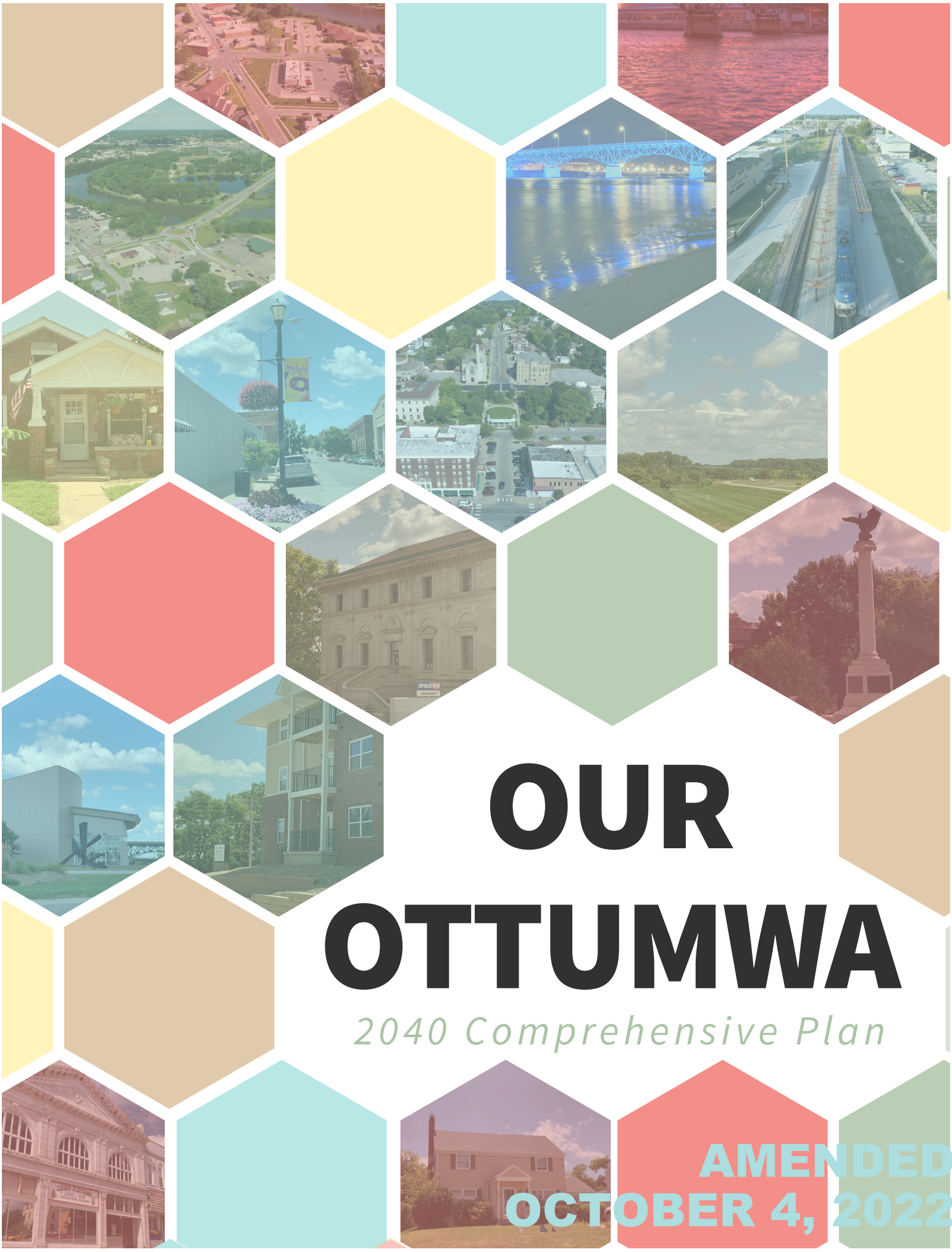

OUR OTTUMWA

2040 Comprehensive Plan

AMENDED
OCTOBER 4, 2022

OUR OTTUMWA

2040 Comprehensive Plan

[CITY OF]
OTTUMWA

October 4, 2022

Dear Reader,

The *Our Ottumwa 2040 Comprehensive Plan* was adopted in August 18, 2020 with the vision for the next 20 years of development and progress in Ottumwa. Through an election which brought four new councilmembers and myself as a new mayor, the commitment to the core principles outlined in the plan remains: growth, quality of life, housing and celebrating diversity. The plan won the 2021 American Planning Association Iowa Chapter's Daniel Burnham Award for a Comprehensive Plan because of the specificity of its goals and the energy demonstrated toward meeting those goals.

Keeping momentum means treating the plan as a living document. To celebrate the two year anniversary of the plan, we have added modest amendments. The amendments added to the *Our Ottumwa 2040 Comprehensive Plan* on October 4, 2022 provide a snapshot summary of the progress made toward implementing the plan in the two years since it was adopted. Those two years have been eventful! From the challenges of the Covid-19 pandemic to the victories we have celebrated opening the streetscape or breaking ground on major projects, revisiting and updating the plan gave us much to report.

Primarily, these amendments take the form of an afterword for each chapter where there was progress to report. These range from a statistical review of the 2020 Census to progress updates on parks and recreation and housing. As development has continued, we have also sought small changes to the Future Land Use Plan as reflected in the new map included in Chapter 9.

Finally, we are excited to launch the new public dashboard for the *Our Ottumwa Plan* with Envisio. This tool will ensure that progress updates for each action item included in the plan are regularly available for the public to see and follow our progress. Done correctly, the process of planning creates the social infrastructure necessary to carry out the goals of the plan itself. Envisio will be an important tool for keeping the public as actively engaged as they were throughout the planning process.

Thank you for sharing in this process. We look forward to continuing Ottumwa's progress for many years to come.

Sincerely,

Richard W. Johnson

Richard W. Johnson
Mayor

OUR OTTUMWA

2040 Comprehensive Plan

Acknowledgments

Comprehensive Plan Advisory Committee

Tom Lazio - Mayor
Phil Rath - City Administrator
Chad Farrington, Police Chief
Tony Miller - Fire Chief
Larry Seals - Director of Public Works
Gene Rathje - Parks and Recreation Director
Don Krieger - Planning and Zoning Commission Chair
Isaac Pezley - City Planner
Zach Simonson - City Planner
Kevin Flanagan - City Planning and Development Director
Jody Gates - City Planning and Development
Meliha Cavkusic - Ottumwa Housing Authority
Holly Berg - City Council Member
Steve Dust - Legacy Foundation (formerly)
Kelly Genners - President - Legacy Foundation
Fred Zesiger - Main Street Ottumwa Director
Brian Morgan - Wapello County Supervisor
Nicole Kooiker - Ottumwa Community School District
Marlene Sprouse - President - Indian Hills Community College
Sharon Stroh - VP - Greater Ottumwa Partners in Progress
Andrew Wartenberg - Greater Ottumwa Convention Center
John Ohlinger - Historic Preservation Commission
Tim Richmond - Emergency Management - Wapello County
Terri Messerschmitt - President - South Ottumwa Savings Bank
Javier Alvarez - Manager - JBS
Troy Mulgrew - General Manger - JBS Swift and Co
Brady Medlrem - Norris Asphalt Paving Company
Chris Bowers - Area 15 Regional Planning Commission
Steve Campbell - Region 8 Iowa Association of Realtors
Lesley Conning-John Deere & Greater Ottumwa Partners in Progress
Gaylon Cowan - C & C Manufacturing
T.J. Heller - CEO Greater Ottumwa Partners in Progress
Audrey Keck - ArchAngel Flying Services
Tom McAndrew - Ottumwa Police
Mike McGrory - Ottumwa Community School District

Mayor & City Council

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Holly Berg, City Council
Matt Dalbey, City Council
Marc Roe, City Council
Skip Stevens, City Council
Victor Streeby, City Council
Bob Meyers, City Council

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Chad Farrington, Police Chief
Tony Miller, Fire Chief
Kala Mulder, Finance Director
Gene Rathje, Parks & Recreation Director
Dwight Dohlman, City Engineer
Chris Reinhard, City Clerk

City of Ottumwa

Thank you to the residents of Ottumwa that provided input throughout the planning process.

OUR OTTUMWA

2040 Comprehensive Plan

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1 CHAPTER Community Vision

COMPREHENSIVE PLAN OVERVIEW

Comprehensive plans are guiding documents for growth. They are designed to assist communities in decision-making on activities and subject areas that affect local government. They cover a wide set of topics ranging from land use, to parks, to natural sources, or infrastructure. The Our Ottumwa Comprehensive Plan describes a vision for the future in Ottumwa and identifies an implementation strategy for the community to reach a desired community vision. The Our Ottumwa Comprehensive Plan addresses the needs of Ottumwa through the year 2040 and beyond. Goals and action items have been identified that will help the city navigate decision-making for the next twenty years.

Comprehensive Plans are built on an extensive existing conditions analysis to determine what is working well and what improvements are needed. Additionally, future demand estimates for personnel, facility space and land needs are calculated to set level of service goals. The existing conditions assessment is then followed by a robust public engagement strategy designed to receive feedback from a diverse set of community stakeholders. The engagement exercises provide an opportunity for a community to hear directly from its residents on issues regarding quality of life and desires for the future. The results of the existing conditions analysis can be found throughout the plan while the public participation efforts are described in detail in Chapter 3.

The Our Ottumwa Comprehensive Plan includes goals, policies and action items meant to guide the city through the year 2040. This roughly twenty-year plan, however, should not remain stagnate over the next 5, 10 or 15 years. Annually, the city should review the implementation plan to evaluate progress on the various action items and to determine if changes are needed. Every five years, the city should review the entire plan to see if there any amendments that should be made to the report, including the Future Land Use Plan.

The City of Ottumwa should use this plan as a reference for decision-making, a marketing tool for development, a detailed source of existing conditions and a summary of the community's feedback on key issues. When a development proposal, re-zoning or ordinance is proposed, leadership should refer to the recommendations in this plan to help guide them. If components of the plan no longer represent the community or its vision, then that part of the plan should be amended.

Ottumwa's last Comprehensive Plan was completed in 2001 with revisions made in 2014. Since then, the demographics and economy of Ottumwa have experienced a significant amount of change. The Our Ottumwa Comprehensive Plan addresses the changing demographics and economic conditions in the community and has created a strategy for Ottumwa to retain its identity as a regional hub with quality manufacturing jobs and plenty of access to nature.

PLANNING PROCESS

The *Our Ottumwa* Comprehensive Plan was completed over four phases:
Phase 1 - Kick-off, Research & Analysis
Phase 2 - Vision, Input & Direction
Phase 3 - Draft Plan & Evaluation
Phase 4 - Final Draft Plan & Adoption

Phase 1 - Kick-off, Research & Analysis

Phase 1 - Kick-off, Research & Analysis involved a kick-off meeting with the plan steering committee to discuss the roles and responsibilities of the group and discuss initial goals and priorities for the community. Data collection and the initial analysis of existing conditions within Ottumwa was also completed during this phase.

Phase 2 - Vision, Input & Direction

Phase 2 - Vision, Input & Direction covered most of the public engagement for the plan. During this phase, there was a public workshop, community survey, stakeholder interviews, a steering committee meeting and a kid-focused box city event. The results of the public engagement gathered in Phase 2 helped to make recommendations and identify priorities for the final report.

Phase 3 - Draft Plan & Evaluation

Phase 3 - Draft Plan & Evaluation included the actual writing of the full draft plan. This is the longest phase of planning and also includes a meeting with the steering committee to discuss the progress made and received feedback on the plan chapters.

Phase 4 - Final Draft Plan

Phase 4 - Final Draft Plan included the finalizing of the draft plan and the public approval process. The public adoption took place through a Planning & Zoning Commission vote to recommend approval, followed by actual approval by City Council.

PLAN CHAPTERS

The Our Ottumwa Comprehensive Plan includes the following chapters:

- Community Vision
- Community Profile
- Public Participation
- Natural Resources
- Parks & Recreation
- Housing
- Community Facilities
- Land Use Plan
- Community Character
- Transportation
- Infrastructure
- Implementation Plan

Future Land Use Plan

One major component of the Our Ottumwa Comprehensive Plan includes the creation of a new Future Land Use Plan for the city. This land use plan represents the ideal or preferred land use and development pattern for the community. Decisions on proposals, re-zoning and developments should be consistent with the Future Land Use Plan. The Future Land Use Plan can be found in Chapter X - Land Use and has been created based on an analysis of land use needs, environmental constraints and preferred development patterns and type for the community.

Implementation Plan

The Our Ottumwa Comprehensive Plan also includes an Implementation Plan Chapter. The Implementation Plan includes a set of goals and action items based on four main categories: housing, quality of life, growth and celebrate diversity. Each action item has each been assigned a priority level, timeframe, and entity responsible.

Goals - Goals are objectives or aims which may be broad or specific.

Action Items - Action items are specific steps and activities the City should take

COMMUNITY VISION OVERVIEW

The public participation and existing conditions analysis completed as part of the Our Ottumwa Comprehensive Plan helped identify four main themes or guiding principles that represent a community vision for Ottumwa. These four themes help guide decision-making throughout the plan. The four primary themes and areas of focus that were highlighted throughout the planning process were:

- Housing
- Quality of Life / Community Character
- Growth
- Celebrating Diversity

These four guiding principles have been used to identify a community vision statement: *The City of Ottumwa will work to grow its population and workforce by improving the community's quality of life through expanded housing opportunities, improved connection to the Des Moines River, and a strong community character that includes a celebration of the growing diversity of the community*.

Housing

The first major community vision principle revolved around the need for improved housing conditions within Ottumwa. Housing was repeatedly brought up as a major opportunity and challenge for the community. Housing improvement refers to both the need for new housing units and the need to improve the housing already existing within the community. Ottumwa has an older housing stock some of which is historic with plenty of charm and quaintness, offering unique opportunities for residents. However, the overall age of the housing stock that contributes to its charm, also can and have led to instances where homes are requiring extensive rehabilitation and maintenance. This plan tries to identify strategies to help improve the existing housing stock to provide an affordable housing option for local residents.

Another facet of the housing theme is the need to attract new housing development within the community. Very few new homes have been constructed in Ottumwa in the past decade. A certain amount of new housing is needed to help attract workforce and new residents. While new housing is not always the best source of affordable housing, at least not unless there is some type of subsidization, there are still wage earners in the community that need housing stock that matches their price range. The implementation plan and land use plan for the Our Ottumwa plan has identified strategies to attract new housing development into the community.

The final component of the housing theme is to work to attract a diverse set of housing types. Several people throughout the engagement process noted that there are housing types, such as townhomes or rowhouses, that are currently lacking within the existing housing stock. While single-family homes make up the majority of Ottumwa's housing stock and will likely continue to do so, other types of housing are needed to meet the needs of existing and future residents.

Quality of Life & Community Character

Another major theme that was identified in the engagement process was the need to preserve and improve quality of life and community character in Ottumwa. Many factors impact quality of life, but one fundamental element of a community's quality of life is having a clear and defined community character that highlights the strengths and resources that residents associate with. Cultivating a diverse, safe, and prosperous community starts with addressing the primary aspects of high quality of life. A primary theme that was brought up during the planning process was the overall maintenance and condition of the roads, housing, and the downtown Main Street. Also important was the community's connection to the Des Moines River. Ottumwa can utilize its residents to promote volunteerism and pride to build a visually appealing community.

More and more, there is significant competition to attract and retain residents. As employment becomes more flexible, people have started to consider factors such as quality of life and sense of place over almost all other factors. While Ottumwa certainly needs to retain employment sources to continue to attract growth and development, special attention should also be given to the quality of life for those living in the community. Quality of life and community character are positively impacted through things such as streetscape improvements, code enforcement, making sure residents feel safe and secure, maintaining a strong downtown district, improving access and recreation opportunities along the Des Moines River, and providing quality parks/trail options, among other factors.

The Des Moines River is a considerable resource for Ottumwa and a key characteristic of the community. The riverfront should be cleaned and protected. Using the riverfront for development of retail, restaurants, and trails to encourage public involvement. Continued riverfront activation can provide additional aesthetic, economic and recreation benefits for future and current residents. A strong relationship to the river will be a

key component of a defined community character. The City has several plans and proposals impacting the riverfront currently underway and the implementation of these strategies is a critical component of community character planning and building.

Growth

At a basic level, Ottumwa needs to continue to work to attract population and employment growth now and in the future. A sense of anxiety over the prospects of future growth or population decline was mentioned throughout the planning process. Participants strongly feared the potential impact of losing a major employer and continued population stagnation or decline. When people feel secure in the long-term potential of their community, they may be more likely and able to make investments in their homes, neighborhoods and businesses. For these reasons, identifying strategies to attract additional growth and development was a key component of this planning effort of the implementation strategies identified.

Growth strategies must address population as well as business growth. There are many policies and programs addressing these concerns already and these efforts should continue to be supported. An essential component of an economic development plan is workforce development to support and assist in activities, policies, and programs to retain a workforce that can support current and future businesses in Ottumwa. Retaining and attracting employers and entrepreneurs to Ottumwa is also important, especially working to attract high-quality technology-based office and industrial jobs. While economic growth will help support population growth, a solid housing strategy and community character building efforts will also be needed to attract residents to live in the City of Ottumwa and not elsewhere in the region.

Celebrating Diversity

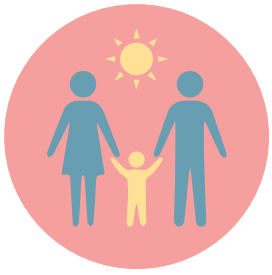
Ottumwa has managed to stabilize and modestly grow its population after decades of population decline in part due to the number of new immigrant families coming to the area to work at large employers such as JBS or John Deere. We see this through changes to the racial composition of the community and through the number of households that speak a language other than English at home. Throughout the public engagement process, the need to celebrate the diversity of Ottumwa came up as an important opportunity for the city in the decades ahead. While many smaller cities in rural areas are facing continued population decline, Ottumwa has an opportunity through its immigrant community to continue to grow its population. Efforts should be made to help celebrate and embrace the increasing diversity of the community. This can be accomplished several ways including multi-cultural festivals or celebrations or getting more minorities involved in civic engagement such as serving on boards or commissions.

OUR OTTUMWA VISION STATEMENT

> **"The City of Ottumwa will work to grow its population and workforce by improving the community's quality of life through expanded housing opportunities, improved connection to the Des Moines River, and a strong community character that includes a celebration of the growing diversity of the community."**

COMMUNITY VISION GUIDING PRINCIPLES

Housing



Quality of Life & Community Character

Growth

Celebrating Diversity

2 CHAPTER Community Profile

COMMUNITY PROFILE OVERVIEW

Ottumwa is a small city in southeast Iowa that has been built upon either side of the Des Moines River, naturally dividing the community into northern and southern segments. Ottumwa is a historic community, first incorporating in the 1840s. The original habitants of the area now known as Ottumwa were the Ioway, Mesquaki and Sac native tribes. Western expansion of the United States pushed the original inhabitants west as the land rush fell upon the Ottumwa area in 1843. Approximately 470 acres of Ottumwa was settled by the Appanoose Rapids Company in a community then known as Louisville. Ottumwa eventually became the official name of the community as Ottumwa began to grow as a city, eventually being named the seat of Wapello County, Iowa.

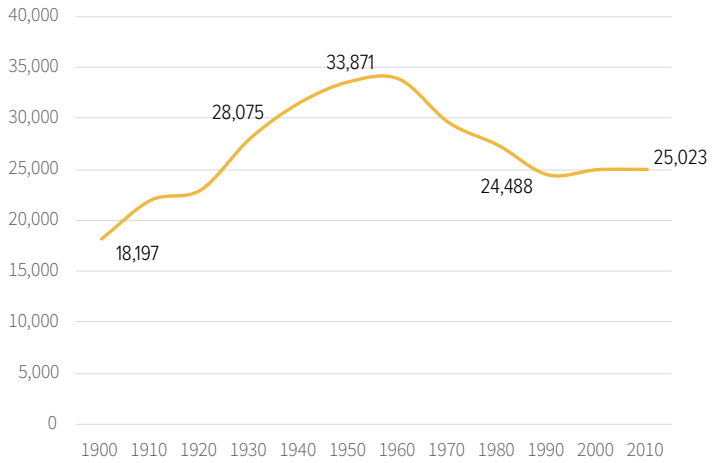
Over the next century, Ottumwa continued to grow in people and jobs, many of which initially worked in coal mining and later in manufacturing and processing. By the 1960s, Ottumwa had a population of nearly 34,000, however, the population began to decline due to several large manufacturing employers leaving the community as well as other issues related to the changing role of agriculture and flooding of the Des Moines River. In recent decades, Ottumwa's population has stabilized at around 25,000 residents. Manufacturing has remained an important industry in the community despite the changing nature of the field due to technological improvements and automation. Ottumwa now faces the task of retaining its identity as a vital regional hub for southeast Iowa.

The Community Profile chapter provides a detailed socioeconomic profile of the Ottumwa community and overviews the existing employment and industry profile. This chapter reviews data related to age, race/ethnicity, incomes, housing, educational attainment and more. A more detailed analysis of the market conditions in Ottumwa is provided in Chapter 10 – Economic Development as well as in the Appendix. Full Market Report. The data and analysis in this chapter helped inform decisions and recommendations made throughout the entire Our Ottumwa Comprehensive Plan.

Total Population

Ottumwa's population has grown from around 1,600 in 1860 to a peak of nearly 34,000 in the 1960 Decennial Census. Since the 1960s, Ottumwa gradually saw its population decline until around 1990 where its population began to stabilize. Between 1990 and 2000, Ottumwa experienced population growth of around 2.1%. The 2010 Decennial Census estimated a population growth rate of 0.1%, indicating another stabilizing of the population at around 25,000. While 2018 U.S. Census American Community Survey 5-Year Estimates suggest Ottumwa has declined slightly in population since 2010, the 2020 number will give a better estimate of Ottumwa's ability to retain population in the 2010s. Demographic data was taken from U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates whenever available. All other sources, including dates, will be noted otherwise. A map of the overall population density by block group is shown in Figure 2.3.

Figure 2.1 - Age Profile Summary, Ottumwa, Iowa & U.S. (2017)



Source: U.S. Census Bureau

Age Profile

Figure 2.2 shows the breakdown of Ottumwa's population into age cohorts (0-4, 5-9, 10-14 etc.) by male and female population. The largest age cohorts in Ottumwa are children (ages 0-9), young adults (ages 25-29) and older adults (ages 55-59). Generally, the female and male population seem balanced across age cohorts with a few notable exceptions. There are more male children (ages 0-9), more female teenagers (ages 10-19), and more older adult women overall (ages 50+). In general, having more younger males and more older females follows national trends for age cohort breakdown.

The overall median age in Ottumwa is 35.7 which is younger than the U.S. median age of 37.8. Males in Ottumwa have a median age of 34.5 and females are slightly older on average with a median age of 37.2. While Ottumwa is generally skewed younger than the U.S. as a whole, the trend between male and female median age is consistent with the ratio as the national level (36.5 and 39.1, respectively). Table 2.1 shows the breakdown of median age for Ottumwa, the State of Iowa and the U.S.

Figure 2.2 - Age by Sex, Ottumwa (2017)

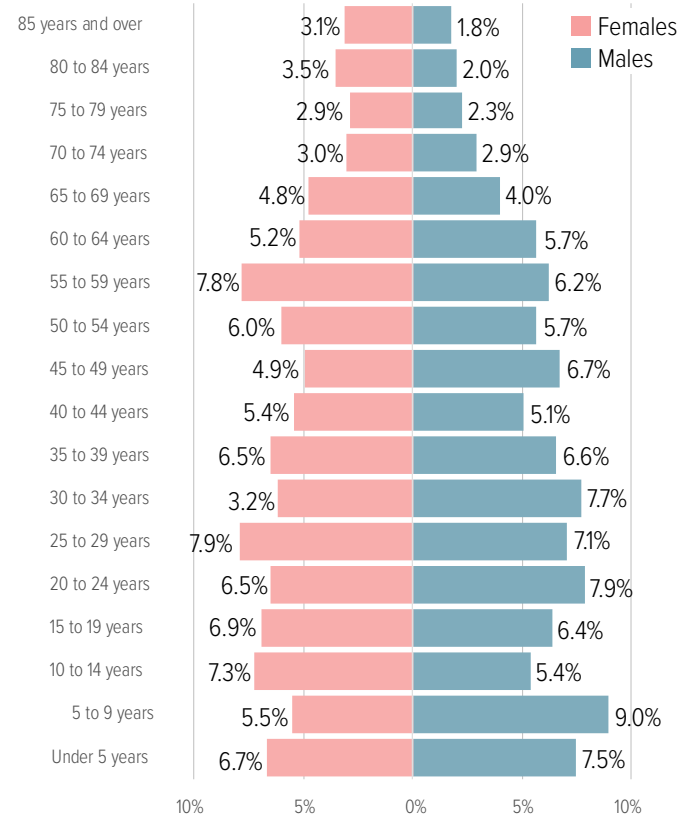


Table 2.1 - Age Profile Summary, Ottumwa, Iowa & U.S. (2017)

Median Age	Ottumwa	Iowa	U.S.
Total	35.7	38.1	37.8
Male	34.5	36.8	36.5
Female	37.2	39.4	39.1
Selected Age Categories (2017)			
Age Category	**Ottumwa (%)**	**Iowa (%)**	**U.S. (%)**
5 to 14 Years	13.6%	13.1%	12.8%
Under 18 Years	24.4%	23.4%	22.9%
18 to 24 Years	10.1%	10.3%	9.7%
15 to 44 Years	40.0%	38.6%	40.0%
18 Years +	75.6%	76.6%	77.1%
60 Years +	20.7%	22.4%	20.9%
65 Years +	15.2%	16.1%	14.9%
75 Years +	7.9%	7.4%	6.3%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

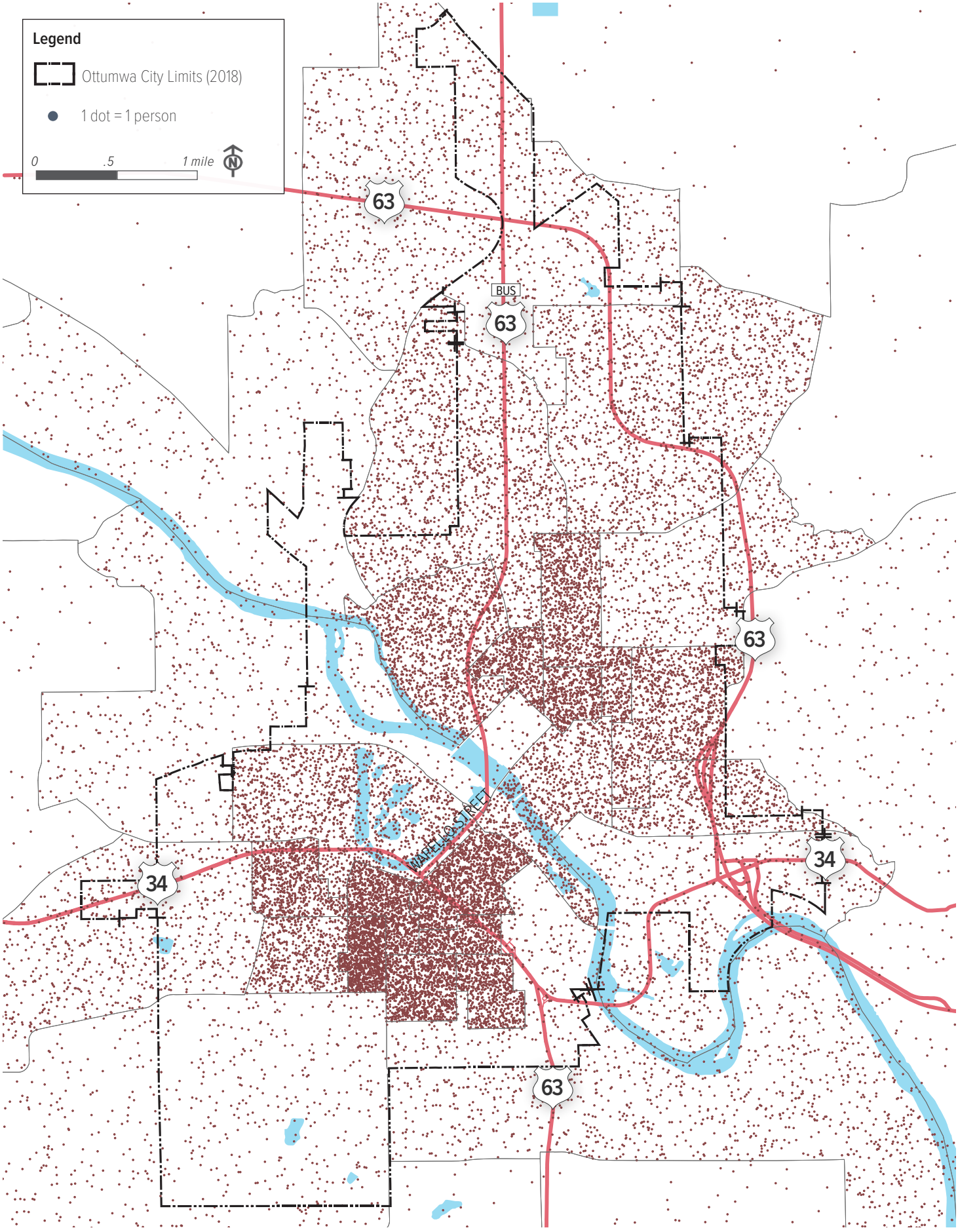


Figure 2.3 - Dot Density Map by Block Group (2018)

Data Source: U.S. Census Bureau

Households & Families

There are approximately 9,998 households in Ottumwa. The average size is 2.39 per household. The average size for owner-occupied units is 2.5 per household, which is higher than the average of 2.2 for renter-occupied units. Approximately two thirds (66.9%) of the households are living in owner-occupied housing units, while one third (33.1%) are in renter-occupied housing units. Figure 2.4 shows the breakdown.

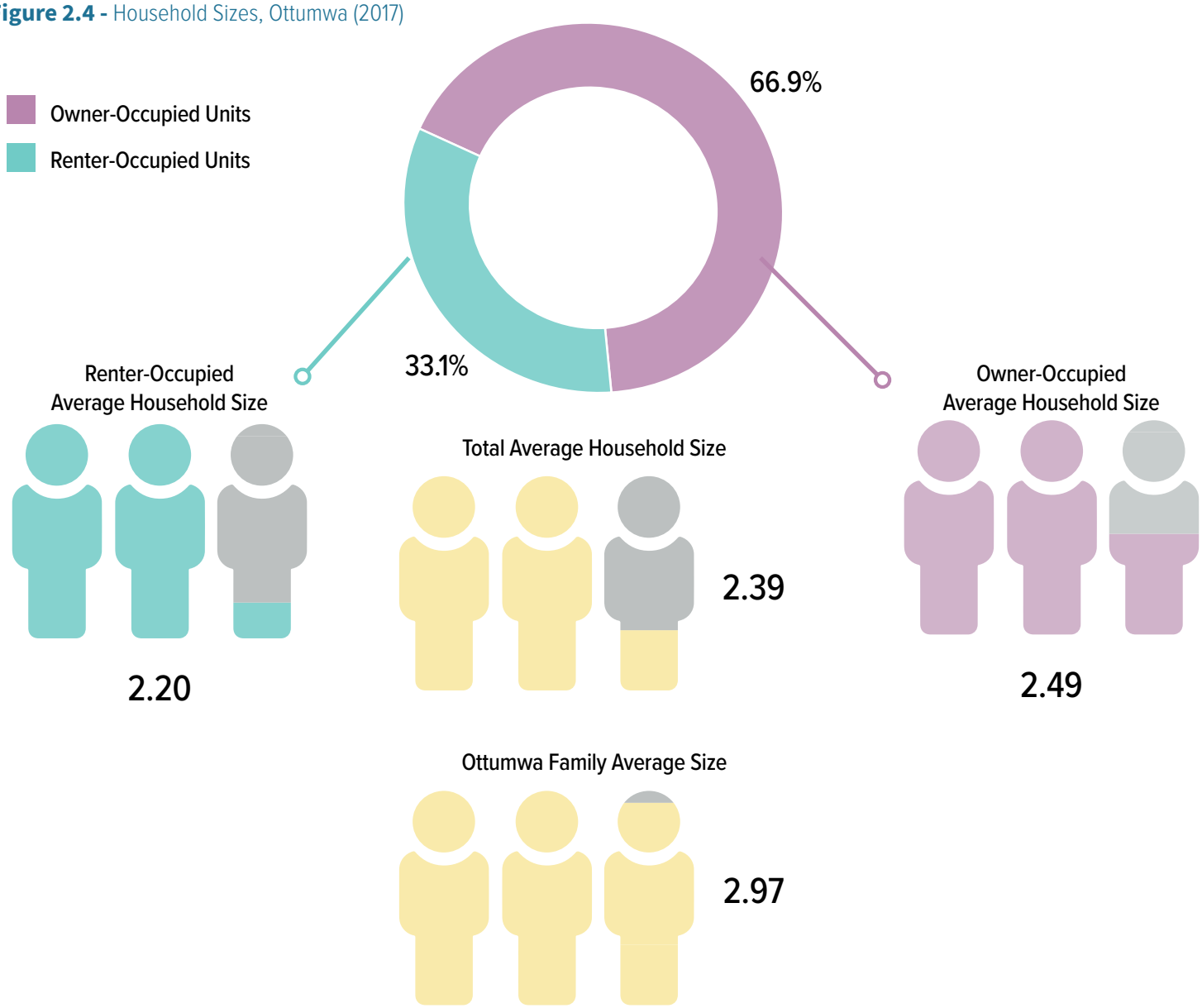
The total number of families in Ottumwa is estimated at 6,295 with an average size of 2.97 per family. A family is composed of two or more members who live in the same home and are related by birth, marriage or adoption. Approximately 33% of households have their own children under age 18 years living with them. Of these households, over half have children between the ages of 6 and 17 only. Another 35% of households in Ottumwa have one or more people age 60 years or older. Approximately 33% of households live alone. Table 2.2 shows the breakdown.

Table 2.2 - Households & Families, Ottumwa (2017)

Households	Ottumwa
Total Households	9,998
Average Household Size	2.39
Families	**Ottumwa**
Total Families	6,295
Average Family Size	2.97
Household Characteristics	**Ottumwa**
Households with children under 18 years	33.0%
Households with people age 60 years or older	35.7%
Householder living alone	32.5%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Figure 2.4 - Household Sizes, Ottumwa (2017)



Incomes

The median annual household income for all occupied households in Ottumwa is estimated to be $39,193. Figure 2.5 shows the breakdown of households by income bracket in Ottumwa compared to Wapello County, Iowa and the United States. The two largest income brackets for Ottumwa are $35,000 to $49,999 (17.5%) and $50,000 to $74,999 (17.5%). Approximately 44.7% of Ottumwa households earn less than $35,000 annually. Roughly 10.5% of households in Ottumwa earn more than $100,000 per year. Compared to Iowa and the United States, these lower income bracket levels are much higher and the higher income levels much lower.

The median household income in Ottumwa ($39,192) is approximately 10% lower than the Wapello County median household income. The State of Iowa median household income is also higher at $56,570 – which is approximately 30% higher than Ottumwa's. Nationally, the median household income is $57,652. There is a significant divide between the median household income of homeowners and renters in Ottumwa. The median household income for owner-occupied is $49,421, more than double the median household income for renters of $21,430. Table 2.3 summarizes this data. Table 2.4 shows median household income by age of householder. Householders age 45 to 64 have the highest median income at $47,308. The lowest median income by householder age is $27,928 for householders under age 25 years.

Table 2.3 - Median Income by Occupancy and Housing Tenure (2017)

Jurisdiction	Occupied Housing Units	Owner-Occupied Units	Renter-Occupied Units
Ottumwa	$39,193	$49,421	$21,430
Wapello County	$43,329	$53,567	$22,169
Iowa	$56,570	$69,105	$31,975
United States	$57,652	$73,252	$36,653

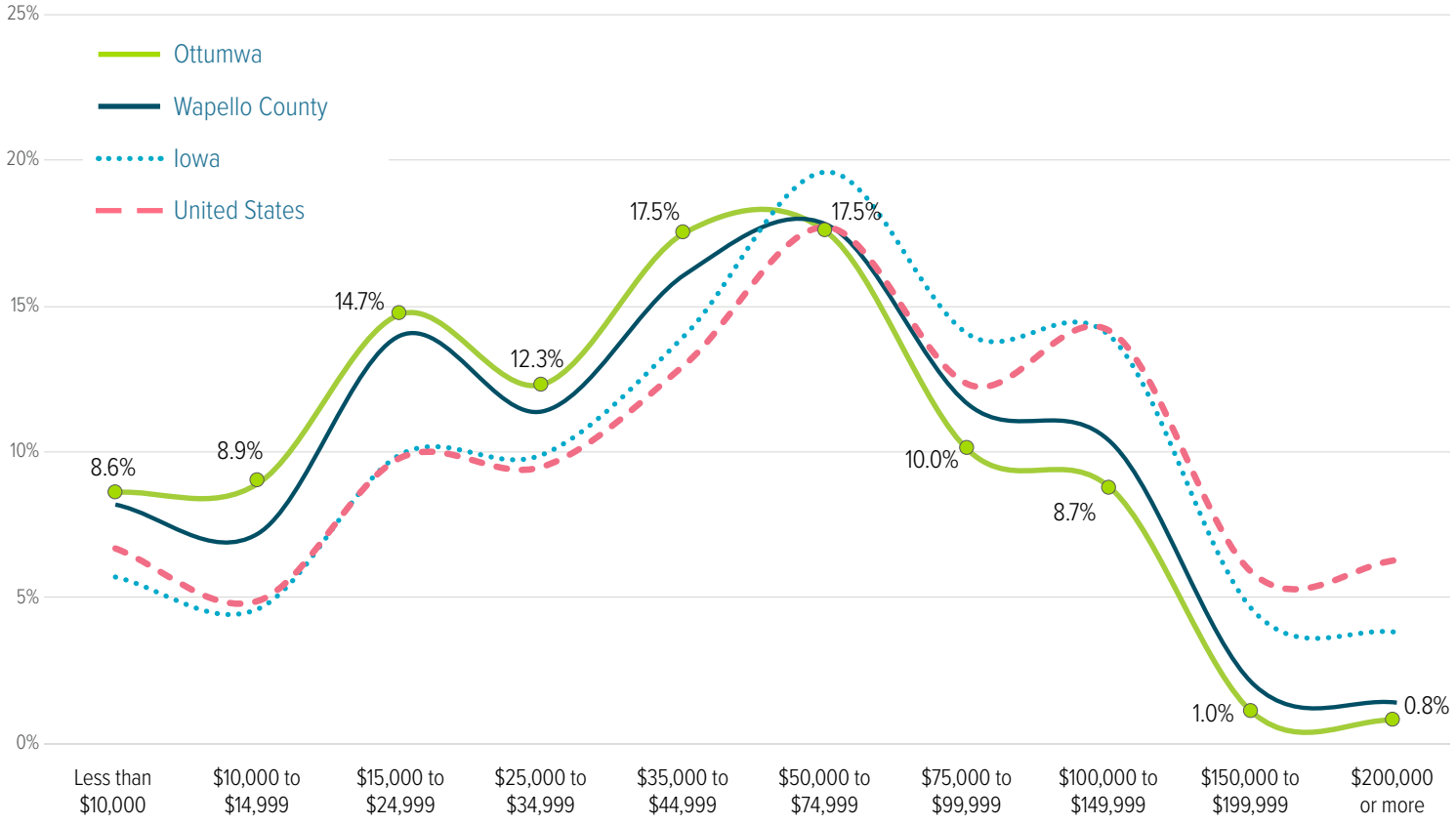
Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 2.4 - Median Income by Age of Householder (2017)

Age of Householder	Median Household Income
Householder under 25 years	$27,928
Householder 25 to 44 years	$44,244
Householder 45 to 64 years	$47,308
Householder 65 years and above	$29,722

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Figure 2.5 - Household Income by Bracket Comparison (2017)



Educational Attainment

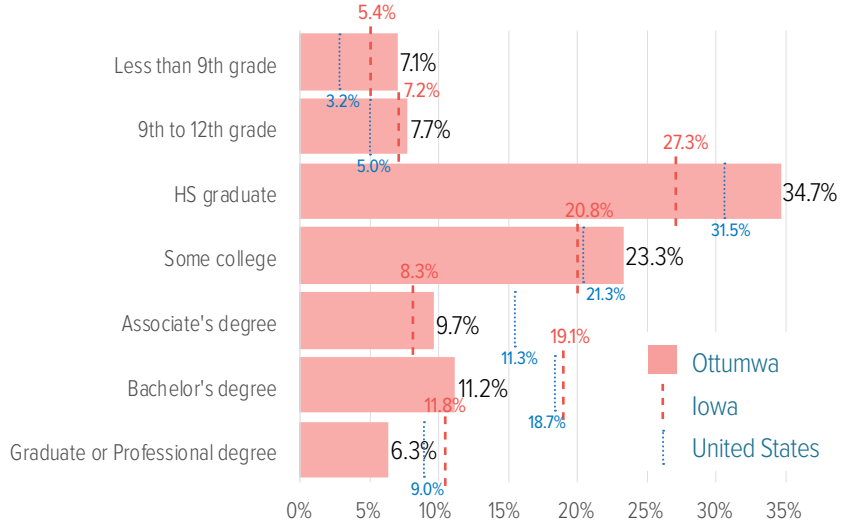
Figure 2.6 shows educational attainment in Ottumwa for the total population age 25 or older. Most Ottumwa residents have either a high school diploma (34.7%) or some college (23.3%). Over 14% of residents have less than a high school diploma. Another 11.2% of residents have obtained a bachelor's degree and 6.3% have gone on to receive a graduate or professional degree. Educational attainment levels in Ottumwa vary significantly by race and ethnicity as shown in Figure 2.7. Over 90% of white residents have a high school degree or higher and nearly 20% have a bachelor's degree or higher. However, only 42.7% of Hispanic or Latino residents have obtained a high school diploma or higher and only 3.7% have a bachelor's degree or higher. There are major implications for median earnings estimates based on education attainment achieved. While a resident with a graduate or professional degree would have a median income of $50,662, a resident with less than a high school diploma earns a median income of $26,819. Table 2.5 shows the breakdown of median income estimates by educational attainment level.

