational facility.
- » Expand, enhance, and link natural resource areas and corridors to create a wider greenway system
- » Provide more outdoor programming, festivals, and recreational activities for a broader spectrum of the community, in particular for children and the seniors.





## PARKS, TRAILS & RECREATION:



The following methodologies guide the creation of the goals, policies, and implementation initiatives:

### GOALS:

Written as statements and expressions of desired outcomes ... "to which planned effort is directed." Goals should support one or more guiding principles – if it is an important goal and there is no logical supporting guiding principle – maybe consider a guiding principle revision. Consideration should be given to how it measured. Metric may be subjective or objective (quantifiable).

### POLICIES:

Written as passive guidelines, general rules or explicit rules in some cases with heavy use of verbs such as: support, encourage, prohibit, protect, preserve, establish, require, etc.

### IMPLEMENTATION INITIATIVES:

Written as action statements that work towards achieving a defined outcome. They may have a definitive start and stopping point; or they may be on-going. They may be physical capital improvements or physical plans or they may be programs. Implementation Initiatives should respond to a specific goal. They require a specified set of resources (human, capital, and/or financial) that should be identified to some degree.

## GOALS, POLICIES, & INITIATIVES

### Goals

The formation of relevant goals and policies that are embraced by the community will allow the City of Johnston to develop a successful transportation system.

1. Provide a park and recreation system that meets the needs of a growing and diverse population.
2. Provide a park and recreation system that strengthens the image of the city and provides places for social gatherings within neighborhoods and the larger community.
3. Using the Johnston Walkability Study as a guide, Johnston will have safe, convenient, and coordinated facilities for alternative means of transportation throughout Johnston.
4. Through park development, maintenance, and continued improvement, Johnston will establish a park system that is a leader in sustainability and natural resources management. Areas within the Beaver Creek Natural Resource Area, such as Terra Park, will be a regional destination.
5. Become a hub and destination within the Des Moines Area water trail network for outdoor recreation.

### Policies

1. Implement the recommendations contained within this plan based on the needs of Johnston's population and sustainable development and management practices.
2. Coordinate planning and development of the park and recreation system with other local, county, state and federal governments and agencies.

3. Preserve and protect the natural environment with an emphasis on the conservation of appropriate natural resources for the present and future benefit of the community.
4. Offer a variety of activities in the park and recreation system including active and passive recreation areas, conservation areas, cultural sites and public art.
5. Multi-use park and recreation facilities will be encouraged to maximize accessibility and use by area residents.
6. Operate recreational programs that are accessible to all members of the community.
7. Encourage the development of recreational programs that meet the needs of the seniors, adults, teens, and young populations as well as people with special needs.
8. Conserve and protect natural resource areas including wetlands, groundwater recharge areas, streams, woodlands and drainageways where feasible.
9. Use new green building materials and technologies in park buildings where possible.
10. New park facilities and substantial renovations of existing facilities will include a sustainability evaluation of materials, energy use, operating costs and lifecycle replacement costs.
11. Use traditional and alternative stormwater management techniques in the development of new parks consistent with Johnston's Watershed Assessment and Stormwater Management Plan.
12. Native plants should be used in parks to reduce landscape maintenance requirements, to provide food and shelter for wildlife and to discourage invasive and nuisance species.
13. Encourage community and neighborhood involvement in the maintenance and management of natural areas.
14. Promote convenient and equitable access to parks and recreation facilities by generally locating parks within ½ mile of all residents.
15. Utilize Crime Prevention through Environmental Design (CPTED) principles in the planning and design of new park facilities.
16. Promote the benefits of active living through Parks and Recreation Department communications.
17. City-wide trails will act as coordinating elements for the Johnston park system.
18. Trails will be integral to larger scale development and will be installed at the developer's expense. These trails will connect to the existing and proposed extensions of the Johnston trail system.
19. The Johnston trail system will be coordinated with the trail systems of Polk County, the Corps of Engineers and surrounding cities.
20. Continue to partner with the Johnston Community School District, Camp Dodge, Army Corps as appropriate in the planning, development and operation of the Johnston park and recreation system.
21. Collaborate with the private sector where appropriate to provide community recreation services and facilities.
22. Continue to coordinate youth athletic programs with local athletic associations.
23. Require private recreation areas to be built and maintained by developers of medium and high-density residential developments.
24. Acquire park land and develop existing land into parks at a rate commensurate with the needs of Johnston's growing population.
25. Collaborate with federal, state and county agencies to preserve natural resource areas.
26. Promote recycling in all parks and public buildings.
27. Utilize the Johnston park system to promote active healthy living.
28. Ensure that park and open space areas are accessible consistent with the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities.



*Johnston  
Commons  
Park*



*Camp Dodge Entrance*



*Paved multi-use trail*

## Implementation Initiatives

1. Review and update the Parks and Recreation Plan every five to ten years.
2. Develop a community-wide Bicycle and Pedestrian Plan.
3. Establish and employ high-quality design standards in the development of the park system including provisions for accessibility, safety, and comfort.
4. Conduct periodic needs assessments and user studies to ensure that current park operations meet residents' needs and to expand the base of information for future Parks and Recreation Plan updates.
5. Utilize the city's website and other outreach methods to provide information on park and recreation opportunities in Johnston.
6. Develop a community-wide Natural Resource Management Plan for natural resource areas within the Johnston park and open space system.
7. Install bicycle parking at park system destinations to encourage bicycle use.
8. Develop partnerships with federal, state, regional and county agencies as well as for-profit and non-profit organizations and companies to fund active living initiatives.
9. Conduct community facilities study that explores opportunities for aquatics, indoor recreation, meeting space and community educational/cultural resources. Partner with local and regional entities that can benefit from such facilities and ensure economic impact and financial feasibility is studied.
10. Create an interconnected park, trail and recreation corridor along Beaver Creek through implementation of the Gateway and Water Trails Plan.
11. Partner with private and civic organizations to bridge gap in facilities and programming
12. Strategically plan for a growing and aging park system by adequately staffing and funding the parks department to meet planning, operations, maintenance, and replacement needs in the future.



## PARK CLASSIFICATIONS

Johnston has a variety of different types of parks that are components of the overall park system. In order to examine existing parks and to project future park needs, a uniform classification system is used in this plan. Additionally, the plan uses standards for neighborhood and community parks to assess the adequacy of both the existing and future supply of such facilities. The following provides information on each of the park categories.

### Neighborhood Parks

Johnston's park and recreation system is comprised of a wide variety of park types, each with its own role in the community. Classifying the City's parks into 'types' is an effective way to understand their role in the system, who they serve, and what characteristics and amenities they would typically provide. This classification system also provides the framework for assessing the community's additional park and recreational facility needs relative to the minimum standards established by the National Recreation and Park Association (NRPA).

**Description:** Neighborhood parks are the foundation of the parks system and provide for the day-to-day recreational needs of Johnston's residents. They should be safe, accessible, and well maintained with an emphasis on informal active and passive recreation like picnics, pick-up sports, playground play, and games.





**Location Criteria:** ¼ to ½ mile distance and uninterrupted by non-residential roads and major barriers than cannot be safely navigated by children and older adults.

**Size Criteria:** Usually between 5 and 10 acres.

**Standard:** 2.5-5 acres per 1,000 people.

**Typical Facilities:** For general planning purposes, the Johnston Park Advisory Board has established a list of “typical” recreational facilities that may be found in neighborhood parks. This listing contains only potential facilities and does not imply that all of the items listed are appropriate for every park within the city. The locational characteristics and physical properties of each site, combined with the needs of the anticipated users, will determine which facilities are appropriate for specific parks. A typical neighborhood park may include the following:

- » Play Equipment
- » Baseball/Softball Backstop
- » Tennis Courts
- » Off-Street Parking
- » Open Field Area
- » Restrooms
- » Trails
- » Picnic Tables
- » Picnic Shelters (small)
- » Basketball
- » Volleyball
- » Sledding



### School Parks

**Description:** Combining park and school recreational program needs into a shared site can more efficiently provide recreational facilities for both students and surrounding neighborhood residents. These parks are often the most fully utilized throughout the day and fulfill the needs of two user groups in the same space. These parks can provide park programming and facilities typical of a variety of other park classes including neighborhood and community parks, athletic complexes and special use facilities.

**Location Criteria:** Determined by location of school district property.

**Size Criteria:** Variable

## Community Parks/Sports Complex

Description: These parks provide community or regional scale recreation amenities with a focus on facilitating community-based recreational programs and preserving and restoring unique natural and open space areas. They typically provide multi-sport athletic fields and facilities and consolidate support facilities such as restrooms, parking, shelters, storage, and lighting to more efficiently meet the requirements of sports programs with minimizing land and resource requirements.

Location Criteria: Determined by the quantity and usability of the site.

Size Criteria: Typically between 30 and 80 acres.

Standard: 5-10 acres per 1,000 people

Typical Facilities: For general planning purposes, the Johnston Park Advisory Board has established a list of “typical” recreational facilities that may be found in community parks. Community parks are recreational facilities that serve as focal points of community recreational systems. Activities may include athletic complexes, archery, fishing, nature study, hiking, picnicking and other uses. Community parks commonly contain facilities that are designed to appeal to both active and passive users within one park site. The listing below contains only potential facilities and does not imply that all of the items listed are appropriate for every community park within the city. The locational characteristics and physical properties of each site combined with the anticipated needs of the entire Johnston community will determine which facilities are appropriate for specific parks.

A typical Community Park/Sports Complex may include the following:

- » Play Equipment
- » Baseball/Softball Fields
- » Soccer Fields
- » Tennis Courts
- » Off-Street Parking
- » Open Field Area
- » Restrooms
- » Trails
- » Picnic Tables
- » Picnic Shelters (small and large)
- » Basketball
- » Volleyball
- » Sledding
- » Concession Stands
- » Football Fields
- » Amphitheaters
- » Swimming Pools/Splash Pads
- » Special Use Facilities (Skate Park, Dog Park, etc.)
- » Lighted Athletic Fields





### **Natural Resource Areas**

Description: Lands identified and acquired for the preservation of significant natural resources, remnant landscapes, and open spaces. These areas are important for the community because they preserve visual quality, protect existing habitat, provide ecosystem services, and scaffold the wider park and trail system by providing connections and corridors linking other system elements.

Location Criteria: Depends on resource availability and opportunity. An emphasis should be placed on acquiring and protecting existing high quality natural areas and selecting pieces of land that either make or extend connections within the system. These lands can be thought of as one of the primary conduits through which the City's trail system connects to its parks and recreational destinations.

Size Criteria: Variable



### **Greenways and Linear Trail Connections**

Description: Land used to effectively tie park system components together to form a continuous park environment.

Location Criteria: Depends on resource and availability and opportunity.

Size Criteria: Variable



### **Private Park and Recreation Facilities**

Description: Parks and recreation facilities that are privately owned yet contribute to the public park system. Private facilities can offer either indoor or outdoor recreation opportunities, usually on a membership or fee basis.

Location Criteria: Variable, depends on specific use.

Size Criteria: Variable



### **Indoor Park/Recreation Facility**

Description: Indoor recreational facilities that are open to the general public and operated by a public entity.

Location Criteria: Typically located on sites with convenient transportation access.

Size Criteria: Variable.

Typical Facilities:

Gymnasiums, Indoor Ice Rinks, Fitness Centers, Community Meeting Areas, Indoor Walking/Running Tracks, Court Facilities, Pools, Auditoriums, and other Support Facilities like Restrooms, Showers, Locker Rooms, and Short Term Child Care.



## BIKE AND PEDESTRIAN FACILITY TYPES

In Johnston, trails are expected to accommodate a variety of users. Walking, jogging, in-line skating, bicycling and cross-country skiing are just some of the ways Johnston's trails area used. The bicycle and pedestrian system can be classified into one of five facility types:

### Sidewalks:

Sidewalks compliment the larger trail system by providing connections for pedestrians and light bicycle traffic. Sidewalks are not specifically shown on the trail plan because they require detailed and specific site considerations that are not within the scope of a comprehensive plan. Sidewalks should be planned and developed along with roadway construction and reconstruction projects.

### On-Street Trails:

In areas where right-of-way and other factors preclude the construction of off-street trails, on-street trails will need to be used. On-street trails can consist of street signage identifying various roadways as bicycle paths or in some cases, an actual designated bicycle lane can be delineated on the paved roadway when paving widths can safely accommodate such uses.

### Primary Trails:

Primary trails are major trail segments that are expected to carry a significant number of users. Primary trails should be constructed of bituminous surfacing and have a total width of 10 to 12 feet.

### Secondary Trails:

Secondary trails are significant components of the overall trail system but are those routes that may carry less traffic than the primary trails. Secondary trails should have a minimum width of 8 feet.