Table 2.5 - Median Earnings by Educational Attainment (2017)

Educational Attainment	Ottumwa Median Earnings	U.S. Median Earnings
Less than high school graduate	$26,819	$27,738
High school graduate (or equivalent)	$30,785	$29,815
Some college or associate's degree	$27,230	$35,394
Bachelor's degree	$33,932	$52,019
Graduate or professional degree	$50,662	$69,903

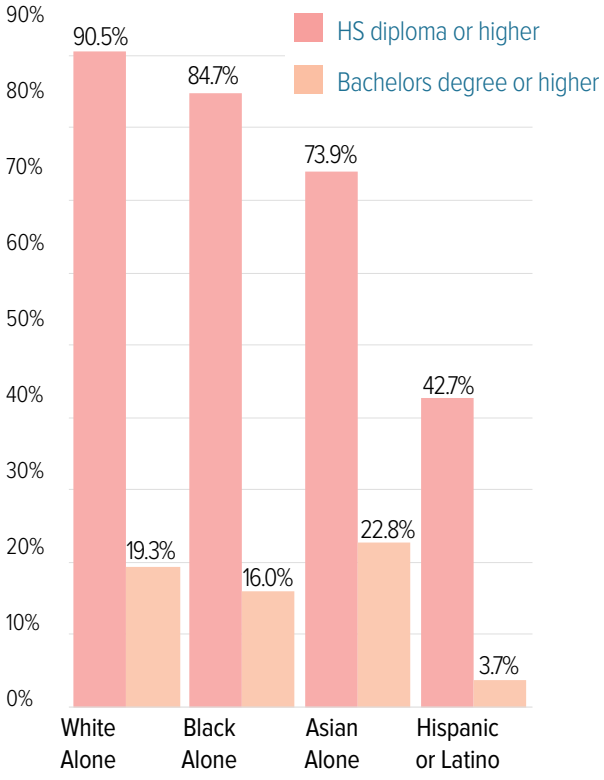
Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Figure 2.6 - Total Educational Attainment, Ottumwa (2017)



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Figure 2.7 - Educational Attainment by Race (2017)



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Vehicles Available & Transportation to Work

Table 2.6 shows the number of vehicles available to households in Ottumwa for 2017. Only 8.7% of households have no vehicles available. Over 70% of households have access to between 1 and 2 vehicles. Nearly 5% of households have access to four or more vehicles. Most (81%) of residents age 16 or older drive alone in a car, truck or van to get to work and another 12.5% carpool in a car, truck or van. Only 1.4% of residents walked to work and another 2.6% relied on a taxi, bicycle or motorcycle. Data indicates approximately 2.3% of residents work from home in Ottumwa.

Table 2.6 - Vehicles Available by Household (2017)

Vehicles Available	Count	Share
No vehicle available	873	8.7%
1 Vehicle Available	3,589	35.9%
2 Vehicles Available	3,828	38.3%
3 Vehicles Available	1,221	12.2%
4 or more Vehicles Available	487	4.9%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

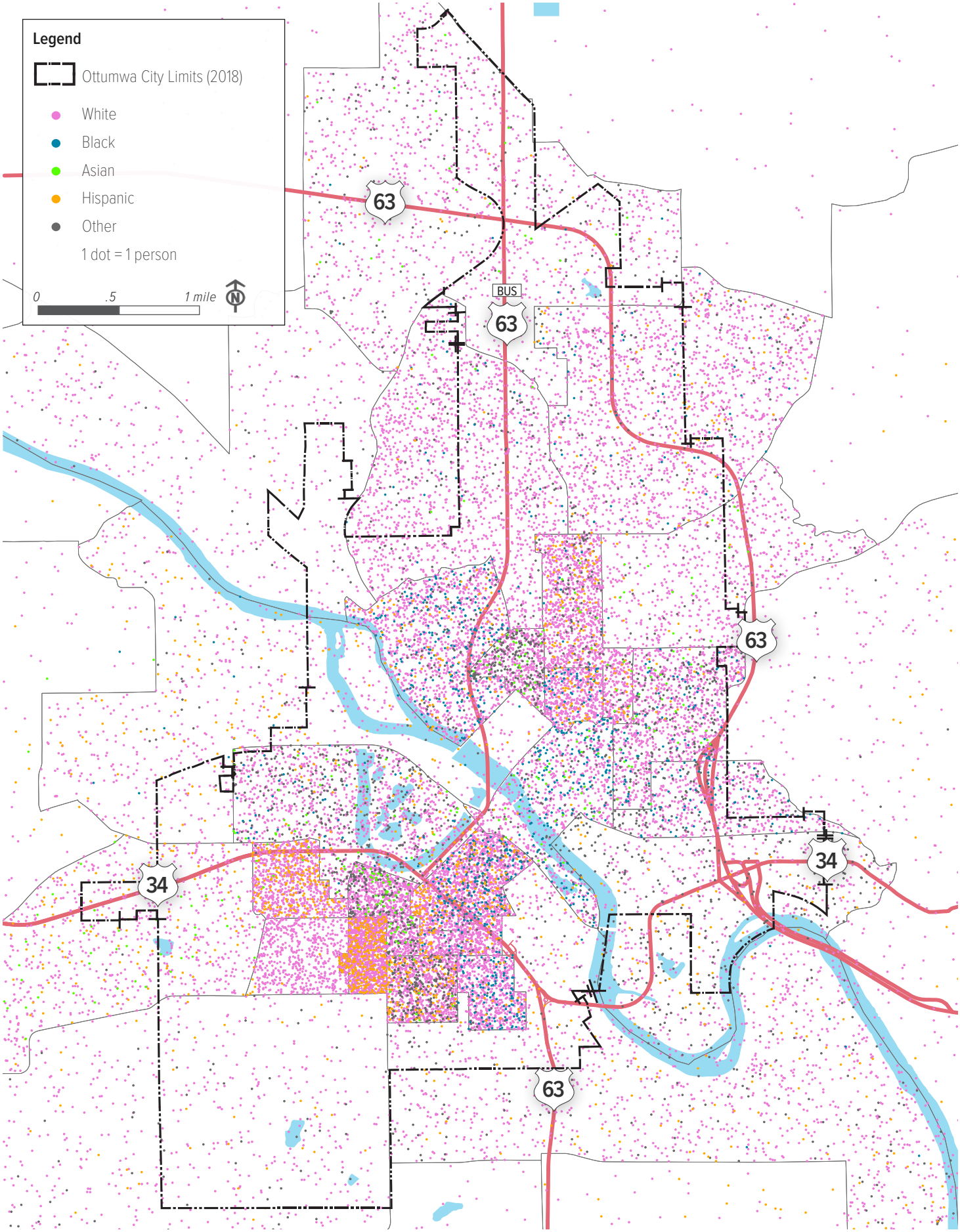


Figure 4.8 - Dot Density Map by Race/Ethnicity and Block Group (2018)

Data Source: Iowa DNR 2009

Race / Ethnicity

Ottumwa is significantly more diverse than the rest of Iowa, particularly when it comes to the percentage of the population that is Hispanic or Latino or some other race alone. According to 2017 estimates, 84.2% of Ottumwa is white alone. This is significantly lower than the State of Iowa that is 90.6% white, however, it is still a higher percent white alone than the United States overall. Nearly 15% of Ottumwa residents are Hispanic or Latino which is considerably higher than Wapello County (10.5%) and Iowa (5.7%). Ottumwa more closely aligns with the percentage of the entire United States that is Hispanic or Latino (17.6%). Since 2010, the number of Hispanic or Latino residents in Ottumwa has increased by over 1,000 people. Over 8% of Ottumwa residents identify as some other race than those listed on the Census form, which is significantly higher than the 4.8% of the United States overall in this category. Table 2.7 shows the breakdown. Figure 4.8 shows the approximate geographic distribution of people in Ottumwa by race/ethnicity per block group as of 2018. The more diverse areas of the community appear to be south of the river and north of downtown Ottumwa.

Table 2.7 - Race / Ethnicity Comparison (2017)

Race / Ethnicity	City of Ottumwa	Wapello County	Iowa	United States
White alone	84.2%	88.1%	90.6%	73.0%
Black or African American alone	4.0%	3.0%	3.4%	12.7%
American Indian and Alaska Native alone	0.1%	0.1%	0.3%	0.8%
Asian alone	1.1%	0.9%	2.3%	5.4%
Native Hawaiian and Other Pacific Islander alone	0.3%	0.3%	0.1%	0.2%
Some other race alone	8.3%	5.8%	1.3%	4.8%
Two or more races	4.0%	3.4%	4.0%	6.3%
Hispanic or Latino	14.7%	10.5%	5.7%	17.6%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Language Spoken at Home

Not only is Ottumwa racially and ethnically diverse, the diversity extends to the languages spoken in the community. Of residents age 5 and older, approximately 83% speak only English at home. The remaining nearly 17%, approximately 3,800 residents, speak a language other than English at home. Most of the non-English speakers speak Spanish at home accounting for nearly 13% of all residents age 5 or older. The remaining non-English speakers speak Other Indo-European language (1.3%), Asian and Pacific Island language (1.2%), or another non-specified language (1.2%).

Table 2.8 - Speaks a Language Other than English at Home (2017)

Language Spoken at Home	Count	Share
Population 5 Years and over	22,959	100.0%
Speak only English	19,158	83.4%
Speak a language other than English	3,801	16.6%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 2.9 - Language Spoke at Home (Non-English) (2017)

Language Spoke at Home	Count	Share
Population 5 Years and over	22,959	100.0%
Spanish	2,975	13%
Other Indo-European languages	288	1.3%
Asian and Pacific Island languages	265	1.2%
Other languages	265	1.2%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

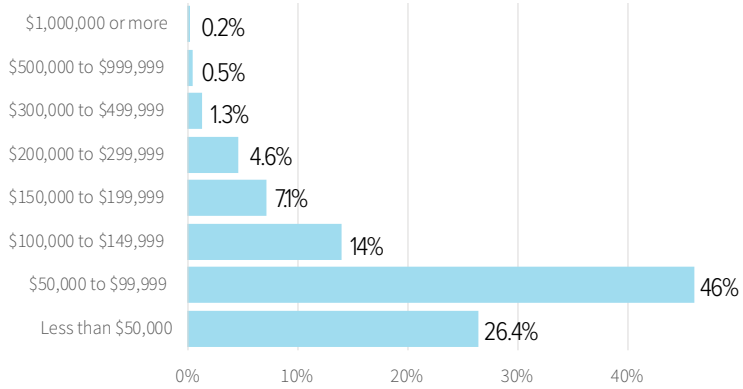
7%

DECREASE IN PEOPLE ONLY SPEAKING ENGLISH AT HOME

83%

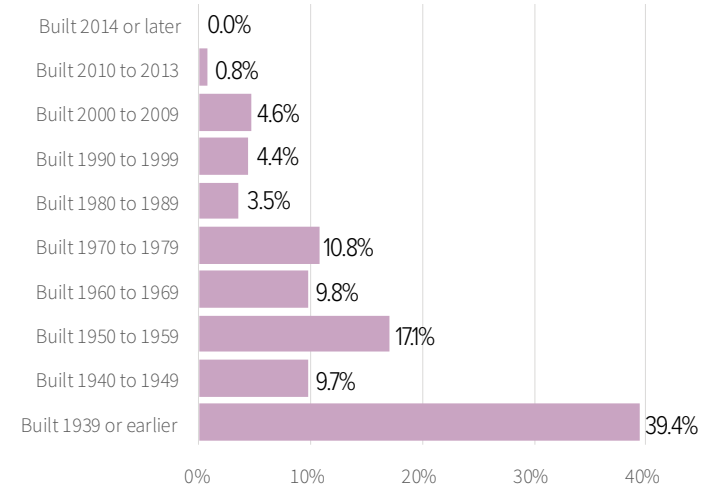
SPEAK ONLY ENGLISH AT HOME IN 2017

Figure 2.9 - Owner-Occupied Housing Values (2017)



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Figure 2.10 - Year Structure Built, Ottumwa (2017)



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 2.10 - Housing Overview (2017)

Housing	Ottumwa	%	Iowa	%
Total Housing Units	11,168	100%	1,376,133	100%
Occupied Housing Units	9,998	89.5%	1,251,587	90.9%
Vacant Housing Units	1,170	10.5%	124,546	9.1%
Homeowner Vacancy Rate	1.4	-	1.5	-
Rental Vacancy Rate	14.0	-	6.2	-

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 2.11 - Households & Families (2017)

Housing	Ottumwa	%	Iowa	%
Occupied Housing Units	9,998	100%	1,251,587	100%
Owner-Occupied	6,686	66.9%	889,285	71.1%
Renter-Occupied	3,312	33.1%	362,302	28.9%
Families	6,295	-	800,576	-
Avg HH Size (Total)	2.39	-	2.41	-
Avg HH Size (Owner-Occupied)	2.49	-	2.51	-
Avg HH Size (Renter-Occupied)	2.20	-	2.18	-
Avg Family Size	2.97	-	2.98	-

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 2.12 - Household Size by Tenure (2017)

Household Size	Owner Occupied	Renter-Occupied
1-person household	26.4%	44.9%
2-person household	39.1%	21.9%
3-person household	12.4%	11.6%
4-person or more household	22.2%	21.6%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Housing

There are approximately 11,168 housing units in Ottumwa as of 2017. Approximately 89.5% of the housing units in Ottumwa are occupied and nearly 11% are vacant. The overall homeowner vacancy rate for Ottumwa is 1.4% and the rental vacancy rate is much higher at 14.0%. Table 2.10 shows the comparison of Ottumwa to Iowa. The rental vacancy rate for Ottumwa is significantly higher than the rental vacancy rate for the State of Iowa.

Of the nearly 10,000 occupied housing units in Ottumwa, approximately 66.9% are owner-occupied. The remaining 33% are renter-occupied. The average household size for owner-occupied households is 2.49 persons while the average renter-occupied household size is slightly smaller at 2.20 persons. Ottumwa families have the largest average size at 2.97 persons. Household sizes in Ottumwa are comparable to state averages as summarized in Table 2.11. Ottumwa has a slightly higher percentage of renter-occupied housing units.

Renters are more likely to live in 1-person households than homeowners. Likewise, owner-occupied households are more likely to live in 2-person households. A roughly equal percentage of renter and owner-occupied households live in 3-person and 4-person or more households. Table 2.12 summarizes the data.

Figure 2.9 shows the estimated values of owner-occupied housing in Ottumwa. Nearly half of all homes are valued between $50,000 and $99,999. Another 26% are valued below $50,000. Less than 1% of Ottumwa homes are valued between $500,000 and $1,000,000 or more. The median home value for Ottumwa is $73,400.

Ottumwa homes are generally older. Nearly 40% of homes were built in 1939 or earlier. Another 36% of homes were constructed between 1940 and 1969. Collectively, this means that nearly 80% of homes are at least fifty years old with many much older than that. Very few homes have been constructed since 2000, with an estimated 5.4% of homes constructed since then. Figure 2.10 shows the year-built breakdown.

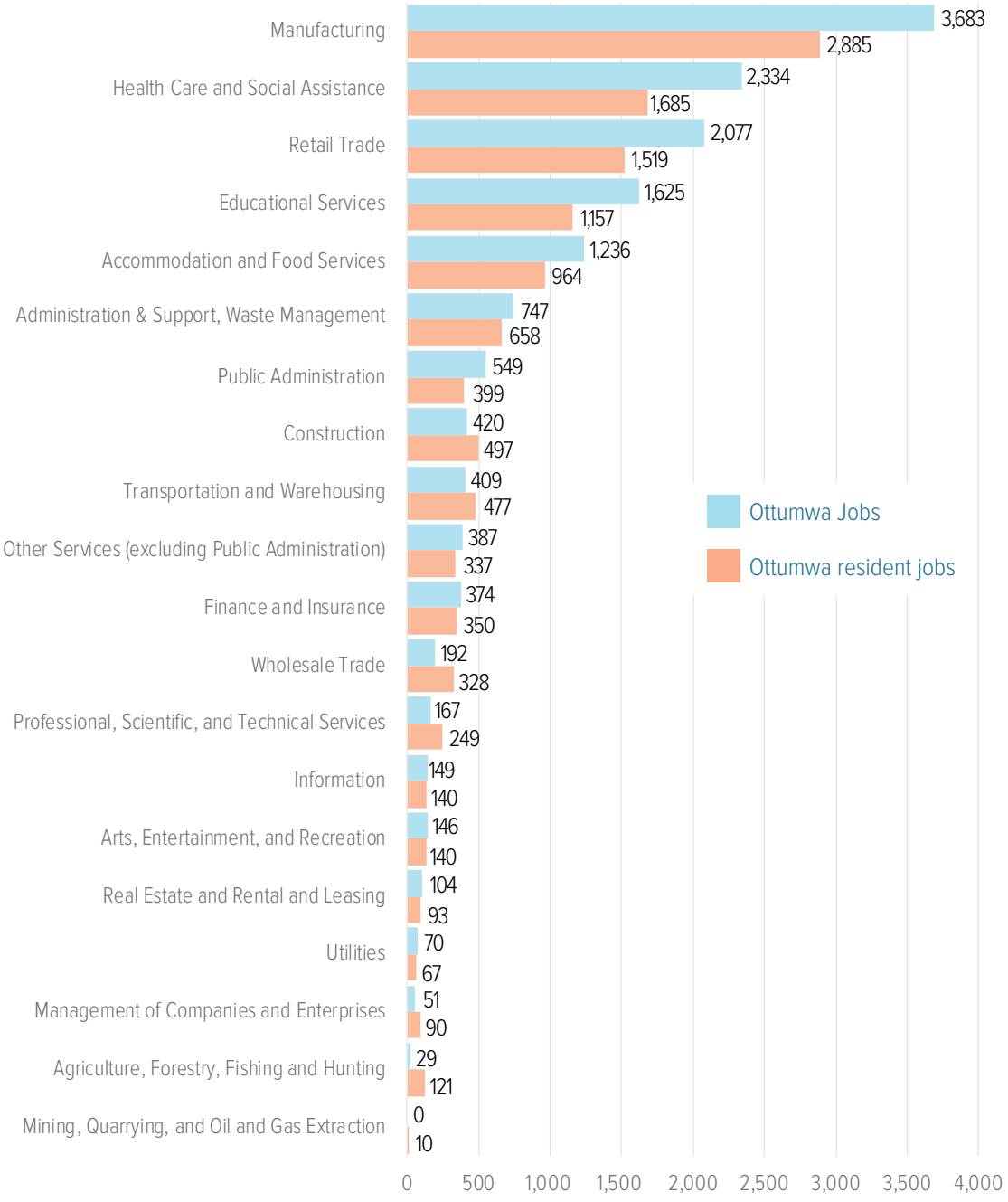
EMPLOYMENT + INDUSTRY PROFILE

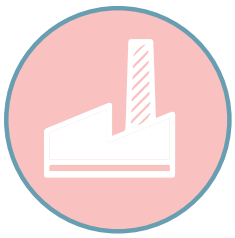
Employment data from 2017 reveals there are approximately 14,759 jobs located in Ottumwa. Additionally, there are 5,982 Ottumwa residents that work outside the city limits. This section reviews the major industries, wages, and characteristics of the workers from both these categories of workers and jobs. Since 2007, the total number of jobs located in Ottumwa has increased from 14,163 by approximately 4.2%.

Major Industries by Employees

The largest industry by total employees in Ottumwa is Manufacturing with an estimated 3,683 jobs which accounts for 25.0% of all jobs. The next major industries are Health Care and Social Assistance (15.9%) and Retail Trade (14.1%). Other large industries include Educational Services (11.0%) and Accommodation and Food Services (8.4%). The major industries for Ottumwa residents that work generally the same: Manufacturing (23.7%), Health Care and Social Assistance (13.9%), and Retail Trade (12.5%). Figure 2.11 shows the major industries for Ottumwa-based jobs and Ottumwa-resident jobs for 2017. Overall, the major industries are not surprising given the heavy role of manufacturing in Ottumwa employment, Ottumwa's role as a regional hub for healthcare and retail, as well as the presence of the Indian Hills Community College and school district.

Figure 2.11 - Major Industries by Employees (2017)





Manufacturing
(25.0%)

Health Care & Social Assistance
(15.9%)

Retail Trade
(14.1%)

Educational Services
(11.0%)

Table 2.13 - Worker Age

Age	Ottumwa Based Jobs	Ottumwa Resident Jobs
Age 29 or younger	24.7%	25.9%
Age 30 to 54	52.1%	50.9%
Age 55 or older	23.2%	23.2%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Figure 2.12 - Jobs by Wages

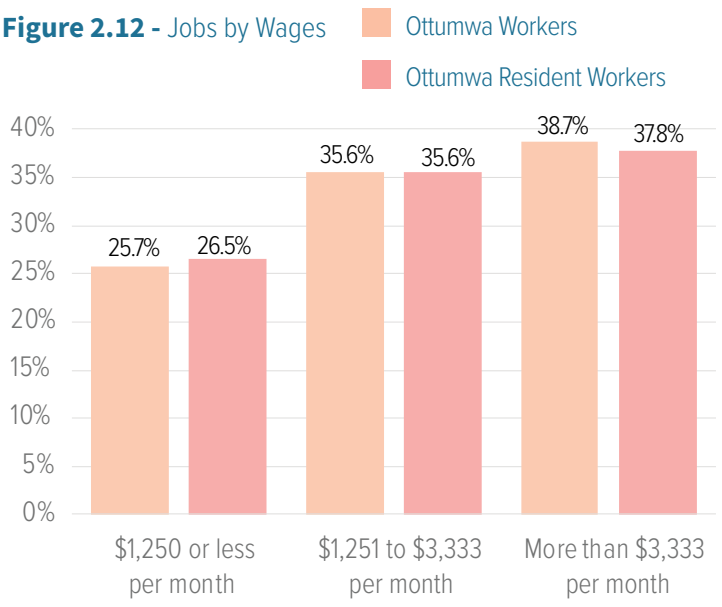
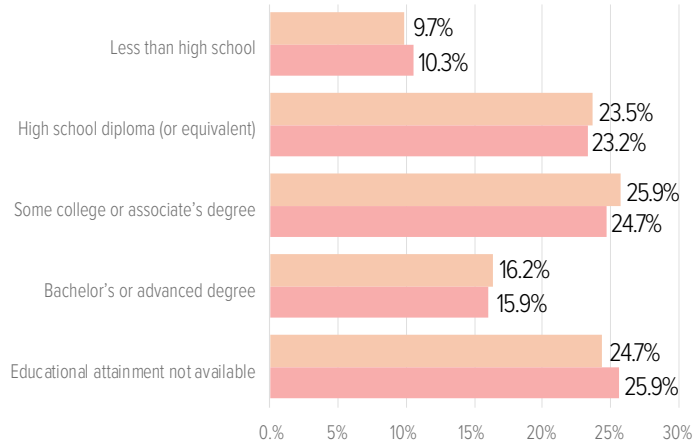


Table 2.14 - Worker Race / Ethnicity

Race / Ethnicity	Ottumwa Jobs	Resident Jobs
White	91.7%	91.7%
Black or African American	4.1%	4.4%
American Indian or Pacific Islander	0.6%	0.7%
Asian	2.5%	2.0%
Native Hawaiian or Pacific Islander	0.2%	0.2%
Two or more race groups	0.9%	1.0%
Hispanic or Latino	10.2%	12.4%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Figure 2.13 - Jobs by Educational Attainment



EMPLOYMENT + INDUSTRY PROFILE

In addition to understanding the major industries present in Ottumwa and the industries most Ottumwa residents work in, it is useful to review the typical profile of workers and the jobs they have available to them.

Worker Age

Table 2.13 shows the age breakdown estimates for Ottumwa-based jobs and Ottumwa resident jobs in 2017. A majority of jobs in Ottumwa are held by workers age 30 to 54. The remaining jobs are split evenly between younger (age 29 or less) and older workers (age 55 or older). The breakdown of worker age between Ottumwa jobs and resident worker jobs is nearly even.

Monthly Wages

Figure 2.12 shows the jobs by monthly earnings for Ottumwa-based and Ottumwa resident jobs. Nearly 40% of jobs in Ottumwa earn more than $3,333 per month, the higher of the wage categories. A similar percent of Ottumwa resident workers earn wages in this category. The least common wage category for both worker types is the lowest wage category ($1,250 per month or less) with around 25% each. Around 35% of each worker type earn monthly wages between $1,251 and $3,333.

Worker Race / Ethnicity

Table 2.14 shows the racial / ethnic composition of workers in Ottumwa. The majority of Ottumwa jobs are held by White workers and around 10% of workers identify as Hispanic or Latino. There are slightly more Ottumwa residents that work who also identify as Hispanic or Latino with 12.4%. Around 4% of both Ottumwa-based jobs and Ottumwa resident workers are Black or African American Alone. Another 2.5% (Ottumwa-based jobs) and 2.0% (Ottumwa resident jobs) are held by Asian workers.

Worker Educational Attainment

The educational attainment of workers in Ottumwa are shown in Figure 2.13. The educational attainment profile of both workers are similar. Less than 20% of workers have a bachelor's or advanced degree. The most common educational attainment level is some college or associates degree (25.9% - Ottumwa jobs, 24.7% - Ottumwa resident workers). Close to 10% of both worker types have less than a high school diploma. Another 25% of both worker types did not have educational attainment data available because they are workers aged 29 or younger.

POPULATION + GROWTH

Population projections are a key component of any comprehensive plan because they help provide a community with a sense of where they are heading. Projections can help cities plan for facility and staffing, infrastructure, parks, streets and housing. Several projection scenarios were calculated for Ottumwa. Projections are based on the idea that what has happened in the past will likely continue to happen in the future.

Projections

There were several projection methodologies used in the plan:

- Age Cohort Percent Change 2000-2010 (Age Cohorts 1)
- Age Cohort Percent Change 2000-2016 (Age Cohorts 2)
- Age Cohort Percent Change 2010-2016 (Age Cohorts 3)
- Average Total Percent Change 1990-2016 (Annual PC Change 1)
- Average Total Percent Change 2000-2016 (Annual PC Change 2)
- Average Total Percent Change 1990-2000 (Annual PC Change 3)
- Average Total Percent Change 2000-2010 (Annual PC Change 4)
- Average Annual Total Percent Change 2010-2016 (Annual PC Change 5)
- Hamilton-Perry

Some projections predict population decline while others predict a significant amount of growth. To account for these variations, an average population projection has been calculated and used for facility, park and other demand estimates.

The average 2020 population projection was 25,092. By 2030, the average population projection grows to 25,828. For 2040, the average population projection puts the population at 28,966.

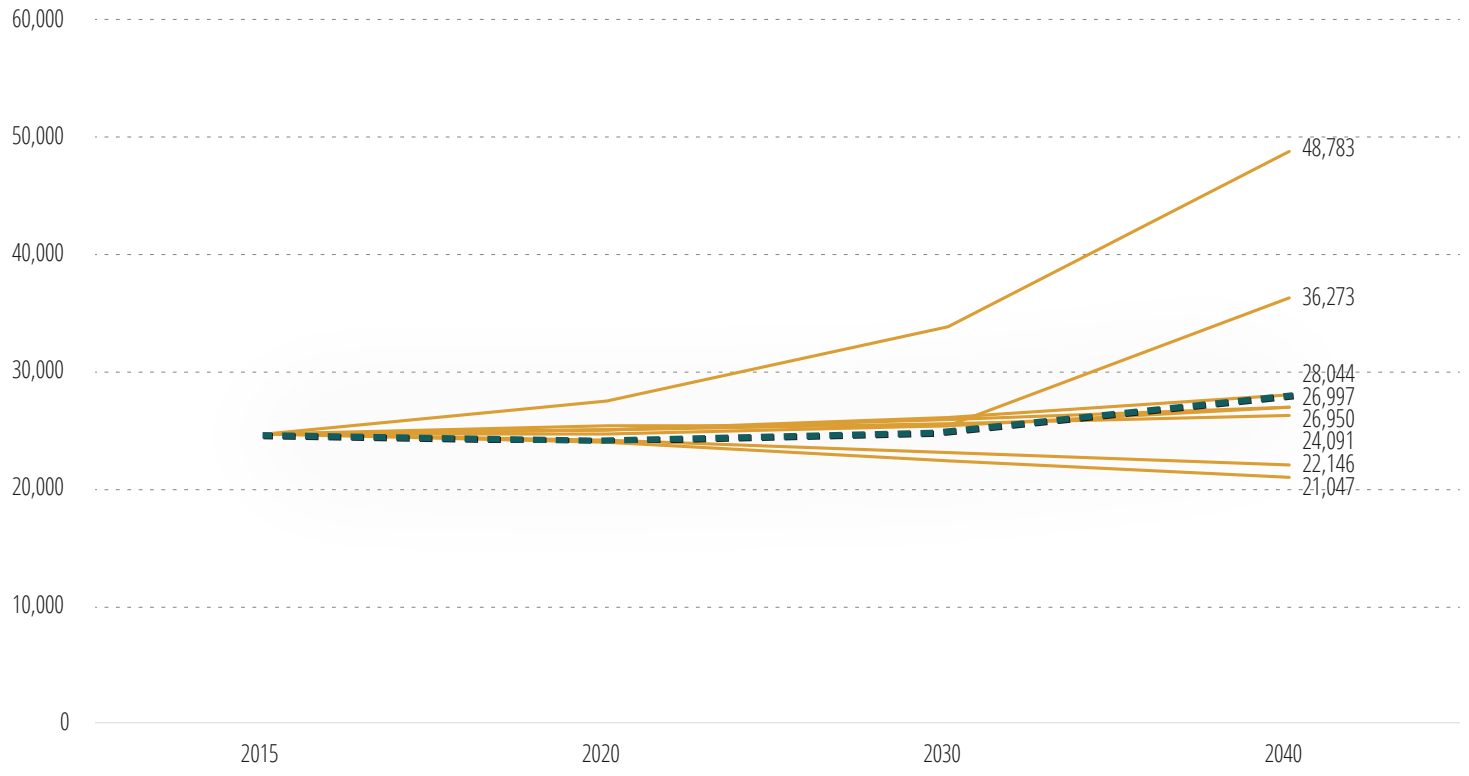
Figure 2.14 and Table 2.15 show the full set of population projections. While the average projection does anticipate some growth over the next twenty years, there are many factors beyond the city's control that will impact the actual population. These factors include national economic trends such as a recession or more local factors such as either losing or gaining a major employer. The upcoming 2020 U.S. Decennial Census will provide greater insight into the future population trends in Ottumwa.

Table 2.15 - Population Projections 2020-2040

Projection	2020	2030	2040
Age Cohorts 1	25,060	26,165	28,044
Age Cohorts 2	26,165	25,414	36,273
Age Cohorts 3	28,044	25,344	26,950
Annual PC Change 1	25,076	26,019	26,997
Annual PC Change 2	24,262	23,180	22,146
Annual PC Change 3	24,057	22,502	22,146
Annual PC Change 4	24,977	25,659	26,360
Annual PC Change 5	24,605	24,346	24,091
Hamilton Perry	27,585	33,824	48,783
AVERAGE	25,092	25,828	28,966

Source: Confluence

Figure 2.14 - Population Projections 2020-2040



Our Ottumwa 2040 Comprehensive Plan

Community Profile – Two Year Update

Since completing the Comprehensive Plan, the 2020 Census has been completed and much of the data has been released. This data provides an opportunity or provide an update statistical information. The total 2020 Census population for the City of Ottumwa was 25,528. That is a growth of 506 people between 2010 and 2020 and propelled Ottumwa past Fort Dodge and Clinton to be the 18th largest city in Iowa. This population growth figure exceeds the average population project in the Comprehensive Plan by 436 persons. Updated statistical profile information is below.

Population	
Population	25,529
Age and Sex	
Persons under 5 years, percent	6.9%
Persons under 18 years, percent	22.3%
Persons 65 years and over, percent	15.6%
Female persons, percent	50.20%
Households	
Total Households	10,152
Average Household Size	2.34
Speaking language other than English in the home	15.6%
Income	
Median household income	$42,418
Per capita income	$24,602
Persons in poverty, percent	18.1%
Education	
High school grauduate or higher	86.0%
Bachelor's degree or higher	20.1%

Race/Ethnicity	
White alone	82.8%
Black or African American alone	5.2%
American Indian or Alaksa Native alone	0.2%
Asian alone	1.8%
Native Hawaiian or other Pacific Islander alone	1.1%
Two or more races	3.6%
Hispanic or Latino	14.8%
White alone, not Hispanic or Latino	75.6%
Housing	
Owner-occupied housing unit rate	61.4%
Median value of owner-occupied housing units	$75,800
Median selected monthly owner costs with a mortgage	$969
Median selected monthly owner costs without a mortgage	$459
Median gross rent	$765

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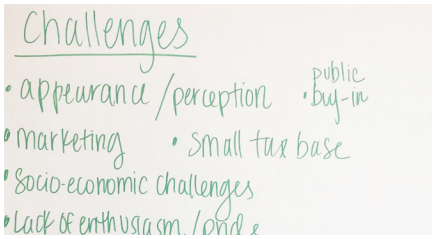
3 CHAPTER Public Participation



PUBLIC PARTICIPATION OVERVIEW

Comprehensive Plans are meant to reflect the future vision for a community based on a review of the existing conditions and input from members of the community. Public engagement was a key component of the planning effort as it helped define the community vision and goals that guided decision-making throughout the plan. Early in Phase 1, a Communication Plan was established that detailed the various engagement methods to be utilized. The City knew not all residents would participate in the same type of event or exercise. For this reason, a mixture of in-person, one-on-one and online engagement exercises were planned. This chapter provides an overview of the engagement exercises completed for the Our Ottumwa Comprehensive Plan and summarizes the input received from the community.

The Communication Plan included the following exercises:

- Project Branding + Website
- Comprehensive Plan Advisory Committee (CPAC)
- Key Stakeholder Interviews
- Public Workshop
- Ottumwa Leadership Academy
- Box City Event
- Community Survey
- City Council Workshop

PROJECT BRANDING & WEBSITE

Project Branding

An early component of the Communication Plan was the creation of a project brand. The branding exercise was completed to become a recognizable identity for the planning process used to market the plan and solicit feedback from residents. The project logo was a major part of the branding effort. The name 'Our Ottumwa' was selected based on feedback received from the Comprehensive Plan Advisory Committee (CPAC) and city staff. The logo and color scheme were designed to complement the existing City of Ottumwa logo as well as marketing efforts underway from the convention and visitor's bureau. The name 'Our Ottumwa' was also selected because the new comprehensive plan is meant to address the needs and desires of all community members in Ottumwa.

Project Website

A project website was created for the comprehensive planning effort. The site, www.OurOttumwa.com, was used to provide information to the public about the comprehensive plan, to publicize public meetings, and publish major milestones. The site was also used as an additional source of public input via a commenting section.

Figure 3.1 - Our Ottumwa Logo & Project Website Images

COMPREHENSIVE PLAN ADVISORY COMMITTEE

The City relied on the feedback received from a Comprehensive Plan Advisory Committee (CPAC). The CPAC was composed of key City staff and leadership as well as representatives from a diverse set of community interests and organizations such as housing, the immigrant community, industry and banking. The CPAC met regularly to review progress and provide feedback on draft chapters. Members of the CPAC include:

- Tom Lazio, Mayor
- Andrew Morris, City Administrator
- Chad Farrington, Police Chief
- Tony Miller, Fire Chief
- Larry Seals, Director of Public Works
- Gene Rathje, Parks and Recreation Director
- Don Krieger, Planning and Zoning Commission Chair
- Zach Simonson, City Planner
- Kevin Flanagan, City Planning and Development Director
- Jody Gates, City Planning and Development
- Meliha Cavkusic, Ottumwa Housing Authority
- Holly Berg, City Council Member
- Steve Dust, Legacy Foundation
- Kelly Genners, Legacy Foundation
- Fred Zesiger, Main Street Ottumwa Director
- Brian Morgan, Wapello County Supervisor
- Nicole Kooiker, Ottumwa Community School District
- Marlene Sprouse, President - Indian Hills Community College
- Sharon Stroh, GOPIP
- Andrew Wartenberg, Greater Ottumwa Convention Center
- John Ohlinger, Historic Preservation Commission
- Tim Richmond, Emergency Management - Wapello County
- Terri Messerschmitt, President - South Ottumwa Savings Bank
- Javier Alvarez, Manager - JBS
- Troy Mulgrew, General Manger - JBS Swift and Co
- Brady Medlrem, Norris Asphalt Paving Company
- Chris Bowers, Area 15 Regional Planning Commission
- Steve Campbell, Region 8 Iowa Association of Realtors
- Lesley Conning, Greater Ottumwa Partners in Progress / John Deere
- Gaylon Cowan, C & C Manufacturing
- T.J. Heller, CEO - Greater Ottumwa Partners in Progress
- Audrey Keck, ArchAngel Flying Services
- Mike McGrory, Ottumwa Community Schools

Input from the committee members was integral to the planning process. Members provided critical feedback, helped establish connections to community members and helped ensure the plan reflected the Ottumwa community effectively.

KEY STAKEHOLDER INTERVIEWS

Key stakeholders from major organizations and groups in Ottumwa were identified by the CPAC committee and offered an opportunity to sit down one-on-one with the City's consultant team to engage in a candid conversation about the untapped opportunities and pressing issues facing Ottumwa now and in the future. Representatives from over twenty groups met with the consultant team in January-February 2019 to provide input on the community's existing and future needs.

The representatives from these organizations were interviewed included:

- Welcome + Connect
- Indian Hills Community College
- Ottumwa Community School District
- Legacy Foundation
- Community 1st Credit Union
- Ottumwa Public Library
- Ottumwa Housing Authority
- South Ottumwa Savings Bank
- Ottumwa Area Arts Council
- Ottumwa Area Chamber of Commerce
- Ottumwa Family YMCA
- Ottumwa Leadership Academy
- Local lawyer
- Current + Retired Teachers
- Immigrant Community Insiders
- Ottumwans for Racial Justice
- League of United Latin American Citizens Council #377
- O! Pride

The major takeaways from the stakeholder interviews were similar to the other public input. The discussion focused on housing, infrastructure maintenance, and economic development. The interviewees agreed that Ottumwa needs to boost positivity to combat the adverse opinions of some residents. There needs to be a greater emphasis on celebrating diversity and attracting a young workforce with quality jobs in Ottumwa. The riverfront and downtown area have great opportunity for development. While there are quality parks and trails in the area, they can be expanded and improved on. There is also opportunity for investment in the art community and technology industry.

Key takeaways from the key stakeholder interviews included:

- Need to combat negativity of some residents
- Celebrate our diversity
- Housing is a major area of concern / people see it as a catalyst issue for other positive things
- Infrastructure maintenance is another major concern
- Retaining / attracting young people through quality jobs and things to do in the community
- Riverfront / downtown as major opportunities
- Excellent parks / trails – expand and improve upon this system
- Tech business / incubator
- Building art community

PUBLIC WORKSHOP

A public workshop was held at the Bridge View Center on January 19, 2019. The public workshop included a short presentation that overviewed the comprehensive planning process and a high-level demographic analysis of the community. After the presentation, attendees were asked to partake in visual and priority preference exercises and an interactive puzzle mapping exercise. The results of each exercise are summarized below.

Four tables at the public workshop had markers and a large sheet of paper with the following phrases:

- My favorite place in Ottumwa is...
- One word to describe Ottumwa...
- Ottumwa needs more...
- What do you love about Ottumwa...

Attendees were encouraged to write their response to each question directly onto the board. Figure 3.2 shows two question responses.

Postcard Exercise

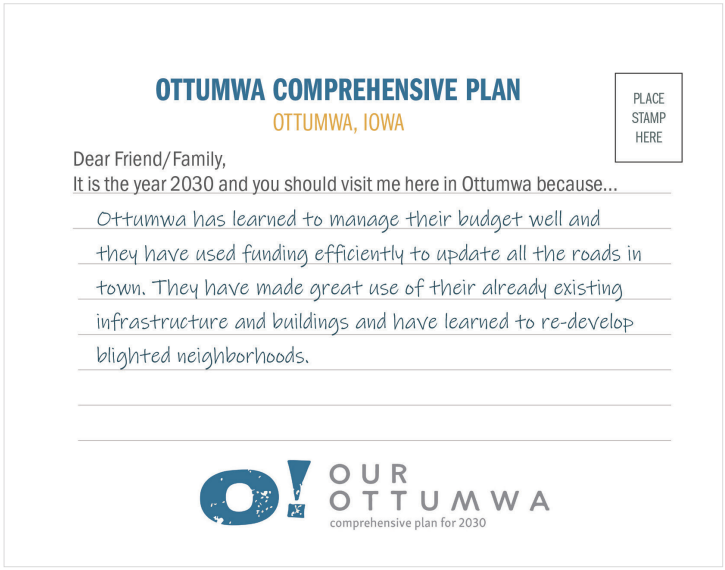
Upon entering the public workshop, attendees were given a postcard and three notecards. The postcards were designed to look like an actual postcard one might send to a relative or friend, equipped with an Ottumwa-themed image. The back of the postcard contained the following prompt:

Dear Friend/Family,
It is the year 2030 and you should visit me here in Ottumwa because...

Early in the presentation, attendees were asked to fill out the postcard based on their future vision for Ottumwa. The main themes included riverfront + downtown revitalization, road maintenance, downtown housing, shopping + retail, and sports tournaments in Ottumwa. An example postcard and response are shown in Figure 3.3.

Figure 3.2 - Public Workshop 'My Favorite Place' Board

Figure 3.3 - Public Workshop Postcard Exercise Results



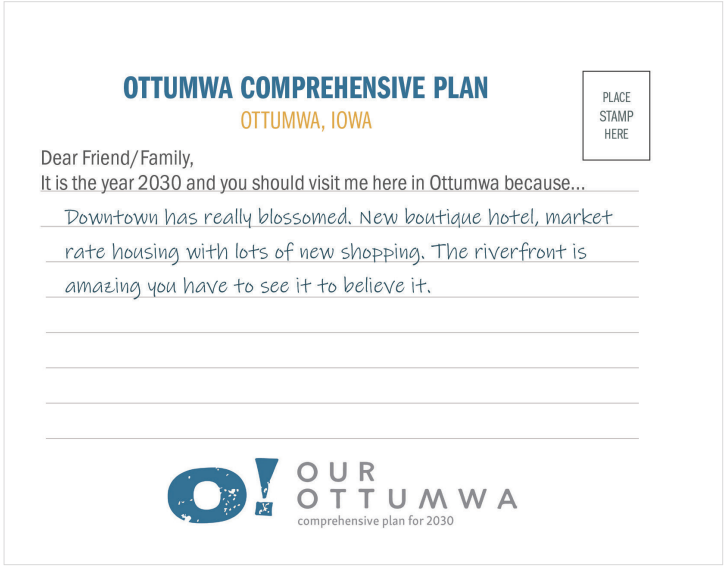


Figure 3.4 - Public Workshop Notecard Exercise Results

Biggest Opportunities

Biggest Challenges for Ottumwa

One Big Dream for Ottumwa

One Big Fear for Ottumwa

PUBLIC WORKSHOP CONT.

Notecard Exercise

The public workshop participants were given three notecards. Each notecard either had a red dot, green dot, or was left blank. Participants were asked to answer the following prompts:

Green Dot Notecard - *What are the biggest opportunities for Ottumwa?*
The biggest opportunities in Ottumwa based on the responses were housing, leadership, positivity, and the potential to become a regional hub. Other responses include attracting residents, tolerance, high paying jobs, health care and attracting employers.

Red Dot Notecard - *What are the biggest challenges for Ottumwa?*
The biggest challenges for Ottumwa based on responses are stagnation and population loss. Most responses seemed to revolve around losing people or employers. Bad jobs and lack of investment were also common responses.

Blank Notecard - *What is your one big dream and what is your big fear for Ottumwa?*
The one big dream for Ottumwa was largely based on housing. Other common dreams were around creating more positivity and leadership among residents and city leaders. Becoming a regional hub was also important. There were also several references to jobs.

PUBLIC WORKSHOP CONT.

Visual Preference Exercise

The participants were asked to place dot stickers on a variety of images that represented different components of a community. They would place green dots on images that they would like to see and red dots on the images they do not want to see in Ottumwa.

Industry & Employment
The industry and employment images that the participants liked were a wind farm, a medium-sized commercial building downtown, and large-scale industrial plant. The least liked were a photo of a Dollar General retail and agricultural storage building.

Community Services + Events
The most liked images for potential community services and events were a community garden and riverfront community concerts. The least liked images were covering graffiti and a vendor event.

Streetscape Improvements
The streetscape improvement images that were most liked were protected two-way bike lanes, downtown sidewalk landscaping, and a residential roundabout. No images were disliked.

Riverfront Activation

The riverfront activation images that were most liked were riverfront lighting + paved sidewalk and riverfront stairs for public space. No images were disliked.

Parks + Recreation

The parks + recreation images that were the most liked were an outdoor public space with art and seating that was located downtown. Another liked image was a wooded trail. The least liked images were a public splash pad and a group fitness class.

Housing

One housing image that was most appealing was a traditional single-family and double-story home with a porch. The second image were medium-sized identical townhomes with fenced in yards. The least liked images were an older styled multi-family apartment building and a newer looking single-family house on a large lot.

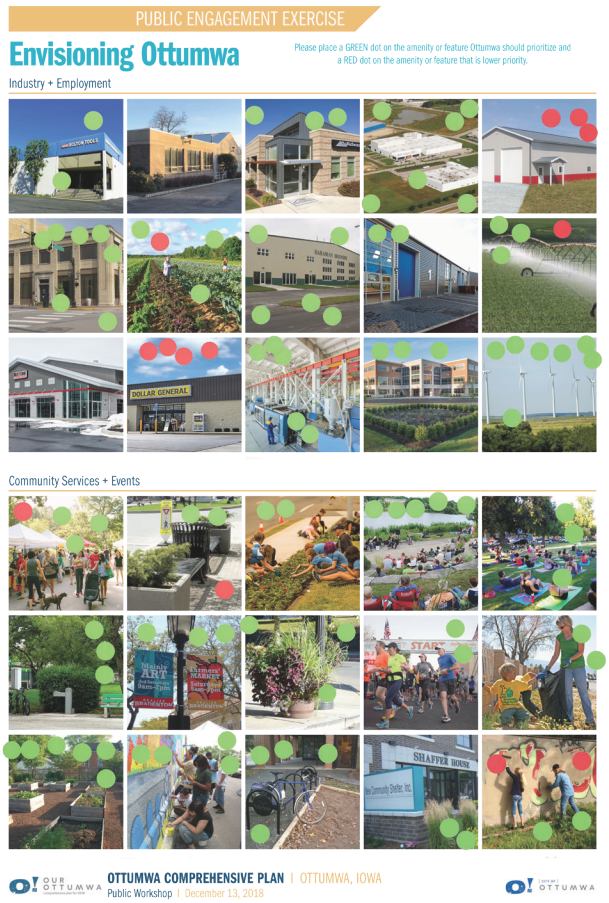
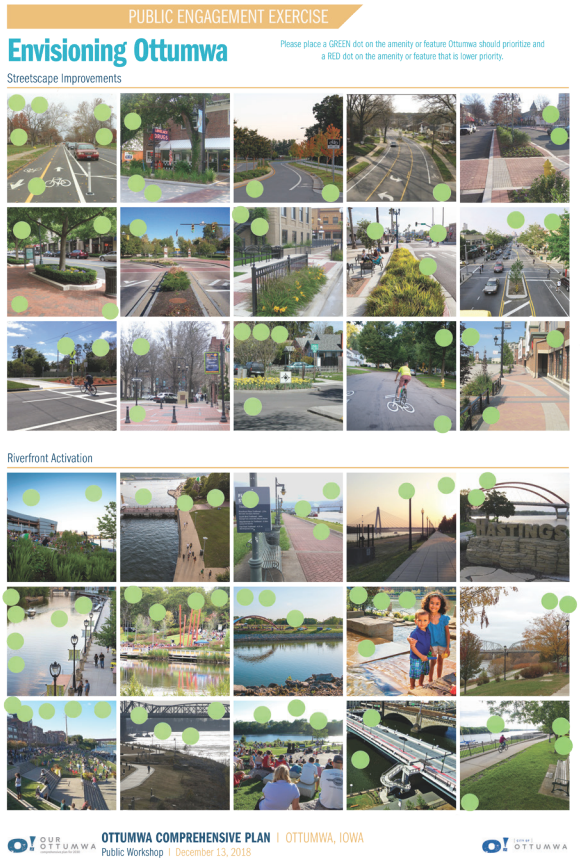


Figure 3.5 - Public Workshop Visual Preference Boards Results



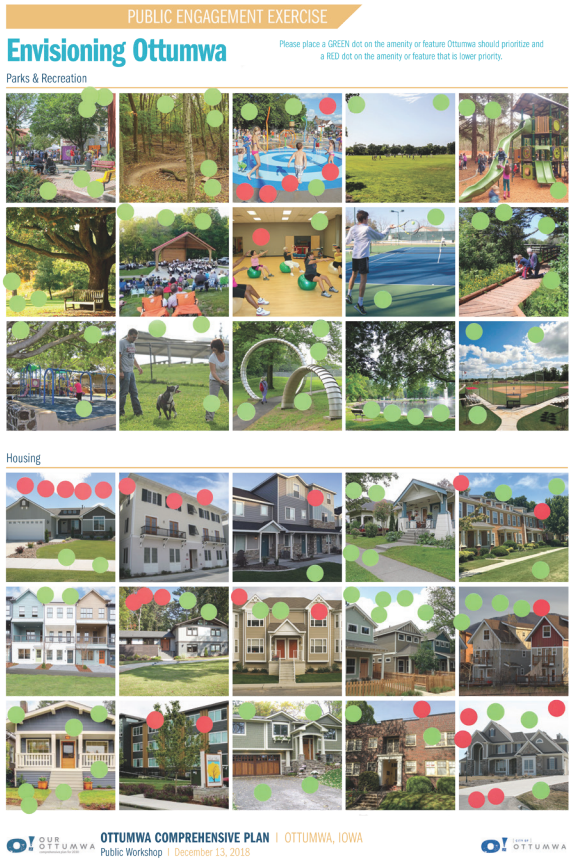
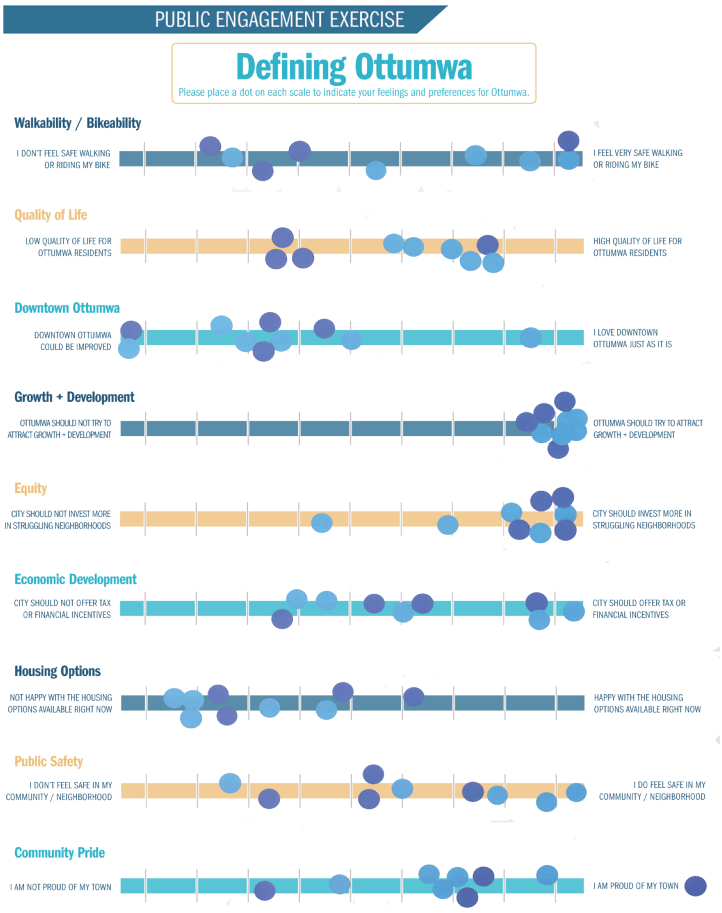


Figure 3.6 - Public Workshop Engagement Boards Results



PUBLIC WORKSHOP CONT.

Preferences Exercise

The workshop participants were asked to place a sticker on scales to identify the feelings or preferences towards ten different categories. Figure 3.6 shows the results board.

Walkability / Bikeability
The results were mixed on whether residents felt safe walking or riding their bike around Ottumwa. Some felt safe and others less so.

Quality of Life
There were two clusters on quality of life results. One cluster was around 4/10 and the second cluster was around 8/10.

Downtown Ottumwa
Most participants agreed that downtown Ottumwa could be improved.

Growth + Development
There was strong support for Ottumwa attracting growth and development.

Equity
The results were mostly strong support for the need to invest more in struggling neighborhoods.

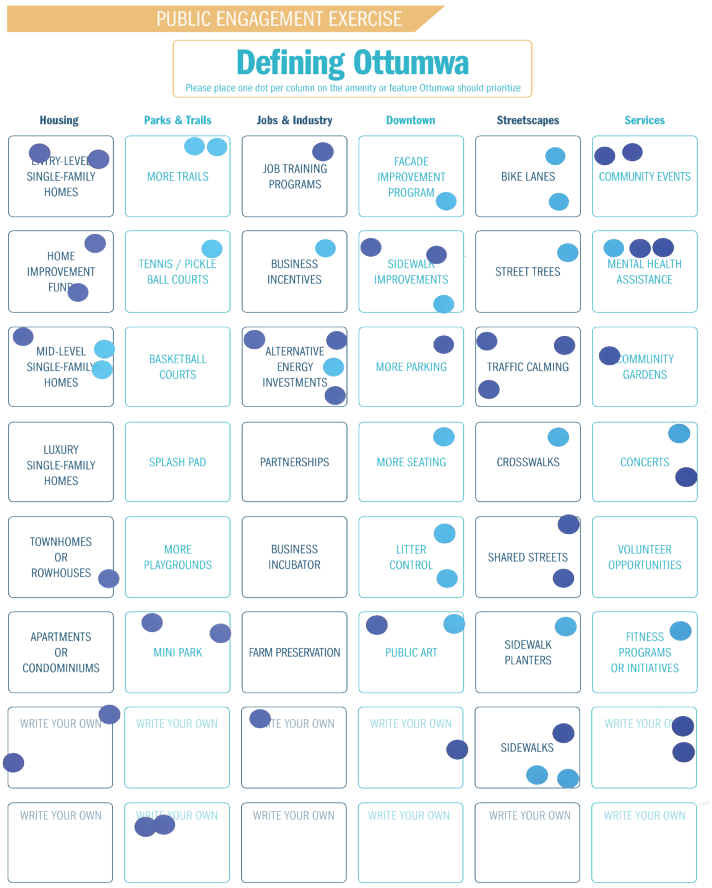
Economic Development
There were mixed results on whether Ottumwa should offer tax or financial incentives. The results were primarily in the middle area.

Housing Options
There are mostly negative views on the housing options available currently in Ottumwa.

Public Safety
The results were spread out on feelings regarding safety in Ottumwa. People seemed to feel somewhat safe in Ottumwa and their neighborhood.

Community Pride
The participants were overall seemed fairly positive on their community pride of Ottumwa.

Figure 3.7 - Public Workshop Engagement Boards Results



PUBLIC WORKSHOP CONT.

Priority Exercise

The priority exercise goal was to identify public amenities or features that the Ottumwa residents desired for their community. Participants used dot stickers to show their preferences. Figure 3.7 shows the priority ranking exercise results. The categories and top priorities included:

Housing
Mid-Level Single-Family Home, Entry-Level Single-Family Homes, Home Improvement Fund, and Downtown Upper Story Housing

Parks & Trails
Sports Complex, Trails, and Mini Parks

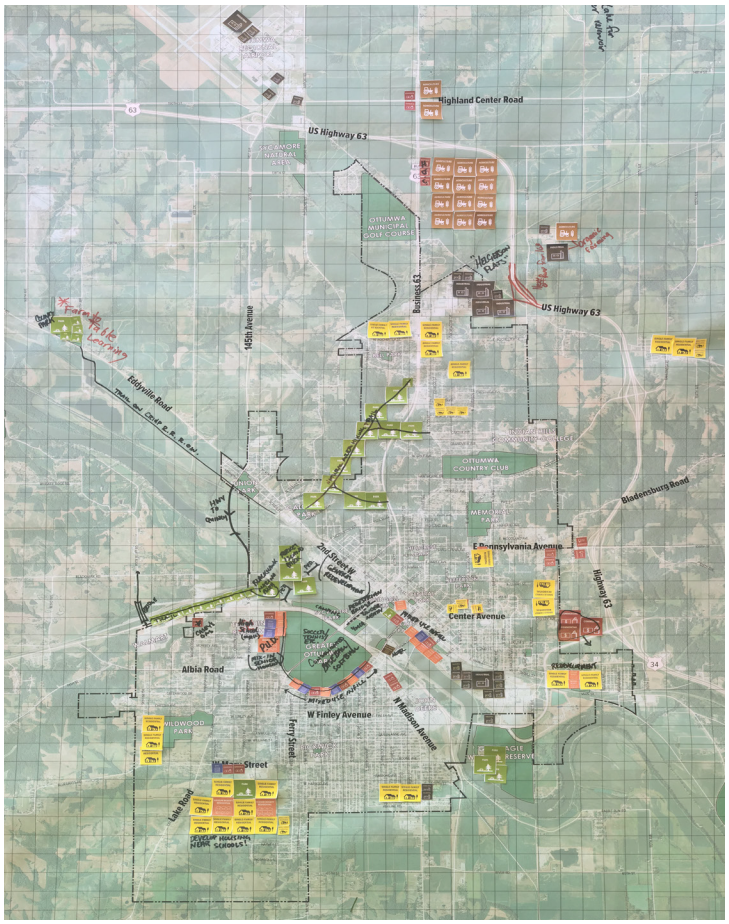
Jobs & Industry
Alternative Energy Investments, Job Training Programs, and Business Incentives.

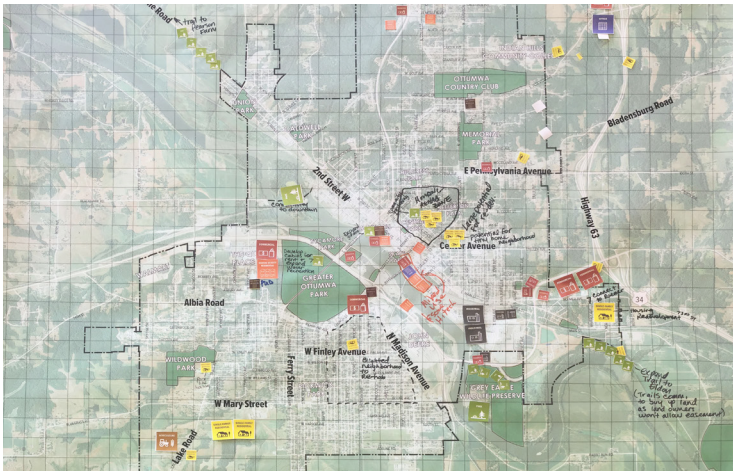
Downtown
Sidewalk Improvements, Litter Control, and Public Art

Streetscapes
Traffic Calming, Sidewalks, Bike Lanes, and Shared Streets

Public Services
Mental Health Assistance, Community Events, Concerts, and Childcare

Figure 3.8 - Puzzle Mapping Activity Results





PUBLIC WORKSHOP

Puzzle Map Exercise

The last exercise of the public workshop was participants were asked to add their land use preferences to a map of Ottumwa to get a visual representation of what changes to land use they want to see. The land use options were in forms of stickers to be placed on the map. The options were: *Industrial, Single-Family Residential, Medium Density Residential, High Density Residential, Park, Agricultural, Commercial*, and *Office.*

Each puzzle map varied, the common themes that emerged from potential land use and development for the Ottumwa region were:

- Mixed-use infill downtown and surrounding the riverfront
- Development of housing near schools
- Redevelopment
- Trail to Pearson Farm
- Agricultural near the Ottumwa Regional Airport by Highway 63
- Housing rehab zone north of downtown Ottumwa
- Trail expansion to Eldon, IA
- Consolidated baseball + softball at Greater Ottumwa Park
- Redevelopment north of Foster Park

OTTUMWA LEADERSHIP ACADEMY

The Ottumwa Leadership Academy is a program started by the Legacy Foundation in 2013 to help establish a pool of knowledgeable community leaders. According to the program's website, Ottumwa Leadership Academy is primarily a community awareness organization dedicated to educating individuals who desire to deepen their knowledge of challenges and opportunities facing Ottumwa while developing and refining their leadership skills. The 2019-2020 class of the Ottumwa Leadership Academy participated in an informational and engagement exercise for the Our Ottumwa plan on February 21, 2019. The group heard about the plan and the initial socioeconomic analysis performed. Then, the class participated in visioning exercises to identify the biggest challenges and opportunities for Ottumwa.

The key opportunities that were identified for Ottumwa were the Indian Hills Community College, downtown revitalization, community diversity, and the school district. Participants agreed Ottumwa had potential for becoming a regional hub. The challenges were negative perceptions of Ottumwa, housing, and poverty.

Figure 3.9 - Box City Activity Images

BOX CITY EVENT

A box city event was held on March 1, 2019, at the Ottumwa Public Library. A box city event asks school-aged children to help design their idea city by deciding Ottumwa's land use, decorated boxes to replicate building types, and filled out "building permits" on a city scene. The event helped children understand the planning process.

Some key takeaway from the events was the importance children placed on amenities, specifically activities that tailor to children and families such as parks and zoos. A large trail was added around the entire city scene also. Several children added a variety of retail stores around the community.

COMMUNITY SURVEY

A community survey ran from February 2019 through April 2019. The thirty-five-question survey was available online and on paper for those residents who wanted a paper copy. Overall, there were 283 responses. The key takeaways are summarized below:

Respondent Profile

Over half of the respondents (55%) have lived in Ottumwa for 20 or more years. About 18% lived in the city between 10-20 years and 19% have lived in the city between 2-9 years. Approximately 78% of the respondents work in Ottumwa, while about 13% work outside the city. The respondents are primarily employed outside the home. The three primary reasons why the respondents choose to live in Ottumwa is due to work, family, or they grew up in Ottumwa.

Housing

There was strong support for more affordable entry-level single-family homes or townhomes for Ottumwa. Other housing that the respondents believe Ottumwa needs are affordable multi-family housing and senior-focused housing options. There was general agreement that there should be increased regulation and inspection of rental housing in the future.

Parks & Recreation

The most needed parks and recreation amenities that respondents thought Ottumwa needs were indoor recreation space, outdoor recreation complex with multi-sports fields, recreation programs and trails.

Life in Ottumwa

The average quality of life ranking responses was 4.8 / 10. About half of the respondents expect the quality of life to improve over time, while about a quarter expect quality of life to decrease. The key elements to improving the quality of life for Ottumwa are property maintenance, retail growth, job creation, and a decreasing crime rate. The three features Ottumwa needs more are office and business development with employment opportunities, retail or shopping businesses, and industrial development.

Transportation & Infrastructure

The average ranking on the connectivity and quality of streets in Ottumwa was 2.8 / 10. When asked about what transportation and mobility amenities that Ottumwa will need in the next 10-15 years, about 96% answered general road maintenance.

Figure 3.10 - "What changes would increase quality of life in Ottumwa?"

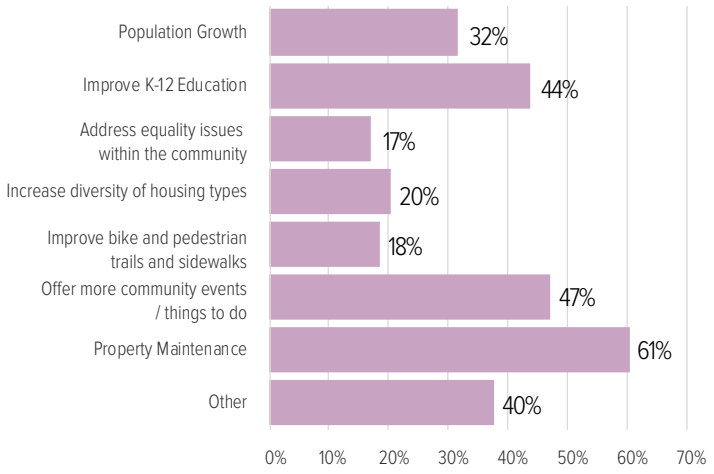


Figure 3.11 - "What type of housing is most needed?"

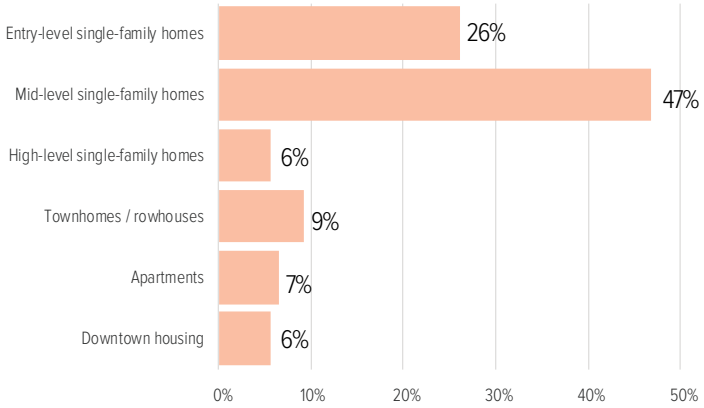


Figure 3.12 - "Over time, you expect the quality of life to..."

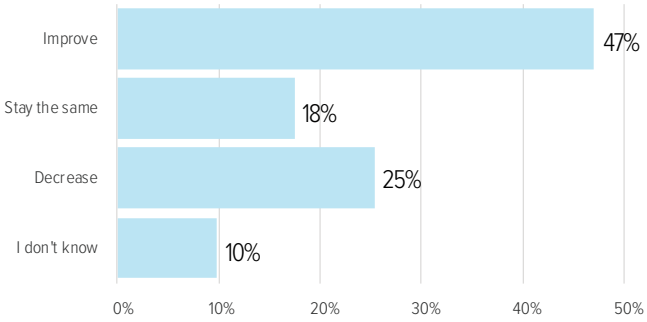
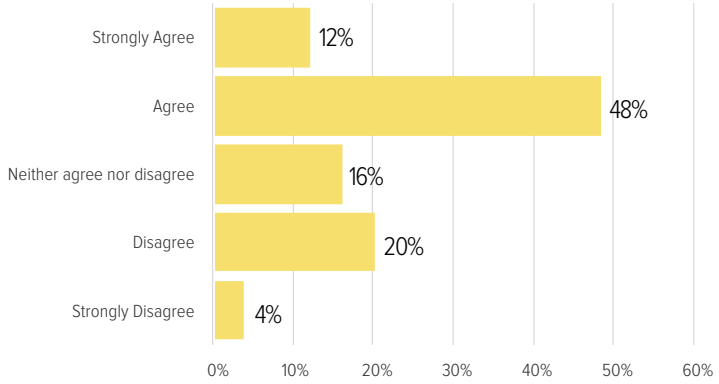


Figure 3.13 - "I feel safe living, working and visiting Ottumwa..."



PUBLIC FEEDBACK SUMMARY

The public participation survey and workshops highlighted the primary themes and community needs of Ottumwa residents.

The favorite parts of Ottumwa from the public feedback were the parks and trails, the diverse restaurant options, and the Des Moines River. The words that were used most to describe Ottumwa were "original" and "home". There was optimism for housing, development, and opportunity for the future of Ottumwa. They identified the major opportunities for the community in the development of housing, the downtown / riverfront, and the retail market.

The biggest challenges the respondents see for the community is poverty, funding, and the negative perception of Ottumwa. Participants were most afraid of population loss and economic stagnation.

The general quality of life in Ottumwa scored in two clusters – one group around 4 / 10 and another around 8/10. Another thematic point of disagreement was that some respondents felt safe in the community while others did not. There were mixed results in how walkable and bikeable the community was. The responses of whether Ottumwa should annex more land into the city limits to promote new development and better manage growth in nearby rural areas were split in half as well.

Housing

The most needed housing types identified were mid-level and entry-level single-family housing. Respondents indicated that Ottumwa needs affordable multi-family housing, senior housing, and downtown housing. The community indicated less interest in high-end single-family homes or old-fashioned multi-family housing in the community. There was lots of discussion regarding housing rehab and redevelopment, particularly in neighborhoods northeast of Central Park and south of Greater Ottumwa Park.

Parks, Trails, and Recreation

Riverfront trail development was one primary recommendation for Ottumwa. There was great support for building an indoor and outdoor multi-use recreational space at the Greater Ottumwa Park. Developing water recreation and other outdoor activities for the community were suggested.

Jobs & Economic Development

There was a large request for more retail, shopping, and entertainment. The respondents favor Ottumwa attracting growth and development by using business and tax incentives. There was favorability towards Ottumwa committing additional tax dollars to attract and retain employment opportunities for the city, since they believed the employment opportunities are limited in Ottumwa. They want to see offices, business parks, and industrial growth in Ottumwa in the future. However, discounted retail was not as appealing.

Downtown Revitalization

There was a general agreement that downtown Ottumwa could be improved. It was brought up frequently throughout the feedback exercises. Some suggestions were improving the sidewalks and implementing public art throughout the downtown. Lastly, the respondents were eager to have community events in downtown Ottumwa.

Riverfront Development

There was substantial discussion about redeveloping the downtown riverfront. The respondents were in favor of restaurants and trails along the river. Also, there was interest in additional spaces along the river for community events.

Streetscapes

On the community survey, Ottumwa was ranked an average of 2.8 / 10 for connectivity and quality of streets. Road maintenance was a primary concern for the streets. Respondents were also in favor of traffic calming strategies, such as street loops. A large emphasis was put on installing sidewalks and protected bike lanes.

4 CHAPTER Natural Resources

NATURAL RESOURCES OVERVIEW

The natural environment impacts where land can and should develop as well as the overall look and feel of the community. Understanding environmentally significant land can help steer the discussion of development, redevelopment, and growth. Environmentally sensitive land should not be developed, and certain best practices should be followed for development along the periphery of these natural features. The natural features covered in this chapter include:

- Floodplain
- Tree Cover
- Streams & Watersheds
- Wetlands
- Slopes

FLOODPLAIN

Floodplains are generally found in the low areas near rivers, streams and creeks that are periodically covered with water due to flooding from rain or snow melt. Floodplains are defined by the Federal Emergency Management Agency (FEMA). When floodplains remain undeveloped with permeable surfaces, they are better able to absorb water and slowly release it back into the stream or infiltrate it into soils. This can help prevent dangerous and expensive flood damage. Floodplains are ecologically diverse with a variety of flora and fauna.

100-Year & 500-Year Floodplains

The 100-year floodplain are areas in which the annual probability of a flood is 1%. The 500-year floodplain are those areas in which the annual probability of a flood is .5% per year.

Impact of the Levees

Several areas within Ottumwa are protected via levees. The City has many upcoming improvement projects along the Levee System. These projects are geared toward maximizing both public and private land use of the area along the river, while managing potential flood conditions and the ecosystem of the riverway. The Levee System is an integral key to the quality of life in Ottumwa through flood protection, recreation, and facilitating increased economic development. These three components feature prominently in the City's future planning for the downtown river area. Through grant efforts, such as the Build Grant Initiative, and public/private projects involving mixed-use developments, the City is coupling public infrastructure rehabilitation and new development opportunities in order to maximize land use of this formerly underutilized community asset, while improving the quality of river community life.

IMPACT ON THE PLAN

Development within the floodplain should be well planned and managed and performed in conjunction with low intensity uses such as parks, recreation or agricultural preservation. This helps protect the integrity of the stream in addition to the protection of life, resources and property.

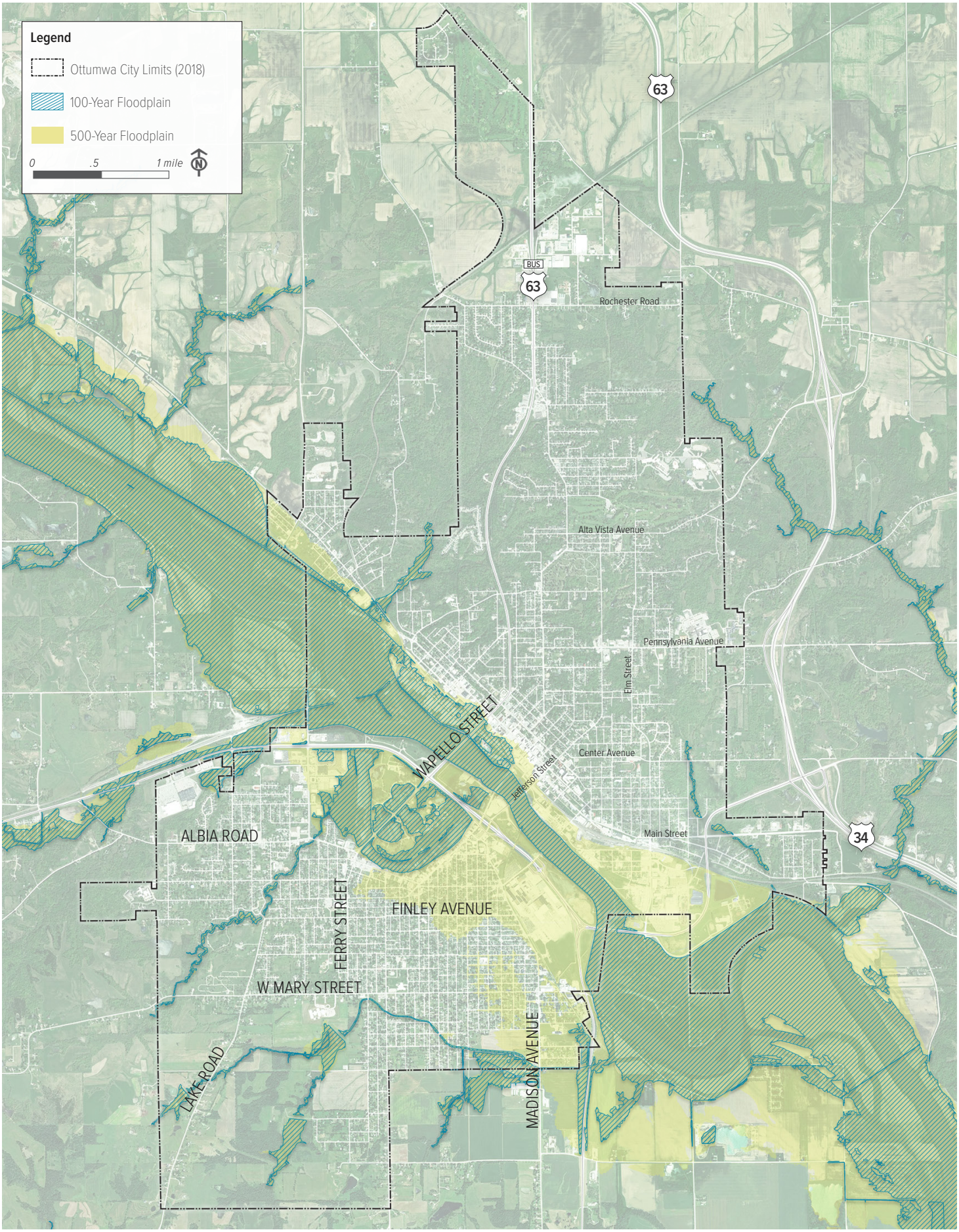


Figure 4.1 - Floodplain Map, Ottumwa

Data Source: FEMA / Iowa DNR

TREE COVER

Figure 4.2 shows the approximate location of tree cover in Ottumwa as of 2009. Trees are important environmental features that provide a wide variety of ecological and human benefits including:

- Prevent urban heat island effect
- Provide oxygen and absorb carbon dioxide
- Provide shade cover
- Bird and other wildlife habitat
- Scenic / increase property values

IMPACT ON OTTUMWA

Protecting and preserving tree cover is an important environmental benefit that also has numerous community character and economic development benefits as well. Some main principle takeaways or impacts on Ottumwa related to tree cover are:

- Tree Preservation
- Tree Diversity
- Tree Replenishment

Tree Preservation

Ottumwa is fortunate to have within its boundaries and the greater Ottumwa area, a significant amount of tree cover. A large portion of the main entryway into downtown Ottumwa from the north is surrounded by a dense tree canopy, buffering the nearby residential from the highway. Existing, significant trees stands in Ottumwa should be preserved because of the environmental and quality of life impacts they provide.

Tree Diversity

Tree disease has made a serious impact on many streets, neighborhoods and urban/suburban areas throughout the United States. Historically, entire streets were dotted with trees of the same species, often serving as the origin for street names such as Elm or Poplar. In the advent of tree diseases such as Dutch Oak and Emerald Ash Borer, wide swaths of tree species in a given area have perished or required significant cutting. New developments and redevelopments should be designed with mandatory tree species diversity.

Tree Replenishment

In the course of land development, trees will inevitably need to be cut down in order to grade or construct buildings or new homes. While tree preservation should be the overarching goal, adequate tree replenishment is a viable alternative. To maintain the forested areas of the community, as well as bring ecological vibrancy into the built City environment, policies should be established such as requiring that for each existing tree removed, two additional new trees should be planted as replacement within the Right-of-Way or elsewhere on site or at another nearby or suitable location. Street trees and City forests are key to lowering temperatures in summer neighborhoods, cleaner air in our downtown areas, and the authentic character of the City.

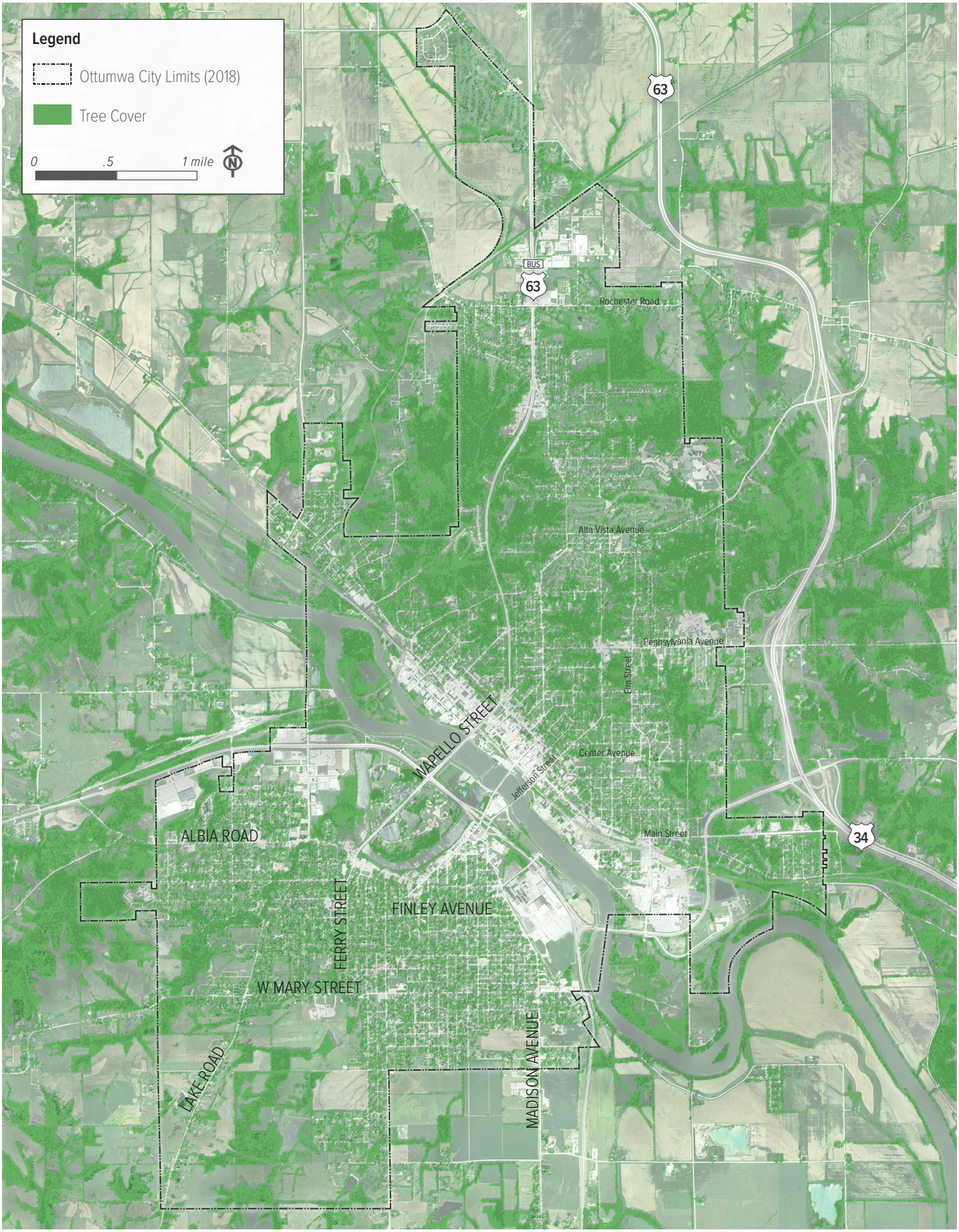


Figure 4.2 - Tree Cover Map, Ottumwa

Data Source: Iowa DNR 2009

STREAMS / WATERSHEDS

Streams are a major player in the history of Ottumwa. The main water body that impacts Ottumwa is the Des Moines River, which meanders through Ottumwa south of downtown. Figure 4.2 shows the streams in Ottumwa by type, the main two of which are defined below. Streams are major components of the watersheds around Ottumwa

Type 1 & Type 2 Streams

Type 1 - Perennial Streams are those bodies of water that exist almost all of the year including during times of extreme drought. Type 2 - Intermittent Streams are those streams that existing most of the time except in cases of extreme drought.

Watersheds

Watersheds are the boundaries in which water drains to the lowest point within a specified area. Watersheds can be small or very large with some spanning multiple states or even countries. Streams and creeks are major defining features of any watershed as they are the main pathway through which water travels in a watershed to enter a larger water river basin. Stormwater runoff and snow melt are also important components of a watershed as this water eventually enters a stream or creek to enter the watershed.

IMPACT ON OTTUMWA

Stream bank erosion, water quality, and flooding are the main issues on stream and watershed management in Ottumwa. Collectively, these issues can best be addressed at a municipal level through conservation efforts such as dedicated stream buffers required through a stream buffer ordinance.

Stream Bank Erosion

Stream bank erosion can occur when the naturally occurring foliage, vegetation and trees that line natural streams are mowed or otherwise removed which can destabilize the stream edge. Woody vegetation along the stream bank can help stabilize the edge and prevent soils from entering the stream and help capture and filter runoff entering the stream from elsewhere in the watershed. When soils are left to erode into the stream it can negatively impact water quality by increasing turbidity which impacts how much light can penetrate the stream to allow photosynthesis to occur.

Water Quality

In addition to preventing stream bank erosion, stream buffers can also positively impact water quality concerns but protecting the trees and vegetation surrounding the stream that can help capture, slow and filter water entering the stream. By controlling the amount of permeable pavement and development near the stream, there is less opportunity for polluted runoff entering the stream also.

Flooding

When the stream banks are protected with a steam buffer, the trees and vegetative cover around the stream (existing or added as a conservation project) can help naturally slow and absorb flooding during high water events. When the stream banks are not protected from development, the water can more easily and quickly runoff to private property near the stream bank causing damage to property and potential loss of life.

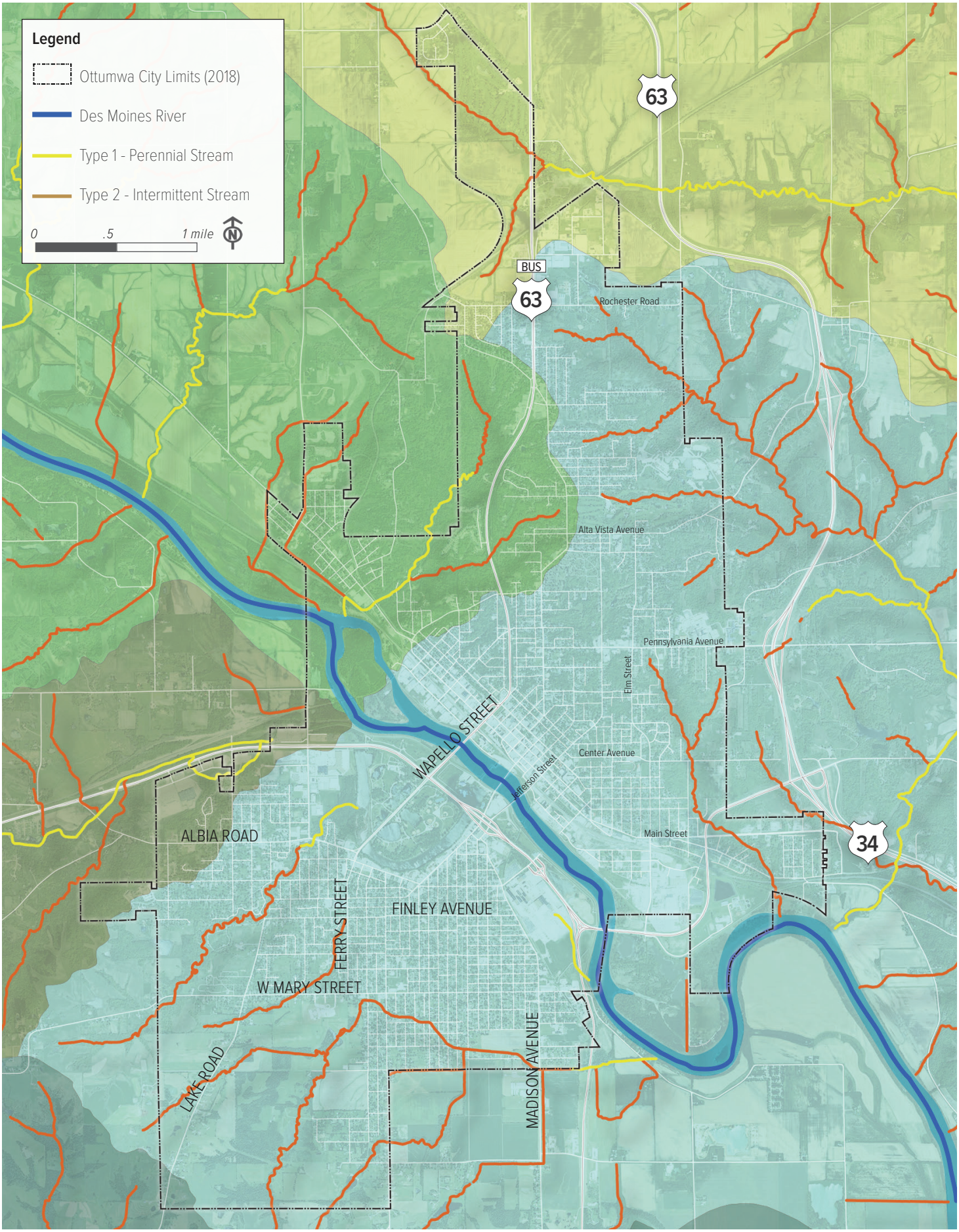


Figure 4.3 - Subwatersheds & Streams by Type, Ottumwa

Data Source: Iowa DNR

WETLANDS

Wetlands can generally be defined as those areas of land that are saturated with water for at least a portion of the year. Wetlands are important ecological areas that provide several key functions:

- Recharge groundwater and improve water quality
- Reduce flooding or severity of flooding
- Regulate climate
- Support recreation and cultural activities
- Wildlife habitat
- Filter stormwater

There are several types and categorizations of wetlands with different levels of specificity. Figure 4.4 shows the location of known wetlands in the Ottumwa area by the following categories:

- Riverine
- Lake / Pond
- Freshwater Emergent
- Freshwater Forested

Freshwater Emergent Wetland

Freshwater Emergent Wetlands are generally characterized by perennial plants and vegetation present for most of the growing season. In Iowa, these wetlands can become open water depending on the amount of precipitation. They are commonly called marshes, meadows, fens or prairie potholes.