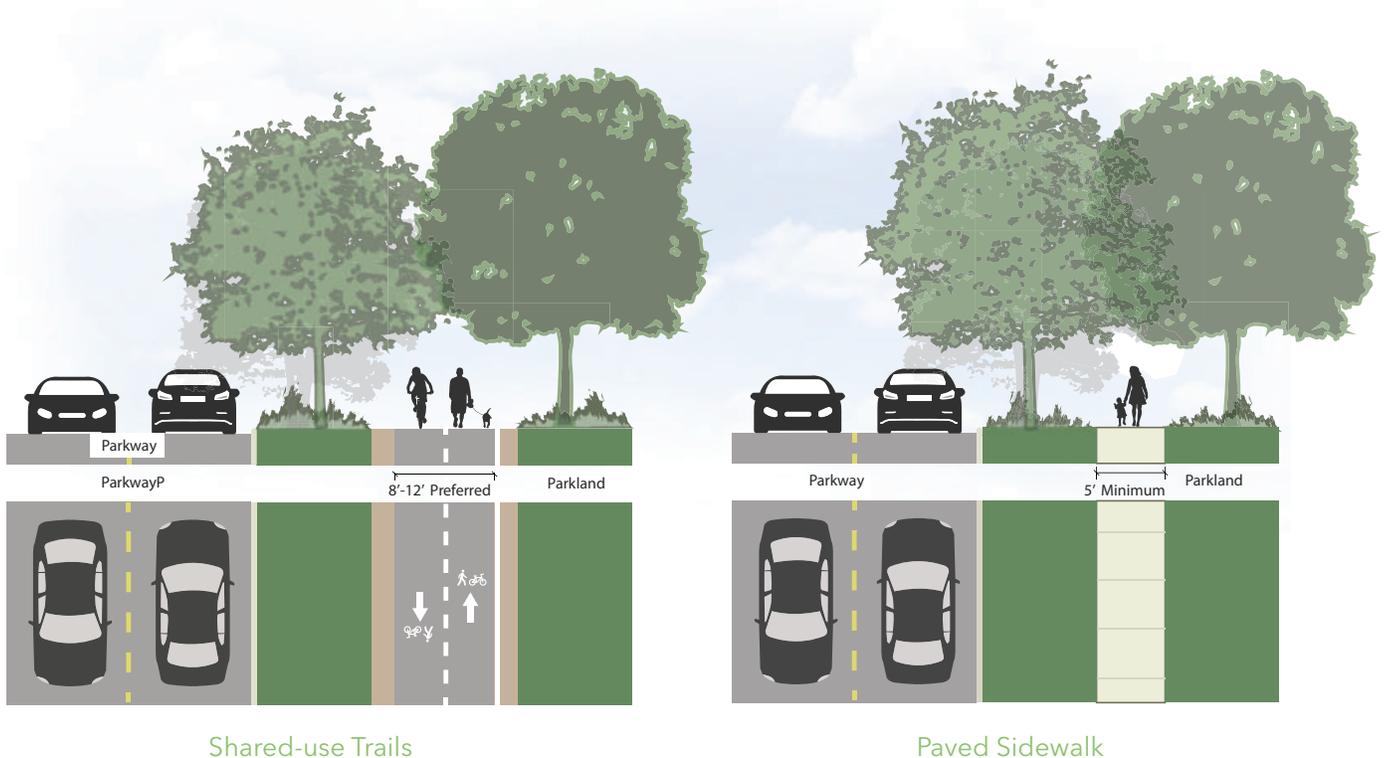
### Nature Trails:

Nature trails are trails intended to provide pedestrian access to natural areas. The surface type and width of nature trails are variable depending on terrain and other factors. In most cases, surfacing is either mowed turf or compacted wood chips.

### Trail Design Standards

In order to ensure consistency, trails should be designed and constructed using a set of uniform standards. The following standards should be considered as the City's trail system is expanded, replaced, and maintained:

- » Trails should range in width from 8 to 12 feet depending on the anticipated volume of users. In areas of extremely heavy anticipated pedestrian use, pedestrian and bicycle traffic may need to be separated.
- » Where feasible, trails should be constructed as separate facilities. Because of existing conditions, on-street trails will need to be built in some areas.
- » Long, steep grades should be avoided where possible. A 6% maximum slope is preferred, an 8% maximum can be used where unavoidable due to existing terrain.
- » Grades at intersections should not exceed 2% to allow adequate ability to stop.
- » Provide positive drainage away from trails with shallow drainage swales or ditches, culverts, and/or storm sewers as required.
- » Avoid sharp or sudden changes in horizontal and vertical alignments. Provide adequate sight distance for bicycles at intersections and on vertical changes in alignment.
- » Bicycle trails should be marked and signed in accordance with the latest edition of the manual on Uniform Traffic Control Devices and should assist users, by using uniform signage, in understanding they are on a comprehensive trail system which traverses several Polk County communities.
- » Minimum standards should conform to current granting authority standards and existing trails should be brought up to current standards as routine maintenance is performed.
- » Grade-separated crossings should be considered, particularly involving roadways with high traffic volumes, high speeds and/or high pedestrian volume.





## EXISTING PARK AND RECREATION SYSTEM

### Introduction

Johnston has an extensive parks and open space system with over 420 acres of public land and another 540 acres of private land dedicated for recreational use. Johnston also has approximately 66 miles of trails and another 116.5 miles of sidewalks connecting the community with schools, parks, places of employment, destinations, and natural resources. Johnston's park system has been assembled and developed through park dedication requirements, partnerships with the Johnston Community School District, and through land donations and acquisitions.

### Regional Setting

Johnston is centrally located around a wide variety of state and county recreation facilities in and around the Des Moines Metro Area. These facilities include Saylorville Lake, the Metro Area's largest recreational body of water, owned and operated by the Army Corps of Engineers. The 26,000 acre lake extends almost 5 miles up the Des Moines River valley from the dam and spillway in Johnston. Acorn Valley, Walnut Ridge, Lakeview Access and the Bob Shetler Recreation Areas provide camping and hiking opportunities within the Johnston city limits. Other recreational facilities also occur around the Saylorville Lake shoreline. Jester Park, which is operated by Polk County Conservation, is a very popular destination for camping, picnicking and golf. Big Creek State Park, a 20 minute drive for most Johnston residents, also offers picnicking, trails and a swimming beach. Saylorville Lake Marina provides slips and moorings for over 400 boats.

Beyond the Saylorville Lake area, a number of other state and county parks are conveniently located in Dallas, Boone and



*Terra Park*

## LEVEL OF TRAIL COMFORT:



In order to meet the needs of the community and provide a bicycle network that is both robust and resilient, it is important to understand that one of the primary barriers to trail use is the level of comfort provided by the facility. Generally the community's bicycle community can be categorized into three types:

### STRONG AND FEARLESS:

Users willing to bicycle with limited or no bicycle-specific infrastructure.

### ENTHUSIASTIC AND CONFIDENT:

Users willing to bicycle if some bicycle-specific infrastructure is in place.

### INTERESTED BUT CONCERNED:

Users willing to bicycle if high-quality bicycle infrastructure is in place.

Story counties. These parks offer an array of facilities and natural habitats that are less than an hour's drive from Johnston. Regional facilities are shown on the Regional Setting map, 9.1.

Camp Dodge Joint Maneuver Training Center also needs to be recognized as a major regional resource. Camp Dodge is a 4,300 acre active US Army training facility in the northern portion of Johnston containing hundreds of acres of open space providing important wildlife habit and ecosystem services like improving air and water quality. It is also the home of the Iowa Gold Star Museum, a publicly accessible museum with meeting and reception spaces that can be reserved by individuals or community groups.

## Bicycle and Pedestrian System

### Sidewalks

Johnston's sidewalk network is the local-level 'front door' feeder that links residents to the City's trail system. It's the primary facilitator of local pedestrian trips to neighborhoods serving destinations like neighborhood parks, mail boxes, corner stores, and other daily destinations. The system is concentrated primarily in the Southern half of the City, largely in neighborhoods constructed since the 1980s. Currently the City has more than 110 miles of sidewalks. City policy requires

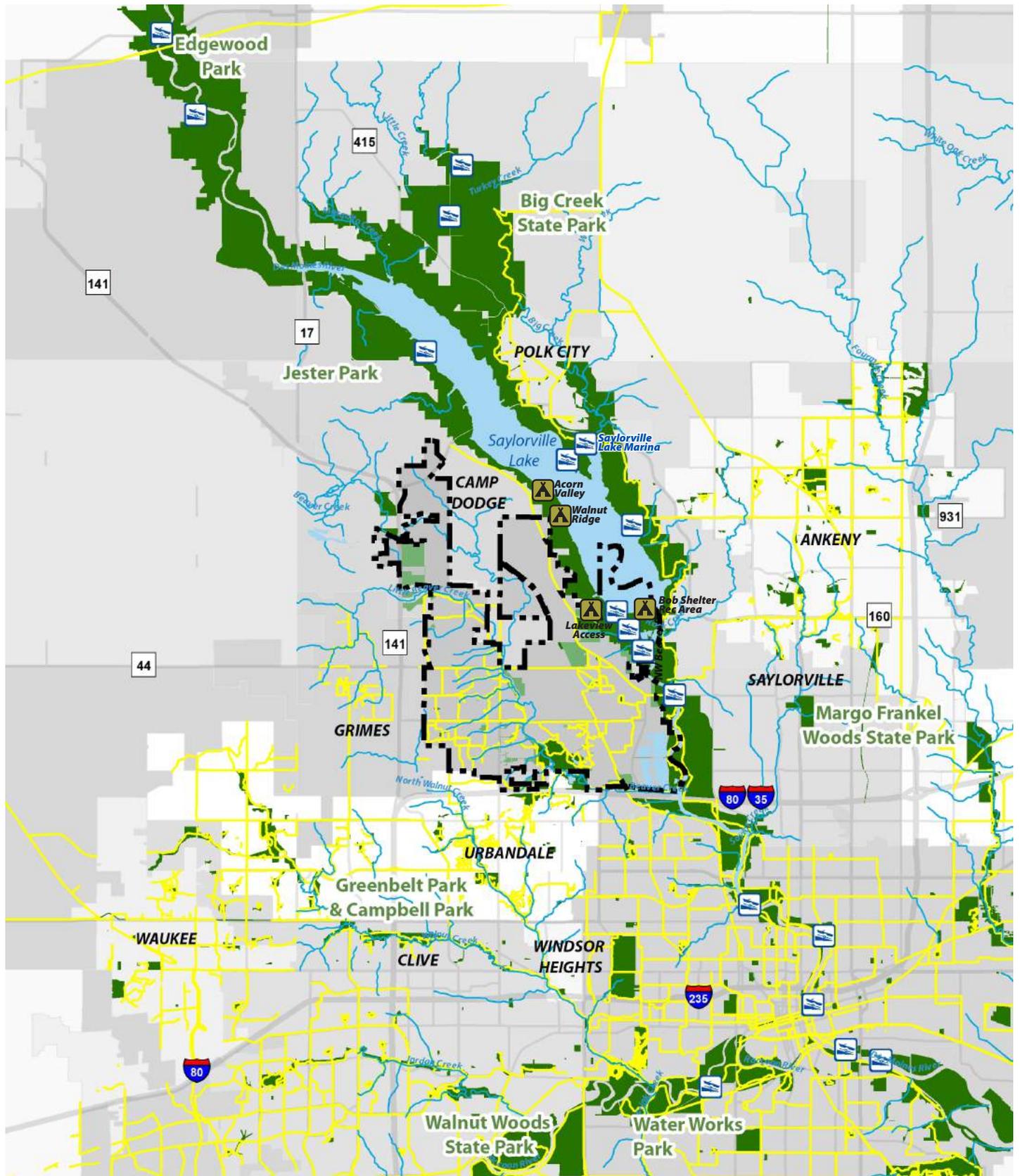
that most new residential development provide sidewalks, and while retrofitting existing neighborhoods with sidewalks is challenging (due to cost and space constraints), the City should be ready to evaluate these additions as opportunities arise. Adding sidewalks to existing neighborhoods is best done in concert with the reconstruction of local streets.

### Multi-Use Trails

Johnston has an established and well connected trail network, serving to some degree all developed portions of the city. Most trails are multi-use facilities accommodating walking, biking and other non-motorized uses. These facilities provide a wider level of access for residents to community wide resources like parks, schools, recreation facilities, natural areas, and community destinations. Figure 9.2 illustrates both the City's trail and sidewalk network.

### Regional Trails

Johnston has great proximity to a number of area regional trails. Some of the significant area trails include: the Trestle to Trestle Trail that connects from the Interurban Trail in Johnston, south to the City of Des Moines; the Sycamore Trail and Neal Smith Trail that lie on the east side of the Des Moines River and Saylorville Lake; and the Raccoon River Valley Trail that heads west through Dallas County and then meanders north to Jefferson. In addition to these trails, the Iowa DNR has established a trail that connects Big Creek State Park, Ledges State Park and Springbrook State Park. This trail, which is primarily but not exclusively an on-road route, covers 91 miles passing over Saylorville Lake on the Mile-long bridge.



0 1 2 4 Miles

-  Water Access
-  Camping
-  Park
-  City Limits
-  Local and Regional Trail Network
-  Johnston Parks and Open Space
-  City Limits

Figure 9.1 Regional Recreation Facilities



Trail Connection along Greenway Corridor



Green Meadows West Private Park Pavilion

### Current Park Facilities

Johnston’s current park system includes three community parks, ten neighborhood parks, six public school sites with park and recreation facilities, and four natural resource areas. The system is knit together by a system of greenways, sidewalks, and trails connecting residents to recreational resources and community destinations. Additionally, the community offers several private recreational facilities which provide programs on a fee for service or membership basis, and supplement specific areas of recreational programming need in the community. Table 9.1 lists the facilities of Johnston’s city parks and open space features. Figure 9.2 identifies Johnston’s existing parks, trails and recreation facilities.

### Recreation Organizations

Johnston has a number of private recreational organizations that offer team sports programming for the community. While these organizations fulfill an important role in the community, it is important to understand their limitations as it pertains to cost and/or membership and that they are not a one for one replacement for community-led programs.

		Covered Shelters	Picnic Area	Playground	Restrooms	Concessions	Ball Fields	Soccer	Open Field Space	Sand VB Courts	Disc Golf	Trail	Fishing	Nature Area	Parking	Canoe/Kayak Access	Dog Park
<b>COMMUNITY PARKS</b>																	
1	Lew Clarkson (formerly Creekside)	56.50															
2	Crown Point	7.00															
3	Johnston Commons Park	19.40															
<b>NEIGHBORHOOD PARKS</b>																	
4	Dewey Park	9.80															
5	Morningside Park	0.75															
6	Pointe Vista	8.75															
7	Ceres Lake Open Space	2.51															
8	Ray Schleih's Park	10.52															
9	Adventure Ridge	5.00															
10	Providence Point	2.60															
11	Crosshaven	6.50															
12	Greenwood Hills Park	2.50															
13	Century Trace (Future Park)																
<b>NATURAL RESOURCE AREAS</b>																	
14	Terra Park	35.39															
15	Beaver Creek Natural Resource Area	160.88															
16	Prairie Pointe Crossing	21.25															
17	Timothy Chicoine Memorial Gardens																
<b>GREENWAYS</b>																	
18	Longmeadow Woods Greenbelt	10.34															
19	Rittgers Oaks Open Space	3.14															
20	Green Meadows Greenbelt	22.00															
<b>PRIVATE PARKS</b>																	
21	Dover Park (private)	2.00															
22	Windsor Park (private)	0.50															
23	Ojendyk Fields (private)																

TABLE 9.1 EXISTING PARKS AND RECREATION FACILITIES





*Terra Park Natural Resource Area*

### **Park Districts**

In 1998, the Johnston Park Advisory Board separated the community into four Park Districts (East, Central, West, and Northridge) for the purpose of planning and financing park improvements. In the 2003 Park Plan update, the Park Advisory Board further subdivided the community into seven park districts in order to accommodate both past and future land annexations. Since the 2030 Comprehensive Plan, the City has added two additional districts, Saylorville North and Highway 141, for a total of nine districts. These districts subdivide the community using logical natural and man-made barriers like major roads, rivers, and other natural features which physically separate the districts. Districting the City in this way was done to ensure that each area is adequately served with park and trail facilities by evaluating what residents could comfortably access accounting for the known barriers and a typically comfortable walking distance of half a mile (a 10 minute walk). These districts still provide an important framework for evaluating the level of service providing by the City's park and trail system. Evaluating the park and trail system gaps is done through this lens.

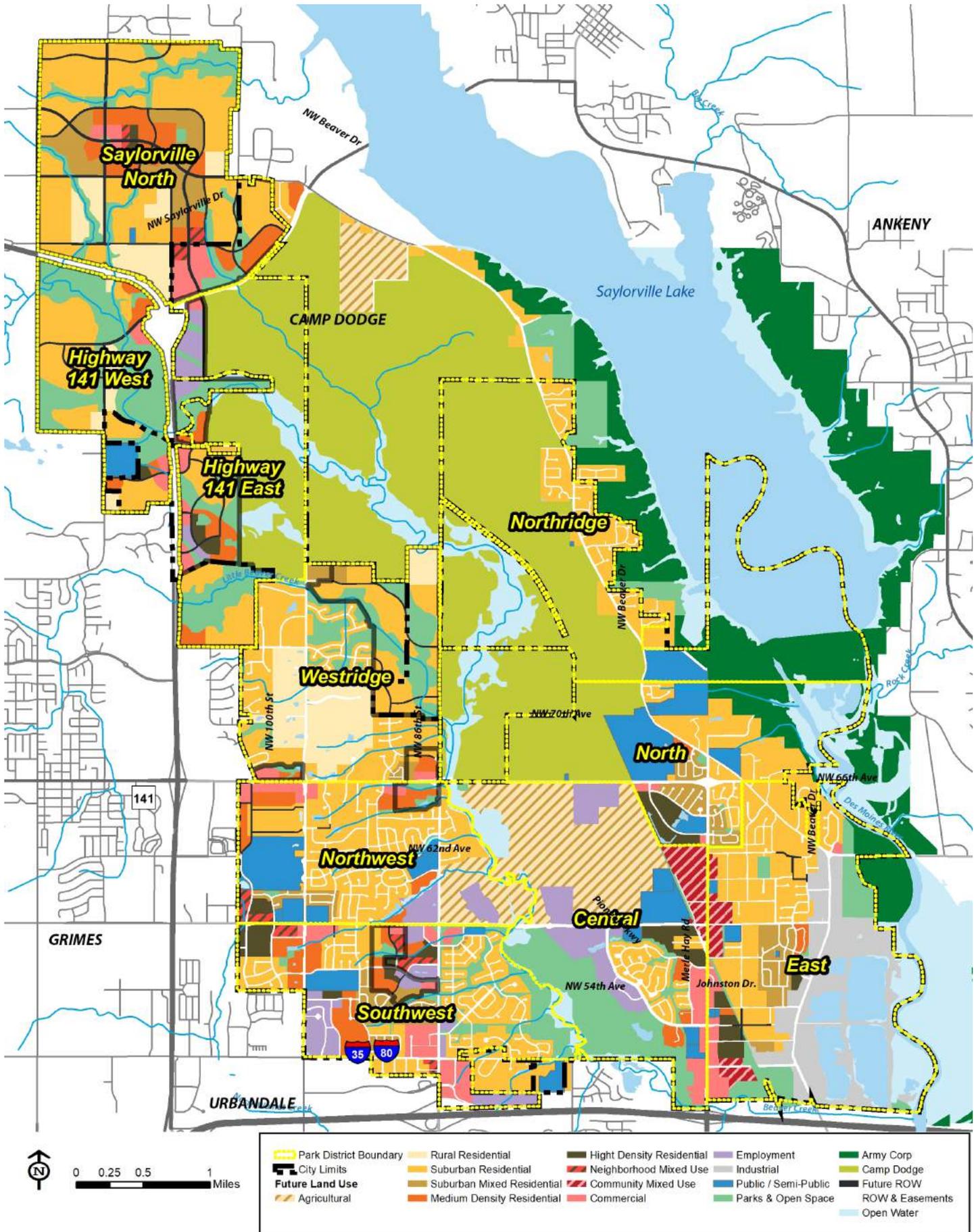


Figure 9.3 Park Districts



## PARK AND TRAIL/SIDEWALK GAP ANALYSIS

This section will examine the two foundational elements of City's existing recreation system, the parks and open spaces system and the sidewalk and trail network that links them together. This analysis is a high-level evaluation of how effectively the current park and trail system is meeting the needs of the community. It examines the existing resource, identifies the gaps, and incorporates the demands of the future growth projections identified in the Land Use Chapter. The intent of this analysis and subsequent recommendations will provide a broader framework upon which city decision makers can evaluate and react to opportunities and community needs as they arise.



*Terra Park*

### **Impact of Shifting Recreation Trends in Johnston**

While it is difficult to predict exactly how the community's recreational needs will evolve over time, there are universally beneficial improvements that can be made which promote and improve on many of the current national trends identified earlier in this chapter. Rather than focusing on targeted programs or trend specific improvements, the City will focus on system-wide enhancements which will benefit the widest spectrum of the community and provide a higher degree of flexibility and resiliency by improving things like safety, choice, and access.

Across the board, accessibility is a key theme and common thread in optimizing the City’s park and trail system to better accommodate and anticipate the community’s evolving recreational needs, both from a national trends perspective and also through input voiced through the community engagement process. Increasing system accessibility improves connections with nature, promotes active living and aging in place, and reduces demands on time by increasing convenience. It supports community destinations and place making by connecting people to the places they want to go and thereby activates and energizes them. Increasing accessibility also improves comfort by providing more choices for a wider range of ability levels and preferences and better utilizes the investments made in specialty and destination recreational facilities.



Lakeview Recreation Area Entrance

### Park System Gaps

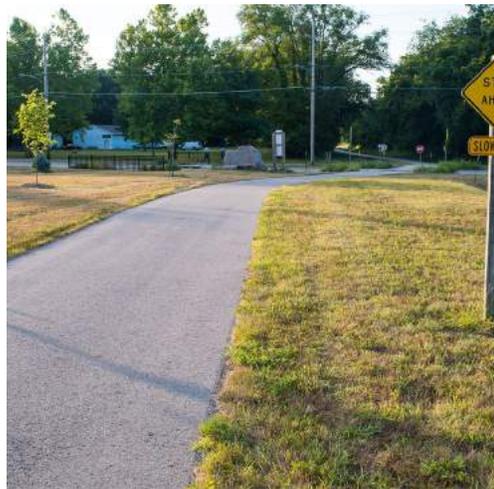
Broadly speaking, Johnston’s park and open space system is robust. It’s scaffolded by a wider network of private parks, specialty facilities, natural resource areas, county, state, and federally owned lands. These facilities however, are fairly concentrated around major natural features including Saylorville Lake and branches of Beaver Creek, resulting in residential areas that have limited access to the day to day recreational facilities they need. The neighborhood park, as defined in previous sections, is the foundational element of the City’s recreation system. It fulfills the day-to-day recreational needs of residents and as such will form the basis around which we evaluate gaps in the community’s access to recreational resources. In certain instances, like the neighborhoods surrounding Terra Park, access to amenities and facilities typically found in neighborhood parks are provided by the more specialized parks where adequate park land already exists. Gaps in the neighborhood park system are identified in Figure 9.4.

### Park Program and Facility Gaps

The City’s extensive park system far exceeds national averages in terms of parks and acres of park per thousand residents, so land access and quantity is not an area of immediate emphasis or need for Johnston. In order to better utilize the abundance of existing park and open space acreage, the City should instead focus on enhancing and expanding amenities and facilities within the existing system. Some ideas for expanded programs and providing additional amenities originating from the community engagement process include:

- » Expanded Fishing and Water Access,
- » Aquatic Center / Pool Facility,
- » Splash Pad,
- » Dog Park,
- » Recreation/Fitness/Wellness Center,
- » Expanded Kayak/Canoe/Paddle Board Facilities,
- » Sand Volleyball,
- » Winter Recreation Programs (Indoor and Outdoor)
- » Improved Quality and Access to Natural Areas

Additionally, the City of Johnston should continue to partner with public and private organizations to sponsor, promote, organize, facilitate, and support community education and recreation programming as those needs are identified. Building on the existing relationships and partnerships with these organization will be critical in fostering a collaborative and mutually beneficial system that will continue to evolve to meet the needs of the community.



### **Bike and pedestrian System Gaps**

If neighborhood parks are the foundation’s cinder blocks, then the bike and pedestrian system is the mortar that binds them together. Trails and sidewalks are ‘front-door’ outlets for recreation. By their very nature they are typically the easiest element of the recreational system to access and thereby serve the widest spectrum of the community, providing places to walk, run, bike, and people watch. Additionally, they provide safe and convenient access to the City’s parks and open spaces, and promote alternative modes of travel to city destinations, employment centers, and other community resources.

### **Community identified barriers to biking and walk**

To function well, the system must have a clear and logical hierarchy, connect residents to places they want to go, and above all be safe, convenient, and enjoyable. Figure 9.4 shows gaps and deficiencies in the Bicycle and Pedestrian system identified by the community and its leaders through the Plan’s outreach and engagement process.

Barriers can prevent users from enjoying trails because they do not adequately meet their needs or they do not provide an equivalent transportation option. Figure 9.4 illustrates where participants in the community engagement process felt there were barriers to biking and walking in Johnston. These areas are described in further detail in the THRIVE 2040 - Community Engagement Results.

### **Wayfinding**

With an existing and future trail system that meanders through natural resources separated from roadways, trail identification and wayfinding improvements are important. A wayfinding system is a coherent, easily understood system of trail names, maps and kiosks that build awareness, identity, safety and ease of use. The city has begun providing some signage in more remote locations like the Beaver Creek Greenbelt Trail as part of the Trail Emergency Access System (TEAS). Additional signage and possibly information kiosks will be needed as improvements of the existing trail system continue and as the system is expanded.