Freshwater Forested Wetland

Forested wetlands are usually dominated by trees and shrubs. The woods and foliage help stabilize the soil to better absorb and filter runoff during high water events.

IMPACT ON OTTUMWA

Wetlands provide an important ecological function both in their role in the water cycle but also as a habitat for flora and fauna. There are certain legal protections for some wetlands based on federal law but there are steps beyond this protection that communities can promote.

Wetland Preservation

Beyond the legal requirements of wetland protections, communities can use wetlands as an opportunity to preserve the greater area as open space, recreation or parkland. When wetlands occur in areas of multi-family residential or commercial development, encouraging developers to incorporate the wetland as a site amenity can help capture stormwater runoff in addition to enhancing the aesthetic quality of the development.

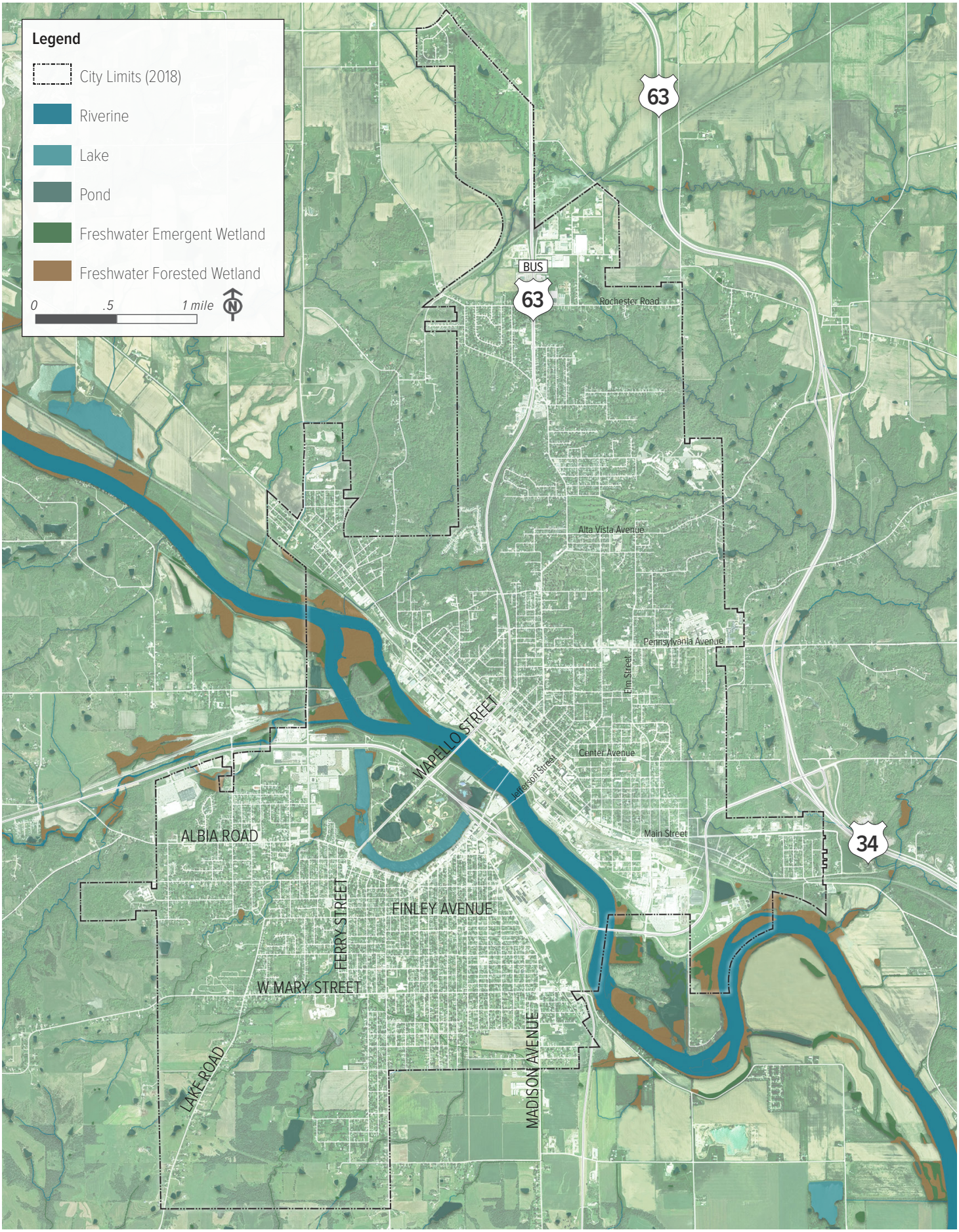


Figure 4.4 - Wetlands, Ottumwa

Data Source: Iowa DNR

SLOPES

Areas with steeper slopes are sensitive ecological areas that are vulnerable to erosion and degradation. Hills often contribute to the scenery of an area and have attracted human settlement for many years. Proper slope management is important to prevent topsoil loss, disruption of wildlife habitat, alteration of drainage patterns and the intensification of flooding[1].

Figure 4.5 shows the approximate slopes for the Ottumwa area based on a slope analysis using LiDAR data. Most slopes in Ottumwa follow stream corridors and a major hill in Ottumwa surrounds the downtown sloping down into the riverbed.

Defining Steep Slopes

There are multiple ways to categorize slope in an area. A common classification of slopes is by degree and includes three main categories:

- Steep (18-25%)
- Protected (25-39%)
- Critical (40%+)
- Protected (40%+)

[1] Design for Flooding: Architecture, Landscape and Urban Design for Resilience to Flooding and Climate Change. Donald Watson-Michelle Adams - John Wiley & Sons - 2011.

Areas with very steep or steep slopes should generally be avoided for development purposes. There is a high economic and environmental cost to development on land with steep slopes.

IMPACT ON OTTUMWA

The City may consider adopting a slope preservation ordinance to protect and preserve areas with steeper slopes within Ottumwa. A slope preservation ordinance could put in place restrictions on development in areas with more than a certain percentage of slope, generally 15% to 25%.

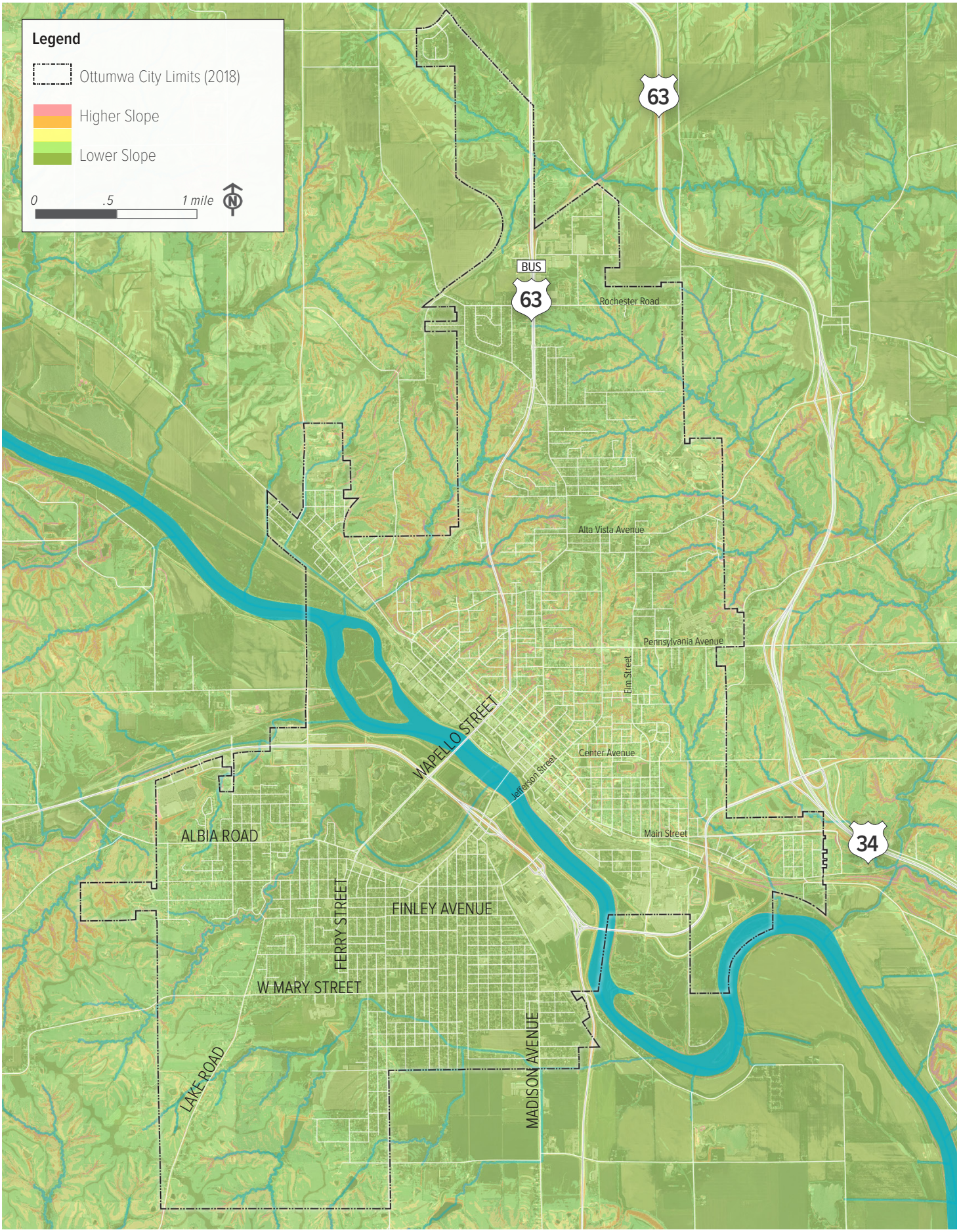


Figure 4.5 - Slope Analysis, Ottumwa

Data Source: Iowa DNR

NATURAL RESOURCES GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Natural Resource Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 2 Maintain and expand the existing parks and open space system, recreation programs, and trails network		Promote sustainable land stewardship in Ottumwa by identifying areas within the City's parks and trail system where low maintenance native species can be planted		
Goal 4 Protect and enhance the community's natural resources		Continue to invest in stormwater infrastructure repair, replacement and improvements Consider adoption of a stream buffer, slope preservation, and tree canopy conservation ordinances to protect the natural areas and City's watersheds from overdevelopment Prohibit development within the floodplain, except where protected by certified levees Require new development to use a wide variety of native plant species to increase biodiversity, reduce the impact of plant disease, and improve the natural appearance of Ottumwa Educate residents, businesses and property owners on best practices in water conservation and surface water pollution prevention Implement best practices for stormwater infrastructure improvements such as combined sewer separation Incentivize green infrastructure solutions to stormwater management by lowering any existing or future fees related to stormwater management		
Goal 5 Improve the City's sanitary sewer system		Continue to prioritize the investments in the combined sanitary sewer separation program		

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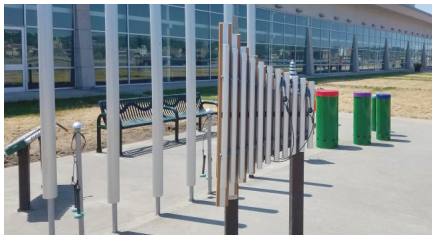
5 CHAPTER Parks & Recreation



PARKS & RECREATION OVERVIEW

Parks are natural or semi-natural areas set aside for active and passive recreation or for the protection of wildlife and habitat. Parks can be natural and undeveloped or can be more landscaped and set aside for recreational sports and programming. Parks vary significantly in size and function ranging from very small, less than one-acre, to very large, more than 500 acres.

Parks provide many different community social, economic, and environmental benefits including:

- Provide accessible recreation opportunities for all ages
- Provide opportunities for social and cultural activities
- Serve recreational needs of individual and small & large groups
- Provide green spaces within neighborhoods
- Protect and enhance the City's tree canopy
- Contribute to health and wellness
- Connect residents to nature
- Provide greenspace within neighborhoods

Parks contribute greatly to the quality of life for a community and are an important amenity people consider when choosing to relocate. Ottumwa has a robust park system with a wide variety of park types and amenities that cater to many types of residents.

PARK TYPES

Ottumwa has parks owned and maintained by the city but is also fortunate to have many large regional parks owned and operated by the Wapello County Conservation Board. Figure 5.1 shows the location of city and county parks in the Ottumwa area. There are many park types that make up the city's park system. These park types vary in size and function. The park categories are defined below.

Mini Parks

Mini Parks are small, generally less than 2 acres, and serve a smaller service radius of approximately ¼-mile. These small parks, sometimes referred to as pocket parks, are meant to serve nearby residents or workers with amenities such as playground, benches and picnic tables.

Neighborhood Parks

Neighborhood Parks are mid-size parks of between 2-20 acres with a typical size of 5-10 acres. These parks primarily serve residents located within walking or biking distance with a service area of approximately ½-mile. Neighborhood parks provide recreational opportunities for nearby residents and often include amenities such as playground equipment, outdoor sports courts, sports fields, picnic tables, pathways and multi-use open grass areas.

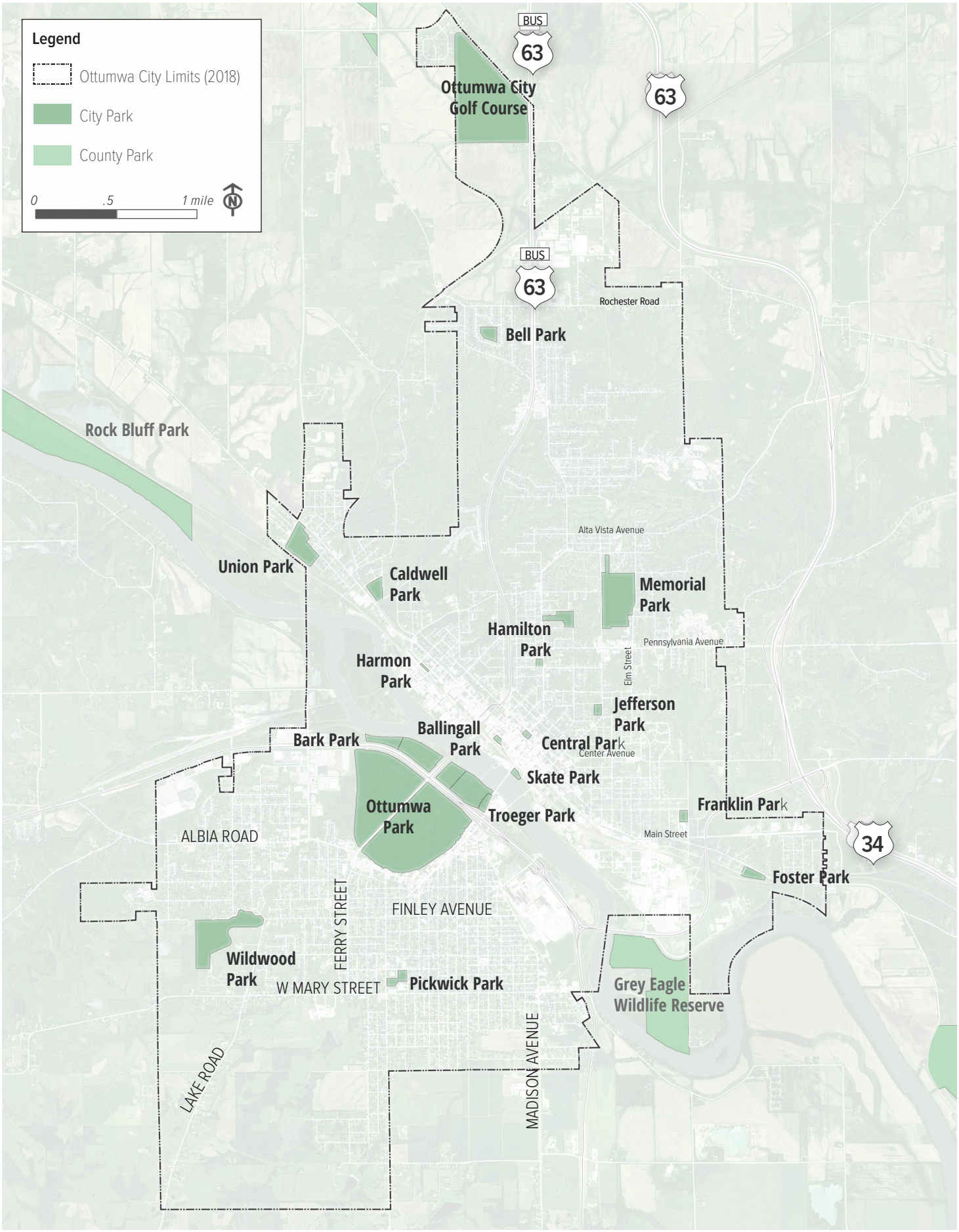


Figure 5.1 - Parks, Ottumwa

Community Parks

Community Parks are larger, ranging from 15-100 acres with a typical size of between 20-30 acres. The service area for these parks are typically 1-mile, but many exceed this depending on features and function. Community parks provide active and passive recreation opportunities that can accommodate a large number of people. The typical amenities found in community parks include picnic shelters, sports fields and courts, play areas, gardens, trails, community event space, and natural areas. Community parks often have off-street parking, permanent restroom facilities and possible transit stops.

Special Use Parks

Special use parks will vary in the size, function and facilities. These factors will influence the size of the service area and type of access needed. By definition, these parks will provide a special and specific purpose and function for a community. Examples of special use parks include dog parks, sport complexes, boat ramps, swimming pools, community centers and skate parks.

Regional Parks

Regional parks are areas of land preserved on account of natural beauty, historic interest, or for recreational use. These parks often cross more than one jurisdiction and are often under the control of a regional, state or national entity. These are the largest park types and can range from 100 to 500+ acres. The parks vary greatly in size, form and intensity. Regional parks often are designated for preservation and allow only passive recreation such as hiking, horseback and camping. Some of the nearby Wapello County parks available for Ottumwa residents to enjoy include Grey Eagle Wildlife Reserve, and Sycamore Natural Area.

OTTUMWA LEVEL OF SERVICE

A common method used to measure the quality of a park system is through a level of service analysis. A level of service analysis for parks is determined by calculating the total acres of park provided per 1,000 residents. The level of service for a given community is then compared to communities both regionally and nationally. There are standards for total acres of parkland and by park type.

The level of service standards are generally as follows:

- Total Acres of Park – 10.5 acres per 1,000 residents
- Mini Parks – .25 to .5 acres per 1,000 residents
- Neighborhood Parks – 1.25 to 2.0 acres per 1,000 residents
- Community Parks – 5.5 to 8.0 acres per 1,000 residents

Special Use Parks do not generally abide by set level of service standards based on the variation of size and function. There are, however, some basic standards for special types of special use parks such as recreation centers, dog parks, golf courses and individual amenities such as basketball courts and soccer fields.

Mini Parks

The estimated LOS for mini parks in Ottumwa is 0.2 acres per 1,000 residents. This is slightly below the national standards for mini parks. Mini parks in Ottumwa include:

- Ballingall Park
- Central Park
- Franklin Park
- Harmon Park

Neighborhood Parks

The estimated LOS for neighborhood parks in Ottumwa is 2.11 acres per 1,000 residents. This is within the recommended standards for neighborhood parks. The neighborhood parks in Ottumwa include:

- Bell Park
- Caldwell Park
- Foster Park
- Hamilton Park
- Hillcrest Park
- Jefferson Park
- Pickwick Park
- Union Park

Community Parks

The estimated LOS for community parks in Ottumwa is 15.1 acres per 1,000 residents, which is well above national standards. Community Parks in Ottumwa include:

- Greater Ottumwa Park
- Memorial Park
- Wildwood Park

Special Use Parks

The LOS for special use parks in Ottumwa is 1.4 acres per 1,000 residents. There are not standards for special use parks LOS. Special Use Parks include:

- Bark Park
- Beach Ottumwa
- Skate Park
- Troeger Park

Table 5.1 - Ottumwa Level of Service Analysis

Park Type	Existing Acres	Existing LOS	Recommended LOS
Mini	5.2	0.2	.25 to .50
Neighborhood	52.1	2.1	1.25 - 2.0
Community	372.2	15.1	5.5 - 8.0
Special Use	35.0	1.4	-
Public Golf Course	155.5	6.3	4.5
Total Park Acres	631.1	25.5	10.5

Source: City of Ottumwa, Confluence with inputs from NRPA and Planner's Estimating Guide

Table 5.4 - Ottumwa Population Estimate + Projections

Year	Population
Existing (2017 est.) Population	24,705
Average 2030 Population Projection	25,828
Average 2040 Population Projection	28,966

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 5.3 - Ottumwa Park Demand Estimates by Type 2030-2040

Park Type	Existing Acres	Existing LOS	Recommended LOS	2030 Demand Acres	2040 Demand Acres
Mini	5.2 acres	0.2	.25 to .50	6.5 - 13 acres	7 - 14 acres
Neighborhood	52.1 acres	2.1	1.25 - 2.0	32 - 52 acres	36 - 58 acres
Community	372.2 acres	15.1	5.5 - 8.0	142 - 206 acres	159 - 232 acres
Special Use	35.0 acres	1.4	-	-	-
Public Golf Course	155.5 acres	6.3	4.5	116 acres	130 acres
Total Park Acres	631.1 acres	25.5	10.5	271 acres	304 acres

Source: City of Ottumwa, Confluence with inputs from NRPA and Planner's Estimating Guide

PARK DEMAND ESTIMATES

Park acre demand estimates were calculated for Ottumwa based on the average population projections for 2030 and 2040 from Chapter 2 - Community Profile. Table 5.4 summarizes the existing and projected population estimates.

Table 5.3 shows the acre demand estimates for 2030 and 2040 by park type and for total park acres. Today, Ottumwa has enough park acres to serve both 2030 and 2040 population estimates. The only category in which Ottumwa is deficient is mini parks. However, the city is only between 2 and 7 acres below the recommended level for this park category. Also, Ottumwa far exceeds the recommended acre demands for nearly all other park types. Still, planning should be undertaken in order to focus on strategic development of mini park and small public social use areas in conjunction with public/private economic development partnership projects, in the future. The City could leverage private investments with public incentives in order to incorporate these smaller park designs into larger efforts for new housing and commercial developments at many underserved locations in the City.

While the total acre park demand estimates are within the recommended range, there are potential issues of maintenance and rehabilitation that may come into play in Ottumwa's park system. As parks age, equipment, concrete and overall facilities will inevitably need upkeep and modernization. The City of Ottumwa should set aside money within their Capital Improvements Plan (CIP) to address these needs.

Parks as an Economic Development Strategy

The park level of service and demand estimates made clear that Ottumwa has an above average amount of parkland available for residents and visitors. The high amount of parkland in Ottumwa helps contribute to its place as a regional hub for activity. Larger parks such as Park Ottumwa, special use parks such as the skate park, and the golf course all bring in regional visitors to the community. Visitors of parkland in Ottumwa likely has an impact on the economic development of the community as people may patron restaurants and other retail establishments during their visit. Another economic development of park space in Ottumwa is the economic impact of sports tournaments. Both youth and adult sports tournaments, but especially the former, are a beacon for economic development with dozens of families and teams visiting a community during tournaments. Continued investments and enhancements of the City's parks can help maintain and spur additional economic development for Ottumwa.

Table 5.5 - Ottumwa Walk-Time Analysis

5-Minute Walk Time	Housing Units	Share of Units
All Housing Types	2,240	26.0%
10-Minute Walk Time	**Housing Units**	**Share of Units**
All Housing Types	5,089	56.5%
15-Minute Walk Time		
All Housing Types	7.129	79.1%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 5.6 - Ottumwa Buffer Analysis

1/4 - Mile Buffer	Housing Units	Share of Units
All Housing Types	3,848	43.0%
1/2 - Mile Buffer	**Housing Units**	**Share of Units**
All Housing Types	7,151	79.3%
1 - Mile Buffer (Community Parks)	**Housing Units**	**Share of Units**
All Housing Types	6,846	76.0%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

WALK TIME ANALYSIS

Another way to assess the strength of a park system is to assess how accessible parks are to residents. Ideally, most residents should live within a reasonable walking distance of a park. To determine how accessible parks in Ottumwa are today, a walk time analysis was completed for all city parks in Ottumwa. Figure 5.2 shows the estimated 5-, 10-, and 15-minute walk time from city parks.

The blue area shows the parts of the community that are within a 5-minute walk time. The yellow area shows 10-minute walk time and the purple area shows the 15-minute walk time service area.

Table 5.5 estimates the number of housing units that fall within the 5-, 10-, and 15-minute walk time service areas using parcel data. The approximate number of households in each walk time service area are:

- Approximately 2,240 housing units live within 5-minute walk time
- Approximately 5,089 housing units live within 10-minute walk time
- Approximately 7,129 housing units live within 15-minute walk time

BUFFER ANALYSIS

One way to assess the distribution of parks in a community is to perform a basic buffer analysis of the park system. Generally, most parks have a service area buffer of around 1/4 to 1/2-mile from the park. Community parks have a larger service area of around 1-mile (or more). Most residents should fall within or close to one of these buffer service areas.

Figure 5.3 shows the buffer analysis completed for parks in Ottumwa. Blue areas show the 1/4-mile buffer around each park in the system. The yellow area shows the 1/2-mile buffer. The red area shows the 1-mile buffer around Ottumwa's three community parks (Greater Ottumwa Park, Memorial Park, and Wildwood).

Table 5.6 estimates the number of housing units that fall within the 1/4-, 1/2-, and 1-mile buffers using parcel data. The approximate number of households in each buffer area are:

- Approximately 3,848 housing units live within 1/4-mile buffer of a park
- Approximately 7,151 housing units live within 1/2-mile buffer of a park
- Approximately 6,846 housing units live within 1-mile of one of Ottumwa's community parks

Analysis Takeaways

Generally, most of the residential areas of Ottumwa are well-served by the geographic distribution of the park system. However, the residential areas in the southern half of Ottumwa on the eastern edge of the community are not as well served through both the walk and buffer analysis. Given the high number of park acres already in the system, this issue may best be addressed through ensuring sidewalk or trail connectivity to existing parks near this area.

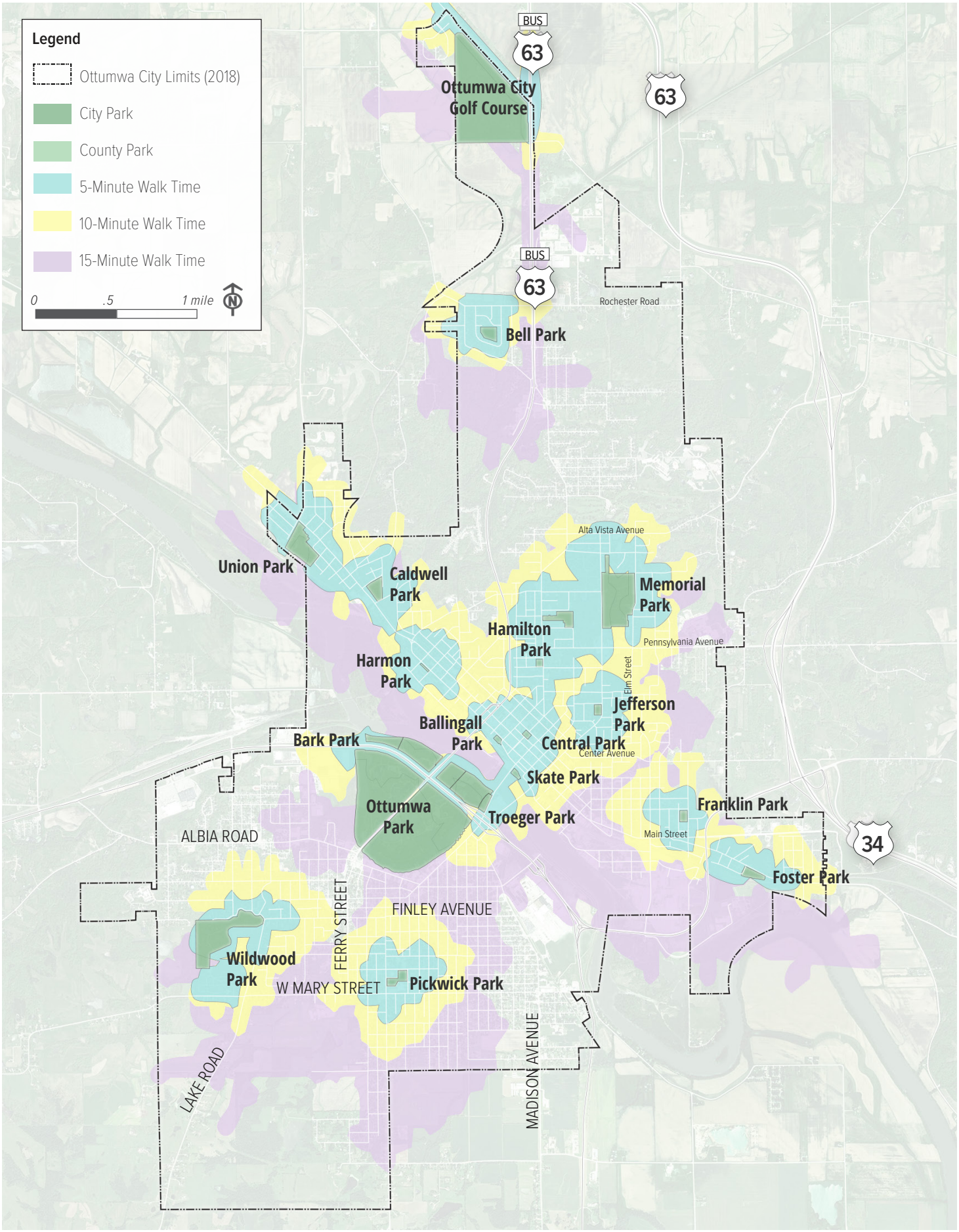


Figure 5.2 - Park Walk Time Analysis, Ottumwa

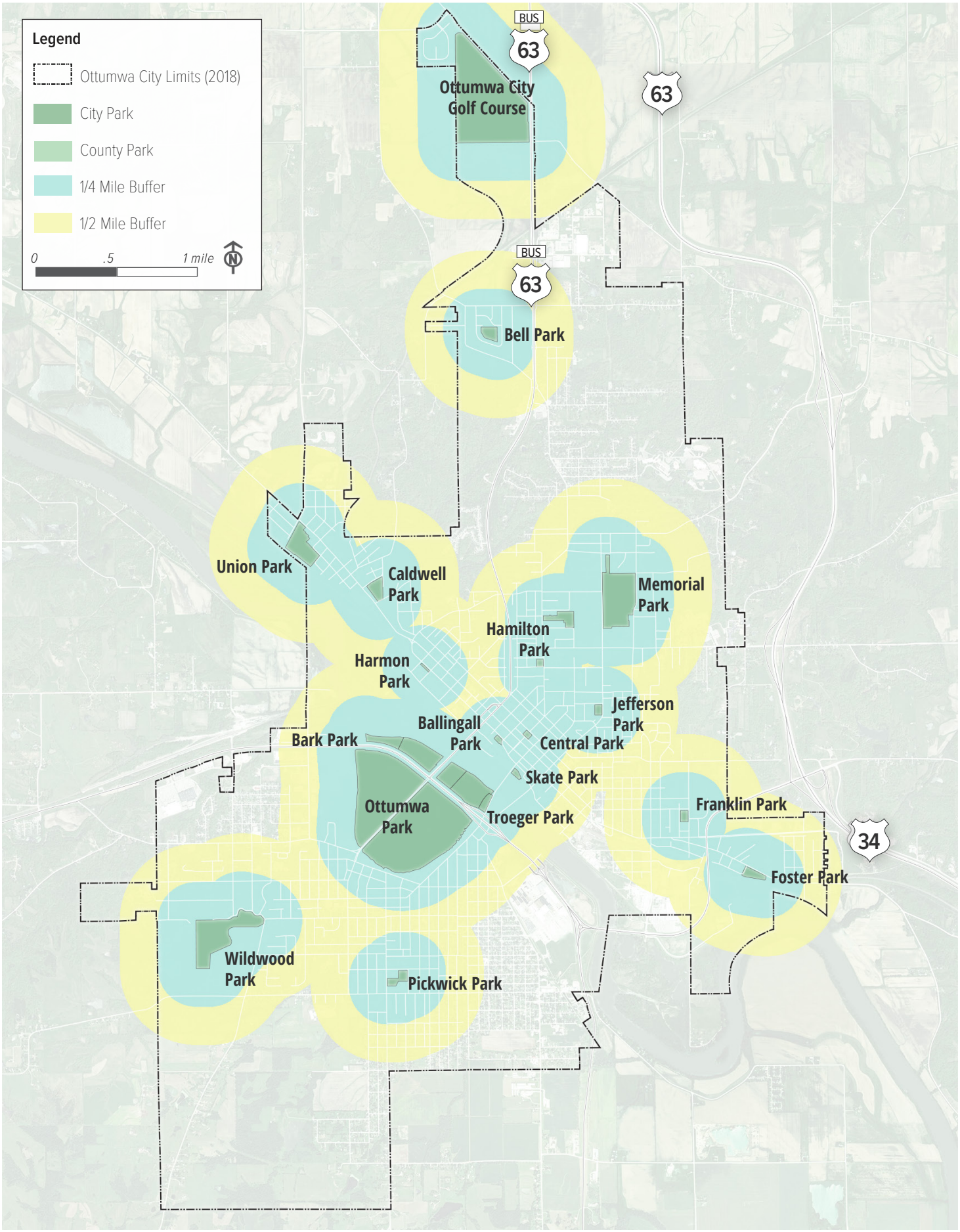


Figure 5.3 - Park Buffers, Ottumwa

Table 5.7 - Ottumwa Facility Demand Estimates by Type 2020-2040

Outdoor Facility Type	Recommended Level of Service			Existing Demand	2030 Demand	2040 Demand
Picnic Shelter	1	site per	1,800	14	14	16
Playground	1	site per	2,000	12	13	14
Rectangular Field	1	field per	3,800	7	7	8
Basketball Courts	1	court per	4,400	6	6	7
Volleyball Courts	1	court per	15,000	2	2	2
Backstops	1	field per	15,000	2	2	2
Tennis Courts	1	court per	4,000	6	6	7
Softball Fields	1	field per	6,000	4	4	5
Baseball Fields	1	field per	3,500	7	7	8
Snow Sledding Hill	1	site per	30,000	1	1	1
Dog Park	1	site per	50,000	0	1	1
Skate Park	1	site per	50,000	0	1	1
Splash Pad	1	site per	15,000	2	2	2
Outdoor Pool	1	site per	40,000	1	1	1
Indoor Facility Type	**Recommended Level of Service**			**Existing Demand**	**2030 Demand**	**2040 Demand**
Indoor Pool	1	site per	35,000	1	1	1
Indoor Recreation (sq. ft.)	2	SF per	person	49,410 SF	51,656 SF	57,932 SF

Source: City of Ottumwa, Confluence with inputs from NRPA and Planner's Estimating Guide

RECREATION FACILITIES

Recreation Demand Estimates

Recreation facility demand estimates have been calculated for the current population (2017 est.) as well as the average 2030 and 2040 population. Table 5.7 summarizes the demand estimates.

The recreation demand estimates indicate that by 2040 Ottumwa should maintain approximately sixteen (16) picnic shelters and fourteen (14) playgrounds. There should be at least eight (8) rectangular fields, eight (8) baseball fields, seven (7) basketball courts, seven (7) tennis courts, and five (5) softball fields. However, these numbers are just general guidelines. Recreation programs should regularly be evaluated to assess if the current inventory of fields and programs match the desires of residents, adjusting when appropriate.

Today, youth sports are a major industry and there is significant market-driven demand for various field and court types. Team sports such as softball, soccer, basketball and volleyball are especially popular. As part of the Our Ottumwa Comprehensive Plan, an updated reimagining of Ottumwa Park and its recreation facilities has been created as shown in Figure 5.8. This reimagining has twelve (12) baseball / softball fields, new camping, and eight (8) additional soccer fields.

TRAILS

Existing Trails

Currently, there are both city and county-owned trails within Ottumwa. The city-owned trails are concentrated near the downtown and along the Des Moines River. One trail segment provides a path through Greater Ottumwa Park. There are also trails on the north and southside of the Des Moines River. There is a trail segment that runs along Madison Ave creating a loop on the south bank of the river. County trails are more expansive. In north Ottumwa, there is a county trail that runs along N Court St, E Alta Vista Ave/Dahlonega Rd, and E Rochester Rd. Another trail runs along Pennsylvania Ave and extends into Bladensburg Rd. In south Ottumwa, there are trail routes along Black Hawk Rd, N Quincy Ave, Ferry St, W Mary St/Bluegrass Rd, and Lake Rd.

Proposed Trails & Priority Corridors

Figure 5.1 shows the existing and proposed trails in Ottumwa. The proposed trails are those recommended in the Ottumwa Bicycle and Pedestrian Plan completed by the Area 15 Regional Planning Commission. The Bicycle and Pedestrian Plan also identifies priority corridors for pedestrian connectivity enhancements. These areas should be priorities for sidewalk maintenance and expansion within Ottumwa. These four priority areas are the main pedestrian links that allow for pedestrian movement through the community.

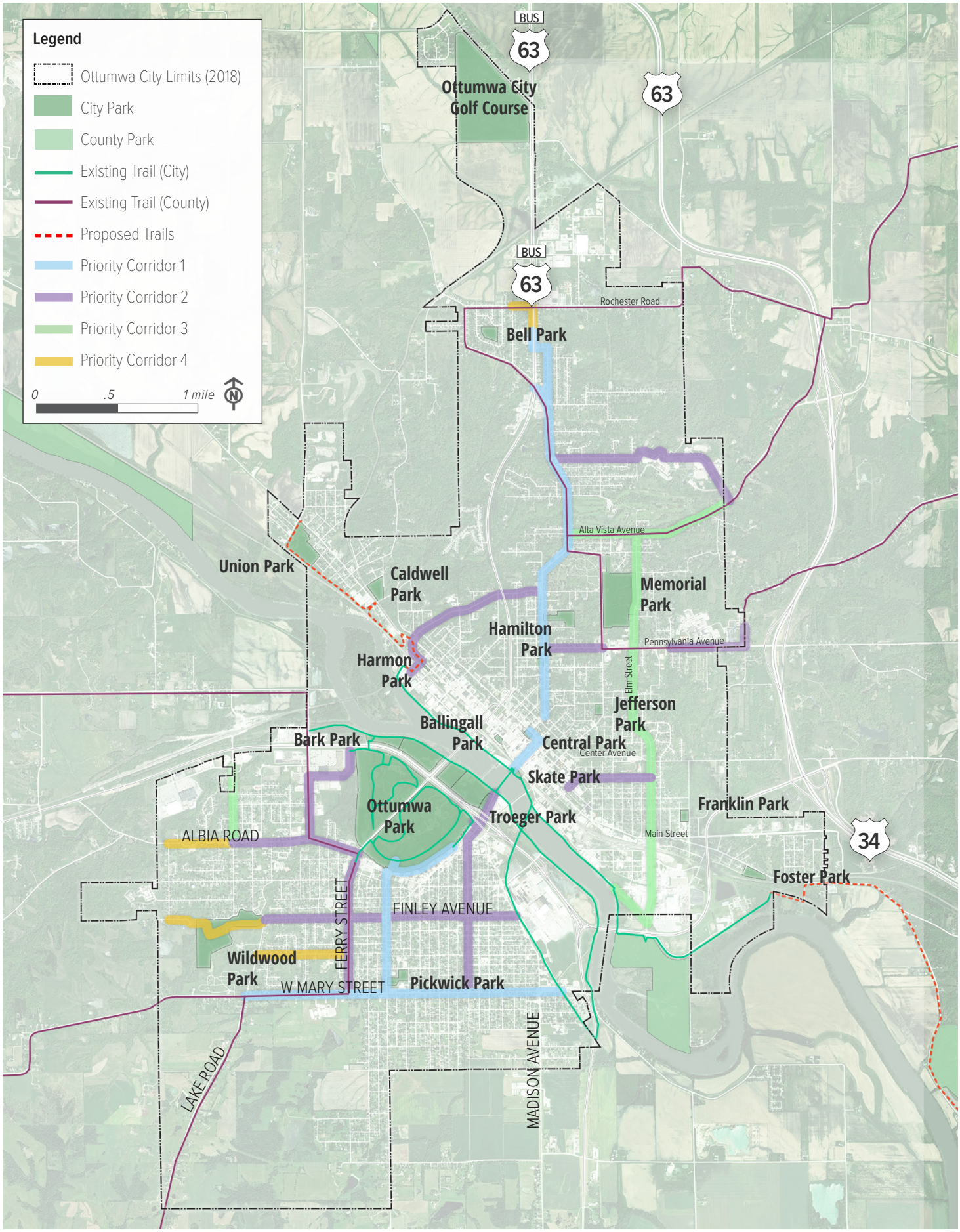


Figure 5.4 - Existing Parks, Existing Trails & Proposed Trails, and Priority Corridors, Ottumwa

Data Source: Area 15 Regional Planning Commission

PLANNED PARK DEVELOPMENTS

Electric Park

Ottumwa is pursuing a large riverfront redevelopment project for the area northwest of the Market Street Bridge in downtown Ottumwa (more discussion on this development can be found in Chapter 9 Land Use). A major component of the riverfront vision is the creation of a new park, tentatively named "Electric Park". The City of Ottumwa hired Vandewalle & Associates, Inc to create a vision for the area. It is slated to be adjacent to the Ottumwa dam with special lighting planned to highlight this unique feature of the community. Per the Ottumwa Opportunity Analysis + Implementation Strategy report completed by Vandewalle & Associates, the Electric Park will "incorporate interactive light and motion sculptures to create a unique experience that goes beyond public art." Figure 5.5 shows a plan and Figure 5.6 shows a rendering of the Electric Park plan.