### **Influencing Factors**

The Johnston trail system has been designed to reflect existing and planned land uses and other local and regional influences. Factors influencing trails in Johnston include:

**Landscape Features:** Topography, vegetation and floodplain areas have been considered in determining the locations of trails. The trail system allows access through a number of different environments in order to provide a diverse recreational

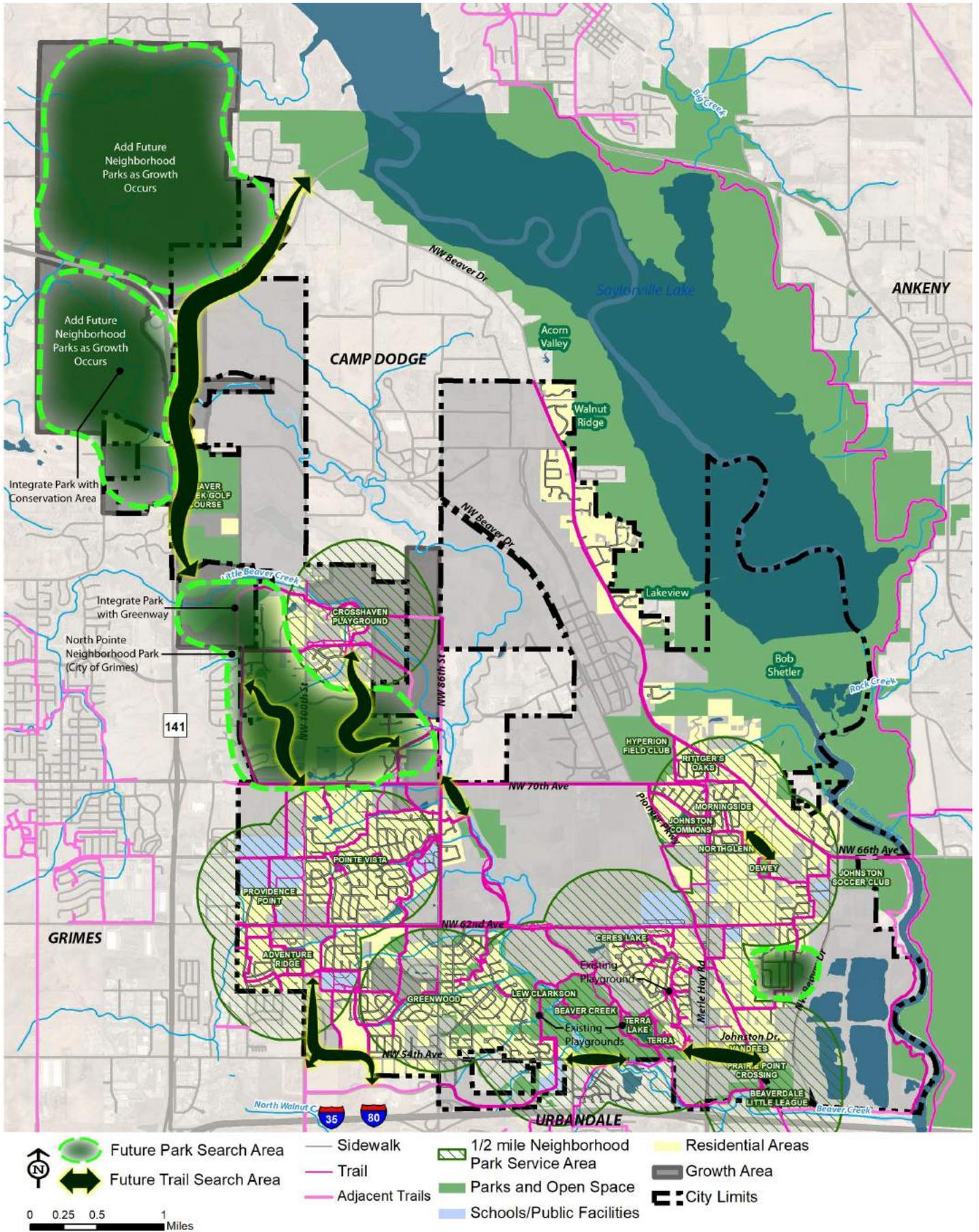


Figure 9.4 Future Park Search Analysis - Existing System Gaps



Public Art, Signage, Trash, Seating, Shelter, Toilets, and even Dog Waste Bag Dispensers are all important comfort and convenience elements in the Community's parks



experience. In the Beaver Creek floodplain area, trails will meander through the flat lands of the floodway fringe. Trails connecting to the northeast portion of Johnston will rise from the floodplain areas to the higher bluff elevations that provide broad vistas over the western and southwestern portions of the community.

**Existing Development Patterns:** Placing trails within existing developed areas requires careful review and consideration. Adding trails in areas that were not originally designed to accommodate bicycle and pedestrian movements may require modification of "typical" trail standards. For example, in the neighborhood areas east of Merle Hay Road, future trail connections may need to be on-street, with signage delineating various roadways as bike routes. Off-street trails in existing neighborhood areas may not be feasible because of narrow rights-of-way and existing development obstacles.

**Development Trends:** As development continues to occur in Johnston, right-of-way and/or easements will be acquired to accommodate the eventual completion of the community-wide trail system. Trail alignments identified in the comprehensive plan need to be accommodated during subdivision design and platting for new development areas.

**Existing and Proposed Recreation Areas:** The policies contained in the plan stress the need to connect residential areas with existing and future parks. Therefore, existing and future park locations have been identified and trail access to them has been planned.

**Linkage with Adjacent Community and Regional Trails:** Urbandale and Polk City have existing and planned trail segments that link to the Johnston trail system to become part of a larger trail network. The trail in Johnston that follows the old Interurban Railroad right-of-way forms a spine that will provide connections to Jester Park on the north and to the City of Des Moines to the south.



## CHAPTER 10

# UTILITIES

## INTRODUCTION

Everyday life and future community growth depends on the ability of the City of Johnston to deliver a core infrastructure system consisting of potable water, wastewater, and storm water management. In addition, close collaboration with the private sector is needed to ensure additional critical utilities such as gas, electric, solid waste management, broadband, and telecommunications technology. This chapter outlines goals, policies, and implementation initiatives that will help ensure Johnston's ability to deliver these services in a sustainable and resilient manner.



## INTRODUCTION:

The following is a collection of goals, policies, and general implementation initiatives. These lists build of the existing comprehensive plan by attempting to reduce duplication (although some still exists across categories), eliminating actions that have been completed or are no longer relevant, and incorporating new directions based on community input or best practices. The following methodologies guide the creation of the goals, policies, and implementation initiatives:



## GOALS:

Written as statements and expressions of desired outcomes ... “to which planned effort is directed.” Goals should support one or more guiding principles – if it is an important goal and there is no logical supporting guiding principle – maybe consider a guiding principle revision. Consideration should be given to how it is measured. Metric may be subjective or objective (quantifiable).

## POLICIES:

Written as passive guidelines, general rules or explicit rules in some cases with heavy use of verbs such as: support, encourage, prohibit, protect, preserve, establish, require, etc.

## IMPLEMENTATION INITIATIVES:

Written as action statements that work towards achieving a defined outcome. They may have a definitive start and stopping point; or they may be on-going. They may be physical capital improvements or physical plans or they may be programs. Implementation Initiatives should respond to a specific goal. They require a specified set of resources (human, capital, and/or financial) that should be identified to some degree.

# UTILITY GOALS, POLICIES AND IMPLEMENTATION INITIATIVES

In order to guide future utility expansions and replacement projects, the following general policies, and coordinating implementation initiatives , have been identified.

## Goals

1. Ensure core utility systems will meet the needs of current residences and businesses and serve future growth in a fiscally responsible manner without compromising the quality of the natural environment.
2. Provide safe and clean drinking water to all of its residents and businesses.
3. Preserve and improve upon the quality of Johnston’s surface water resources.
4. To the extent possible, prevent or minimize damage to infrastructure and property from flooding and other natural disasters.
5. Solid waste should be safely collected and disposed of in ways that minimize land, air, water, and visual pollution.
6. Reduce greenhouse gas emissions and energy costs by increasing energy production through renewable energy sources and reducing the overall consumption of energy.
7. Ensure that wastewater collection and treatment is provided in an efficient, low-cost manner that meets current and future demand.
8. Ensure reliable high-speed connections to affordable broadband internet technology for residents, businesses, and institutions in Johnston.

## Policies

1. Utilities should be designed, located, and constructed to avoid significant adverse environmental impacts and to protect valuable environmental features. Siting decisions should include all relevant planning policies, and should include the following:
  - *Necessary improvements should be provided where utilities are inadequate to serve existing development in urban areas. Utility capital improvement programs should give priority to improving systems with significant inadequacies.*
  - *Utility providers, including the city and Des Moines metropolitan service providers, should plan to eventually serve urban uses and densities throughout all urban areas and those rural areas where the comprehensive plan has determined that urban densities will be appropriate in the future.*
  - *Standards and plans for utility services in rural areas should be consistent with long-term, low-density development. Facilities that serve urban areas, but must be located in rural areas or resource lands, should be designed and scaled to serve primarily the urban areas.*
  - *Utilities should make joint use of utility rights-of-way whenever possible. Underground utilities should also be grouped together and easily accessible for maintenance, repairs, and expansions.*
  - *Above-ground utility installations should be designed and located to minimize unsightly views and environmental impacts. Power and telephone poles should be as far from right-of-way centerlines as possible.*
  - *Power and communication wires should be installed underground where feasible, particularly in newly-developing and high-density areas. Existing overhead utilities should be installed underground when other improvements occur within the right of way.*



2. Public sewers are the preferred method of wastewater treatment for development in urban service areas. On site systems should continue to be monitored and replaced with municipal systems according to public health issues and needs, and as determined appropriate by the City of Johnston.
3. Service areas for sewers should be designated only in urban areas and their identified expansion areas. In designating or adjusting service area boundaries, the following criteria should be applied:
  - *Detailed land use plans and zoning for urban uses and densities support the proposed expansion;*
  - *Potential adverse impact of sewers on adjacent rural areas or resource lands, and environmentally sensitive areas will be mitigated;*
  - *Sewers are technically feasible within the proposed expansion area;*
  - *The proposed expansion can be served by gravity sewer, pressure line or similar approved method, to the existing service area; and*
  - *There is sufficient treatment plant capacity and interceptor capacity to serve the entire existing service area as well as the proposed expansion.*
4. Level-of-service standards for the water supply assure water quality, adequate municipal supply, and fire-flow levels in urban areas. Level-of-service standards for rural areas must also assure water quality and municipal supply, and provide fire-flow levels consistent with low residential densities.
5. The city should design system improvements and plan future annexations based on the following factors:
  - *Adequate system capacity to accommodate planned land use intensities in urban areas; and*
  - *The planned area-wide, low residential densities and rural uses in rural areas.*
6. Conservation measures should be included in municipal plans to support planned land uses with reliable service at minimum cost, and to assure maximum net benefit in the allocation of water for municipal and recreational uses.
7. Public watersheds should be managed primarily for the protection of drinking water, but should allow for multiple uses, such as recreation, when such uses do not endanger water quality standards.
8. Surface water management should be used to protect natural drainage systems wherever possible.
9. A basin and watershed approach will be utilized in surface water management, with the responsibility shared between the various municipalities and Polk County.
10. Basin and watershed plans will provide for multiple uses, including recreation, fish and wildlife enhancement, flood protection, erosion control, public utility management and reclamation, and open space.
11. Surface water management facilities should be funded through adequate and equitable system fees on contributing and benefiting properties, with the facilities required for new development designed and built for low-cost, long-term maintenance and consistency with water quantity and quality standards.
12. Energy distribution and transmission facilities, such as substations, pump stations, major power lines and pipelines, biofuels and wind energy generation, and transmission and reception towers, should be located in industrial areas and resource lands when possible. They should be located in residential areas only when necessary to provide an efficient and cost-effective method of utility service.
13. The city's siting decisions for energy facilities should be based on the following factors:
  - *Minimal health risks to residents of neighboring properties, whether from noise, fumes, radiation, or other hazards;*
  - *Minimal visual impacts, achieved with buffering through distance and/or landscaping;*
  - *No adverse impacts on aviation traffic patterns from power lines, transmission towers, or reception towers; and,*
  - *Convenient access to a street.*
14. Large scale transmission and reception towers, should be located outside residential areas when possible.

15. The city should presume a wireless telecommunications facility is safe if it meets the technical emission standards set by the Federal Communications Commission. The facility should not create interference with any other communication signals.
16. The city should encourage the principle of co-location, which affords two or more utility providers the ability to place their transmitting facilities in the same location or on the same tower or pole.
17. Johnston should maintain local control to streamline the permitting process for the installation of small cell wireless technology.
18. Johnston should periodically evaluate the existing fiber optic infrastructure and service providers and ensure all residents and businesses have access to high quality and affordable high-speed internet.
19. Allow for smaller scale wind or solar energy installations that are designed to co-exist within the context of the surrounding neighborhood.
20. Trees should be viewed as a public utility for the benefits of reducing stormwater runoff and improving air quality among other benefits.

### Implementation Initiatives

1. Undertake a high-speed internet visioning study and explore opportunities to improve high speed internet affordability and accessibility throughout the city.
2. Evaluate and update operation and maintenance standards for both urban and rural service areas. Special programs should be established in areas with a high risk of system failure, depending on utility funding ability.
3. The city should continue the practice of updating its methodologies in addressing surface water runoff.
4. Changes in collection methods that minimize airborne or water-eroded material collection shall be monitored and reported (i.e., lids on recycling bins).
5. The city should continue efforts to reduce the level of residential, commercial, and industrial inflow and infiltration (I & I) into the sanitary sewer system.
6. The city will continue coordination with its solid waste collection contractors and vendors to encourage the reuse and recycling of household goods.





## INFLOW AND INFILTRATION:



Inflow and infiltration (I/I) are terms that describe clear water that enters wastewater systems, takes up limited space in wastewater pipes, and increases demand at wastewater treatment plants. Excessive flows can result in public and environmental health concerns if untreated sewage discharges to basements, rivers, lakes, or other public areas. Inflow and infiltration each have unique sources, methods of entry, and effects on the wastewater collection system. Both are costly to communities and utility ratepayers due to increased treatment and maintenance costs

- » Inflow is typically stormwater that increases peak flow in the wastewater system during and after rainfall events from point sources such as broken manhole covers, sewer cleanouts, sump pumps, foundation drains and rain leaders.
- » Infiltration is typically groundwater that gradually enters the wastewater system through cracks and openings in sewer mains, service laterals, joints, and deteriorated manholes. Infiltration increases base flow in the wastewater system and removes water from the natural hydrologic cycle, which could otherwise recharge the regional aquifers.

- <https://metrocouncil.org/About-Us/Facts/Wastewater-WaterF/Inflow-and-Infiltration.aspx>

## SANITARY SEWER SYSTEM

### Existing System

Johnston is a member of the Des Moines Wastewater Reclamation Authority (DMWRA), which provides sanitary sewer services to the Greater Des Moines area. Sanitary sewer service is provided to Johnston's residents, businesses, and public facilities through more than 65 miles of collection lines and a series of lift stations. The City of Johnston has two connections to the DMWRA sewer, one located west of Merle Hay Road and one located adjacent to the old interurban (abandoned) railroad right of way.

As a member of the DMWRA, the City of Johnston pays wastewater collection, operation, and maintenance costs on a proportionate basis according to annual proportional wastewater flows contributed. Wastewater flows generally increase as the community continues to grow in population and employment. A good maintenance and replacement schedule of aging infrastructure can help offset some of the increase in flows by limiting inflow and infiltration of clean water into the system. The DMWRA's current agreement with Johnston provides the institutional structure needed to implement the requirements of Section 208 of Public Law 92-500 (duties and responsibilities of each constituent community as well as the proportionate funding for implementing the Des Moines Facilities Plan). The cost for implementation of the Facilities Plan is paid on a proportional basis among DMWRA member communities. Johnston's existing sanitary sewer system is illustrated in Figure 10.1.



## MUNICIPAL WATER SYSTEM

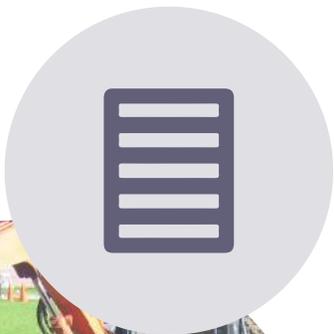
### Municipal Water Service Policies

The City of Johnston provides municipal water service for all residential and commercial customers within the city limits. Federal and State laws govern water quality standards, and the city is responsible for engineering, building, and operating a public water supply in conformance with these laws.

### Existing System

The City of Johnston constructed its first municipal water system in the mid-1970s. The municipal water system has developed to serve most of the development within the City of Johnston. The City of Johnston currently purchases water from Des Moines Water Works in accordance with the agreement between the city and Des Moines Water Works. Presently, the city operates and maintains over 150 miles of water main distribution, and three water storage tanks that provide over 4 million gallons of municipal water. Johnston's existing municipal water system is illustrated in Figure 10.2.





## STORM DRAINAGE FACILITIES

### Storm Drainage and Surface Water Management Service Policies

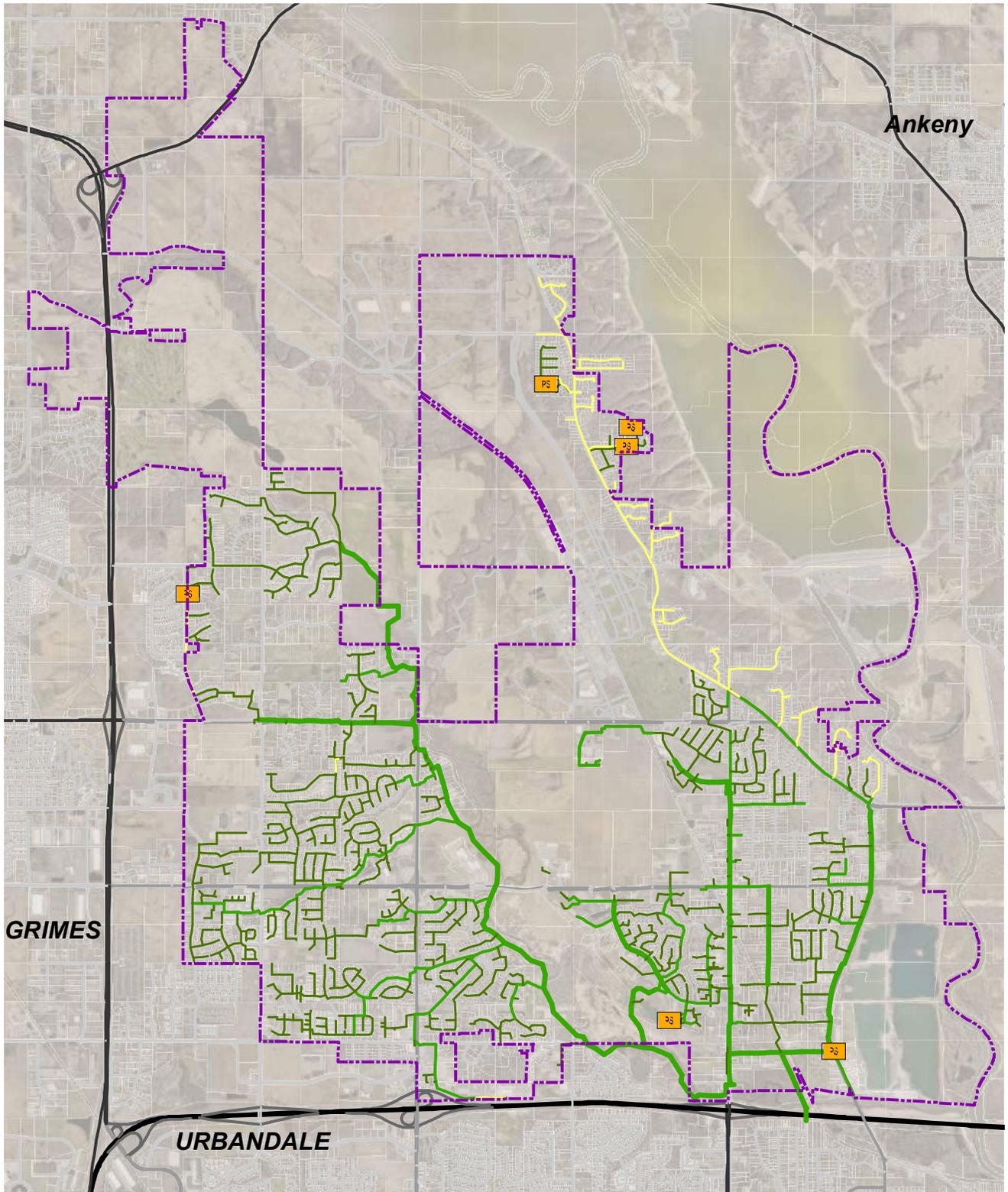
The management and control of storm and surface water has become more crucial as more of Johnston's land is covered by impervious surfaces such as streets, parking lots, and buildings and as the severity and frequency of storm events has increased.

The purpose of surface water management is to minimize water quality degradation, flooding, erosion, and attendant property damage. In Johnston, surface water management is addressed through a plan that provides policies and guidance to implement the preservation of watersheds through the City's Community Development and Public Works departments that develop functional plans, operate and maintain area-wide facilities, and develop facility standards which are applied to both public and private development projects.

### Existing System

The City of Johnston's municipal storm drainage system continues to be managed through growth of the system in developing areas and strategic re-investment and revitalization in established or developed areas of the city. Major roadway improvement projects along the city's minor arterial and collector street corridors have provided opportunities over the years to implement off-site drainage collection from adjacent developments. Plans and studies have been conducted to adequately size storm drainage systems in Johnston's most recently constructed subdivisions.

*Since 2011, the City has invested over \$15 million in storm water improvement projects funded by its storm water utility fund, the state revolving fund or other funding resources.*



- Legend**
-  Corporate Limits
  -  Lift Stations
  -  Force Main
  -  Large Diameter Trunk Main
  -  Interceptor Main
  -  Main

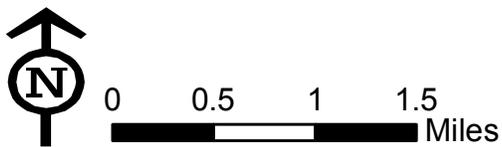


Figure 10.1 Existing Sanitary Sewer System

Sustainable stormwater management practices continue to evolve and as the City of Johnston embraces “smart” planning principles, it will also seek ways to manage drainage and new infrastructure in accordance with processes that provide the proper balance between the human and natural environment needs.

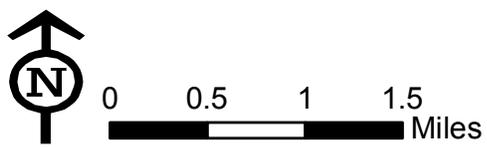
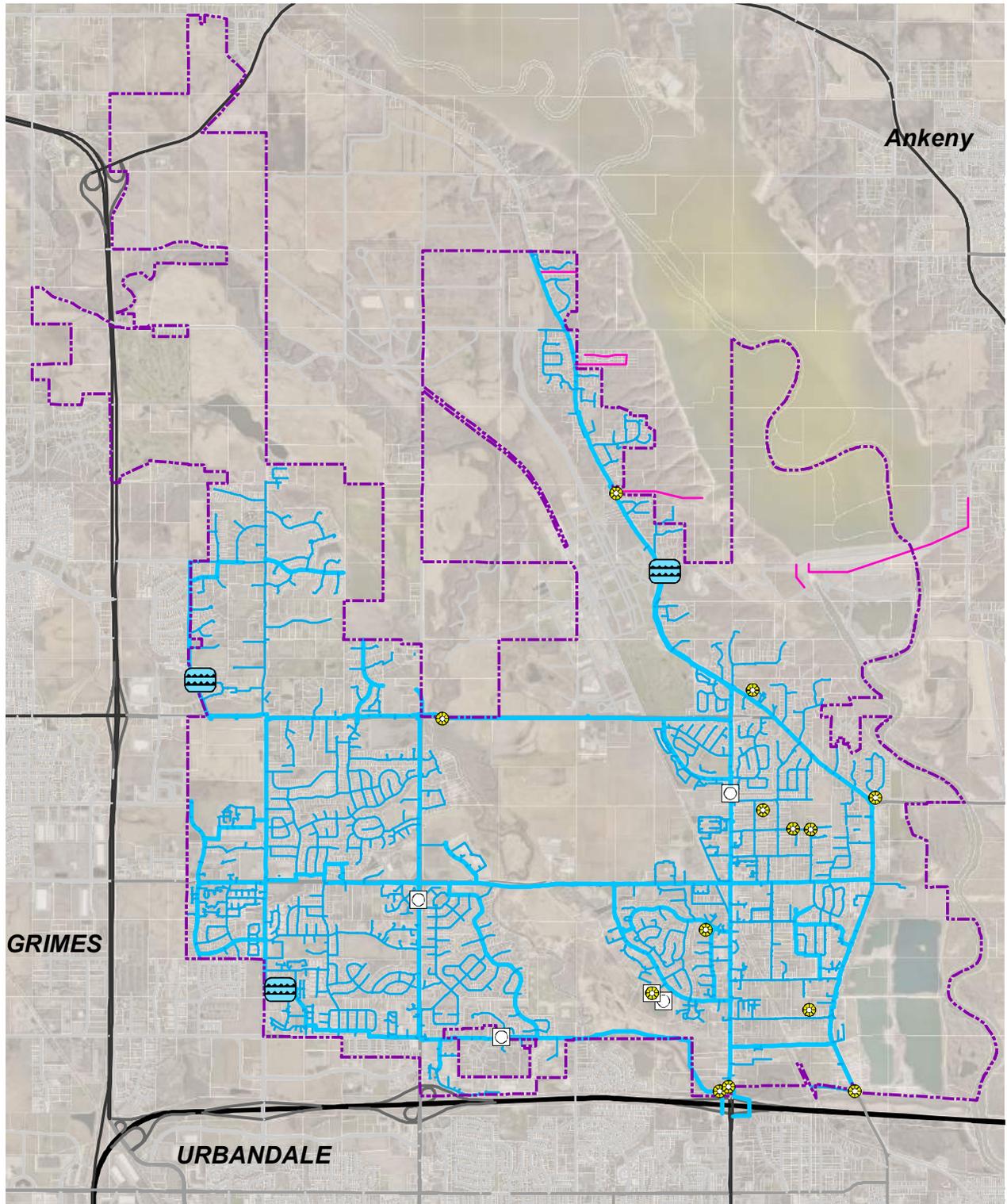
Most of the storm sewer infrastructure within the city is relatively new, and designed with proper capacity to convey typical storm events (10-year storm events or less). The City currently operates under the guidance of its Watershed Assessment and Stormwater Management Plan completed in 2009. The assessment of issues and opportunities related to stormwater needs remain largely relevant today as they did 10 years ago. The largest issue identified as part of the storm drainage assessment is the potential damage to the system that could be caused by erosion downstream of storm sewer outfalls, either near downcutting stream channels or downstream of storm outlets discharging near the top of a steep grade. Some outfalls may require additional protection or other enhancements to address these issues. Threatened, undermined, exposed, or damaged public and private improvements include storm sewer outlets that have been impacted by channel erosion, sanitary sewers that have been exposed by scour from increased flow volume from both small and large storm events, and manholes that have become exposed from collapsed or eroding soils. Johnston’s existing storm drainage system is illustrated in Figure 10.3.