Figure 5.5 - Electric Park Plan

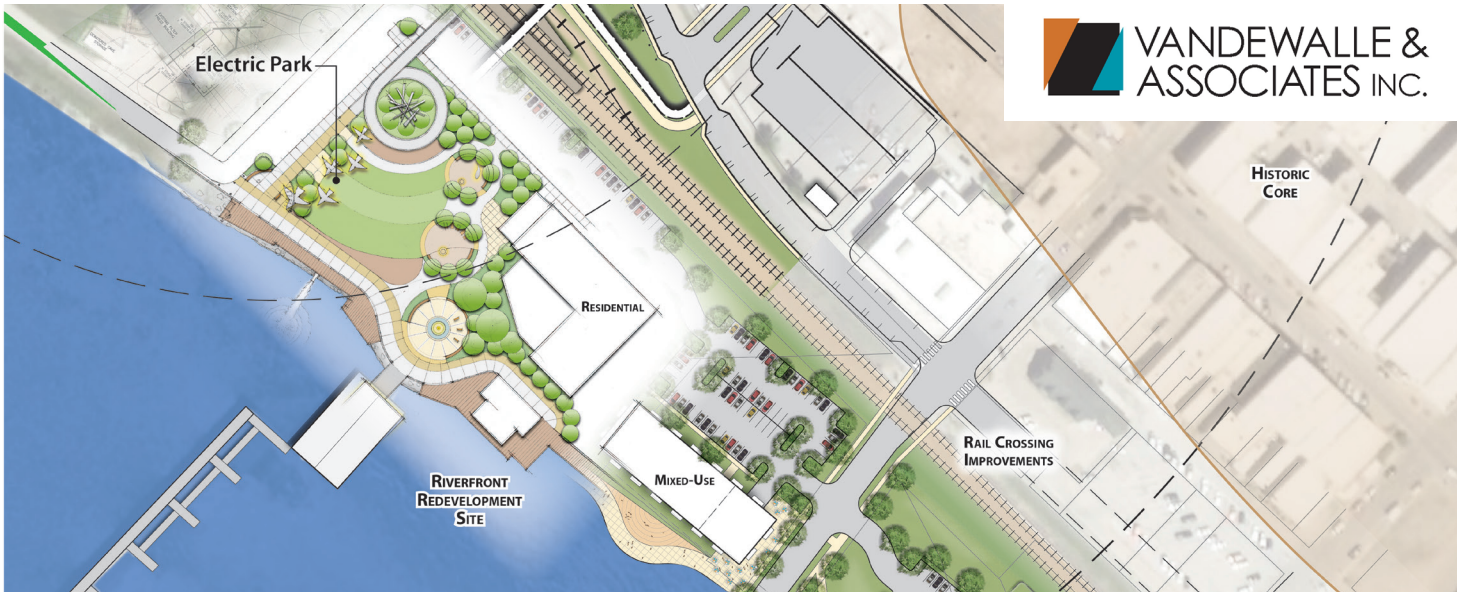
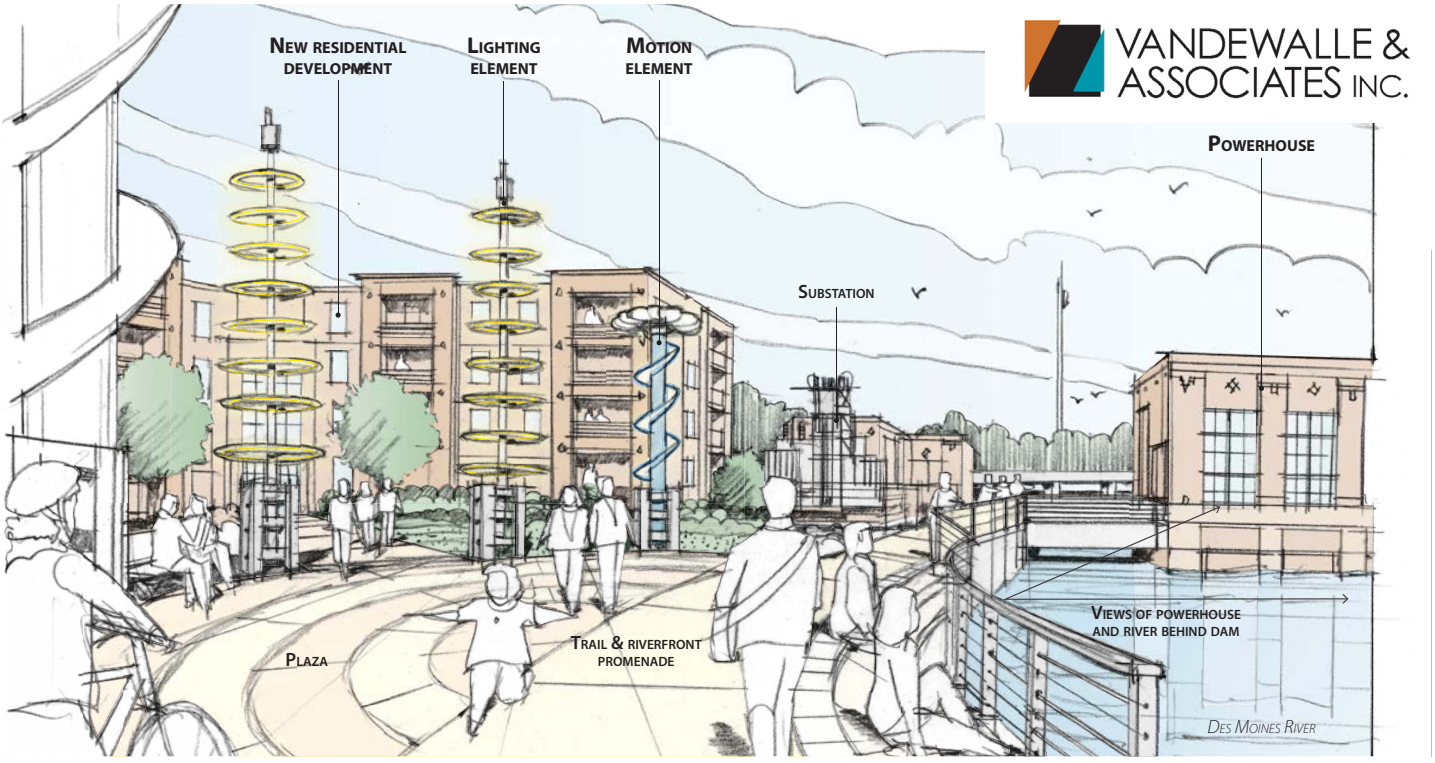


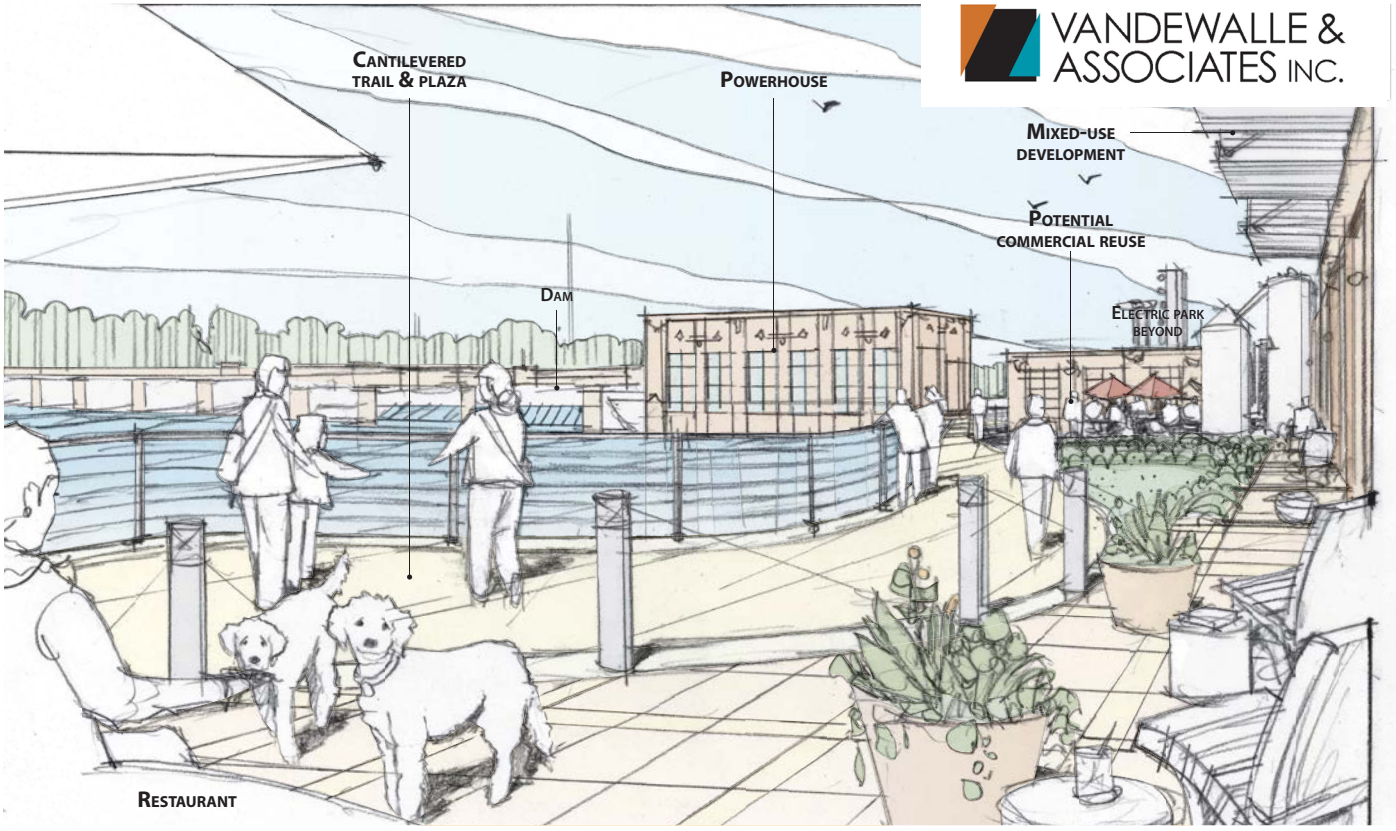
Figure 5.6 - Electric Park Rendering



Riverwalk Expansion

In addition to the Electric Park along the Des Moines River, Ottumwa has proposed plans to create an expanded riverwalk extending over the Des Moines River along the new development. The riverwalk would include cantilevered trail and plaza space, connected by planned restaurants, retail and apartments. The riverwalk is proposed to extend from northwest of the Market Street Bridge, through the proposed Electric Park, and along the river until the storm sewer plant. Figure 5.7 shows Vandewalle & Associates' rendering of the riverwalk expansion.

Figure 5.7 - Riverwalk Rendering



Ottumwa Park Reimagined

Figure 5.8 shows a reimagining of Ottumwa Park updated as part of the Our Ottumwa Comprehensive Plan. This new master plan builds upon the work completed in previous park planning efforts to narrow in on a design that better utilizes this unique, regional-drawing amenity. The new Park Ottumwa master plan calls for:

- Eight soccer fields
- New indoor recreation building
- New Amphitheater
- New Pedestrian Bridge
- Relocated tennis courts
- New skate park
- Relocated camping
- Twelve sotball / baseball fields
- Additional parking
- Expanded pool options
- New basketball courts
- Second dog park

In addition to the recreation features, there are several adjacent developments included in the master plan - the planned Bridgeview Center Hotel, one-story retail and townhomes along the river southeast of the park site.

Figure 5.8 - Ottumwa Park Reimagined

PARKS & RECREATION GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Parks & Recreation Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 2 Maintain and expand the existing parks and open space system, recreation programs, and trails network		Continue to evaluate existing park facilities and recreation programs to ensure they meet the changing needs of the community Expand recreational activities for the entire community including indoor and outdoor winter activities and afterschool programs Promote sustainable land stewardship in Ottumwa by identifying areas within the City's parks and trail system where low maintenance native species can be planted Look for opportunities to share park facilities and operating and maintenance costs with the school district and other community and volunteer organizations Implement the Ottumwa Bicycle and Pedestrian Plan to expand the trail system within natural areas and seek opportunities to promote the trail system in Ottumwa including the addition of trail-centric retail where possible Complete sidewalk improvement, maintenance and expansion along the Priority Corridors identified in the Ottumwa Bicycle and Pedestrian Plan to enhance the ease of access and ability of residents to walk throughout the community		

Our Ottumwa 2040 Comprehensive Plan

Parks and Recreation – Two Year Update

Since adopting the Our Ottumwa Plan, progress on parks and recreation has been steady. In 2021, the City contracted Design Workshop to prepare a Master Plan for Greater Ottumwa Park. This master planning effort includes the entire Greater Ottumwa Park area Sycamore Park and the Oxbow. The final report will be completed in fall 2022 and will include design work and phasing for major program expansions including additional baseball facilities and new soccer and tennis facilities.

Central to parks development is the ongoing effort to develop the Ottumwa Sportsplex near the Beach Ottumwa. The proposed 60,000 square foot complex would include basketball courts, volleyball courts, turf soccer, batting cages, a track, concessions and event space.

In July 2022, work began on the new showerhouse to serving campers at Greater Ottumwa Park. The modern showerhouse will improve the camping experience as camping revenue continues to grow. Also in Greater Ottumwa Park, steady progress continues on filling a pond on the east side of Wapello St. Filling this pond will provide the space to grow a new baseball and softball complex.

In June, 2022 the Council approved the sale of Pickwick Park to Ottumwa Community School District. This sale will support and addition project at Douma while allowing for new school playground equipment which will also be available to the neighborhood outside of school hours.

Additional trails projects are also advancing. The multipurpose trail on Milner St. links much of the south side to trails system. An upcoming project to connect the south part of the Oxbow with the trails will provide safe, uninterrupted access from the entire Milner trail to Greater Ottumwa Park and all points beyond.

Finally, Ottumwa's park system has added a new sport. As pickleball explodes in popularity nationwide, four new courts have been installed by Park's employees in Bell Park and Memorial Park.

6 Housing

CHAPTER

HOUSING OVERVIEW

An adequate housing stock is a critical component of any growth and development strategy. For Ottumwa to attract residents and growth, it needs to have a housing inventory that is diverse in type, style and density. Housing needs vary by age, income level and lifestyle preference. Millennial's that once flocked to apartments are getting older and beginning to desire home ownership. Baby Boomers seem to be divided between those wanting to age in place within their current single-family home while others are wanting to downsize into small homes or medium density townhomes or condominiums. Ottumwa should consider these changing dynamics when considering future housing needs and work to ensure the housing stock reflects these differences.

According to the project survey, the primary housing type desired by residents currently were mid-level single-family homes. The second housing type was entry-level single-family homes. Other public input indicated that the residents would like to see more affordable multi-family housing, senior housing, and downtown housing. While there was overall less demand shown for higher-end single-family homes, many mentioned that higher end executive housing was needed to attract qualified higher earning employees. Overall, the need for housing rehabilitation of existing older homes was another major concern for the residents.

Housing was listed throughout the planning process as simultaneously Ottumwa's biggest opportunity and its most significant challenge. Many believe a lack of adequate housing is a major contributor to population stagnation experienced in Ottumwa. Others believe that the condition of existing housing in Ottumwa is also a major issue area for the community. This chapter reviews the existing housing stock in Ottumwa and identifies key issue areas the city should consider in housing planning for the year 2040.

OTTUMWA HOUSING INVENTORY

The U.S.Census Bureau estimates there are approximately 11,168 housing units in Ottumwa as of 2017. Approximately 9,998 (89.5%) of those units are occupied, while 1,170 (10.5%) are estimated to be vacant. Ottumwa's total homeowner vacancy rate of 1.4 is similar is to the homeowner vacancy rate of Wapello County (1.2) and the State of Iowa (1.5). Ottumwa's rental vacancy rate is high at 14%, significantly higher than the national average of 6.1%. To review the housing stock in Ottumwa a mixture of U.S. Census Bureau American Community Survey 2013-2017 5-year estimates and 2019 Wapello County tax assessor data was reviewed. Figure 6.1 shows the estimated residential land in Ottumwa as of 2019.

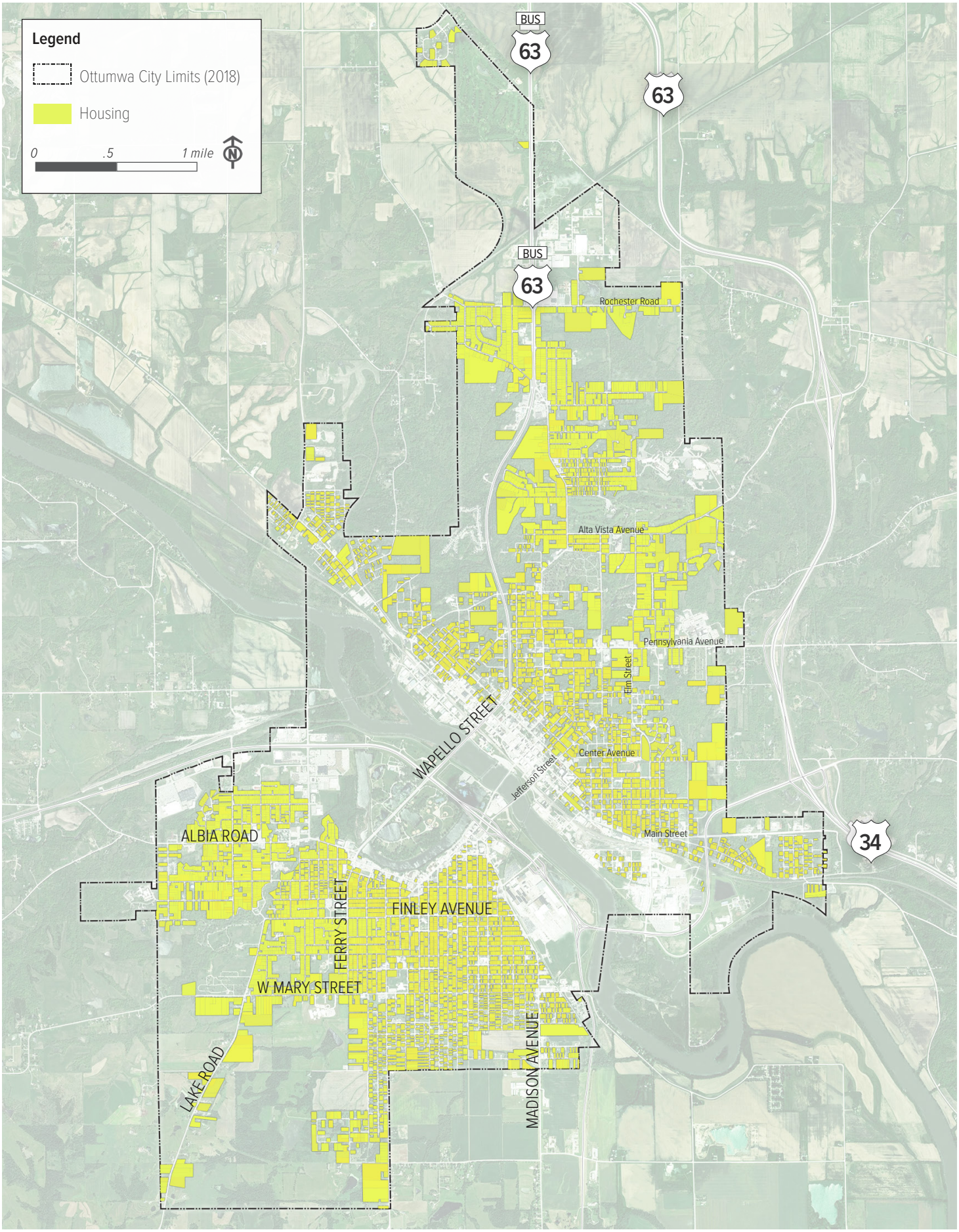


Figure 6.1 - Residential Areas, Ottumwa (2019)

OTTUMWA HOUSING OVERVIEW

Housing Type

There are approximately 8,449 single-family detached units in the City of Ottumwa according to 2019 Wapello County tax assessor data. The housing units are the dominant housing type available to Ottumwa residents. There are just over 50 apartment buildings in the city which provide 776 apartment units for residents. There are just over 200 home conversion units in the city and 11 condominium buildings. The city has approximately 50 duplex and two-family flats. There are also approximately 122 mobile home units in the city. Overall, single-family homes are the dominant housing type available. Table 6.1 summarizes.

Age of Housing

Figure 6.2 shows the U.S. Census estimates for Year Structure Built for housing units in Ottumwa in 2017. Of the roughly 11,168 housing units, approximately 40% were built in 1939 or earlier. Another nearly 27% were constructed between 1940 and 1959. Collectively, this indicates Ottumwa's housing stock is composed of mainly older housing units. The Census estimates only 5.4% of housing units in the city have been built since 2000. There were two decades of higher construction in the 1900s, between 1950-1959 (17.1%) and between 1970-1979 (10.8%).

Table 6.2 summarizes Wapello County tax assessor data for housing in Ottumwa. Wapello County tax assessor data lists the average year built for single-family detached housing as 1935. More than 50% of single-family detached homes were built before 1939 and only 1.6% of single-family detached homes in the city were constructed in 2000 or later. Tax assessor data reveals that apartment buildings in Ottumwa are significantly newer than the single-family housing stock in the city with an average year built of 1967. While approximately 40% of apartment buildings in Ottumwa were built in 1980 or later, the total number of units from this time period account for more than 60% of all apartment units in the city. Home conversions are more likely to be in older homes in the city with 76% of these structures built in 1920 or earlier. Mobile homes are the newest housing stock in the city according the average year built of 1994, however, these units account for a very small percent of total housing in the city.

Housing Occupancy & Tenure

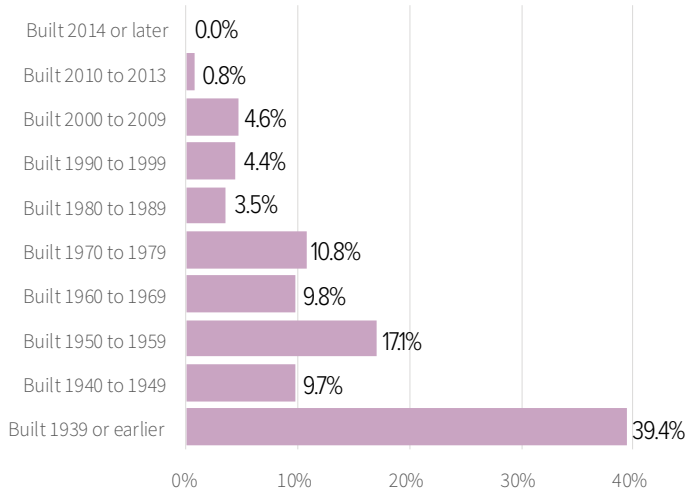
Table 6.3 shows there are approximately 10,000 occupied housing units in Ottumwa according to U.S. Census data for 2017. Occupancy can be divided into groups by housing tenure. Typically, housing tenure is divided into owner and renter-occupied units. According to the U.S. Census, approximately 66.9% of Ottumwa housing is owner-occupied, meaning the owner of the unit lives in the unit. The remaining 33.1% of units are renter-occupied, meaning that the occupant is a tenant that pays the owner to live in the unit. The average household size for owner-occupied units in Ottumwa is higher at 2.49 compared to the 2.2 average household size for renter-occupied units.

Table 6.1 - Housing Types, Ottumwa (2019)

Housing Type	Count	Units*
Single-Family Detached	8,449	8,449
Apartment Buildings	51	776
Condominiums	11	-
Home Conversions	201	-
Duplex / 2-Family Flat	50	100
Mobile Home	122	122

Source: Wapello County Tax Assessor Data 2019

Figure 6.2 - Year Structure Built, Ottumwa (2017)



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 6.2 - Average Year Built + Assessed Value, 2019

Housing Type	Avg Year Built	Avg Assessed Value
Single-Family Detached	1935	$70,520
Apartment Buildings	1967	$582,623
Condominiums	1992	$129,740
Home Conversions	1904	$34,284
Duplex / 2-Family Flat	1951	$91,044
Mobile Home	1994	$49,811

Source: Wapello County Tax Assessor Data 2019

Table 6.3 - Housing Tenure, Ottumwa (2017)

Housing Tenure	Count	Share
Total Occupied Housing Units	9,998	100.0%
Owner-Occupied Units	6,686	66.9%
Renter-Occupied Units	3,312	33.1%
Average Owner-Occupied Household Size	2.49	
Average Renter-Occupied Household Size	2.2	

Source: U.S. Census Bureau, ACS 2013-2017 5-year estimates

Year Householders Moved into Unit

Figure 6.3 shows the breakdown of the year householder moved into their current unit. Over 60% of householders have moved into their unit between 2000 and later. Just over 35% of householders moved into their unit between 2010 to 2014. Nearly 17% of householders have lived in their current unit for more than 30 years (moved in 1989 or earlier). These numbers indicate that while there is a large amount of movement of new householders in the housing of Ottumwa, there remains a fairly significant portion of the population that has lived in their homes for a very long time.

Housing Values

Figure 6.4 shows the U.S. Census Bureau's 2017 estimate for owner-occupied housing values in Ottumwa. Nearly three-fourths of owner-occupied housing units in Ottumwa are valued less than $100,000 (72.4%). The largest category of home values is between $50,000 and $99,999. Another 14% of homes are valued between $100,000 to $149,999. Very few homes are estimated to be very high value homes ($300,000 or more) with only 2% of homes falling into this category.

Figure 6.5 shows the average assessed value for single-family detached homes in Ottumwa. Assessor data estimates that 80% of single-family homes are assessed at values below $100,000. Nearly half of all single-family homes are assessed for values less than $50,000. Another 12% of homes are valued between $100,000 to $149,999. Similar to the U.S. Census estimates, only a very small percent (.5%) are very high value homes ($300,000 or more).

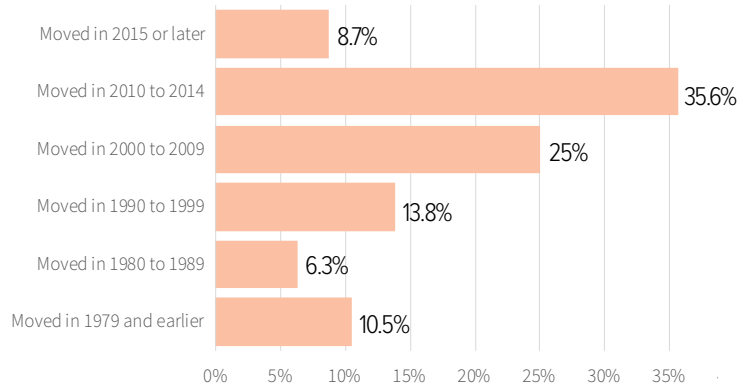
$70,139

AVERAGE APPRAISED SINGLE-FAMILY HOME VALUE

$56,470

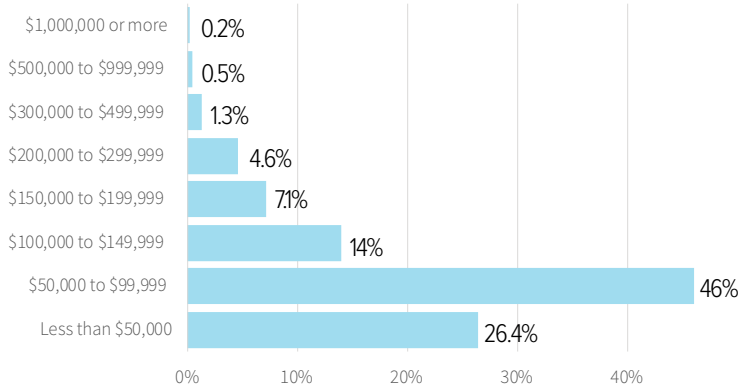
MEDIAN APPRAISED SINGLE-FAMILY HOME VALUE

Figure 6.3 - Year Householder Moved Into Unit (2017)



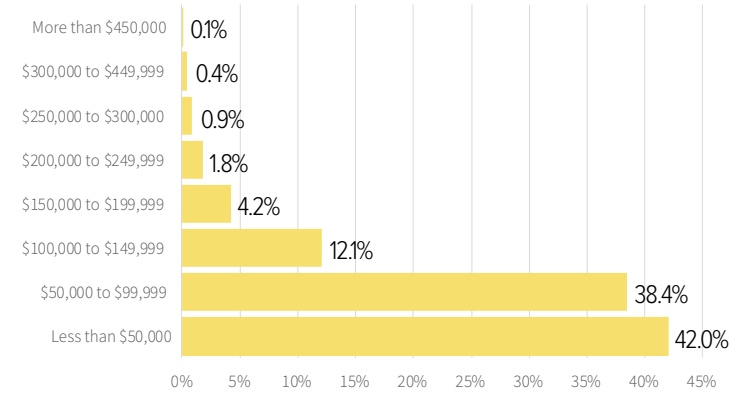
Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Figure 6.4 - Owner-Occupied Housing Values (2017)



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Figure 6.5 - Single-Family Appraised Values (2019)



Source: Wapello County Tax Assessor 2019

Table 6.4 - Monthly Owner Costs, Units with a Mortgage

Owner-occupied housing units	Count	Share
Housing Units with a Mortgage	3,872	100.0%
Less than $500	119	3.1%
$500 to $999	2,256	58.3%
$1,000 to $1,499	1,161	30.0%
$1,500 to $1,999	244	6.3%
$2,000 to $2,499	39	1.0%
$2,500 to $2,999	26	0.7%
$3,000 or more	27	0.7%
Median Monthly Costs	$901	

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 6.5 - Monthly Costs as % Household Income, Unis with a Mortgage (2017)

Housing Units with a Mortgage	Count	Share
Less than 20%	1,908	49.4%
20% to 24.9%	714	18.5%
25% to 29.9%	350	9.1%
30% to 34.9%	224	5.8%
35% or more	666	17.2%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 6.6 - Gross Rent, Renter-Occupied Units

Owner-occupied housing units	Count	Share
Occupied Units Paying Rent	3,048	100.0%
Less than $500	716	23.5%
$500 to $999	2,079	68.2%
$1,000 to $1,499	216	7.1%
$1,500 to $1,999	13	0.4%
$2,000 to $2,499	14	0.5%
$2,500 to $2,999	10	0.3%
$3,000 or more	0	0.0%
Median Gross Rent	$409	

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

Table 6.7 - Gross Rent as % Household Income, Rentals (2017)

Occupied Units Paying Rent	Count	Share
Less than 15%	2,957	12.2%
15% to 19.9%	361	10.6%
20% to 24.9%	312	14.3%
25% to 29.9%	423	7.8%
30% to 34.9%	232	8.4%
35% or more	1,382	46.7%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates

HOUSING AFFORDABILITY

According to the U.S. Department of Housing and Urban Development (HUD), households that pay more than 30% of their income for housing are considered "cost burdened". When more than 30% of income goes towards housing, other necessities such as food or transportation becomes difficult to afford.

Owner-Occupied Housing Affordability

There are approximately 3,800 owner-occupied housing units with a mortgage in Ottumwa. Table 6.4 shows the estimated monthly housing costs for these units. The majority of units pay between $500-$999 per month in housing costs and an additional 30% pay between $1,000 to $1,499 per month. The median monthly housing cost amount is $901. For those owner-occupied units without a mortgage, the median monthly housing cost is lower at $409. While these numbers are lower than national averages, housing costs alone do not indicate whether a household is cost burdened.

Table 6.5 shows the selected monthly housing costs for owner-occupied housing units with a mortgage as a percentage of household income. Almost half of homeowners in the city spend less than 20% of their household income on housing. Only 18.5% are believed to spend between 20%-24.9% of their household income on housing costs. However, there are 23% of homeowners in the city that are considered cost burdened, spending 30% of more of their household income on housing costs.

Renter-Occupied Housing Affordability

There are approximately 3,048 households in Ottumwa that pay rent each month. Table 6.6 shows the Gross Rent estimates for Ottumwa renters. The median rent is $639 per month. Nearly 70% of renters pay between $500 to $999 per month. Another 23% spend less than $500 on rent. Less than 1% of renters spend $2,000 or more per month on rent. When viewing rent payments as a percentage of household income, it becomes apparent that renters are significantly more cost burdened than homeowners in the city. Table 6.7 shows the breakdown. Almost half of all Ottumwa renters spend 35% or more on rent per month. Another 30.5% spend between 20% to 34.9% on rent per month, which is still considered cost burdened by HUD. Just over 20% of renters spend less than 20% of their income on rent.

HOUSING DISTRIBUTION

Figures 6.6 and 6.7 show the geographic distribution of housing in Ottumwa by year built and average assessed values. Distinct patterns emerge in the distribution.

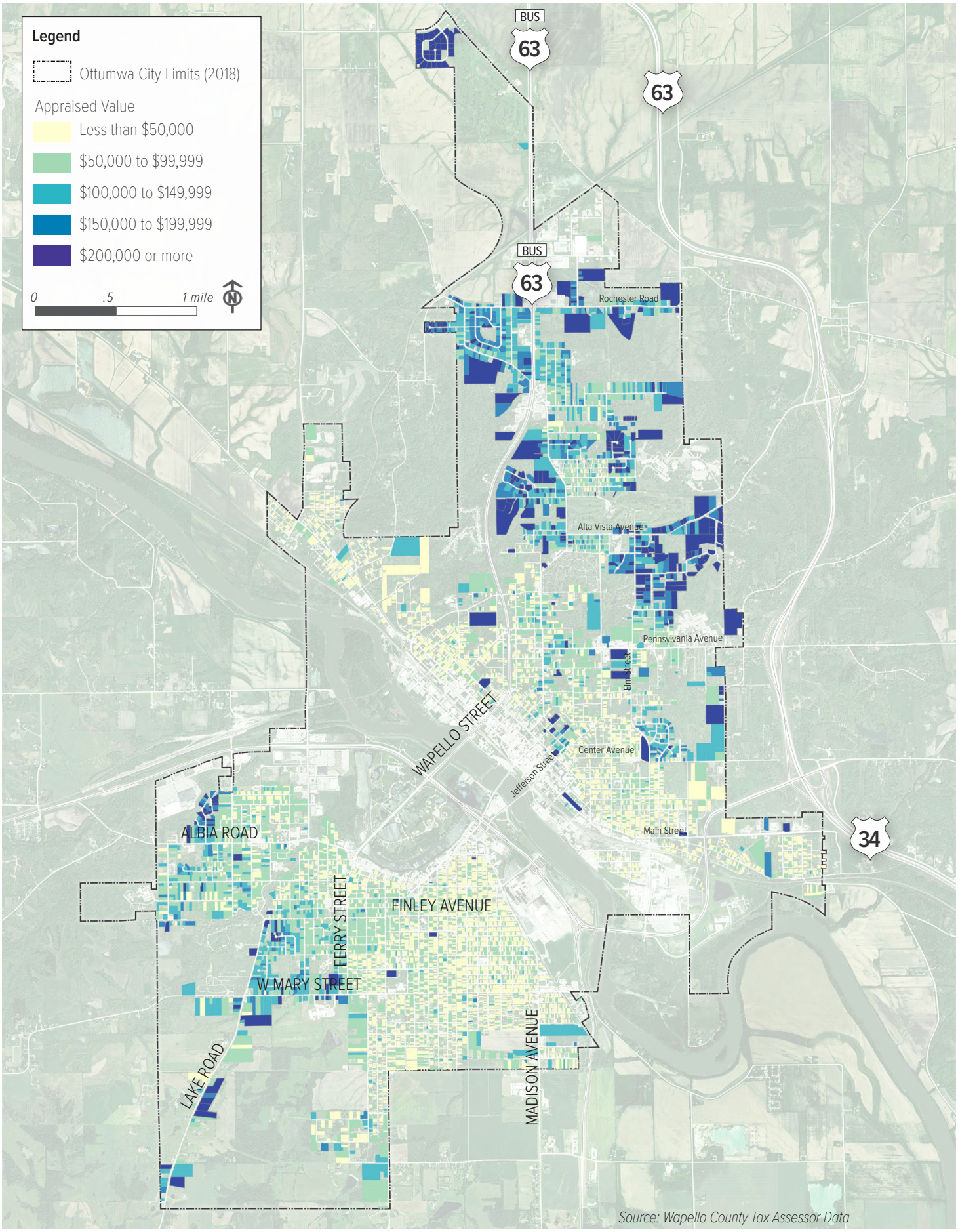


Figure 6.6 - Single-Family by Appraised Value, Ottumwa (2019)

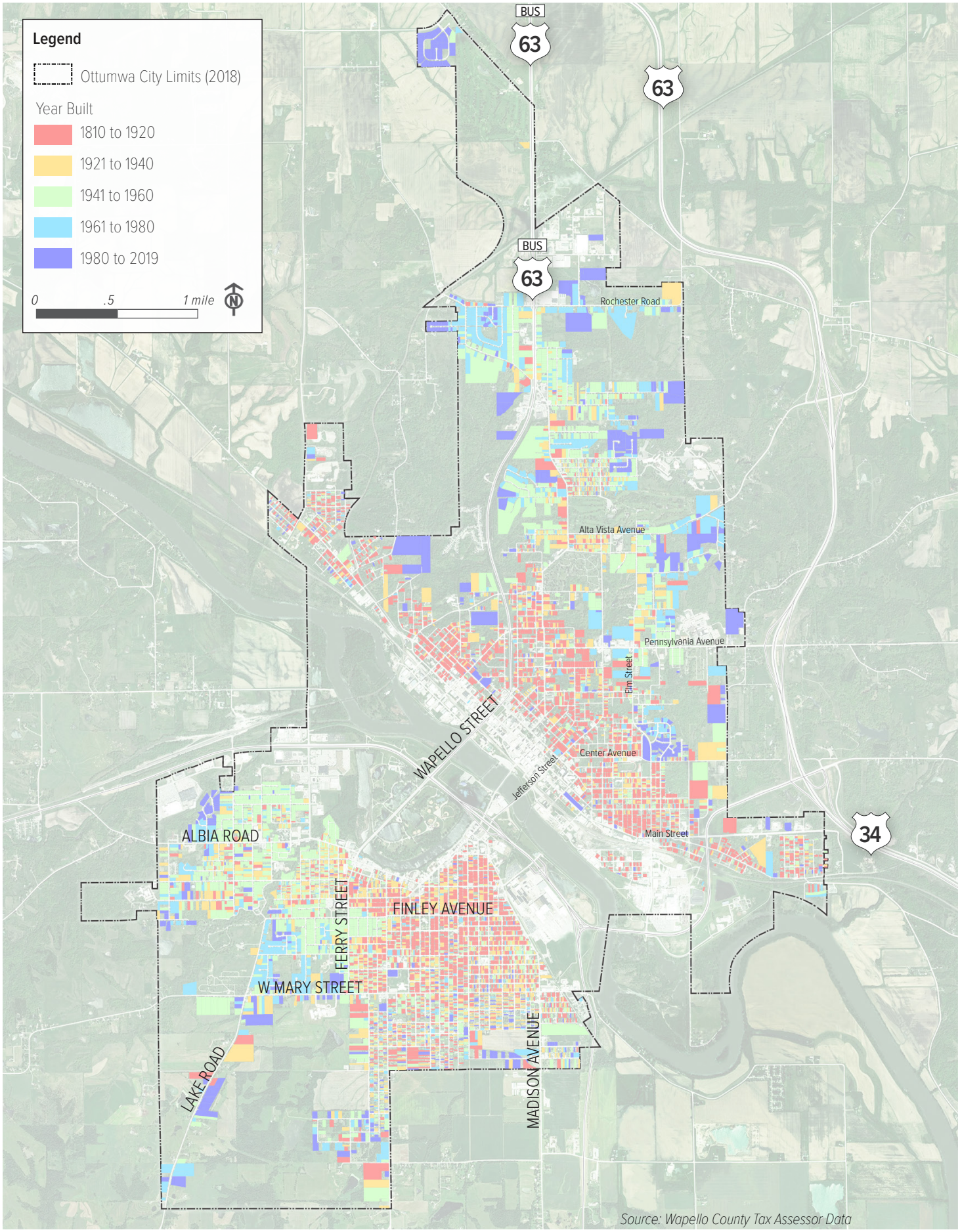


Figure 6.7 - Housing by Year Built, Ottumwa (2019)

PUBLIC INPUT ON HOUSING

A variety of public input was received on housing in Ottumwa, the highlights of which are summarized below.

Public Workshop Housing Feedback

Postcard / Notecard Exercises

The postcard exercise revealed that people desire downtown housing in Ottumwa. In particular, some people mentioned their desire for townhomes in the downtown area.

For the notecard exercises, the biggest opportunities for Ottumwa related to housing were the overall need for new housing, infill development, blight / housing rehabilitation, and affordable housing. Housing, generally, was also listed as a big challenge for the community. Housing was also the most common theme in the one big dream for Ottumwa.

Biggest Opportunities for Ottumwa

One Big Dream for Ottumwa

Engagement Boards

The housing priorities identified in the priority ranking engagement board at the meeting were, in order:

- Mid-level single-family homes
- Entry-level single-family homes
- Downtown upper story
- Home improvement fund
- Townhomes or rowhouses

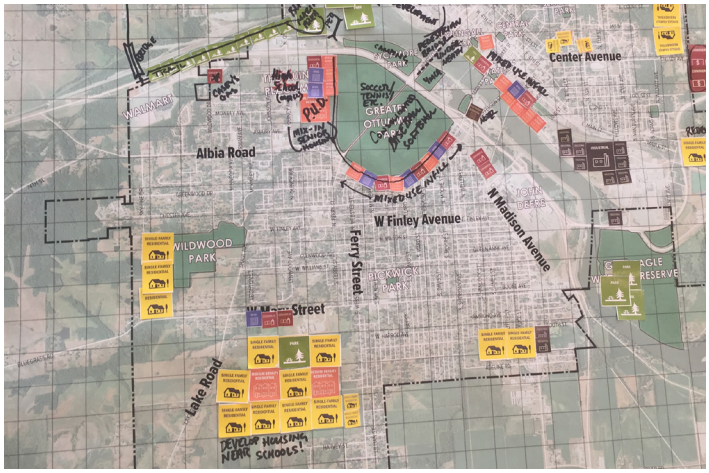
In the visual preference exercise board for housing, the most liked housing options included smaller lot bungalow-style single-family detached homes, small-lot townhomes, and mid-level single-family homes. The housing options they did not like include larger lot single-family home, apartments, and high-end single-family homes.

Public workshop attendees generally indicated they were unhappy with the housing options available in Ottumwa today based on the preference ranking boards.

Puzzle Mapping Exercise

Several housing ideas came out of the puzzle mapping exercise:

- Need neighborhood names to help sense of place
- More housing needed in the north and south ends of Ottumwa
- Neighborhood rehabilitation needed in the Madison & Finley area
- Neighborhood rehabilitation needed north of downtown Ottumwa
- Senior housing near Greater Ottumwa Park



Community Survey Housing Feedback

The survey asked participants to rank the overall quality of life in Ottumwa, which was around 4.8 out of 10 in the survey. The follow-up question asked what changes they think would improve the quality of life in Ottumwa. Figure 6.7 shows the responses. The most common selection was Property Maintenance. While not explicitly about housing, the need for code enforcement in neighborhoods was also brought up anecdotally by residents throughout the engagement process.

Figure 6.7 - What would improve quailty of life...