### **Long-Range Storm Drainage Planning and Watershed Improvements**

In 2009, after a thorough assessment of the water resource planning needs, the City of Johnston adopted an aggressive watershed action plan to set storm drainage policies and implement a number of critical projects to correct long-standing drainage deficiencies, repair environmental and city infrastructure damages, and improve the ability to manage drainage costs in the future.

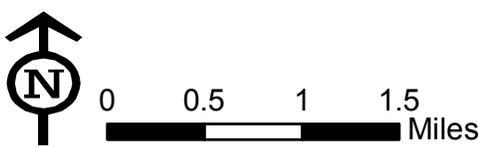
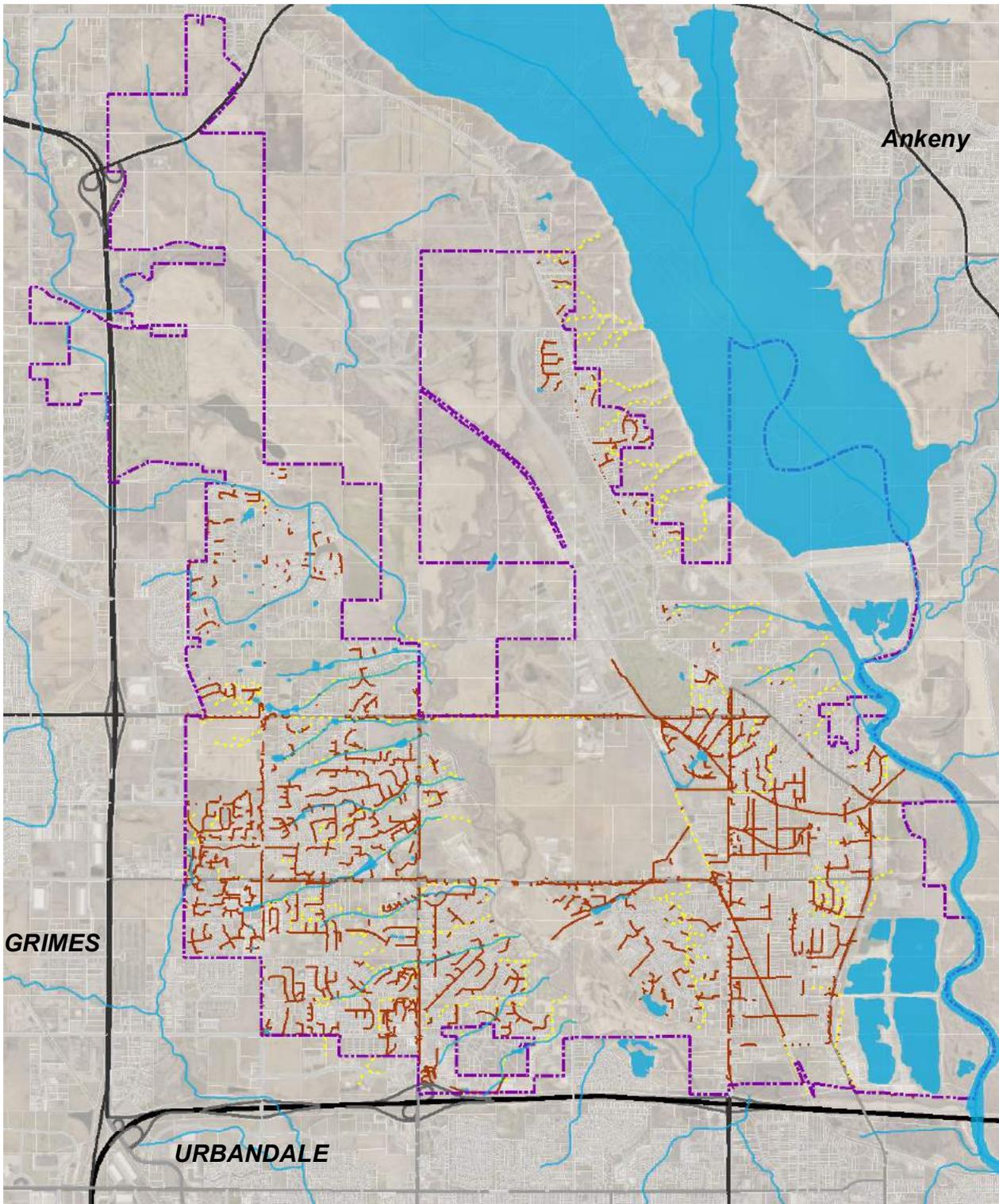
Throughout the citywide watershed assessment process, more than 80 locations were identified that were in need of some level of improvement or repair that could warrant consideration as a city-funded project. It was realized very early that funding sources would not be available to address all of the identified issues using local funds, and a need to narrow the list of projects to a more select group that could be reviewed in more detail was developed. To begin tackling these needed improvements, the city implemented a stormwater utility in 2012 and immediately began improvement projects throughout the city. As of 2020, this effort has led to an investment of over \$10M in improvements to the storm sewer system, water quality improvements, and erosion and bank stabilization projects. Throughout these projects the city has worked to ensure that stormwater is managed as an amenity for residents to enjoy, and not an after thought.





- Legend**
-  Corporate Limits
  -  Storage Tank
  -  Meter Pits
  -  Booster Pump
  -  Private Mains
  -  8" Mains
  -  12" or Larger Mains

Figure 10.2 Existing Municipal Water System



- Legend**
- Corporate Limits
  - Water
  - Storm Sewer
  - Overland Flow

Figure 10.3 Existing Storm Drainage System



## OTHER PUBLIC AND PRIVATE UTILITIES

In addition to sanitary sewer, municipal water, storm drainage facilities, development in the community relies on private utilities, including electric, gas and communications services, and solid/ yard waste and recycling services.

### Broadband/Telecommunications

There is a high demand from other telecommunication industries for the installation and use of fiber optic cable in the city's right-of-way. New technologies have spurred higher demand for varied communication services. While meeting this demand is important, it is also important for telecommunication companies to pursue ways of sharing conduit and other facilities to provide for the most efficient provision of services with limited negative visual impacts and non-duplicative use of the right-of-way.

### Telecommunications and Wireless Data Transmission Service Policies

Since the last Johnston comprehensive plan update, mobile telecommunications and wireless data transmission have created a marketplace with new, more efficient technologies. These technologies should encourage economic development by creating jobs and helping local businesses remain competitive. At the same time, the influx of new telecommunication providers poses a challenge to the city as it performs its traditional land use responsibilities.



### CURRENT SERVICE PROVIDERS IN JOHNSTON INCLUDE:

- » CenturyLink, Inc.(VDSL)
- » CenturyLink, Inc.(Fiber)
- » Mediacom Communications Corp.(Cable Modem DOCSIS 3.0)
- » Mediacom Communications Corp.(Cable Modem DOCSIS 3.1)
- » Fiber Platform, LLC(Fiber)
- » ICS Advanced Technologies(Other Copper Wireline)
- » Consolidated Communications, Inc.(Other Copper Wireline)
- » JAB Wireless, Inc.(Terrestrial Fixed Wireless)
- » Iowa Network Services (Fiber)
- » UPN Fiber



### Solid Waste

The City of Johnston contracts with qualified vendors for solid waste hauling services. Weekly collection services are provided to residential and institutional properties, and businesses. Recycling and composting services are also provided to Johnston consumers with regular collection times in coordination with its contracted vendors. Yard waste is collected each week during April - November.

### Solid Waste Service Policies

Solid waste management within the City of Johnston governs refuse at every stage, including storage, collection transfer, resource recovery, and disposal. Most solid waste is collected, taken to transfer stations for recycling or temporary storage, or taken directly to landfills. Solid and yard waste disposal and recycling services will continue to be provided by a private contractor to the City of Johnston; however, to the extent practicable, the city should engage in providing contractor guidance based on the use of its public streets and other facilities to provide such services.



### Energy Service

Electrical and gas services in Johnston are provided by MidAmerican Energy. Many large generation and transmission facilities in Johnston are regional facilities subject to federal or state law. Local distribution, transmission, and reception facilities, however, are the responsibility of the city to regulate in order to safeguard public health and safety, and to control aesthetic impacts.

*“In addition to sanitary sewer, municipal water, storm drainage facilities, development in the community relies on private utilities, including electric, gas and communications services, and solid/ yard waste and recycling services. ”*



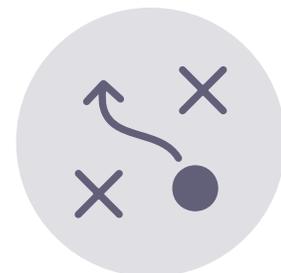
## GROWTH AND REDEVELOPMENT AREAS – LONG RANGE UTILITY STUDIES, PLANS AND RECOMMENDATIONS

From 2003 to 2010, the City of Johnston studied sanitary sewer, municipal water system, and storm sewer staging or replacements in four subareas of the community. These four areas are known as Beaver Ridge, the Northwest Planning Area, the Central Basin area, and an expanded area of the Central Basin associated with an improvement project completed east of Merle Hay Road in the established area of the community south of NW 62nd Avenue.

An overview of these studies is presented below. Each of the study area recommendations are in various stages of completion and therefore, are considered a “work in progress” for the city. (The reader is referred to the City of Johnston for more information about these studies.)

### IMPLEMENTATION INITIATIVE:

As the improvement projects identified from 2009 Watershed Assessment Stormwater Management and Action Plan near completion, the City should complete an update of its stormwater management plan. The plan should be done in partnership with regional agencies sharing common interests.





### **Beaver Ridge**

Beaver Ridge follows the ridge of NW Beaver Drive from NW 66th Avenue to the north city limits, in close proximity to Saylorville Lake and Camp Dodge. While most of Johnston is relatively level, this area of the community is located on a terrace plain that includes the floodplain of Beaver Creek. The Beaver Ridge area includes bluffs that are 130 feet above the Des Moines River to the east and therefore much of the ridge's drainage courses flow to Saylorville Lake. Much of the area remains on rural utility systems. The U.S. Army Corps of Engineers, responsible for the maintenance of Saylorville Lake, has requested that the City of Johnston continue to monitor and encourage residential connections to city sewer where possible to improve the water quality of the lake.



### **Northwest Planning Area**

The Northwest Planning Area is that area of the community generally bounded by NW 70th Avenue, NW 107th Street/NW 78th Avenue/ Highway 141, and Little Beaver Creek. The Northwest Utility Service Master Plan, approved in 2004, included planning for all municipal utilities, but focused on the availability of sanitary sewer service in the Northwest Growth Area.

Specifically, the master plan calls for the extension of the Beaver Creek trunk sewer northward to serve areas for future growth. A 2017 analysis demonstrated the feasibility of extending the system to the area north of Saylorville Drive (Hwy 415). Future water services would also need to be planned to serve future growth in this area. Water system improvements would include new water mains and storage facilities to serve projected growth. It is recognized that Xenia Rural Water currently provides water service to portions of the area envisioned for future Johnston growth and coordination with Xenia on service areas is underway. Future extension of services and growth in these areas would be driven by demand and future annexation processes.