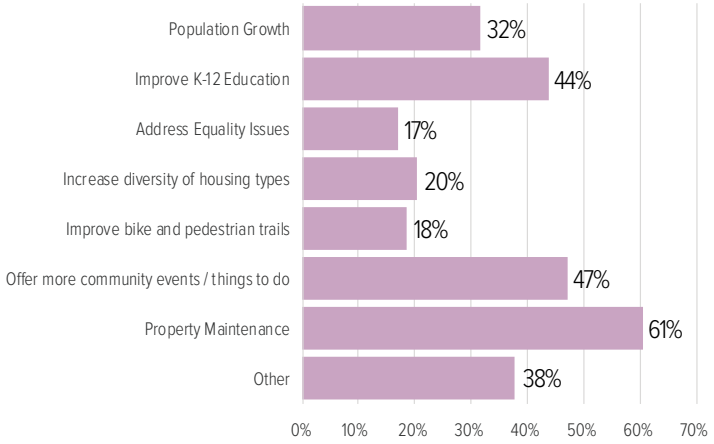
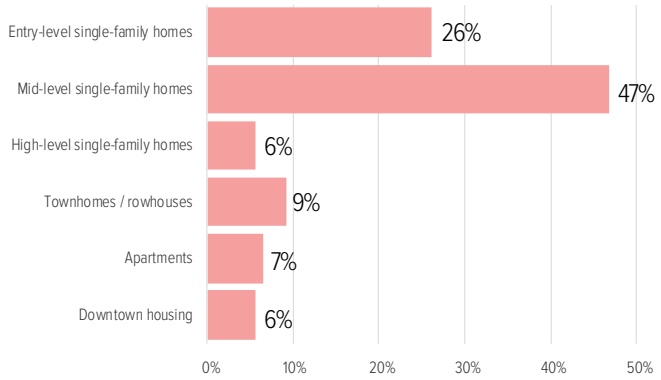


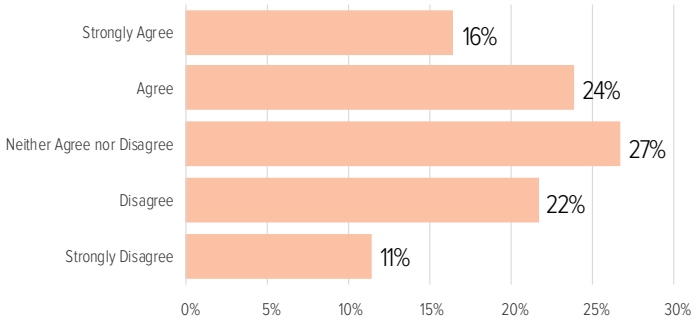
Figure 6.8 - What type of housing is most needed in Ottumwa?



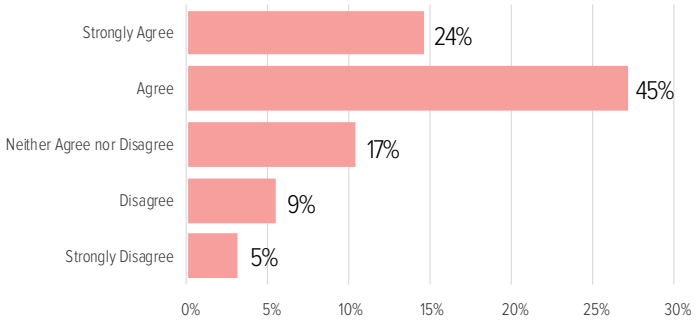
There were a series of questions asking how much participants supported different housing types. Figure 6.8 shows the responses. There is significant support for entry and mid-level single-family homes. Moderate and divided support over affordable multi-family housing (roughly equal support/ not support). Generally strong agreement over affordable entry-level single-family homes and senior-focused housing. There was strong support for the need to increase regulation and inspection of rental housing. This response ties back to the strong desire for property maintenance.

Figure 6.9 - The City of Ottumwa needs more...

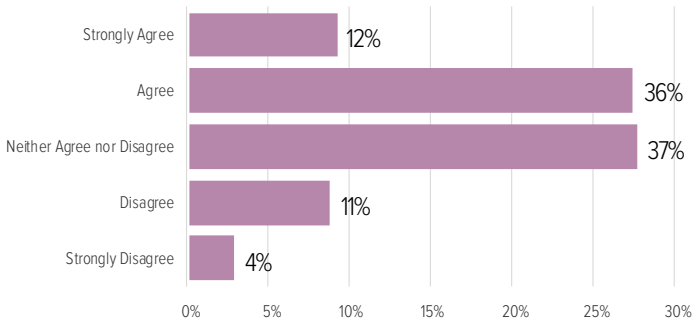
"...Affordable multi-family housing such as apartments."



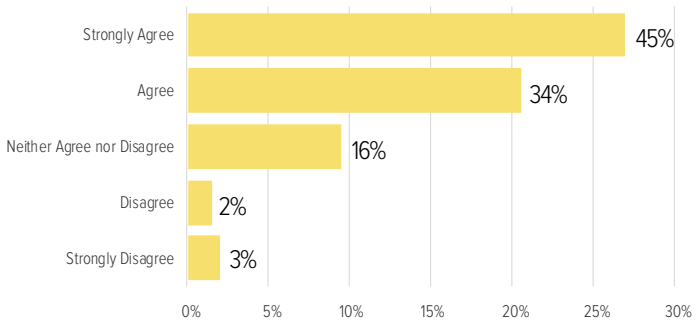
"...Affordable entry-level, owner-occupied housing such as small single-family homes or townhomes / rowhouses."



"...Senior-focused housing options."



"...Increased regulation and inspection of rental housing."



When asked what the city needs more of, just under 30% of respondents listed 'more broad range of housing choices.' While this was not in the top four answers for this question, it ranked higher than five other responses including parks, public amenities, healthcare and natural resource protection. When asked what amenities respondents consider when choosing a place to live, housing options was the second most common response with roughly 69%, only below employment opportunities. Figure 6.9 shows the responses.

KEY CONSIDERATIONS

Housing and Quality of Life

Housing is a major factor involved in assessing the quality of life in a community. When asked to identify the biggest opportunities and dreams for Ottumwa, many responses heard throughout the public engagement exercises revolved around housing. In fact, housing was the most common response when asked to identify a word to describe their dream for the community. The results of the engagement exercises and the existing conditions analysis support the conclusion that housing currently keeps Ottumwa from reaching its potential. A real improvement in the housing conditions in Ottumwa would likely lead to a significant improvement in the actual and perceived quality of life for residents.

Housing Safety & Rehabilitation

The parcel and Census data tell us that Ottumwa homes are older and assessed at lower values. Unmaintained older neighborhoods are at risk of becoming blighted and decreasing the overall quality of life of a community. The depressed condition of property in some neighborhoods in Ottumwa is apparent as one travels through the community. Not only is a deteriorated housing stock visually unappealing, these older homes can have safety issues due to the risk of lead paint/plumbing, asbestos, outdated wiring, and structural issues. Yet, many older homes are historic and/or are an important source of affordable, entry-level housing for residents. It is difficult to attract and fund new affordable housing construction, and housing rehabilitation may be the best affordable housing solution to address quality of life and safety of residents. Programs such as home rehabilitation programs with a revolving loan fund can help homeowners and landlords improve the condition of their properties. Existing programs such as the AHEAD Regional Housing Trust Fund are already working to address the financial incentives needed to promote rehabilitation of older, affordable housing stock.

Historic Preservation

The Historic Preservation Commission has made recent efforts to become more active. The Commission organized neighborhood meetings in each of the five residential districts on the National Register of Historic Places. The meetings have sparked a sense of neighborhood pride, especially in Vogel Place where the meeting was the catalyst for reviving a tradition of Christmas luminaires. The Commission has also undertaken to install boundary signs to mark and promote the historic districts. Their nomination secured a place for the historic Daum House on Preservation Iowa's Most Endangered Properties List and with their support Agassiz School will soon become the first landmark on the city's south side listed on the National Registry.

Continuing this progress would require the community to develop a Historic Preservation Plan. This planning would allow the city to leverage the full advantage of participating in Iowa's Certified Local Government Program. Features of a plan would include solicitation of public input, evaluation on the economic and social effects from historic preservation efforts, forecasting future preservation challenges

and opportunities, goal-setting for the Commission and the community and neighborhood-level participation. Possible goals would include a survey to begin establishing a historic district on the south side of Ottumwa, public education activities and creating an infrastructure for preservation volunteers and supporters.

Housing Study

Ottumwa has a vested interest in incentivizing rehabilitation and the improved safety of housing conditions in the community. However, not all older homes or lower assessed value homes can necessarily be considered historic or worthy of rehabilitation. A housing study is needed to assess the on-the-ground conditions of neighborhoods to determine which homes or neighborhoods warrant rehabilitation and financial assistance. The housing study could also highlight code enforcement issues that are unsafe or undesirable.

Senior Housing

With a wave of Baby Boomer retirements on the horizon, senior housing will likely experience a boom in the coming decades. Some seniors living in more rural areas of southeast Iowa may now require more convenient access to healthcare and other social services, creating a possible incentive to live in a small city like Ottumwa that has the amenities of a larger area but still has a small-town feel. Senior housing can include more typical assisted living facilities; however, some seniors will inevitably want to age in place. Seniors may desire smaller single-family homes that need less maintenance. Some may want to live in small clustered cottage housing while others will want the ease of living in an apartment, condominium or townhome. There is no one type of senior housing and Ottumwa should be prepared for a variety of housing options. While much of this development will be market-driven Ottumwa should explore possible incentives or, at a minimum, encourage this type of construction. A senior housing strategy could be included as part of the housing study.

Rippling Waters

Rippling Waters was a nonprofit organization established to address the housing needs of Ottumwa that existed under the umbrella of the Legacy Foundation. Rippling Waters has now become an independent nonprofit entity, with its own board of directors, tasked with aiding the City in addressing the Ottumwa community's housing issues. The organization will focus on housing revitalization throughout the City, with an emphasis on affordability and neighborhood rehabilitation. Blight remediation will also be a core mission. Rippling Waters hopes to partner with the City in order to perform rehabilitation on viable older structures, create infill development on empty City lots that are recovered blighted properties, perform education and outreach concerning housing ownership and property maintenance, and work with private development interests and local employers to address the City's housing gaps and needs with an emphasis on affordable home ownership.

Housing Gaps & Strategy

The Ottumwa community was asked to identify the type of housing most needed both in the community survey and through exercises available at the Public Workshop. Conversations about the needed housing types was also a part of many stakeholder interviews. Unsurprisingly, the answer to this question varied significantly. The community survey asked respondents to select from a long list of housing types (see Figure 6.8 on page 62). The most common results by far were mid-level single-family homes (47%) and entry-level single-family homes (26%). The least popular selections were high-level single-family homes and downtown housing, each with approximately 6%. Conversations with stakeholders and the Comprehensive Plan Advisory Committee (CPAC) told a different story. Stories of executives and mid-level managers having difficulty finding suitable housing within Ottumwa's supply and instead having to turn to either homes built outside Ottumwa city limits or else taking a job elsewhere in a community that better suits their needs for housing and quality of life. Others spoke of the need for higher quality multi-family housing to serve young professionals, older residents or people in need of transitional housing when they first arrive to town.

A housing strategy in Ottumwa needs to be multi-faceted to address the divergent needs of residents. While the specific needs of residents will vary, all groups are looking for improved housing options in Ottumwa. The housing strategy in Ottumwa revolves around two core principles: maintaining and improving the existing residential neighborhoods and fostering investment and growth for new housing for all types and price ranges. Existing residential neighborhoods can be maintained and improved through regulatory tools such as zoning code updates, rental housing inspection and code enforcement. Neighborhood identities and branding can support strong neighborhoods, and rehabilitation programs can help incentivize and financially support housing improvements. The City can also more readily promote the existing programs that are designed to improve housing conditions and partner with local businesses to promote homeownership. New housing growth can be encouraged through programs that acquire and award vacant residential lots for in-fill development, including single-family, townhome, apartment and senior-oriented housing. A tiered incentive program and policy can support new residential construction. The City can also continue to seek partnerships with the development community to build new housing. A series of goals and action items to support achievement of these housing goals are provided in Chapter 13 Implementation.

HOUSING GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Housing Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 1 Maintain and expand the existing parks and open space system, recreation programs, and trails network	Update the zoning code regulations to restrict or prohibit the conversion of existing single-family dwellings into multi-family units Update the zoning code regulations to add incentive for existing multi-family home conversions to revert back into single-family units Annually identify and target neighborhoods for cleanup assistance, code enforcement, nuisance abatement and demolition of dilapidated structures Create a neighborhood identity and branding program to promote the creation of positive neighborhood identities and neighborhood groups focused on the improvement and celebration of their neighborhood Develop a home maintenance and improvement program to assist homeowners and landlords in fixing and improving their neighborhood Promote local home ownership education programs that highlight and explain the benefits of home ownership, the steps necessary to become a successful homeowner and basic home maintenance and improvement skills Perform a housing study that comprehensively reviews and inventories the existing housing stock to identify target redevelopment strategies Work with local landlords and Ottumwa Housing Authority to improve rental properties so that they can qualify for the federal government's housing voucher program that assists low-income families, seniors and people with disabilities to afford decent housing in the private market			

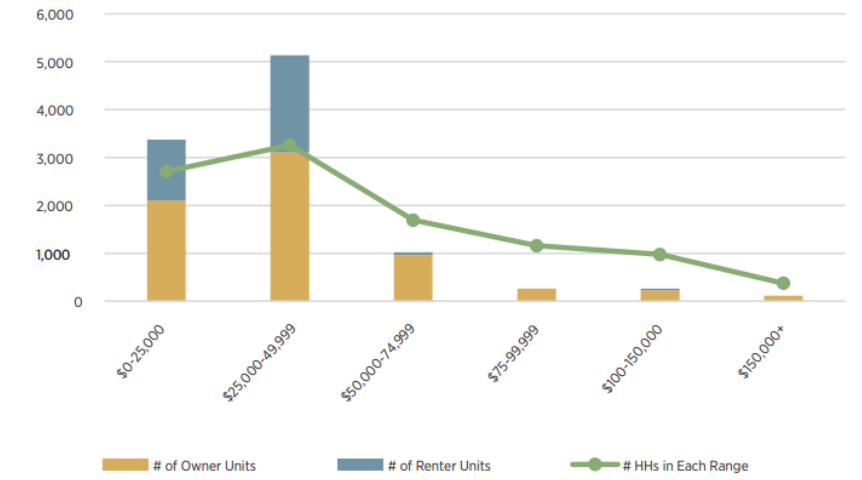
Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 1 Maintain and expand the existing parks and open space system, recreation programs, and trails network	Improve community outreach and communication regarding home improvement and housing assistance programs available to Ottumwa residents and residential developers			
Goal 2 Foster investment and growth in new housing in all categories and prices	Create an enhanced program to acquire and award blighted or vacant residential lots for in-fill development Identify in-fill areas for new single family, townhome, apartment, and senior-oriented housing Develop a tiered incentives program and policy to support new residential construction Continue to seek partnerships with the development community, such as Rippling Waters, to build new housing			
Goal 5 Update the City Zoning and Subdivision regulations to reflect the goals and recommendations of the Comprehensive Plan			Craft new zoning districts and regulations to encourage and support downtown and mixed-use development, and purpose-built accessory dwelling units on single-family residential properties intended for use by extended family members	
Goal 11 Develop and expand upon arts & cultural local economic development opportunities for Ottumwa residents and businesses			Provide cultural assets such as public art in affordable housing developments	
Goal 2 Make Otumwa livable and enjoyable for people of all ages and abilities				Promote the development of accessible, senior housing across the continuum of care and accessible housing for people with disabilities
Goal 4 Treat all Ottumwans fairly and justly				Investigate and partner with developers to provide appropriate incentives for housing projects that include units for permanent and transition housing for people experiencing homelessness or who are at risk of homelessness Build new housing, incentivize rental housing renovation and explore a “legal source of income” ordinance to ensure that all Ottumwans who qualify for federal housing choice vouchers can find quality places to live

Our Ottumwa 2040 Comprehensive Plan

Housing – Two Year Update

Housing has been one of the greatest areas of change and progress since the Comprehensive Plan was adopted. In February 2022, the Council adopted the *Ottumwa Housing Plan*. The Housing Plan was funded by the Legacy Foundation and provide a holistic evaluation of housing market and conditions around housing in Ottumwa. The study leveraged market research, public polling, focus groups and the professional experience of RDG Planning and Design to make findings and actionable recommendations.

Chief among the findings was the identification of a so-called "Missing Middle" phenomenon in the Ottumwa housing market. The graph below visualizes that phenomenon. Because there is a significant lack of housing targeted toward middle-earners, families with annual incomes between $50,000 and $150,000, these middle-income families compete with lower-income families. This raises the cost of housing for lower-income Ottumwans and leaves many middle-income families unhappy with their housing situation.



Source: American Community Survey 5-Year Estimates; RDG Planning & Design

In addition to the Missing Middle, the study found housing needs in nearly all categories and price points. Because Ottumwa's housing production has lagged so far behind its need, and because the 2020 Census supports the expectation of moderate population growth, the Housing Plan recommended creating 500 units of new housing before 2030.

To assist in achieving this goal, community partners have come together to launch Mission 500. This working group brings together government, nonprofits, bankers and developers. Coordinated by the Legacy Foundation, the group has already demonstrated appreciable success in bringing advocates together to advance projects and collaborate on policymaking.

The Housing Plan contained specific, actionable policy recommendations. These include:

- Ramp up a non-profit developer like Rippling Waters;
- Provide incentives for medium-density infill development;
- Provide Gap Financing to close the distance between the value of a new project and the cost to complete it;

- Community campaigns to build ownership, hope and pride at the neighborhood level;
- Workforce development.

Several actions have already been taken to support these recommendations. In 2022, the Council adopted a far-reaching Zoning Code amendment which reduced barriers to housing development. One major step was the creation of the Housing Opportunity Infill use type. Medium density infill development which conforms to an approved site plan can be completed on nearly any infill lot in the City without need for variance or other review. Work is already underway completing these prototypes and the Council will review additional incentives for demonstration projects which put the prototypes into use.

With funding support from the Legacy Foundation, the City launched Build Ottumwa in 2022. The program provides a $10,000 economic development grant to anyone who completes a new single-family home valued at $125,000 or more. These grants will contribute toward the goal of developing Gap Financing.

Finally, the Blocks to Neighborhoods program retooled the existing Healthy Neighbors program to provide an incentive for homeowners to complete exterior home renovation projects. The program provides grants up to $2,500 with only a 50% match for qualifying projects. However, homeowners are required to submit an application with at least two of their neighbors. These grants seek to have a neighborhood-level impact while catalyzing neighborhood cooperation and pride.

As the City continues to bring together the right mix of incentives and tools, housing projects are already making progress throughout the community. On Bonita Ave., 108 units are under construction in a project instigated by JBS to address workforce housing shortages. JBS has already launched a purchase, rehab, resell program which improves homes throughout the City while giving their employees opportunities for homeownership. Downtown, seven new apartments received economic development grants from IEDA in 2022.

While much work remains, the City has set ambitious but achievable goals for housing over the course of the comprehensive plan. Progress toward those goals remains promising.

7 CHAPTER Economic Development

EMPLOYMENT CONDITIONS

Overall Employment Growth Trends

Since the trough of the national recession, in 2010/2011, there has been positive annual employment growth nationally, as well as in both the State of Iowa and Wapello County. Since 2001, Iowa's cumulative job growth has lagged below the national rate. Because of this, the nation has 18 percent more jobs currently (as of 2017) than in 2001, while Iowa has seen growth of 8.8 percent.

Statewide job growth has in fact been quite uneven across urban and rural areas, with its largest cities (especially the Des Moines metropolitan area) experiencing very robust growth, while most rural counties remained stagnant or in decline. Consistent with this urban/rural divide, Wapello County's overall employment growth trend has generally followed the ups and downs of the national and state economy, but with much more subdued growth levels over the recent post-recessionary period. The county's total job count in 2017 was approximately the same as it was in 2001 (down by 0.9 percent in total).

Manufacturing Employment Growth Trends

The good news for Wapello County, however, can be found by looking at its largest and best-paying employment sector, manufacturing. Comparing county manufacturing job growth to the statewide and national trends, again indexed to a 2001 base year, Figure 7.2 shows that Wapello County has experienced a 5.7-percent cumulative increase, while both the state and nation saw double-digit declines (-8.8 percent and -21.4 percent, respectively).

So, even though there was no net post-recession increase in Wapello County manufacturing, this remarkable comparison of manufacturing sector health relative to the state and nation, especially since 2001, highlights a central reason for Ottumwa's ability to stave off the more serious population losses experienced by many rural Iowa communities.

Figure 7.1 - Percent Employment Growth since 2001
Wapello County vs Iowa & U.S.

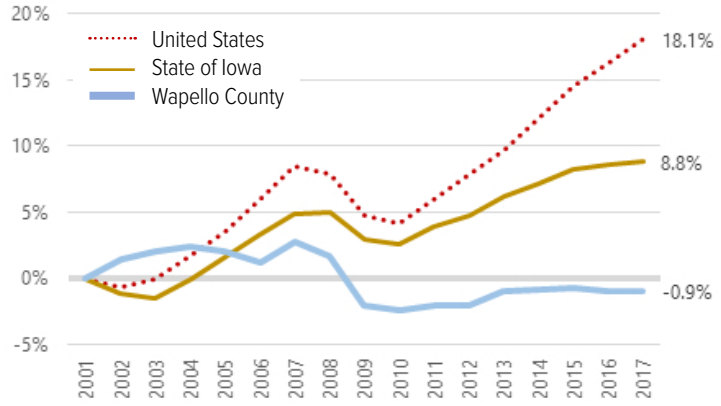
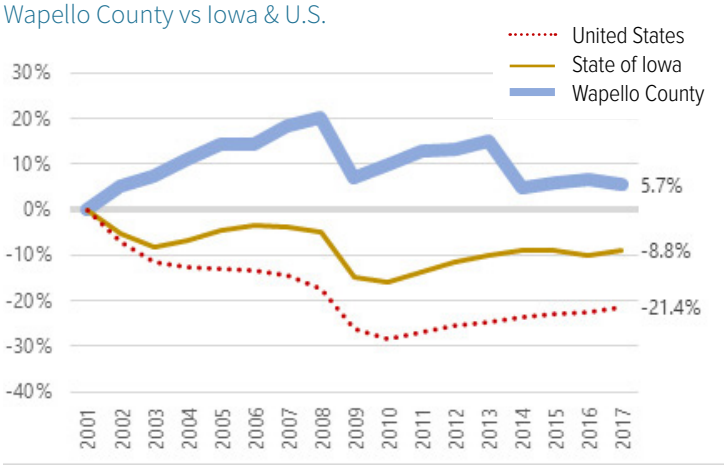


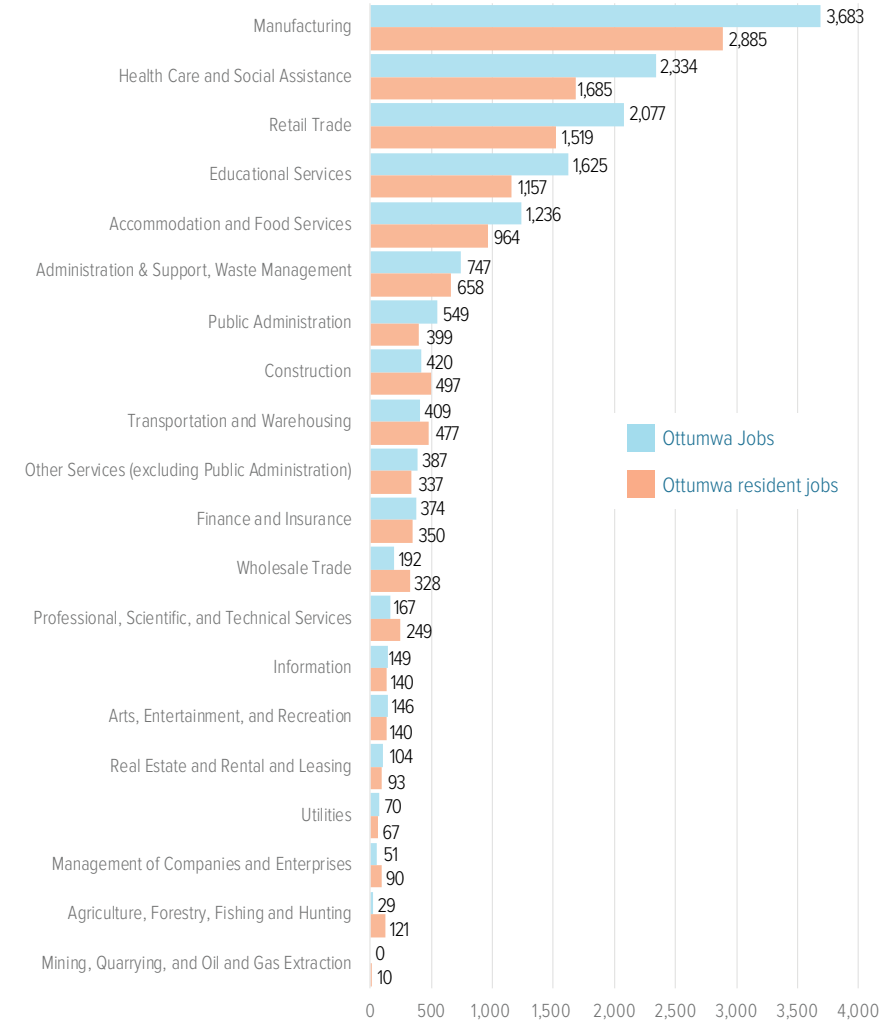
Figure 7.2 - Manufacturing Employment Growth Since 2001
Wapello County vs Iowa & U.S.



Ottumwa Employment Profile

Figure 7.3 shows employment by industry, specific to the city of Ottumwa – both in terms of jobs held by Ottumwa residents and jobs taking place within Ottumwa workplaces. From both perspectives, Manufacturing emerges as the top employment sector for the city. As of 2017, approximately 3,683 people worked in Ottumwa manufacturing firms, while some 2,885 Ottumwa residents worked in the manufacturing sector (either in Ottumwa or outside). Three other sectors have more than 1,000 employees both living in Ottumwa or working in Ottumwa: healthcare, retail and educational services. The accommodation and food services (lodging/dining) sector rounds out the top five industry sectors, with nearly 1,000 resident workers and 1,200 jobs in Ottumwa workplaces. Of those top five industries, retail and dining/lodging stand out as having relatively low wages, while manufacturing, healthcare and education are generally much better-paying.

Figure 7.3 - Ottumwa Employment by Industry 2017



Comparing wages earned by Ottumwa resident workers with wages paid by Ottumwa businesses, Figure 6 shows that in-town jobs are somewhat lower-paying on average than out-of-town jobs filled by out-commuting Ottumwa residents – although the differences are not extreme.

Figure 7.4 shows growth (or decline) by industry sector in employment at Ottumwa workplaces. Over the decade ending in 2017, Manufacturing grew substantially (again, especially given declines nationally and across the state), adding 171 local jobs. Retail over that same period lost 219 jobs. Overall net growth across industries was fairly flat (a net gain of 79 jobs on a base of almost 14,000 Ottumwa-based jobs).

Sector by sector growth trends for jobs held by Ottumwa residents is illustrated in Figure 7.6. From this perspective, Manufacturing is actually shown to have the greatest loss in jobs over that decade. This somewhat counterintuitive finding is likely due to a major closure or layoffs sometime around 2008 at one or more jobsites located outside the city limits but staffed largely by Ottumwa residents.

Accommodation and food services jobs increased for both Ottumwa residents and Ottumwa workplaces – growth that appears to be largely due to the Hampton Inn hotel built downtown in 2010.

Figure 7.5 - Iowa Workforce Development Regions

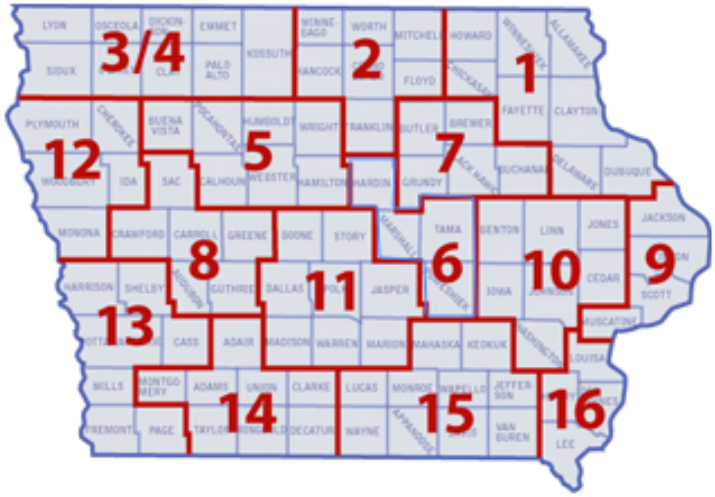
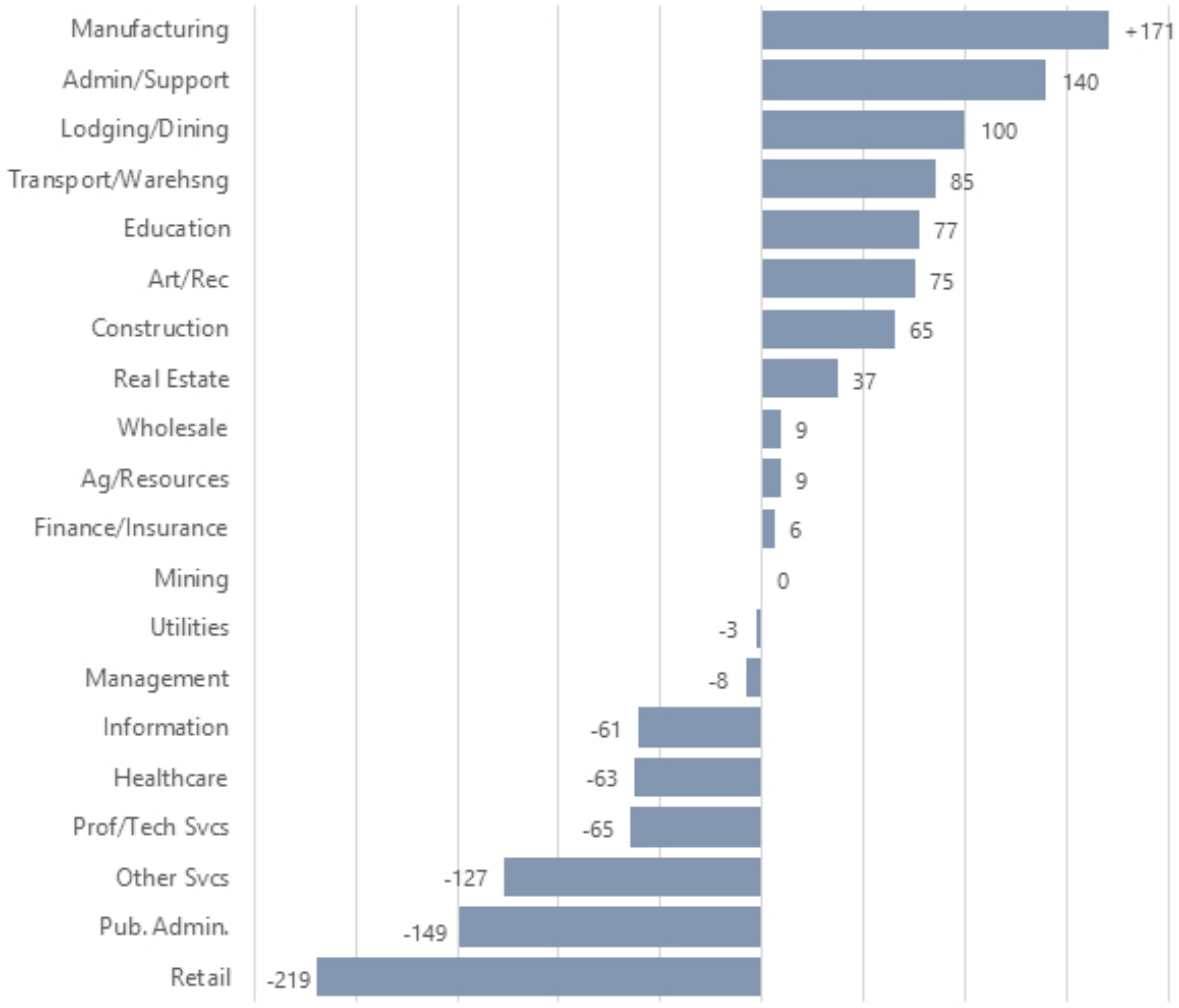


Figure 7.4 - Job Growth by Industry at Ottumwa Workplaces (2005-15)



Employment Forecasts

Through its Workforce Development department, the State of Iowa periodically produces "long-term" forecasts of future employment growth across the many industry sectors and sub-sectors. These 10-year forecasts are made for each of the state's 16 workforce development regions. Wapello County is the primary economic hub for the ten mainly rural counties in southeast Iowa making up Region 15.

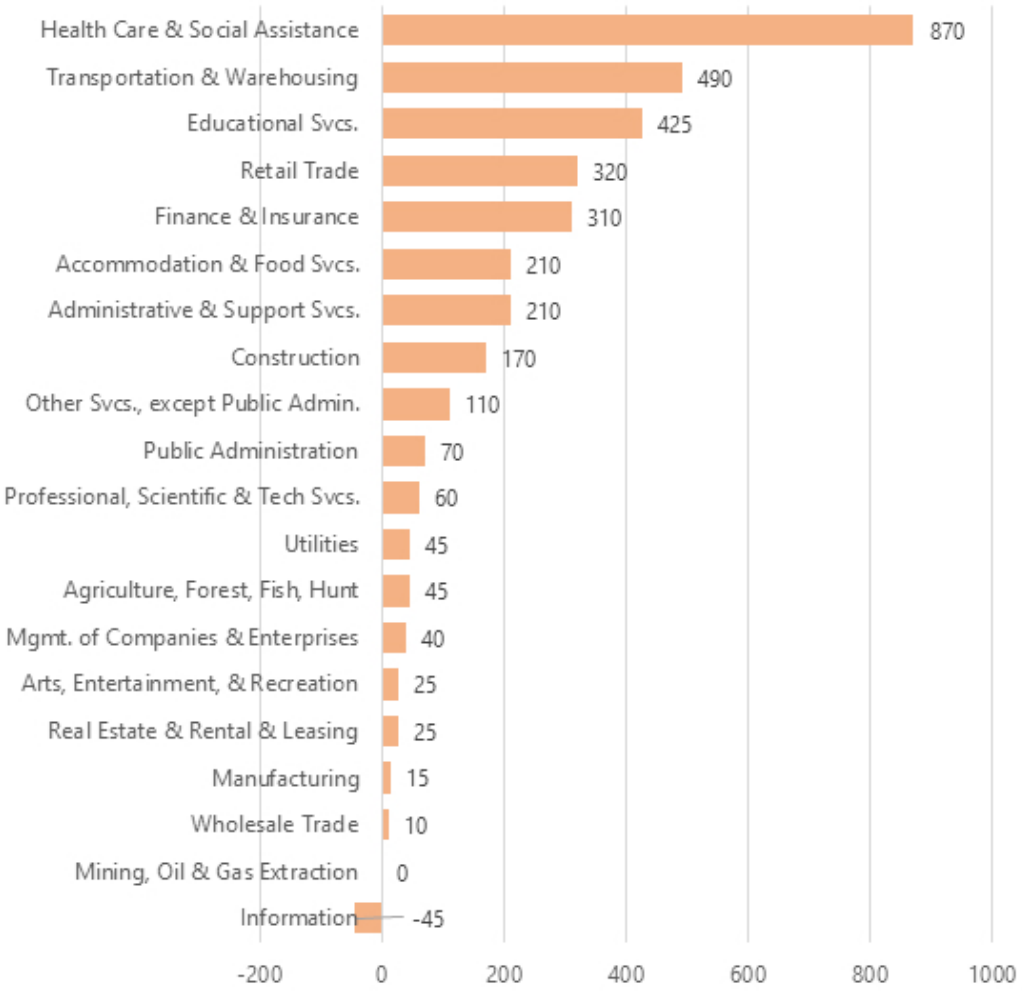
The most recent available set of employment forecasts covers the period from 2016 to 2026. Iowa Workforce Development projects at least some growth across (almost) all industries for Ottumwa's region. The overall projected addition of 3,750 jobs would represent an average annual employment growth rate of 0.6-percent for the ten counties in Region 15.

The leading single growth sector is projected to be healthcare, with an expected 870 new jobs over the decade. Medical industry growth is driven (both here and across most national markets) largely by the aging Baby Boomer population bulge. As that segment enters their senior years, demand for medical and related social services are likely to rise across the board.

The transportation and warehousing sector is expected to add almost 500 jobs, reflecting the strength of the trucking logistics industry. Two-thirds of projected Region 15 logistics job gains are within the warehousing and storage subsector, with the remainder in truck transportation. While not located on an interstate highway, Ottumwa lies at a confluence of major U.S. and state highways (including US 34, US 63 and IA 149) and multiple active rail lines, giving it a locational advantage for capturing the lion's share of that growth.

Education, retail and finance/insurance sectors round out the top five regional industries in terms of forecast growth. The 310 projected finance sector jobs have the potential to support a modest amount of new office space absorption. Manufacturing and wholesaling are expected to hold steady but not add significant jobs over the next ten years. As explained previously, even very moderate manufacturing growth in the region could potentially surpass the state and nation, which have experienced net losses in manufacturing since 2001.

Figure 7.6 - 2016 to 2026 Net Added Jobs



MARKET ANALYSIS CONCLUSIONS

Leland Consulting Group has analyzed supply and demand conditions, along with demographic and economic factors to inform the update of Ottumwa's Comprehensive Plan. Preliminary findings in this report should help to "right-size" the varied residential, commercial and civic land use elements. That is, by providing a range of absorption projections across major real estate categories, this analysis will aid in visioning and planning efforts to maximize the quality and value of the City of Ottumwa's long-term development, at a quantity and pace consistent with market realities.

The following absorption conclusions focus on the near-term (10-year) future, rather than the full 25-year comprehensive plan horizon, as demand quantities become highly uncertain beyond year ten.

Figure 7.7 - 10-Year Attainable Market Demand by Land Use Category

	Zero population growth scenario	Moderate population growth scenario (0.2% annual)	
	Opportunities	Estimated Regional (8-county) Demand	Estimated Capture of Regional Demand
Residential			
Ownership	Limited to replacement of obsolete stock and shifts toward smaller, low maintenance units in walkable setting. Some growth potential in senior housing, including independent Considerable below-market (including workforce & moderate income) demand across all scenarios.	720 Units	240 units
Renter		340 units	110 units
Retail	Selective re-tenanting and property rehab, but no net new space demand.	190,00 sq. ft.	65,000 sq. ft.
Employment Office, Industrial, R&D, Flex	Re-tenanting, but no net new demand	Potential for new demand through economic development recruitment, but highly unpredictable. Ottumwa remains a logical sub-regional hub for medical development clustering.	
Lodging	Employment-driven new market demand is low, but performance of new Bridge View events center could warrant small to mid-sized hotel as complement.		

The market analysis[1] conducted at the outset of this comprehensive plan process, together with staff and stakeholder outreach, community analysis, and other observations, all come together to inform a better understanding of Ottumwa's role in the region and its prospects for effective economic development going forward. This chapter represents a synthesis of those inputs and offers corresponding recommendations in the form of a set of planning goals, policies, and action items geared towards furthering Ottumwa's economic progress.

Before laying out those recommendations, we present an organized summary of market and related learning to date, in the form of a Strengths-Weaknesses-Opportunities-Threats (SWOT) Analysis.

[1] Included in its entirety as an appendix to this plan document.

ECONOMIC DEVELOPMENT SWOT ANALYSIS

This SWOT analysis is not a comprehensive listing of Ottumwa's assets and challenges. Instead, the following is a highlighting focused on those factors seen as directly impacting the city's strategic standing in the context of economic development – Ottumwa's own strengths and weaknesses, alongside the opportunities and threats in the broader economic environment that may impact its chances for success. We define the key terms for this exercise below. Note that, in the spirit of a traditional SWOT analysis, opportunities and threats are defined as being things external to Ottumwa (as opposed to simply uncertain).

- Strengths: assets of Ottumwa that give it an advantage over others.
- Weaknesses: potential liabilities of Ottumwa that place the city at a disadvantage relative to others.
- Opportunities: elements or trends in the environment that Ottumwa could exploit to its advantage.
- Threats: factors or trends in the environment that could hinder achievement of goals

Figure 7.8 - Economic Development SWOT Analysis

	Potentially Helpful	Potentially Harmful
Internal to Ottumwa	**Strengths** • A big "small town" -- **economic bullseye** for large geographic area with multi-modal options (7+ counties) • Good "bones" **downtown** with signs of economic and creative life • Resilient **manufacturing** sector – outperforming state & nation • Residential **diversity** (of incomes, ethnicity, housing stock) • **Riverfront/oxbow** aesthetics & amenities – remarkable abundance of parks • **Legacy Foundation** – outstanding philanthropic resource and action catalyst for town of this size • **Bridge View Center** – excellent civic, cultural and business resource with regional draw potential • **Indian Hills Community College** – great regional resource for applied higher ed and training • **Regional Airport** and nearby land around US 63 and Hwy 149 intersection –very marketable economic development asset for potential industrial or flex users	**Weaknesses** • **Low growth** for population and employment (though holding ground better than many rural areas) • Share of **moderate-to-low income** residents – presents some housing and social challenges & makes certain development types more difficult • **River** poses infrastructure challenges (floodways & expensive crossings) • **Small town** cons, including perceived limits to arts, culture, education, urban amenities – will deter certain firms and would-be hires from relocation (despite pros of manageability, affordability, friendliness, etc.) • **Geographic isolation** in a smaller rural county makes the cost of construction and new development higher
External to Ottumwa	**Opportunities** • **Runaway urban housing prices** across U.S. & Midwest raises affordability appeal of Ottumwa • **Aging demographics** of Boomer population bulge ups demand for senior-friendly housing and medical services – Ottumwa well-positioned geographically to serve as **rural regional healthcare hub** and **senior housing destination** with walkable town amenities • **Amtrak** line connecting Chicago to California (and Omaha) – with moderate ridership currently but that could rise with higher gas prices, helping build awareness of Ottumwa's downtown & riverfront station area.	**Threats** • **Employment concentration** – relatively small number of large facilities & corporations, raises stakes of departures or downsizing • **Increased automation**, especially in manufacturing – great for firm productivity & profit, but lowers dependence on mid-skill labor (Ottumwa's sweet spot) • **Development in unincorporated fringe** – (Eddyville vicinity) mostly well-placed heavy industry but future clustering may compete with potential north Ottumwa sites & create unnecessary commutes • **Overdue contraction** – national economy has been expanding for 10+ years, making recession likely • **Internet commerce** weakening the profitability of brick & mortar retail (incl. older malls like Quincy Place)

ECONOMIC DEVELOPMENT GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Economic Development Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 1 Continue to enhance and improve the Downtown and Riverfront		Continue to coordinate and partner with downtown interests to implement downtown and riverfront improvements and programs Prioritize downtown, the Amtrak station, and the riverfront for investment in redevelopment, new development and public improvements that will improve the quality of life for all residents Support and foster the establishment of new restaurants, a hotel connected to the Bridge View Center and upper story housing		
Goal 2 Maintain and expand the existing parks and open space system, recreation programs and trails network		Implement the Ottumwa Bicycle and Pedestrian Plan to expand the trails system within natural areas and seek opportunities to promote the trail system in Ottumwa including the addition of trail-centric retail where possible		
Goal 1 Secure an economic leadership role for Ottumwa in its seven-county region			Seek out opportunities for advancing Ottumwa's economic leadership role Leverage Bridge View Center as a venue for regional economic planning events Consistently lobby for regional infrastructure decisions that emphasize Ottumwa as a regional hub	
Goal 2 Focus on new industrial and commercial development to grow the community's tax base			Continually evaluate and update the package of economic development incentives available to new companies and business expansions Maintain economic development information and materials on the City and Legacy Foundation websites to market the strengths of Ottumwa as a place to do business Identify and target new venues in which to market Ottumwa to a broad array of businesses	

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 3 Retain quality employers and make Ottumwa their first choice for any business expansion			Pursue open and mutually supportive relationships with existing Ottumwa employers Proactively solicit feedback on employer goals, needs and complaints Include employers early and often in community-wide planning and policy discussions	
Goal 4 Grow and support the community's labor pool			Work alongside existing programs to proactively solicit feedback on employer goals, needs and complaints, include employers early and often in planning and policy discussions, and continue an open and mutually supportive relationship with existing Ottumwa employers Implement the recommendations included in the Regional Workforce Attraction plan to market Ottumwa, including a branding/marketing plan	
Goal 7 Continue to partner with the Legacy Foundation and Indian Hills Community College to support job training and business development / incubation				
Goal 8 Invest in Airport infrastructure for commercial and industrial development			Conduct a feasibility study for the Ottumwa Airport to assess future expansion and development possibilities	
Goal 10 Promote a viable and economically resilient Quincy Place area, with updated tenants, improved pedestrian appeal, and a broader mix of uses			Engage the mall owners in discussions of mall activation and re-tenanting and explore public and private-sector investments in updated design and redevelopment of aging malls	
Goal 4 Develop and expand upon arts & cultural local economic development opportunities for Ottumwa residents and businesses			Integrate more public art and streetscapes to increase traffic to underutilized or struggling areas or corridors	

Economic Development

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 1 Invest in women, immigrant, veteran and minority entrepreneurs				Identify partners that help develop, incentivize and incubate women-, veteran-, racial minority- and immigrant-owned businesses Distribute the City's development manual to local organizations representing immigrants and other minorities and devote staff time and resources to helping minority entrepreneurs access development incentives Identify strategies to help support minority-owned restaurants and retail stores in Ottumwa
Goal 3 Celebrate diversity in our community				Continue to be a Home Base Iowa community by welcoming veterans and providing the services they need to connect with career opportunities, start businesses or transition to the civilian community

Our Ottumwa 2040 Comprehensive Plan

Economic Development – Two Year Update

In 2022, the Ottumwa economy continues to recover from Covid-19 pandemic. Unemployment has rebounded to rates lower than before the pandemic, but as a result, employers struggle to find workers to fill vacancies. Inflation affects all Ottumwans, including the city government as construction and material costs remain high.

There are, however, many bright spots in the recovery. Superior Machine and MAAX Swim Spas announced their intent to locate to Ottumwa in 2021. These new manufacturers will produce 200+ new jobs.

Over the last two years, the City has managed to reduce the property tax levy in each subsequent budget. Eliminating the transit levy and reducing trust and agency costs has driven this progress. A lower levy will help Ottumwa compete for industry and commerce.

Under new leadership, Greater Ottumwa Partners in Progress has convened an Economic Development Committee bringing together business, nonprofits and decision-makers to work on pressing issues. The group has a special focus on new retail recruitment. With the new Cobblestone Inn and Suites at Bridge View Center and the Wildwood Retail Center under construction, Ottumwa sees opportunities for retail growth.

Finally, the City has contracted with Retail Strategies to provide retail recruitment services. This three-year program will use Retail Strategies professional expertise and contacts to put Ottumwa real estate in front of national site selectors for major retailers. Retail Strategies will also complete a strategic plan for the Main Street and Church Street business districts and assist with developing entrepreneurs.

8 CHAPTER Community Character

COMMUNITY CHARACTER OVERVIEW

Community character encompasses all those features that make a community unique. There are some common themes in most city's community character chapter, but the list of traits that make Ottumwa different from other communities is special to Ottumwa alone. The community character features for Ottumwa include:

- Neighborhood preservation
- Diversity & culture
- Downtown improvements
- Access to Des Moines River
- Creating positivity
- Code enforcement

Neighborhood Preservation

Ottumwa is a historic community with many older, established neighborhoods that have a built-in charm and quaintness not always offered in newer residential areas. These neighborhoods have older homes, mature trees, and are often located close to amenities such as downtown Ottumwa or a neighborhood park. Older homes can often serve as an important source of affordable housing in a community due to the high cost of new construction homes. However, older neighborhoods can include too many homes that need updating or maintenance and that may not have the kind of amenities desired by households entering the housing market or moving into Ottumwa. Home rehabilitation programs enable residents to better afford home improvements by financing or incentivizing improvements.

The City may also improve existing neighborhoods by identifying locations suitable for infill – be it single or multi-family or even a mixture of uses including commercial. New development can also help bring excitement and additional investment to a community as other residents see what can be possible with their own lot. A housing study that includes a detailed inventory of existing home conditions could help identify areas for infill, houses warranting investment and those potentially worth of demolition.

Neighborhoods may improve is when a sense of identity and community is established. Several community members mentioned that Ottumwa's neighborhoods lack branding or a strong sense of identity or boundaries. While neighborhood identities may exist in the community, they can be formalized through the creation of neighborhood districts or associations. Once established, these associations can help identify improvements and opportunities and connect residents with one another. Long-term, branding and signage strategies can be implemented that help make neighborhoods more attractive for existing and future residents.

Diversity & Culture

Ottumwa is a diverse community that has a significant Hispanic or Latino population as well as several other cultures with a growing presence. While many small to mid-size communities in rural counties of Iowa have experienced continued extended population loss in the last fifty years, Ottumwa has managed to stabilize its population at around 25,000. The growing diversity of Ottumwa presents an opportunity for the City to embrace and celebrate its diversity, and possibly continue to increase population by being a community that is welcoming to immigrants and different cultures. The community should encourage members from a diverse set of cultures to become more involved in civic engagement by running for elections, serving on boards or commissions or simply attending public meetings. The community may consider creating a Spanish version of the city's website or community calendar to accommodate for the over 16% of homes that do not primarily speak English at home. Large local employers such as JBS have embraced the multicultural roots of its employees by having staff that speak the many languages practiced by its employees and through the hiring of a diversity coordinator. A diversity coordinator or commission at the city-level could with this endeavor.

Downtown Improvements

Many efforts are underway to improve downtown Ottumwa for residents and visitors including streetscape and façade improvements and a large plan for the area around the Amtrak Station. These efforts should continue to be supported by the City of Ottumwa. The historic downtown of Ottumwa is a built-in amenity that many other communities seek to replicate through the building of town squares or centers. Ottumwa's downtown offers an authentic and charming opportunity to attract residents and visitors to the community. Efforts to ensure downtown Ottumwa remains a place people want to spend time is paramount to the long-term success of the community. Efforts underway, such as the River Renaissance Initiative, buttressed by the City and the Legacy Foundation partnering in application for a Federal Build Grant, seek to maximize the land use potential of the downtown area adjacent to and surrounding the riverway and the multimodal hub of the historic train station. Developments in this area are planned as mixed-use, with elevation commercial and upper story living uses being complemented by enhanced community gathering, entertainment, public events, and transportation uses.

Restaurants and retail boutiques make for ideal downtown tenants as they bring in people throughout the day and evening, allowing downtown Ottumwa to serve as a true community-serving downtown core. When downtowns are filled predominantly with office or similar day-time only services, the evening life that is vital for restaurant attraction and retention can sometimes be hindered. Upper-story residential is also made more attractive when first-floor tenants are retail and restaurants that improve the livability and walkability of the downtown. Having more people present in the downtown in the early evening hours can also help with safety concerns due to the number of eyes on the street which improves the downtown experience for all residents, especially those choosing to live near or in downtown.

Access to Des Moines River

Ottumwa has an abundance of parkland, greenspace, trees and river access that separate the community from others of similar size and demographic make-up. Ottumwa should continue to promote and work to enhance the community's access to nature and outdoor activities. Outdoor activities can help improve the quality of life for existing residents, be an enticement for new residents, and attract visitors and tourism to the community. Proposed developments such as the riverfront project proposed by Vandewalle and Associates (further described in Chapter 9 - Land Use) will help better connect residents to this water feature. Expanded and improved trail access will also help. The proposed "Electric Park" included in the proposed riverfront redevelopment will also improve access to nature and the Des Moines River.

Creating Positivity

Many residents that participated in the public engagement for the Our Ottumwa Comprehensive Plan identified negativity among residents as a major impediment to future growth and development in the community. They described a sense of pervasive pessimism that can sometimes dampen positive change or successful outcomes in Ottumwa. This belief was supported by the low quality of life numbers indicated on the community survey which suggests people are unhappy with the community today. While it is difficult for a community to reverse negativity directly, there are certain actions or initiatives that could be done to help combat the actual or perceived negativity among residents.

Positive communication and marketing can help the community focus on the positive things happening in their community. This could be accomplished through an enhanced social media presence and/or a newsletter delivered to the community that highlights the improvements and accomplishments of the city, local businesses and residents. Another way to promote positivity is through periodic surveying and focus groups with residents to listen and work to address complaints. The city should also continue to prioritize maintenance of city infrastructure such as streets or enforcement of code complaints to address some of those easily identifiable issue areas. Long-term, a healthy economy with good wages can also do a lot to improve the quality of life in a community by improving positivity and confidence over time.

Code Enforcement

Throughout the planning process, code enforcement issues were brought up as a major concern amongst residents. While individually, a single code complaint may not seriously detract from the overall quality of life in a community, over time the buildup of code compliance issues can create a significant long-term effect on the overall view of a place. Some code enforcement can be aesthetic while others can be a more serious health and safety issue. The aesthetic code enforcement, while mainly cosmetic, can create negative momentum in a neighborhood that encourages or enables other property owners to allow their property to become similarly degraded. Over time, these aesthetic complaints could become a more serious health and safety issue. Health, safety and structural code enforcement need to be addressed directly and swiftly to ensure the health and safety of residents. The City should continue to be diligent in identifying and addressing code enforcement to improve distressed neighborhoods. Neighborhoods that are maintained can improve quality of life and build community character both at a neighborhood and community-wide level.

Arts & Culture

Arts and culture planning is a place-based strategy to grow culture and art assets throughout a community. By supporting the arts through expanded support and funding for programming, services and facilities, the City of Ottumwa would be making a long-term investment in the social equality and economic development of the community. Arts and culture include everything from public art (sculptures or murals, for example), to live performances (plays or orchestras), and live music in restaurants or outdoor concerts. Collectively, these activities promote social cohesion and community engagement by giving people a reason to come together and share an experience. Arts and culture investments can be a good source of local economic development planning because of residents and visitors coming into Ottumwa to experience the art and cultural offerings - all while spending money at local establishments or choosing to stay overnight in Ottumwa to see a concert or show.

Ottumwa already has a strong arts and culture community that is invested in cultivating Ottumwa's standing as a premier cultural community in southeast Iowa. There are over ten different cultural organizations and groups including Community Players, the Ottumwa Symphony Orchestra, Civic Music, City Band, and the American Gothic Performing Arts Festival. Supporting these group's efforts will help create a stronger sense of place and belonging in Ottumwa now and for future residents.

COMMUNITY CHARACTER GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Community Character Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 1 Maintain and improve the existing residential neighborhoods	Update the zoning code regulations to add incentive for existing multi-family home conversions to revert back into single-family housing units Annually identify and target neighborhoods for cleanup assistance, code enforcement, nuisance abatement, and demolition of dilapidated structures Create a neighborhood identity and branding program to promote the creation of positive neighborhood identities and neighborhood groups focused on the improvement and celebration of their neighborhood			
Goal 2 Foster investment and growth in new housing in all categories and prices	Create an enhanced program to acquire and award blighted or vacant residential lots for in-fill development Identify in-fill areas for new single-family, townhome, apartment, and senior-oriented housing			
Goal 1 Continue to enhance and improve the Downtown and Riverfront		Continue to coordinate and partner with downtown interests to implement downtown and riverfront improvements and programs Prioritize downtown, the Amtrak station, and the riverfront for investment in redevelopment, new development and public improvements that will improve the quality of life for all residents Expand the streetscape improvement program throughout downtown including the installation of lighting landscaping, wayfinding signage, street furniture and other hardscape elements Continue to improve and expand pedestrian and bicycle circulation and connectivity throughout the downtown and riverfront area		

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 2 Maintain and expand the existing parks and open space system, recreation programs, and trails network		Implement the Ottumwa Bicycle and Pedestrian Plan to expand the trail system within natural areas and seek opportunities to promote the trail system in Ottumwa including the addition of trail-centric retail where possible		
Goal 6 Preserve the historical and cultural heritage of Ottumwa		Engage community residents in a storytelling exercise to identify shared needs and values Create a community mural to celebrate Ottumwa's rich history Creatively reuse and preserve historic structures		
Goal 7 Promote community pride and stewardship of place		Complete an arts and culture master plan for Ottumwa Inventory, assess, and map all Ottumwa's artistic and cultural characteristics and places Support and promote cultural programs such as workshops, performances and interactive classes		
Goal 11 Develop and expand upon arts & cultural local economic development opportunities for Ottumwa residents and businesses			Create and provide maps, signs and other products that educate consumers on locally owned businesses Integrate more public art and streetscapes to increase traffic to underutilized or struggling areas or corridors Provide cultural assets such as public art in affordable housing developments	
Goal 1 Invest in women, immigrant, veteran and minority entrepreneurs				Identify partners that help develop, incentivize and incubate women-, veteran-, racial minority- and immigrant-owned businesses Distribute the City's development manual to local organizations representing immigrants and other minorities and devote staff time and resources to helping minority entrepreneurs access development incentives Identify strategies to help support minority-owned restaurants and retail stores in Ottumwa

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 2 Make Ottumwa livable and enjoyable for people of all ages and abilities				Continue to ensure that public works improvements make City streets more accessible to people with disabilities by providing curb cuts, safe crosswalks, places to rest, adequate and marked accessible parking spaces and sufficient sidewalk space
Goal 3 Celebrate diversity in our community				Place an emphasis on understanding and promoting local and national Black history, women's history, Native American history, LGBTQ history and the immigrant experience, and other minority groups in the development of the Historic Preservation Plan and celebrate that history not only during Black History Month, Women's History Month, Pride Month, Asian American and Pacific Islander Month, Historic Preservation Month but at all occasions throughout the year Ensure that public art projects include women and minority artists Promote community festivals and celebrations that center diverse cultures as well as educational events that promote equity Ensure that City marketing materials reflect the diversity of the community Explore honorary secondary street names and other local designations that celebrate local history and diversity
Goal 4 Treat all Ottumwans fairly and justly				Create a Spanish language version of the City of Ottumwa website and offer multiple language versions of City forms, rules and regulations Identify existing interpreting services or explore ways in which bilingual/multilingual staff or professional interpreting services can support communication when language is a barrier Review Civil Service procedures, job descriptions and hiring practices to encourage recruiting bilingual/multilingual staff to eliminate implicit or systemic bias in hiring

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 4 Treat all Ottumwans fairly and justly				Progressively review police policies, tactics and procedures to focus on equal, equitable, unbiased, fair and consistent services for all Ottumwans and assign a police department staff member to provide community engagement and communication Investigate and partner with developers to provide appropriate incentives for housing projects that include units for permanent and transition housing for people experiencing homelessness or who are at risk of homelessness Take steps to build capacity for women and minority residents to serve on boards and commissions, review meeting times and board qualifications that may create barriers to board or commission service and set measurable goals or standards to ensure that City boards and commissions have equal representation for women and reflect the diversity of the community Build new housing, incentivize rental housing renovation and explore a “legal source of income” ordinance to ensure that all Ottumwans who qualify for federal housing choice vouchers can find quality places to live Explore restoring the Ottumwa Civil Rights Commission by identifying ways in which the Commission could perform tasks that promote equity in the community rather than simply forwarding issues to the state commission Focus on authenticity by prioritizing diverse representation in community feedback during planning and ensuring the community is leading decision-making

9 CHAPTER Land Use Plan

LAND USE OVERVIEW

Land use in Ottumwa has historically been defined by the placement of the Des Moines River, the varied topography as well as the location of the main roads running through and around the community. Another important factor is likely the location of major industry in the community.

Downtown Ottumwa

Ottumwa's downtown is a major defining feature for the community and defines the land use along the Des Moines River and the area surrounding the downtown. Currently, the downtown is a mixture of civic, commercial and residential uses and mainly composed of one and two-story buildings with scattered buildings with 4 to 6 stories. Most of the streets are two-way with sidewalks and on-street parking. The neighborhoods surrounding the downtown to the northwest and southeast are mainly commercial with some residential and industrial uses. Some areas to the north of downtown are historic residential areas. The downtown area is bordered by the Des Moines River and the district is served by several river crossing bridges including the Jefferson Street and Market Street bridges. Clearly defining and protecting the boundaries of downtown Ottumwa has been incorporated into the land use plan for Ottumwa.

Industrial Land

Manufacturing is a major industry sector in Ottumwa and has been an important source of employment in the community for decades. The industrial land that houses these important jobs have influenced the land use development throughout the community but especially so along the Des Moines River streambank. Larger industrial employers such as JBS and John Deere have their plants along the river as well as many small industrial uses. Other industrial areas in Ottumwa include in north Ottumwa along Business Highway 63 and near the Ottumwa Regional Airport.

Historic Residential Neighborhoods

Ottumwa has several older, historic residential neighborhoods that are a defining feature of the land use pattern in the community. Mainly, these homes are single-family detached dwellings, many of which are very large. Over time, there has been a tendency for these older homes to be retrofitted into multi-unit home conversions available for renters. According to Wapello County tax assessor data, over 50% of single-

family homes in Ottumwa were built before 1940, with approximately 28% built before 1920. Approximately 30% of single-family homes were constructed between 1940 and 1959. Very few homes in Ottumwa have been constructed in the past several decades. This older housing stock presents as both a challenge and opportunity for Ottumwa. Strategies to protect and improve the historic housing stock as well as identifying areas for new residential growth will be critical in the Our Ottumwa Comprehensive Plan.

Des Moines River / Access to Nature

The Des Moines River runs through the middle of Ottumwa running northwest to southeast south of downtown Ottumwa. The river is inextricably linked to the history of the community as it has been the source of beauty, recreation, industry and disaster due to the flooding events common before the levy system was constructed. Despite infrastructure improvements such as the levy, a significant portion of the community remains a part of the floodplain, limiting the development potential of areas around the river and some nearby streams. This in turn as led to a significant amount of undeveloped open space along the river that provides built-in open space, tree cover, scenic views, and recreational opportunities. The presence of this natural feature has had major impacts on the land use in Ottumwa by helping to define where there is open space, where industrial land has developed, and where residents live and recreate in the community.

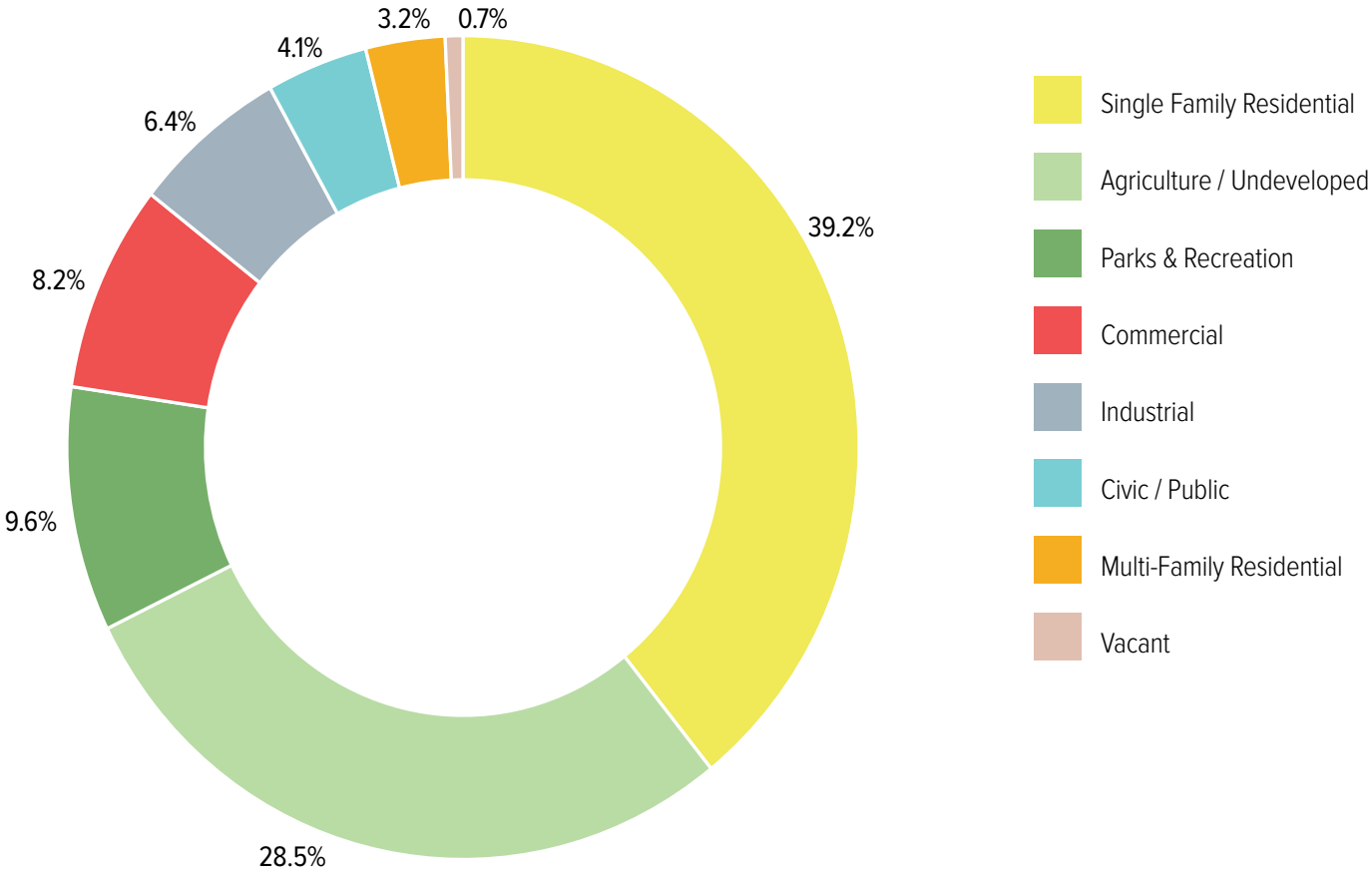
Highway 63 & Highway 34

Ottumwa land use patterns are also largely defined by the location of major transportation routes in the city. These major transportation routes generally include Highway 63, Business Highway 63 and Highway 34. Highway 63 provides Ottumwa's most direct connection to the Des Moines metro area as well as its nearest interstate access. Business Highway 149, also known as Wapello Street in the Ottumwa core, cuts through the northern half of Ottumwa from north to south until it curves right before crossing the Des Moines River. From there, Business Highway 63 intersects the last major transportation route, Highway 34. Which connects Ottumwa to regional communities south of the city. Little development in Ottumwa extends beyond the boundaries of Highway 63 while a significant amount of residential and industrial development occurs south of Highway 34.

Civic Institutions

There is a large amount public and institutional land in Ottumwa because of its role as a county seat for Wapello County. Many of these buildings are downtown providing stable tenants and employers in the downtown core. However, these civic institutions are occupied primarily during day-time hours and do not provide the ideal retail, restaurant and commercial storefronts necessary for a thriving downtown. Ideally, downtowns should be composed of a mix of restaurant, retail, office, service and entertainment uses to provide all-day activity including weekends. Certain civic institutions such as the Ottumwa Depot, the Ottumwa Public Library and the Ottumwa City Hall serve as historic anchors in the downtown creating a unique sense of place.

Figure 9.1 - Existing Land Use Composition - Ottumwa



EXISTING LAND USE

Figure 9.1 and Table 9.1 show the estimated land use breakdown for Ottumwa based on 2019 Wapello County tax assessor data. A map of the geographic distribution of land use in Ottumwa is shown in Figure 9.2. Currently, the dominant land use category within the city limits is Single-Family Residential, with 39.2% of all land uses. There is also a fairly large amount of land that is still undeveloped, open space or agricultural within the city limits. Parks & Recreation is another dominant land use category as this includes both public and private recreation land such as the country club. There is a strong showing of commercial land within the city limits today (8.2%) as well as industrial (6.4%). Multi-family residential accounts for approximately 3.2% of existing land uses though this may be slightly higher in reality due to home conversions in single-family neighborhoods.

Much of Ottumwa's existing development pattern is shaped by the topography and natural features present in the community. Areas near the river have historically been open space/parks, industry and the downtown. Much of the single-family in the north side of Ottumwa has been built in and behind the tree cover and hilly areas that line Wapello Street / Business Highway 63.

Table 9.1 - Existing Land Use Composition - Ottumwa

Housing Type	Count	Share
Single Family Residential	3,360.6	39.2%
Agriculture / Undeveloped	2,444.3	28.5%
Parks	823.4	9.6%
Commercial	700.7	8.2%
Industrial	544.5	6.4%
Civic / Public	354.6	4.1%
Multi-Family Residential	277.4	3.2%
Vacant	61.6	0.7%

Source: Wapello County Tax Assessor Data 2019

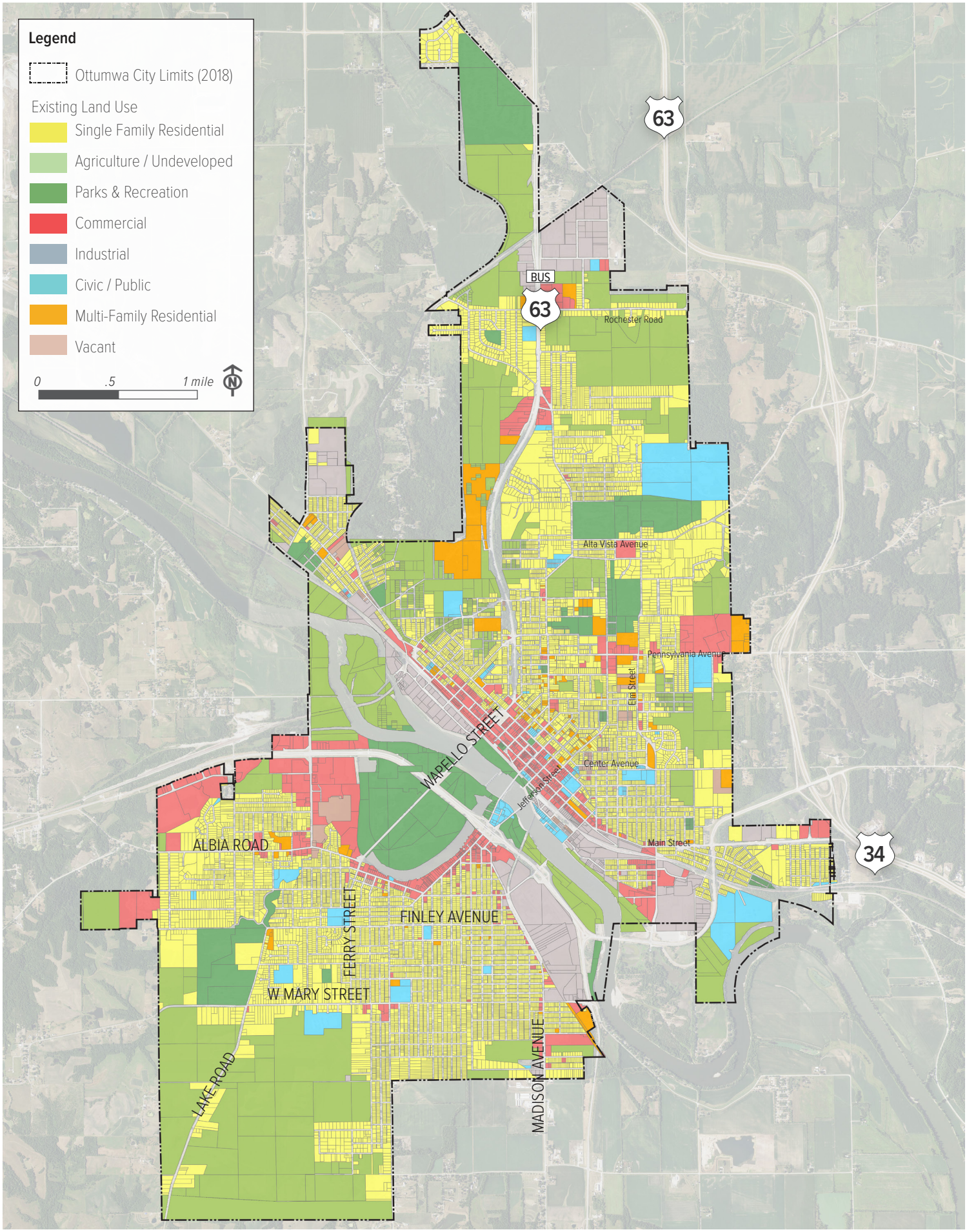


Figure 9.2 - Existing Land Use Composition - Ottumwa

FUTURE LAND USE CATEGORIES

For the Our Ottumwa Comprehensive Plan a new set of future land use categories have been created. These future land use categories have been used to create the Future Land Use Plan that will be used to guide future growth and development in the city. The future land use categories provide areas for conservation, industrial and employment growth as well as residential growth.

Future Land Use Categories include:

- Agriculture / Open Space
- Rural Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Downtown Core
- Office
- Public, Semi-Public, & Institutional
- Parks & Recreation
- Neighborhood Mixed Use
- Mixed Use
- Community Commercial
- Highway Commercial
- Industrial Business Park
- Industrial

Agriculture / Open Space

The Agriculture / Open Space land use category is for land that should remain agricultural or other very low intensity uses. Ottumwa is surrounded by scenic and productive agricultural land that should be protected from development when better alternatives exist for residential or commercial growth. This land use category helps to direct growth to those areas in the planning boundary most suitable for development and preserve wide swaths of land as agricultural and open space. Residential development in the agriculture land use category should be limited to no more than one dwelling unit per 40 acres.

Rural Residential

The Rural Residential land use category includes single-family homes, usually on large lots, located in the more agricultural and natural areas of Ottumwa. These lots may or may not be part of an existing agricultural enterprise and are typically very low density at 1 dwelling unit per 5 acres. The Rural Residential land use category also provides land to promote non-traditional housing developments such as agri-hoods and cluster subdivisions.

Low Density Residential

The Low Density Residential land use category is designed for areas with traditional lower density single-family with lot sizes ranging from 1 to 5 dwelling units per acre. This land use category will be predominantly single-family detached homes with some duplexes and single-family homes with accessory dwelling units. The district also allows for small lot and "tiny" homes to try and increase flexibility and affordability within the housing stock. Development within the category may also include religious, educational, institutional uses, and public and private recreational areas.

Medium Density Residential

The Medium Density Residential land use category is designed for townhome, rowhouses, or cottage home developments as well as single-family homes with accessory dwelling units. There will be a mixture of housing types including single-family detached dwellings, townhomes, rowhouses, and duplexes, with an overall density of between 5 to 12 dwelling units /acre. Development within the category may also include religious, educational, institutional, and public and private recreational areas. This land use can serve as a transitional use between low density residential and more intense uses such as commercial or industrial.

High Density Residential

The High Density Residential land use category is set aside for areas with densities of 12 or more dwelling units per acre. The category should mainly be apartments or condominiums with some townhomes/ rowhouses when appropriate. This housing is meant to provide alternatives to residents young and old as well as serve as transitional housing for new residents. Development within the category may also include religious, educational, institutional uses, manufactured housing developments, child day care centers, and public and private recreational areas.

Downtown Core

The Downtown Core land use category covers the historic and commercial core of downtown Ottumwa. The land use category is centered around Central Park, the Ottumwa Library and City Hall and extends down to the Des Moines River. The downtown core should consist of multi-story buildings and be exclusively first-floor retail or restaurant with limited amount of other commercial or office uses to encourage all-day activity. The second and upper floors of any building should be residential or office. Façade and streetscape improvements should be focused on this core area to enhance the pedestrian experience.

Office

The Office land use category is set aside for areas suitable for small or large-scale office developments and is designed to promote additional employment opportunities in Ottumwa. The land use category can include a combination of professional office and medical uses as well as corporate campuses consisting of single or multi-tenant buildings that are 1 or more stories tall. A limited set of support retail such as coffee shops or dry cleaners may also be included within the land use category.

Public, Semi-Public, & Institutional

The Public, Semi Public & Institutional land use category includes publicly owned land such as city hall, the library, and police/fire facilities. It also includes semi-public land such as cemeteries and the Wapello County Court House. Institutional facilities such as schools and college land also fall into this category.

Parks & Recreation

The Parks & Recreation land use category is set aside for public, private and semi-private recreational land such as parks, trails, golf courses, greenways, and recreation fields. Ownership may be private but is often public and available for use by all residents and visitors.

Neighborhood Mixed use

The Neighborhood Mixed Use land use category is for smaller-scale commercial activities occurring near lower density residential areas that serve the immediate neighborhood. The neighborhood commercial uses may also have second-story apartments or may be scattered alongside single-family homes, townhomes or apartments. The land use is meant to preserve the existing neighborhood serving commercial areas present along collector roads in Ottumwa.

Mixed Use

The Mixed Use land use category is for areas to be developed at a higher more urban density with multi-story buildings with a combination of residential, retail and office uses. Generally, retail and office uses will occupy the first-floor with residential uses above. This area is also set aside for the new proposed developed along the riverfront that includes a mixture of office, residential and retail. One such area is set aside for the new proposed developed along the riverfront that includes a mixture of office, residential and retail.

Community Commercial

The Community Commercial land use category is designed for community-serving retail, entertainment and commercial areas. These retail and entertainment uses are intended to serve the entire Ottumwa community as well as attract users from areas outside of Ottumwa. These locations should contain multiple access points and consist of larger box stores and multi-tenant shopping centers.

Highway Commercial

The Highway Commercial land use category is designed for commercial activity that may occur near major highways with the intent of providing commercial products and services to both local residents and the traveling public. This land has been strategically placed along the major interchanges in Ottumwa along Highway 64 and Highway 34. Typical uses include gas stations, car washes, car dealerships, retail opportunities, fast food and sit-down restaurants, convenience stores, hotels, banks and auto repair stores.

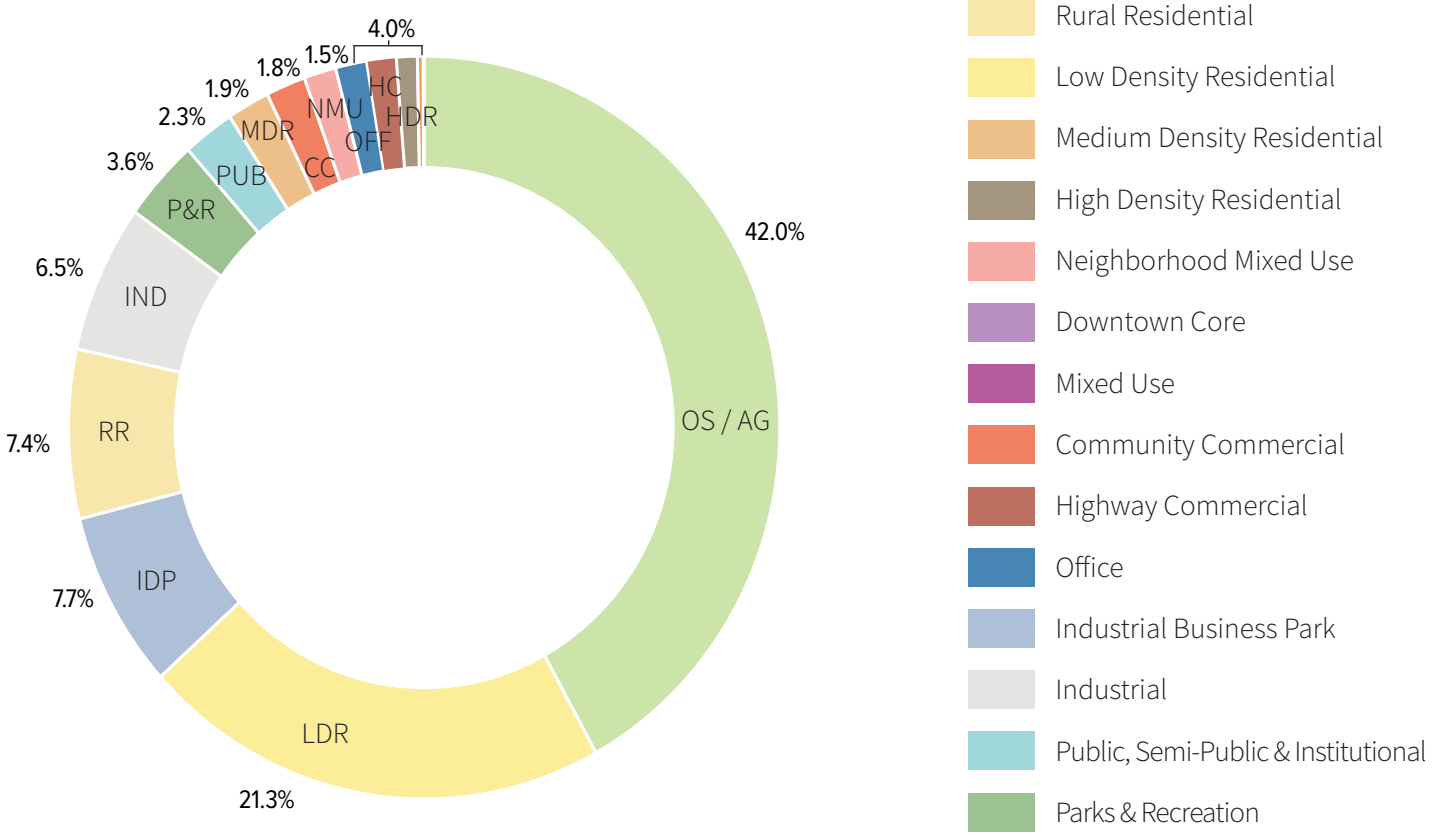
Industrial Business Park

The Industrial Business Park category is designed for business park office complexes and very light industrial uses. Business park uses include larger office complexes or corporate campuses. Light industrial uses include warehouse and distribution facilities and activities such as testing, fabrication, manufacturing, assembly or processing of materials that are in refined form and do not require transformation that creates smoke, odor, dust vibrations, soot or other noxious elements. All activities are contained within the buildings with no outdoor storage. Limited support retail or commercial activities would be allowed including gas stations, convenience stores, or coffee shops.

Industrial

The Industrial land use category is set aside for more intense industrial uses such as the large-scale assembly of goods and material processing. These uses may include outdoor storage as well as all uses allowed in the Industrial Business Park category. Generally, industrial uses should be located away from residential areas. In Ottumwa, the exception of this would be existing industrial that is adjacent to residential areas.

Figure 9.3 -Future Land Use Plan Composition - Ottumwa



FUTURE LAND USE PLAN

Figure 9.4 shows the Future Land Use Plan for the City of Ottumwa. The Future Land Use Plan represents the desired land use development layout for the community in the future. Much of the existing land use has been kept the same in the future land use plan. The plan outlines areas for more growth than will likely occur within the planning period, however, this allows for flexibility in the development of the community.

New residential areas (single and multi-family) have been proposed within the plan. The location of this new residential includes some expanded single-family in south Ottumwa and the area east of downtown near the Highway 34 and Highway 63 interchange. Other new areas for residential growth include in north Ottumwa west and east of Business Highway 63.

There is a large amount of industrial, industrial business park, highway commercial and office land uses near the interchange with US Highway 63 and US Business Highway 63 near the airport. This area is envisioned to be a major new employment and commercial area that takes advantage of the access to the highway system.

Agriculture/Open Space remains the most significant land use category, followed by Low Density Residential and Industrial Business Park. There is a fair amount of Industrial and Rural Residential land uses, each with between 6.5 to 7.4%.