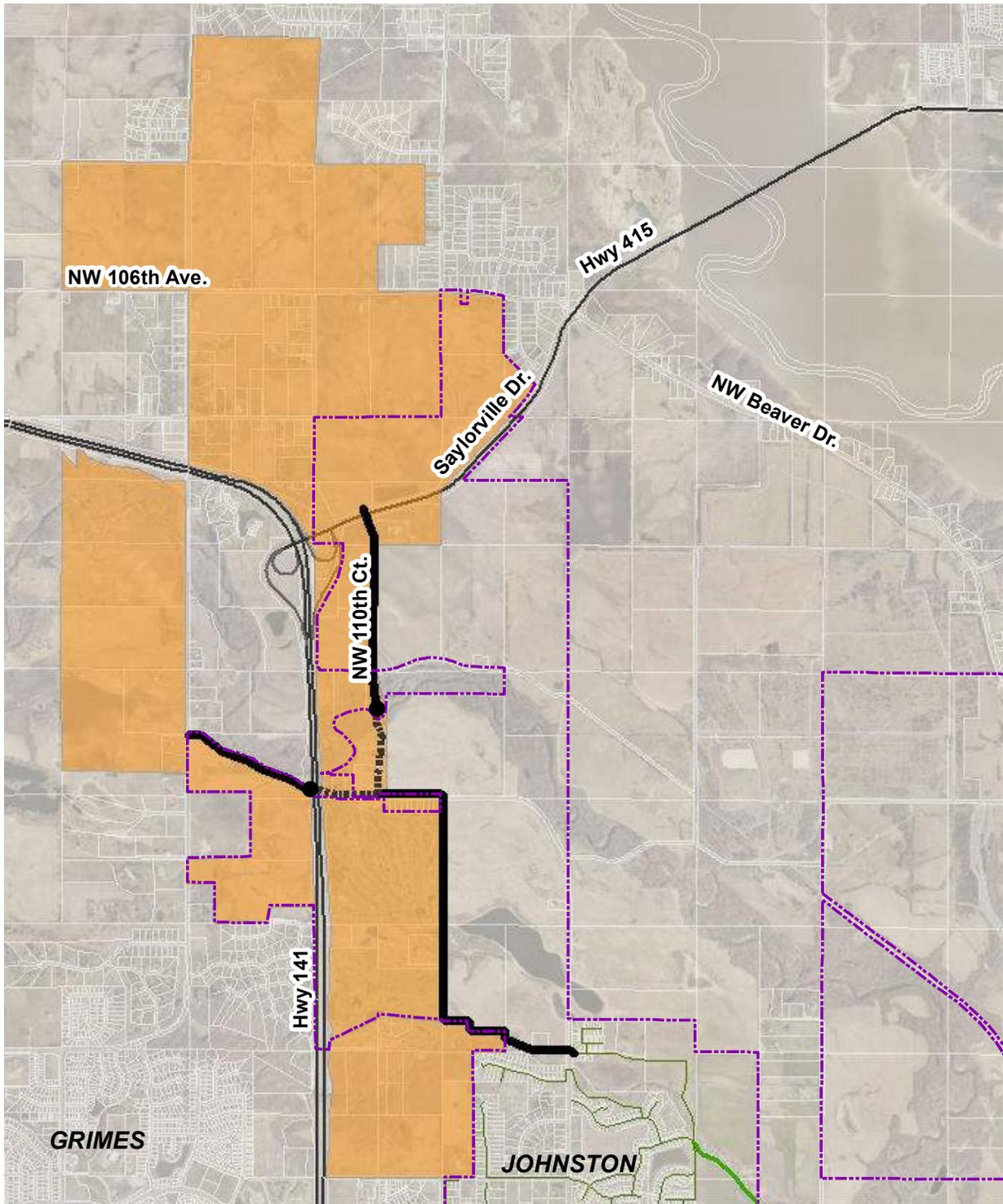
The area north and west of Saylorville Drive Expansion Area was examined by the community in a 2003 annexation study. At the time, it was referred to as "Far North" and encompasses the area roughly bounded by Camp Dodge on the south, NW Beaver Drive on the east, 110th /106th Avenues NW on the north, and NW 121st

Street/Highway 141 on the west. The NW Saylorville Drive Expansion Area is bisected by NW Saylorville Drive, which along with Highway 141 and NW Beaver Drive, are the primary sources of access to this area. The annexation study addressed the provision of municipal utilities in this area, including the roles of current and adjacent service providers in this area, including the City of Granger, Xenia Rural Water District, Des Moines Metropolitan WRA, and Polk County, as well as variables or alternatives for the City of Johnston to serve this area independently with its own utilities or cooperatively with other entities.

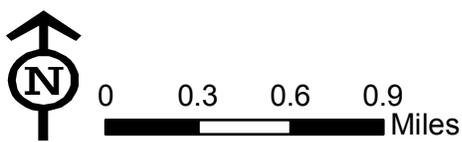
As development pressures continue to grow in this area the city should work with landowners and prepare a focused growth area plan to establish a framework for key infrastructure needs, alignments, and phasing of annexation with associated improvement projects.

#### **Capital Improvement Program (CIP) Utility Replacement - Areas East of Merle Hay Road – 2009-2010**

As a follow-up to the Central Basin Master Plan, capital improvements planning was prepared to update the utilities commensurate with updated street reconstruction standards. The result will be a significant reinvestment in the earliest neighborhoods of Johnston, with the installation of new utilities and street amenities, including curb and gutter, and sidewalks.



- Legend**
- Future Servicable Area
  - Corporate Limits
  - Future Liftstation
  - Existing Liftstation
  - Future Force Main
  - Existing Force Main
  - Future Gravity Main
  - Large Diameter Trunk Main
  - Interceptor Main
  - Main



**Figure North Area Servicable Area Sewer Map**

Figure 10.4 2017 Expansion Study Area



## CHAPTER 11

# IMPLEMENTATION

## INTRODUCTION

Implementation is defined as “putting something into effect.” Putting a comprehensive plan into effect can be as simple as adopting the plan and modifying related land use controls. Implementing the Johnston Thrive 2040 Comprehensive Plan calls for something more.

Each element of the comprehensive plan contains a series of policies and implementation initiatives that take their cues from the Thrive 2040 planning process to establish guides for decision making and public actions. This active use of the comprehensive plan makes it a critical tool for reaching Johnston’s vision.

## CRITERIA FOR CONSIDERATION OF A PLAN AMENDMENT:



1. Property owners have say in how their land will be used in the future. An important question to ask for all proposed development is: How is the proposed use consistent with the Guiding Principles and relevant policy directives within the Thrive 2040 Plan?
2. Is there a demand for the proposed use?
  - Current supply/demand, vacancy/occupancy rates, etc.
  - Short and long term projections for the existing and proposed uses
3. What benefits would be generated by the proposed use as compared to the existing use or current planned use?
4. What is the history of the property? Are there impediments to marketing/developing the site pursuant to the existing or currently planned use?
5. Is there or can adequate land use transitions be provided between existing uses and the proposed use? Can buffers and site design be incorporated to minimize the impact on neighboring property?
6. What are the impacts and is there capacity on the property and within the surrounding area to support the proposed use in the following areas:
  - Roadway network/traffic
  - Utilities (water, sewer, stormwater management)
7. What impacts would the proposed use have on existing neighboring properties? Would the proposed use have comparable impacts on neighboring properties as impact of a project that would be consistent with current comprehensive plan?

Over the next ten to twenty years, Johnston will experience a number of changes, some of which are foreseen in the plan and some of which will be entirely unanticipated. Accommodating those changes will require flexibility. Since not all ideas and proposals will conform to the specific directions of the plan, the vision and guiding principles identified in Section 2 serve as “yardsticks” to assess those ideas and proposals for consistency with the bigger picture. Decision makers may find a proposal to be compatible with the vision; and therefore, find changes to the comprehensive plan to be appropriate. Changes to the plan require a meaningful and transparent public process. The criteria at left should be used to evaluate the merits of a request to amend the plan.

Implementation initiatives are identified to provide an ongoing dialogue regarding planning for the future of Johnston with clear and explicit directions for implementing the comprehensive plan. The initiatives should serve as a tool and direction for city council, advisory boards, and staff in setting annual work programs, goals, and budgets. Finally, initiatives provide a means for Johnston’s residents to continue to be engaged in the community planning process.



Rendering (Source: Bascom)



## ORGANIZATION OF IMPLEMENTATION INITIATIVES

Implementation initiatives are directly related to most of the sections of the plan. Prior to presenting the topic specific initiatives, general initiatives are listed.

### General Implementation Initiatives



#### 1) Understand Available Financial Resources

Implementation will take a combination of public and private actions. Public actions require a public investment and some private actions will require a partnering financial effort as well. When possible, public investments should seek to leverage private investments. While finding public financing can be challenging, there are a variety of financial resources available to undertake community development projects and initiatives.

##### Financial Toolbox

The city is experienced in the use of all primary tools available to Iowa cities. In addition, the specific details on finance powers change over time, emphasizing the importance of ongoing coordination and awareness with state and federal legislative efforts. It is useful, however, to highlight key finance powers and concepts as related to implementation of the comprehensive plan. This overview of the financial toolbox is intended to be a strategic review of powers, rather than a “how to” guide.

##### Debt

The ability to borrow money is critical to implementation of the comprehensive plan. Many public investments related to the plan cannot be financed from annual revenues or reserves. Borrowing money gives the city greater control over the timing of projects and the management of revenues.

##### Revenues

The ability to borrow money is only part of a capital funding solution. The other critical element is the management of revenues used to retire the debt and to build capital reserves.

### Property Taxes

Property taxes provide a consistent and easy to administer source of revenue. As the primary source of local revenue, property taxes are used to fund capital improvements and services. State law limits the City's ability to levy property taxes to pay debt to an amount less than or equal to 5% of the 100% assessed valuation of the City. The City has internal policy to not exceed 75% of the State limit. The City has typically sought to cap debt service levy. Financial planning is needed to manage the tax levy and meet capital investment needs.

### Utility User Revenues

The City collects revenues from customers of municipal water and sanitary sewer utilities. Utility rates can be set to build reserves for future capital projects and to support bond issues. Financial planning helps to prevent inadequate funding and large rate increases.

### Connection Charges

The City uses connection charges to pay for costs of expanding municipal utility systems. These charges are paid at time of final plat. This source of revenue is difficult to forecast because of the uncertainty of development trends.

### Special Assessments

Special assessments represent a portion of improvement costs assessed to benefitted property. The use of special assessments is governed by the City's policy on special assessments. The policy describes the methodology for assessing the cost of public improvements to benefitted properties.

### Tax Increment

State Law allows the city to establish tax increment financing (TIF) districts. In addition to statutory requirements, the city has adopted its own Tax Increment Finance Program. The Program describes the goals, policies, and procedures for the use of TIF. The city can capture and use the growth in property tax revenues from property in the TIF district. This tax increment revenue can be used for infrastructure and other community development activities. The trade off is that monies captured in a TIF district are not available to finance local government services.



## **2) Understand and Evaluate Available Staff Resources and Maintenance Costs.**

Implementation of this plan will lead to new projects, initiatives, and priorities. Care should be taken in undertaking these initiatives to ensure that a full analysis is completed to understanding the long term impacts these efforts will have on the need and availability for additional staffing as well as take into consideration the ongoing maintenance costs. As an example, the Plan may call for utility services to be extended to open up a new area for residential and commercial development. Such an extension would be planned and budgeted for within the City's Capital Improvement Plan, however, this budget will only account for the cost of installation of these new utilities. Thus, an analysis is needed to ensure that there is a true understanding and budget of necessary funds to perpetually maintain this new infrastructure. Likewise, this analysis needs to include potential impacts on available staffing, will the expanded area require a new snow plow route, additional police officers, will new park land require additional staff to operate and maintain, etc. Having a full understanding of ongoing costs and impacts going into a project will improve the decision making process and lead to a better understanding of longer term costs and needs.



### 3) Conduct Annual Reviews of the Comprehensive Plan

Johnston will continue to grow and change in the future. New data and information such as complete census reports will become available from time to time. The comprehensive plan and its referenced plans and community context information should be formally reviewed on a regular basis (annually or biannually) to assess progress on attaining the community's vision and to continue a dialogue about the community's future. The results of this dialogue may lead to potential modifications or amendments to the plan. The Planning and Zoning Commission should serve as the primary entity charged with this review.



### 4) Use the Comprehensive Plan Daily

The plan should be used on a frequent basis not only by the community's planners, but by other city staff, decision makers, advisors, and developers.

The plan can be used as a:

- » Guide and Educational Tool for Other Community Organizations - Growth and change in Johnston is facilitated by a number of community interests, including the school district, business community, developers, and other special interest groups. The plan should be promoted to these groups, not simply as a marketing tool, but as a resource in the development of their own plans which articulate the community's vision and direction.
- » City Staff Resource - The plan should be used most often by city staff across all City Departments. The plan is a guide for staff's recommendations and responses to inquiries from the community about development. It is the responsibility of city staff to ensure that the plan is being kept current, and when inconsistencies arise, to facilitate resolution through a community forum and a public process.
- » Policy Guide to Decision Makers and Advisors - the city council and advisory boards including the Planning and Zoning Commission and Park Advisory Board are charged with making recommendations and decisions about the growth and development of the community. The comprehensive plan's vision, guiding principles, and policies should be the "yardstick" to which new ideas are measured as to how well they achieve the community's shared vision.
- » Basis for Setting Annual Goals and Work Programs - The community's advisory boards, commissions, civic groups/organizations, and city council should (and in many cases already do) establish goals and work programs on an annual basis. The comprehensive plan, and particularly the community initiatives, should serve as a basis for identifying future projects and directions.



### **5) Participate in State Legislative Efforts**

State legislative actions often have an impact on how local communities conduct day-to-day and long-term operations. Legislative actions relative to the environment, energy, regulation of the provision of municipal services, governance, transportation, planning, and zoning rules are continually being discussed and amended during legislative sessions. The City of Johnston should continue to take a proactive approach to engaging its House and Senate representatives to represent Johnston's interests in these regional issues. Cooperation with adjacent jurisdictions is also a critical component when advocating or lobbying for particular legislation.



### **6) Maintain and Update the Capital Improvement Plan**

Another important implementation tool is the Capital Improvement Plan (CIP), which establishes schedules and priorities for projects generally over a five year period. Johnston currently updates its 5 year CIP on an annual basis. The city's financial resources will always be limited and there will always be competition for community resources. The CIP allows the city to provide the most critical public improvements, yet stay within budget constraints. Many of the recommendations of this comprehensive plan should be programmed into the CIP. Through the CIP, recommendations can be prioritized, budgeted, and programmed into the city's decision making process.



### **7) Continue the Established Pattern of Streetscape Improvements for Key Street Corridors**

Preserving community character and establishing a sense of place unique to Johnston is embodied in the guiding principles and key policy directions of this plan. One feature that contributes to a strong community sense of place is the appearance of transportation corridors or streetscapes along heavily traveled roadways and streets which serve as gateways into the community. Streetscape features can go a long way toward enhancing a community's image at key "gateways" into the community or into specific districts.

Johnston has included streetscape enhancements in most of its recent transportation improvement projects. As future improvements occur, the established palate of community identification signs, plantings, lighting, sidewalks, and trails should be continued.



## 8) Continue Community Engagement Efforts

Community engagement and civic participation takes many forms: volunteering on city commissions and advisory groups, involvement with neighborhood and other nonprofit organizations, active participation through city sanctioned social media, and participation in elections and other government processes. When residents are actively involved, decisions that are made are more likely to reflect and serve the needs of the community.

The preparation of this comprehensive plan benefited from active community engagement. Community engagement in the comprehensive plan doesn't stop with the plan's adoption. Retaining community involvement in the comprehensive plan can be accomplished by:

- » Creating a clear and concise "citizen's guide" to the comprehensive plan that explains the purpose and summarizes its content.
- » Maintaining a comprehensive plan webpage on the City's website that includes the citizen's guide and all chapters of the plan.
- » Keep printed copies of the comprehensive plan available for public use at City Hall and the Johnston Public Library.
- » Provide opportunities for public participation in studies that are undertaken to address issues raised in the comprehensive plan.

What follows is a set of targeted implementation initiatives necessary to begin to implement Johnston Thrive 2040 over the next one to ten years. Actions are organized under the umbrella of the Plan's key elements including Natural Resources, Land Use, Transportation, Economic Development, Housing, Parks, Trails, and Recreation, and Utilities. This section includes a brief identification of the key action along with identification of a general time frame, a responsible party, and a level of effort to complete the project.

**General Time Frame** is represented by:

- » Ongoing implementation for those projects that may not have a definitive start and stop date but that are part of continual operations; or,
- » Time frames with implementation time periods of 0-3 years, 3-5 years, 5-10 years.

**Responsible Party** is presented by the Agency or Department (City or partner) responsible for leading the implementation effort and any key agency or partner that would assist with the effort.

**Level of effort** to complete the project refers to general cost understanding. Costs might be represented by the following:

- » Staff resources (minimal to significant on a scale of 1 to 5).
- » Financial resources (minimal which might include a planning or policy analysis to significant which typically would include a major capital investment on a scale of 1 to 5).



Go to the Natural Resources Chapter for more information

NATURAL RESOURCES IMPLEMENTATION INITIATIVES	TIME FRAME	RESPONSIBLE PARTY	LEVEL OF EFFORT
1. Update City's Subdivision Regulations to protect and preserve sensitive natural resources: To preserve trees, floodplain, steep slopes, water quality, select stands of timber, and other similar environmentally sensitive features, examine specific requirements for environmental protection, such as erosion control or limited development on steep slopes, that may be incorporated into the city's subdivision regulations.	0-3 years	Community Development	Staff Resources - 2 Financial Resources - 2
2. Cooperate with the Wastewater Reclamation Authority (WRA) and other levels of Des Moines metropolitan government in promoting the use of innovative sewage treatment systems.	On-going	Public Works	Staff Resources - 1
3. Study the possibility of creating a program of public acquisition of select plant and wildlife habitat areas to ensure preservation.	0-3 years	Parks	Staff Resources - 3 Financial Resources - 3
4. Sand and gravel deposits are a natural resource. Future reclamation efforts for lands being mined for sand and gravel should be continually monitored and evaluated.	3-5 years	Community Development/ Parks	Staff Resources - 1

TABLE 11.1 NATURAL RESOURCES IMPLEMENTATION INITIATIVES



Go to the Land Use Chapter for more information

LAND USE IMPLEMENTATION INITIATIVES	TIME FRAME	RESPONSIBLE PARTY	LEVEL OF EFFORT
1. Growth Area Planning	On-going	Community Development/ Public Works	Staff Resources - 2 Financial Resources - 1
2. Zoning and Subdivision Code Update	0-3 Years	Community Development	Staff Resources - 2 Financial Resources - 2
3. Merle Hay Road Streetscape Corridor Study	3-5 Years	Community Development/ Public Works	Staff Resources - 2 Financial Resources - 2
4. Re-use study of gravel pit areas	5-10 Years	Community Development/ Parks	Staff Resources - 2 Financial Resources - 1

TABLE 11.2 LAND USE IMPLEMENTATION INITIATIVES



Go to the Transportation Chapter for more information

TRANSPORTATION IMPLEMENTATION INITIATIVES	TIME FRAME	RESPONSIBLE PARTY	LEVEL OF EFFORT
1. Implement Walkability Study recommendations	0-3 Years	Community Development/ Public Works/ Parks	Staff Resources - 2 Financial Resources - 4
2. Retrofit non-ADA pedestrian infrastructure	0-3 Years	Public Works	Staff Resources - 2 Financial Resources - 4
3. Conduct transit ridership demand survey	3-5 Years	Community Development/ DART	Staff Resources - 1
4. Collaborate with DART to evaluate and improve connections to transit and transit infrastructure. i.e. stops and shelters	Ongoing	Community Development/ Public Works	Staff Resources - 1 Financial Resources - 1
5. Update standard roadway sections (see Land Use #2)	3-5 Years	Public Works	Staff Resources - 1 Financial Resources - 1
6. Merle Hay Road Corridor Study (see Land Use #3)	3-5 Years	Community Development/ Public Works	Staff Resources - 3 Financial Resources - 3
7. Explore north/south corridor connections in collaboration with Iowa National Guard and Camp Dodge.	0-3 years	Community Development/ Public Works/ Iowa National Guard	Staff Resources - 2 Financial Resources - 2

TABLE 11.3 TRANSPORTATION IMPLEMENTATION INITIATIVES



Go to the Economic Development Chapter for more information

ECONOMIC DEVELOPMENT IMPLEMENTATION INITIATIVES	TIME FRAME	RESPONSIBLE PARTY	LEVEL OF EFFORT
1. Coordination with property owners and prospective developers.	On-going	Economic Development/JEDCO	Staff Resources -1
2. Biannual Community Surveys	On-going	Economic Development	Staff Resources - 1
3. Business Attraction	On-going	Economic Development/JEDCO	Staff Resources -1
4. Utilize tax incentives and other tools	On-going	Economic Development	Staff Resources -1 Financial Resources - 3
5. Develop outdoor recreation plan and strategy	3-5 Years	Economic Development/Parks	Staff Resources 3 Financial Resources 2
6. Continue acquisition of flood plain properties along Beaver Creek for inclusion in recreation corridor	On-Going	Parks	Staff Resources - 1 Financial Resources - 4
7. Develop a sign and façade replacement program	0-3 Years	Economic Development	Staff Resources - 1 Financial Resources - 1
8. Invest in iconic commercial districts	Ongoing	Economic Development	Varies

TABLE 11.4 ECONOMIC DEVELOPMENT IMPLEMENTATION INITIATIVES



Go to the Housing Chapter for more information

HOUSING IMPLEMENTATION INITIATIVES	TIME FRAME	RESPONSIBLE PARTY	LEVEL OF EFFORT
1. Update Zoning and Subdivision Regulations	0-3 Years	Community Development	Staff Resources - 2 Financial Resources - 2
2. Develop a housing study	0-3 Years	Community Development	Staff Resources - 2 Financial Resources - 2
3. Monitor Housing conditions and trends	On-going	Community Development/ Non-profits/ Polk County Housing Trust Fund	Staff Resources - 2 Financial Resources - 1
4. Organize and facilitate community conversations	On-going	Community Development/ JEDCO/Regional Agencies	Staff Resources - 2
5. Build partnerships with lending institutions to provide grants or low interest or zero interest loans	0-3 Years	Community Development/ Economic Development	Staff Resources - 2

TABLE 11.5 HOUSING IMPLEMENTATION INITIATIVES



PARKS, TRAILS, AND RECREATION IMPLEMENTATION INITIATIVES	TIME FRAME	RESPONSIBLE PARTY	LEVEL OF EFFORT
1. Review and update the Park System Master Plan	0-3 Years	Parks	Staff Resources - 2 Financial Resources - 2
2. Develop a community wide Bicycle and Pedestrian Plan	0-3 Years	Parks/Community Development/Public Works	Staff Resources - 2 Financial Resources - 2
3. Utilize the City's website to promote park facilities and programs	On-going	Parks	Staff Resources - 1
4. Develop a community wide natural resources plan	0-3 Years	Parks/ Community Development	Staff Resources - 2 Financial Resources - 2
5. Install bicycle parking at park system destinations	0-3 Years	Parks	Staff Resources - 1 Financial Resources - 1
6. Develop partnerships to fund active living and recreation programs	On-going	Parks/Army Corp/ Iowa National Guard/ Youth Athletics	Staff Resources - 2
7. Conduct community facilities study exploring aquatics opportunities, educational and cultural resources.	0-3 Years	Parks/ Community Development/ Non-Profits	Staff Resources - 2 Financial Resources - 2
8. Create an interconnected park, trail and recreation corridor (Greenway Corridor) along Beaver Creek	On-going	Parks/ Community Development/ Engineering/ Polk County Conservation	Staff Resources - 2 Financial Resources - 3
9. Collaborate with developers to secure strategic park land and trail connections	On-going	Parks/ Community Development/ Developers	Staff Resources- 1
10. Provide adequate staff and programing resources	On-going	Parks	Financial Resources - 3

TABLE 11.6 PARKS, TRAILS, AND RECREATION IMPLEMENTATION INITIATIVES



UTILITIES IMPLEMENTATION INITIATIVES	TIME FRAME	RESPONSIBLE PARTY	LEVEL OF EFFORT
1. Undertake a high-speed internet visioning study.	0-3 Year	Economic Development	Staff Resources - 2 Financial Resources - 1
2. Evaluate and update operation and maintenance standards.	0-3 Year	Public Works	Staff Resources - 2 Financial Resources - 2
3. Evaluate and update methods and best practices for managing surface water run-off.	0-3 Year	Public Works	Staff Resources - 2 Financial Resources - 2
4. Monitor changes in collection methods that minimize airborne or water eroded material collection.	On-going	Public Works	Staff Resources - 2 Financial Resources - 1
5. Establish and enact a monitoring, education, and improvement program to address Inflow and Infiltration.	On-going	Public Works	Staff Resources - 1
6. Coordinate with the contracted solid waste vendor to encourage reduction in waste, reuse of materials, and increased recycling of household goods.	On-going	Public Works	Staff Resources - 1

TABLE 11.7 UTILITIES IMPLEMENTATION INITIATIVES





CITY OF  
*Johnston*

**2040 PLAN**

SEPTEMBER 2020