Table 10.2 -Future Land Use Plan Composition - Ottumwa

Housing Type	Count	Share
Agriculture / Open Space	10,506.3	42.0%
Low Density Residential	5,336.0	21.3%
Industrial Business Park	1,939.0	7.7%
Rural Residential	1,842.7	7.4%
Industrial	1,617.8	6.5%
Parks & Recreation	896.0	3.6%
Public, Semi-Public & Institutional	586.9	2.3%
Medium Density Residential	484.7	1.9%
Community Commercial	451.7	1.8%
Neighborhood Mixed Use	364.5	1.5%
Office	355.0	1.4%
Highway Commercial	334.9	1.3%
High Density Residential	238.1	1.0%
Downtown Core	65.7	0.3%
Mixed Use	9.8	<0.1%

Source: Confluence

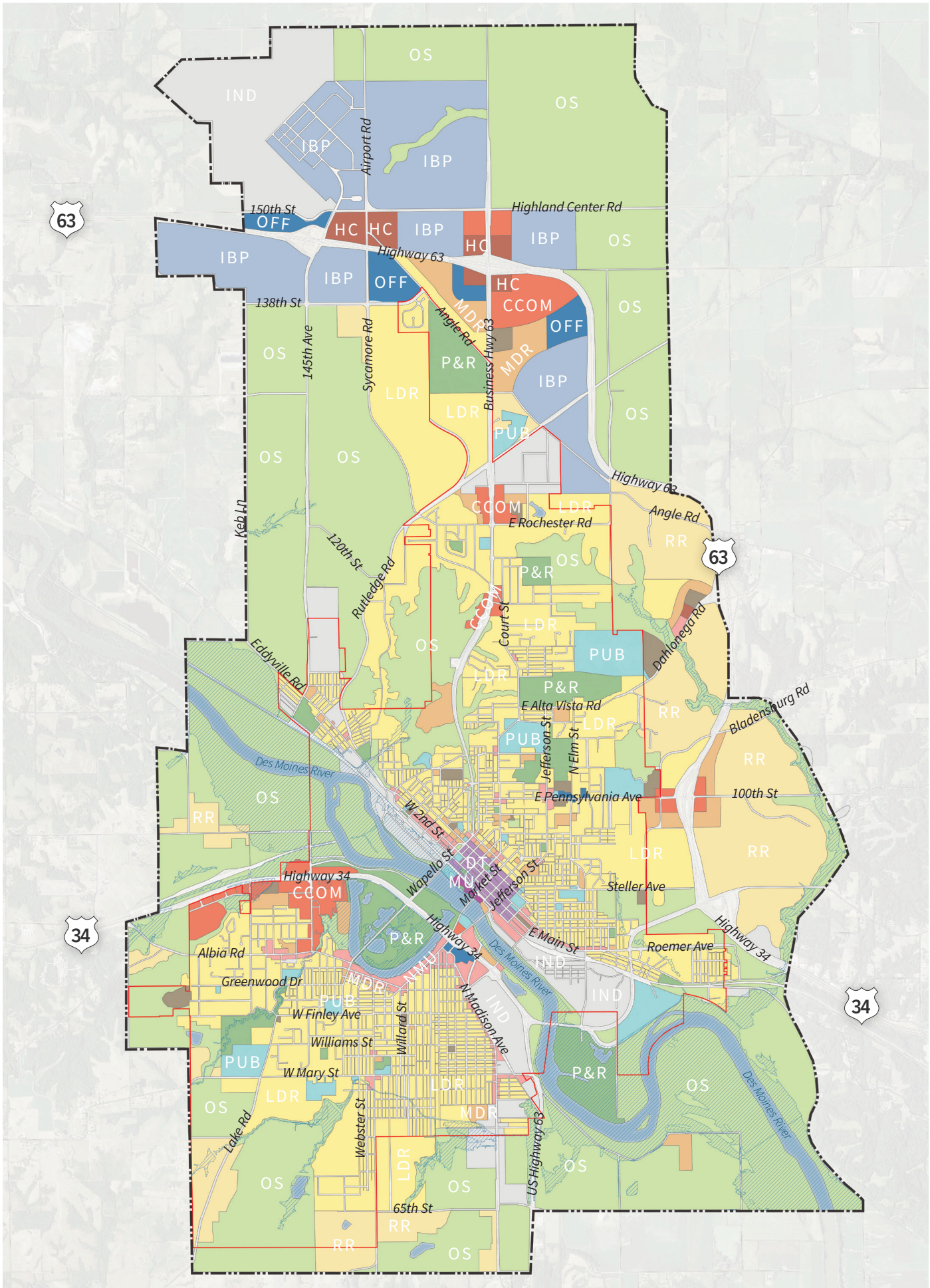
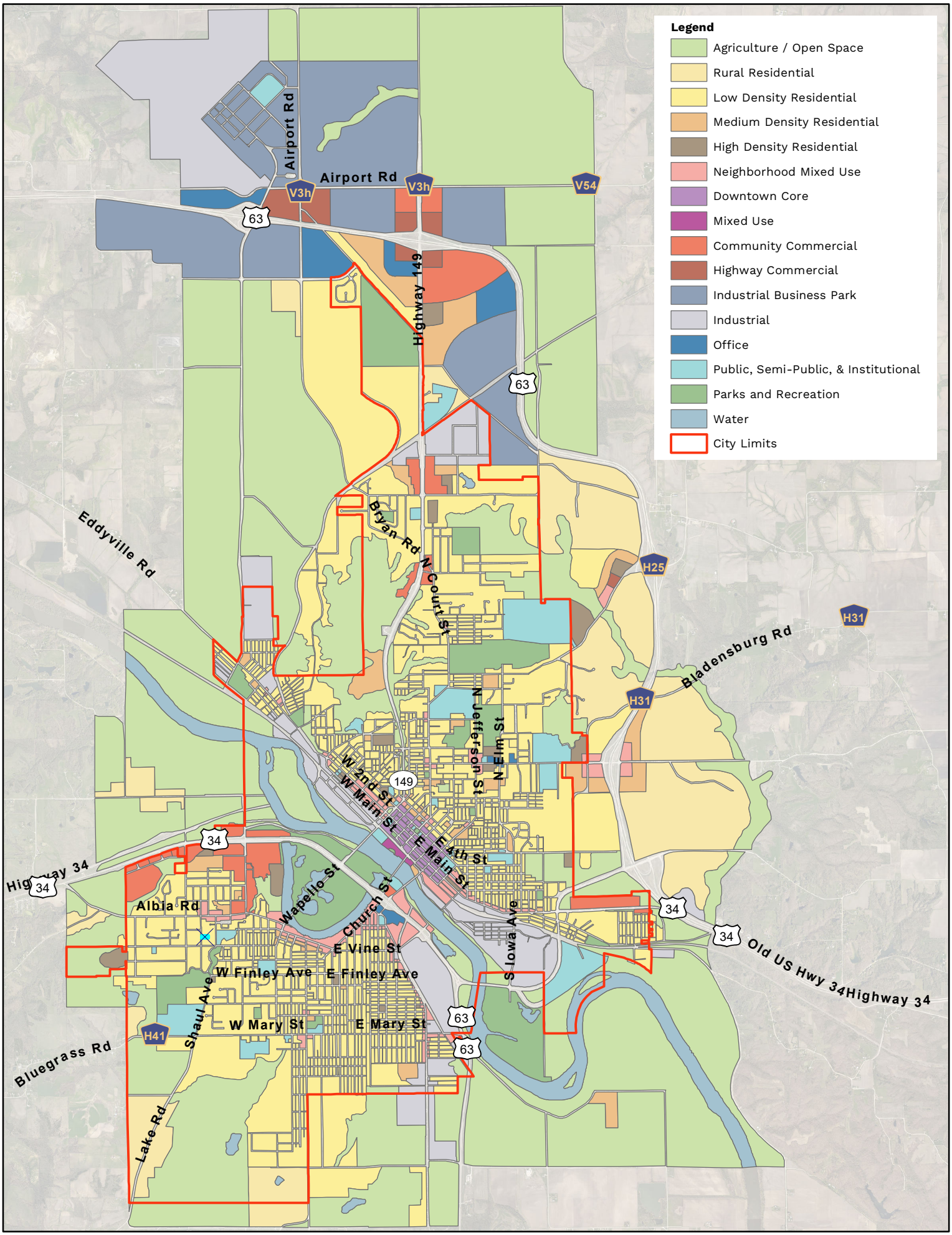


Figure 9.4 -Future Land Use Plan - Ottumwa



OUR OTTUMWA

Future Land Use Plan (Amended October 4, 2022)

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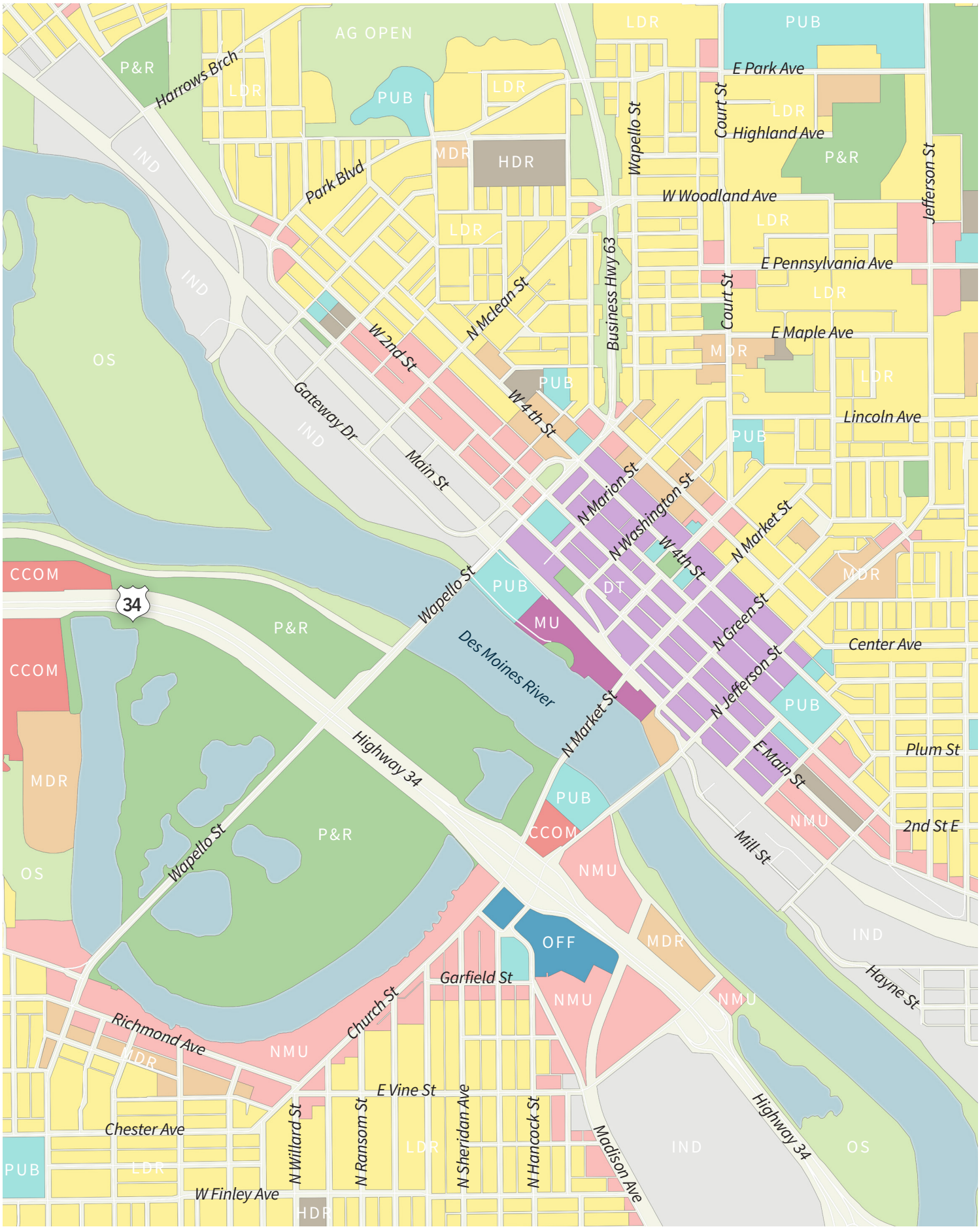


Figure 9.5 - Future Land Use Plan - Downtown Focus Area

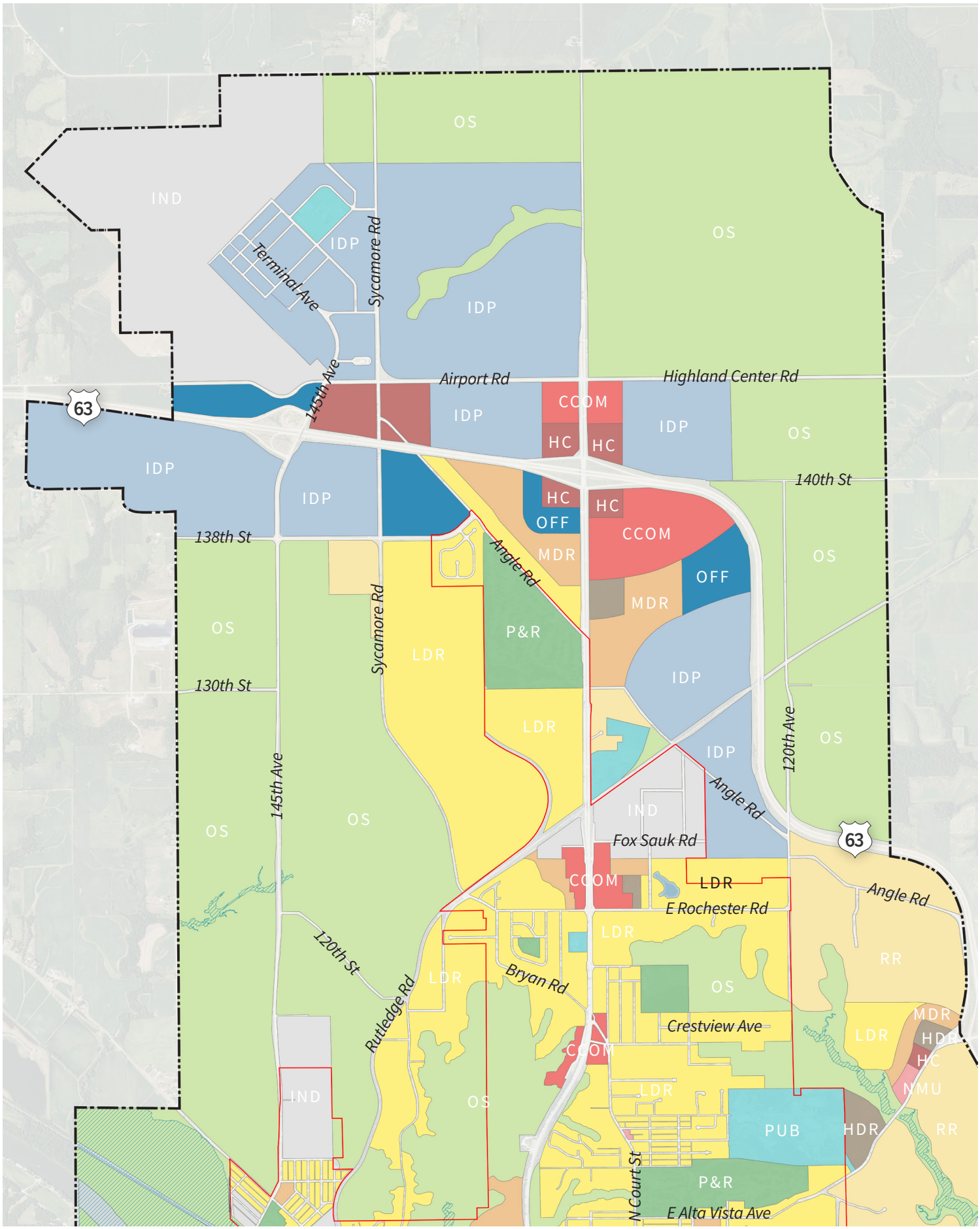
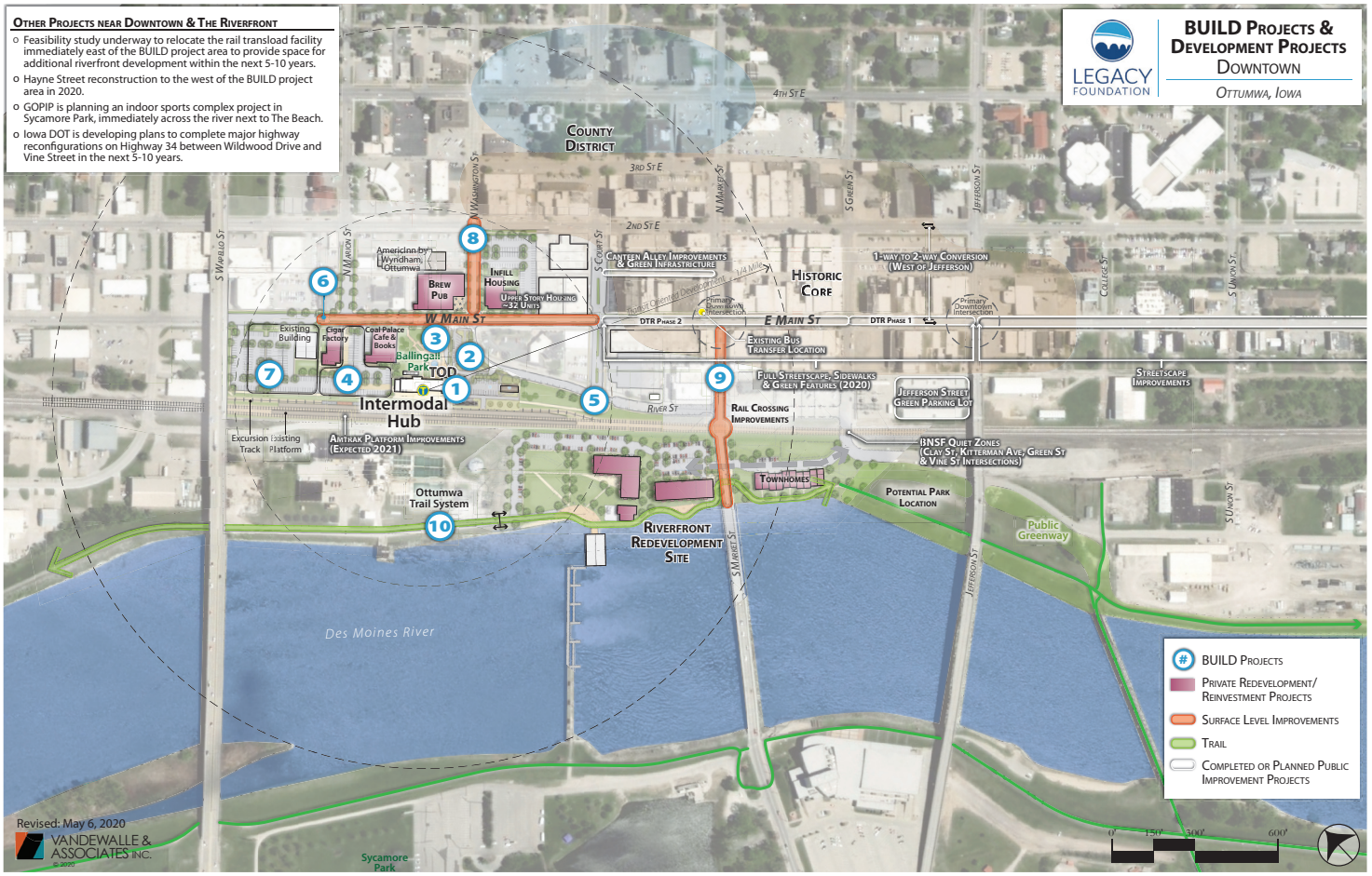


Figure 9.6 - Future Land Use Plan - North Ottumwa Focus Area

Figure 9.7 - River Renaissance Plan



Source: Vandewalle & Associates

PLANNED MAJOR DEVELOPMENTS

One major planning and development project currently being worked on is the River Renaissance Initiative. The City of Ottumwa and the Legacy Foundation are working together to pursue a Federal Build Grant to repurpose the land around the multi-modal train station in the downtown area. Developments proposed in this area are mixed-use with elevated commercial and upper story living spaces. The developed will be paired with an enhanced community gathering space for entertainment and public events. Figure 9.7 above shows the proposed plan completed by Vandewalle & Associates for the City of Ottumwa and the Legacy Foundation.

ANNEXATION PRIORITIES

Future annexations should consider the best long-term use of the properties within the City's planning area and their compatibility with the Future Land Use Map as well as existing uses in the surrounding area. New development and redevelopment must enhance community character (particularly in and around the Dahlonega community area) and support suburban development patterns that favor ease of transportation and access, yet accommodate housing choices and compatible business development. Residential development should range from larger lot (0.5 to 1 acre) single family subdivisions to low and moderate density townhome communities and accommodate areas for construction of commercial, office tech park, and light industrial nodes over time. Suburban type mixed-use planning and development approaches should prioritize innovative design and pedestrian use and livability.

To best position the City for future development and redevelopment, key annexation priorities have been identified. These annexation strategies help create locations suitable for shovel-ready business development and infrastructure-ready retail and residential sites. In order to position itself for likely future growth and opportunities in economic development and housing, the City should seek to strategically connect these key locations with water and wastewater utilities. Priority annexation areas include the commercial, office, and business park area around the airport and at the highway interchanges along Highway 63.

Figure 9.4 identifies four priority annexation areas for the City of Ottumwa.

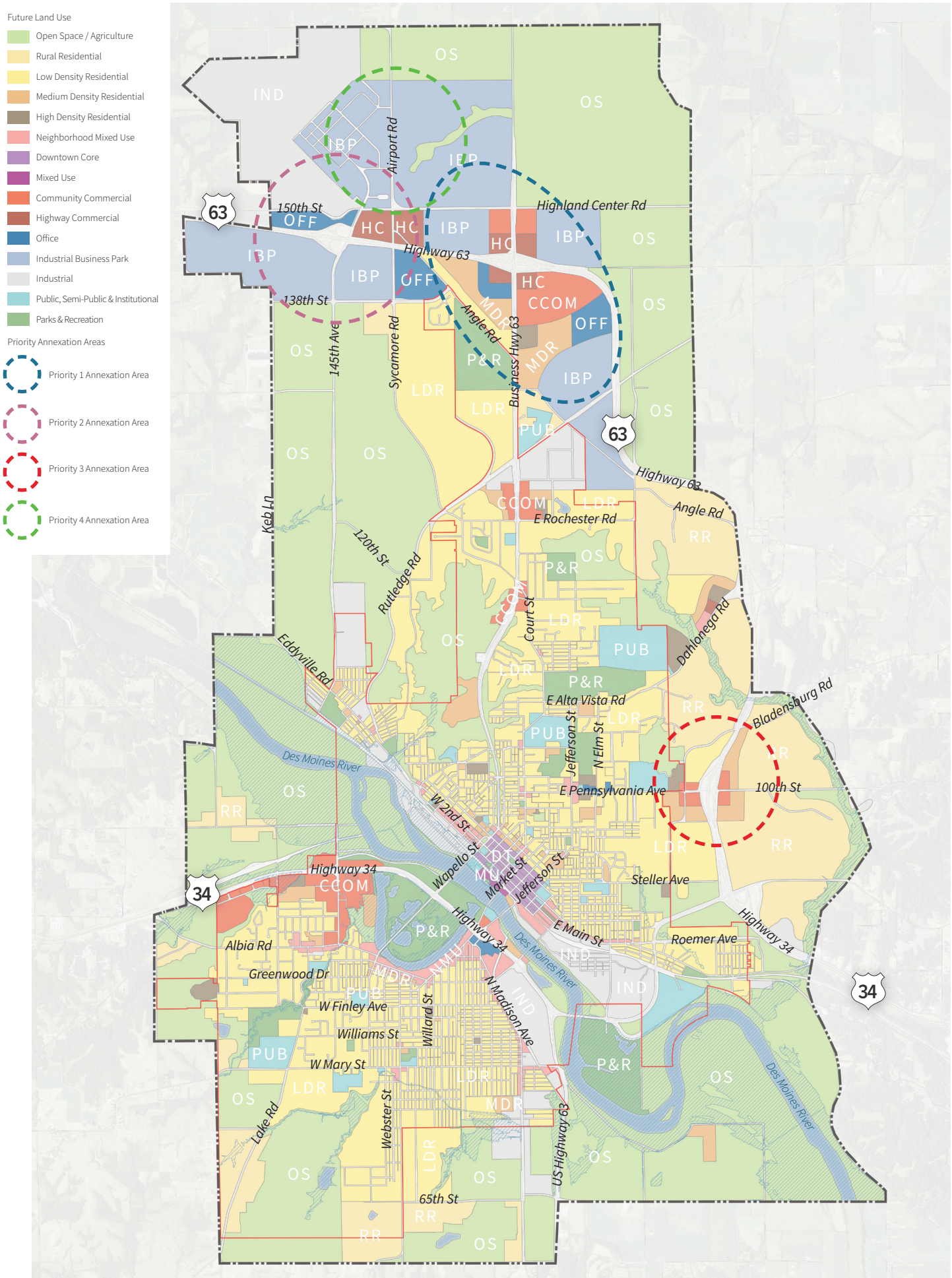


Figure 9.4 -Priority Annexation Areas

LAND USE & ZONING COMPATIBILITY MATRIX

The land use to zoning compatibility matrix shows the relationship between the new future land use categories and the existing zoning districts within the City. Land uses and zoning districts have been listed as either compatible ("C") or partially compatible ("PC").

This matrix should be used as the basis for determining the appropriate zoning district(s) for land that is annexed into the City or as a property rezoning is being considered. If the zoning desired for a given property is incompatible with its land use designation, the designation on future land use map should be first amended accordingly. In certain situations an update or amendment to this matrix may be warranted to address changes in development patterns or revisions to the City's zoning code regulations.

Table 10.3 - Land Use & Zoning Compatibility Matrix

	Zoning Districts																
Land Use Categories	**AG/UR** Agricultural / Urban Reserve	**RR** Rural Residential	**R1** Single-Family Low-Density	**R-2** Two-Family Low-Density	**R-3** Townhouse Residential Moderate-Density	**R-4** Multifamily Residential Medium-Density	**R-5** Multifamily Residential High-Density	**R-MHP** Mobile Home Residential	**C-1** Neighborhood Commercial	**C-2** Community Commercial	**CS-1** Commercial Shopping Center	**C-3** Commercial Mixed-Use	**C-4** Downtown Mixed Use	**BP** Business Park	**I-1** Limited Industrial	**L-2** General Industrial	**PUD** Planned Unit Development
Agriculture / Open Space	C	C															PC
Rural Residential	C	C	PC														PC
Low Density Residential		PC	C	PC													PC
Medium Density Residential			PC	C	C	PC											PC
High Density Residential				PC	C	C	C	C									PC
Downtown Core									PC			PC	C				PC
Office									C	PC	PC	PC	PC	PC			PC
Public, Semi-Public & Institutional	C	C	C														PC
Parks & Recreation	C	C															PC
Neighborhood Mixed Use							PC		C			PC	C				PC
Mixed Use							PC		C			C	C	PC			PC
Community Commercial									C	C	C	C	PC	PC			PC
Highway Commercial									C	C	C	C	PC	PC			PC
Industrial Business Park														C	C	PC	PC
Industrial															PC	C	PC

Source: Confluence

LAND USE GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Land Use Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 1 Maintain and improve the existing residential neighborhoods	Update the zoning code regulations to add incentive for existing multi-family home conversions to revert back to single-family housing units			
Goal 4 Protect and enhance the community's natural resources		Consider adoption of stream buffer, slope preservation, and tree canopy preservation ordinances to protect the natural areas and City's watersheds from overdevelopment Prohibit development within the floodplain, except where protected by certified levees		
Goal 1 Continue to enhance and improve the Downtown and Riverfront		Prioritize downtown, the Amtrak station, and the riverfront for investment in redevelopment, new development, and public improvements that will improve the quality of life for all residents		
Goal 5 Update the City Zoning & Subdivision regulations to reflect the goals and recommendations of the Comprehensive Plan			Require new development to extend street, water and sanitary sewer infrastructure necessary to both serve their project and allow for future development of the neighboring properties Encourage rural development annex into the City and connect to City water and sanitary sewer service Require rural development and subdivisions to have streets built to City design standards and have at least one access point to a paved street network Craft new zoning districts and regulations to encourage and support downtown and mixed-use development, and purpose-built accessory dwelling units on single-family residential properties intended for use by extended family members Adhere to smart growth principles when assessing new development proposals and annexation requests	

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 6 Complete strategic annexation to ensure an adequate supply of land for future development, especially around the airport and highway interchanges			Discourage rural subdivisions within the City's 2-mile extra territorial review area that either do not meet the City's subdivision regulations or are not consistent with the Comprehensive Plan Require any proposed development that cannot connect to City sewer and/ or water provide dry sewer mains, easements, plans, and agreements to connect at some point in the future when service is available	
Goal 8 Invest in Airport infrastructure for commercial and industrial development			Conduct a feasibility study for the Ottumwa Airport to assess future expansion and development possibilities	
Goal 10 Promote a viable and economically resilient Quincy Place area, with updated tenants, improved pedestrian appeal, and a broader mix of uses			Engage the mall owners in discussions of mall activation and re-tenanting and explore public and private-sector investments in updated design and redevelopment of aging malls	

10 Transportation

CHAPTER

OTTUMWA TRANSPORTATION SYSTEM

Ottumwa is the transportation hub for southern Iowa. Facilities such as the Bridge View Center, Market on Main, Indian Hills Community College, and the Wapello County Courthouse draw people into the community every day. Further, the city is an employment center for the immediate region. Companies including John Deere Ottumwa Works, Ottumwa Regional Health Center, and Cargill Meat Solutions employ individuals from many surrounding areas.

The City is well-connected to major economic centers as part of the larger national transportation network. Ottumwa is advantageously located at the crossroads of two US-highways, has direct access to two Class I railroads, and operates the Ottumwa Regional Airport.

The City maintains jurisdiction of approximately 301 total miles of roads within its municipal boundaries. Streets predominately consist of asphalt (ACC) or asphalt-surfaced pavements (COM). The vast majority (87%) are local in nature and primarily serve as access routes to residential uses.

The remaining 13% of the roadway network consists of primary arterials and collector roads which help aggregate and move traffic efficiently throughout the City. Table 1 highlights these important corridors.

The Des Moines River bisects Ottumwa creating a natural barrier to travel; however, the resource also serves as the heart of the City with much of its commercial and industrial development focused along its banks. This concentration of commercial and industrial development means that the four river crossings within Ottumwa are critical to travel and commerce within the city. These four regional bridges are located on Wapello St (IA 149), Market St, Jefferson St, and US-34.

Commercial and industrial developments, however, are not just constrained to the banks of the Des Moines river. These uses are also concentrated along the major highway corridors, the river-crossing corridors, and in the central business area along 2nd and Main Street. This concentration of businesses means much of the city's traffic are currently focused onto a few primary facilities.

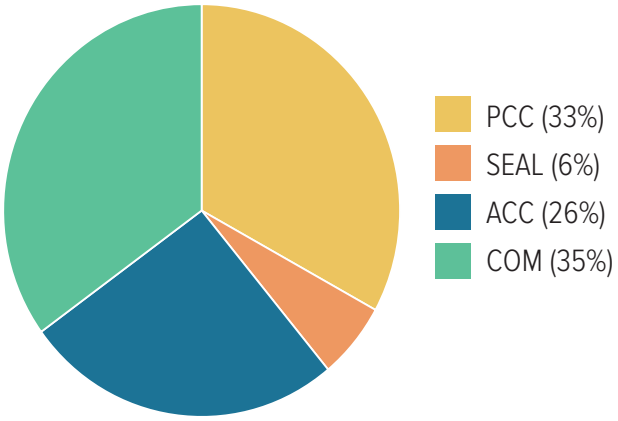
Most traffic in the city is personal-vehicle travel, but Ottumwa's transportation system includes a number of relatively high-volume facilities for several other forms of transport. These modes include air, freight, and rail.

The Ottumwa Regional Airport (formerly the Ottumwa Industrial Airport) located northwest of town is a general aviation (GA) airport and carried about 45 planes a day, in 2017, according to the FAA Master Record for OTM.

The train station, formerly the Burlington Depot which is listed on National Register of Historic Places, serves as a stop on the Amtrak "California Zephyr" line from Chicago to San Francisco and nearly 12,000 passengers passed through Ottumwa last year (3rd busiest stop in state). Other rail lines include Canadian Pacific Railroad (Iowa Chicago & Eastern Railroad line) and the BNSF which both have trans-load facilities in the city. It is only 65 miles along those rail lines to the Mississippi River port in Burlington where a large amount of barge traffic creates demand for the trans-load facilities in Ottumwa, both for moving goods up to Des Moines from Burlington (via trucks or trains leaving from the trans-load facilities), but also demand from goods loaded up on the trains being transported back towards the port.

Non-motorized travel and transit are similarly well supported within the city. There a number of trails and shared-use facilities for bicyclists in Ottumwa, and Wapello County has coordinated with the City to provide a number of external trail connections, as well.

Streets by Surface Type



Streets by Functional Class

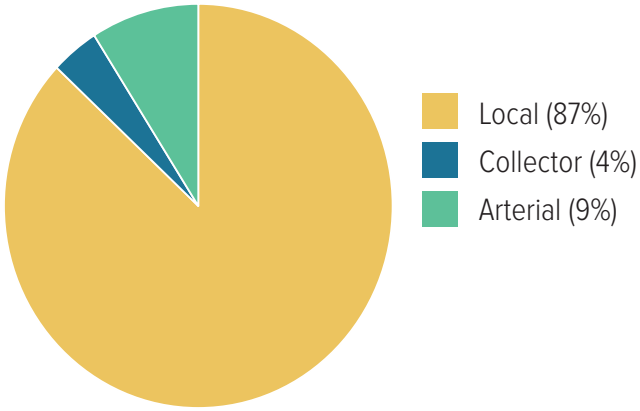


Table 10.1 - List of Gateways and Major Arterials

External Connections	Internal Connections
US 34	Ferry Street / Wapello Street
US 63	Market Street
IA 149	Richmond Avenue
Bluegrass Road / Mary Street / Rabbit Run Rd (H41)	Church Street
Eddyville Road / 2nd Street / Main Street (Old 23)	N Quincy Avenue
Pennsylvania Avenue	Jefferson Street
Stellar Avenue	Court Street
Dahlonega Road / Alta Vista Avenue (H25)	E 4th Street
Milner Street / 140th Avenue	Vine Street
Madison 958	Finley Avenue
Albia Road	-

Public Transit

Ottumwa Transit Authority (OTA) operates fixed route bus services within the community along five main routes (refer to Map 1). OTA also offers special programs for qualifying riders. The LIFT program provides paratransit service for riders with mobility impairments while the Job Access Reverse Commute program serves as a dial-a-ride service for citizens who need assistance commuting from urban centers to suburban jobs.
The second public transportation provider in Ottumwa is 10-15 Transit, a state and federally funded public transportation system operating in Wapello Counties as well as nine other surrounding counties in southeast Iowa.

Other Transit

Ottumwa is served by a private, intercity bus carrier. Greyhound Lines Inc. offers destination points all across North America. Its stop is located in the heart of downtown at 127 East Main Street.

STREET FACILITIES PLAN

The primary form of transportation in Ottumwa is the automobile as consistent with most US cities. Cars and trucks are, by far, the preferred method of travel. As such, the streets are its most important transportation resource. An investigation of existing data sources was used to summarize and analyze the existing network to identify potential outstanding issues in three categories of public welfare: safety, condition, and operations.

Safety

Maintaining public safety along the roadway network is a primary concern for local officials. A review of Iowa DOT crash statistics spanning the previous 10 years helped identify intersections and segments within Ottumwa which may require improvements/modifications. This evaluation also considered intersections previously identified by the agency as Safety Improvement Candidate Locations (SICL). Iowa DOT ranks intersections based on a number of criteria and places high-risk locations on the SICL list. It is important to note that this designation may make future projects eligible for state funding.

Several intersections within Ottumwa are cited within the referenced Iowa DOT list including IA 149 and 4th Street (85th worst in the state) and US 34 and Wapello Street/IA 149 (99th). These SICL fall within the Top 200 list and therefore are considered highest priority safety improvements in the statewide safety improvement program. Ottumwa contains several other intersections in the slightly less immediate category (Top 1000 SICL) including Rochester Street and IA 149 (274th); Finley Avenue and N Ferry Street (295th); and US 34 and Venture Place (598th).

Independent review of available crash data revealed 31 intersections that may warrant further investigation as potential safety improvement locations. These intersections display a greater than average annual incidence rate or an incidence rate per million entering vehicles higher than normal. For reference, Iowa DOT considers more than 3 crashes per year to be abnormally high for urban settings and more than 1.6 crashes per million entering vehicles as a statistically significant difference (with a 90% confidence interval, $p<0.1$), while 0.8 is considered the state average. 15 intersections exceeded at least one of the major concern thresholds (Table 2) while an additional 16 were identified as being potential concerns due their marginally abnormal incidence rates (Table 3).

These 31 intersections may have higher incidence rates due to a number of factors, such as geometrics, volume/speed differences, traffic control method, and sight-line obstructions. Some may just be unfortunate outliers that have no real issue. Further review is required to determine if there exists an identifiable cause and if action needs to be taken.

Non-intersection crashes were analyzed separately and associated to the adjacent street section. Roads that had both higher incidence rates (per 100 Million Vehicle Miles Travelled) and higher crash densities (crashes per mile) than the 10-year state averages for a given functional classification are listed in Table 4. These roadways may warrant additional investigations as there may be geometric issues, access management problems, or sight-distance restrictions that make them more prone to vehicle-crashes.

Table 10.2 - Intersection Crash Incidence Rates - Significant

Intersection Rank	Intersection Name (Significant)	Vehicle Accidents within 100' of Intersection	Estimated Crashes Per Million Entering Vehicles
1	IA 149, S & Wapello Street (US 34, W)	112	0.87
2	Kitterman Avenue (IA 149, S) & West 4th Street, E	79	0.84
3	North Quincy Avenue, N & US 34, E	63	0.73
4	E Woodland Avenue, E & W Woodland Avenue, E	51	1.43
5	E 4th Street, E & North Jefferson Street, N	46	1.23
6	IA 149, N & West Woodland Avenue, E	43	0.74
7	East Rochester Street, E & IA 149, S	42	0.90
8	125th Avenue, N & US 34 W	31	0.54
9	Venture Drive, E & Venture Place, N	23	3.66
10	North Wapello Street, N & West 5th Street, E	17	2.13
11	Bonita Avenue, E & North Court St E Frontage Road, N	11	5.43
12	East 2nd Street, E & North Van Buren Avenue, N	9	2.45
14	Center Avenue, E & North Ash Street, N	7	1.71
15	East Wilson Street, E & South Ransom Street, N	5	1.96

Table 10.3 - Intersection Crash Incidence Rates - Marginal

Intersection Rank	Intersection Name (Significant)	Vehicle Accidents within 100' of Intersection	Estimated Crashes Per Million Entering Vehicles
16	East Main Street, E & South Iowa Ave, N	27	0.81
17	East 2nd Street, E & South Jefferson Street, N	26	0.86
18	North Marion Street, N & West 2ndStreet, E	26	1.23
19	North Jefferson Street, N & Pennsylvania Avenue, E 25	51	1.43
20	Bardell Street, N TO US 34, E & Myrtle Street, E	21	1.11
21	East Vine Street, E & North Weller St, N	12	0.88
22	East Finley Avenue, E & West Finely Avenue, E	10	0.84
23	Greenwood Drive, E & Osceola Street, N	10	1.58
24	Greenwood Drive, E & Minneopa, N	8	1.12
25	Garfield Street, E & North Sheridan Street, N	6	1.23
26	North Jefferson Street, N & Vanness Avenue, E	6	1.18
27	North Willard Street, N & West Finley Avenue, E	6	0.83
28	Venture Drive, E & Venture Way, N	6	0.95
29	East 2nd Street, E & South Walnut Avenue, N	5	1.15
30	North Wapello Street, N & West 6th Street, E	5	0.80
31	87th Street, E & 163rd Avenue, N	5	1.24

Table 10.4 - Streets with High Crash Incidence Rates and/or Crash Density

Intersection Rank	Street Name	From	To	Crashes	Crash per 100 Million VMT	Crash per Mile
1	N Court St	Albany St	Hawthorn Dr	33	242	33.6
2	N Quincy Ave	Sherwood Dr	US 34	25	529	275.4
3	S Market St	US 34	2nd St	22	715	43.9
4	Pennsylvania Ave	N Court St	N Jefferson St	12	2,850	32.8
5	S Iowa Ave	Orchard St	South City Limits	12	391	65.7
6	Chester Ave	N Johnson Ave	N Schuyler Ave	10	295	13.0
7	W Finley Ave	Shaul Ave	West End	8	2,117	20.1
8	W 4th St	IA 149	N Marion St	8	276	113.8
9	E Finley Ave	Ward St	Madison Ave	8	221	14.5
10	E Main St	Roemer Ave	East City Limits	7	805	7.2
11	W 2nd St	Phillips St	Benton St	7	739	79.7
12	S Webster St	W Mary St	W Hand Ave	7	457	21.2
15	S Iowa Ave	E Main St	E 2nd St	7	245	41.5
16	W 2nd St	W Main St	Canadian Pacific RR	6	447	112.8
17	Richmond Ave	N Adella St	Church St	5	289	156.3
18	W Mary St	Shaul Ave	West City Limits	5	203	9.0

STREET FACILITIES PLAN CONT.

Condition

A leading issue for many communities is the condition of their infrastructure and the public opinion regarding it. Iowa DOT partners with Iowa State University's Institute for Transportation through the Iowa Pavement Management Program (IPMP) to collect pavement condition data every other year and provides that information on a pro-bono basis. This permits local agencies to have a complete inventory of their streets and the associated surface distresses. Each street, in addition to the distress survey, is assigned a Pavement Condition Index (PCI) rating to summarize a given road's overall health.

Pavement Condition Data from the 2016 IPMP survey was analyzed in GIS to determine which roads require improvements most immediately (See Map 6 and 7). The overall condition of Ottumwa's streets seemed to be normally distributed, even across class or surface type (Figure 2 & Figure 3). The majority of roads are in fair condition or better. The average PCI is 57 points out of 100 possible. Unfortunately, Ottumwa's pavements overall are performing worse than the state, on average, in every street category (Table 5). Most notably, concrete pavements in the City are 11.7 points behind the state average for urban streets, which is 70.8/100 (considered "Good"). 25 road segments (6.5 miles) in Ottumwa were categorized as being in "Very Poor" and are listed in Table 6.

Bridges represent another critical transportation component of a street network. The infrastructure is required to be cataloged and inspected regularly consistent with state and federal reporting requirements. National Bridge Inventory data was reviewed for all structures within Wapello County to identify potential concerns. Ottumwa has jurisdiction over 10 bridges/structures within the city. Of those structures, two are currently considered "Structurally Deficient" by the FHWA's National Bridge Inventory.

The Jefferson Street Viaduct is rated as Structurally Deficient and received a sufficiency rating of 23/100 (Sufficiency ratings less than 40 typically result in the deficiency label regardless of other structural issues). This viaduct was built 1936 and renovated in 1984 but is still posted for restricted loads due to its condition. Repairing this bridge, however, may be a difficult project to execute because the viaduct is federally listed as a historic structure. Replacement or major renovation may be warranted and additional study is required- especially since this is one of the four Des Moines River crossings.

The other potentially deficient structure is the S Ward Street Bridge located over a drainage feature between the two Harrod Ave intersections. The S Ward bridge is classified as Structurally Deficient and received a sufficiency rating of 27/100. The bridge was constructed in 1950 and has no recorded replacements or renovations. It is also load restricted due to its deteriorated condition. The S Ward bridge is reaching the end of its service life and its serviceability is waning, so additional consideration may be warranted for its replacement. It should be noted that the S Ward Bridge is in a difficult location between two legs of an offset intersection so traditional solutions may not be appropriate.

Table 10.5 - Comparison of Ottumwa Pavement Ratings to State Averages

	Ottumwa	State Average (Urban Only)
Local / Residential Streets	55.3	61.0
Arterial & Collector Streets	59.3	63.3
Ashpalt Pavement	57.1	61.0
Concrete Pavement	59.1	70.8
Composite Pavement	56.5	60.4
Seat Coat	61.5	64.1

Figure 10.2 - Pavement Condition Distribution by Functional Class

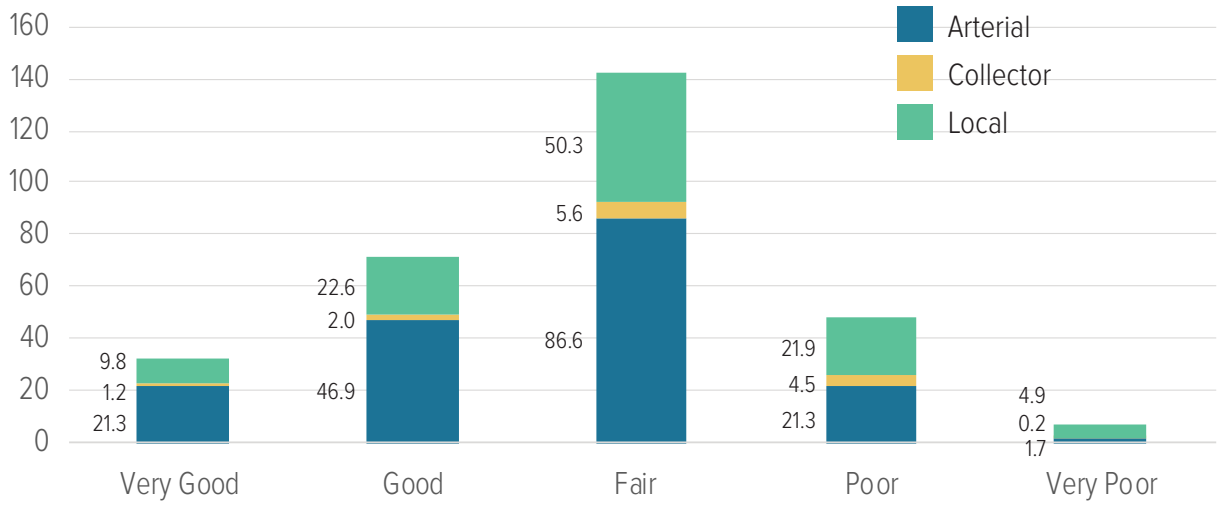


Figure 10.3 - Pavement Condition Distribution by Surface Type

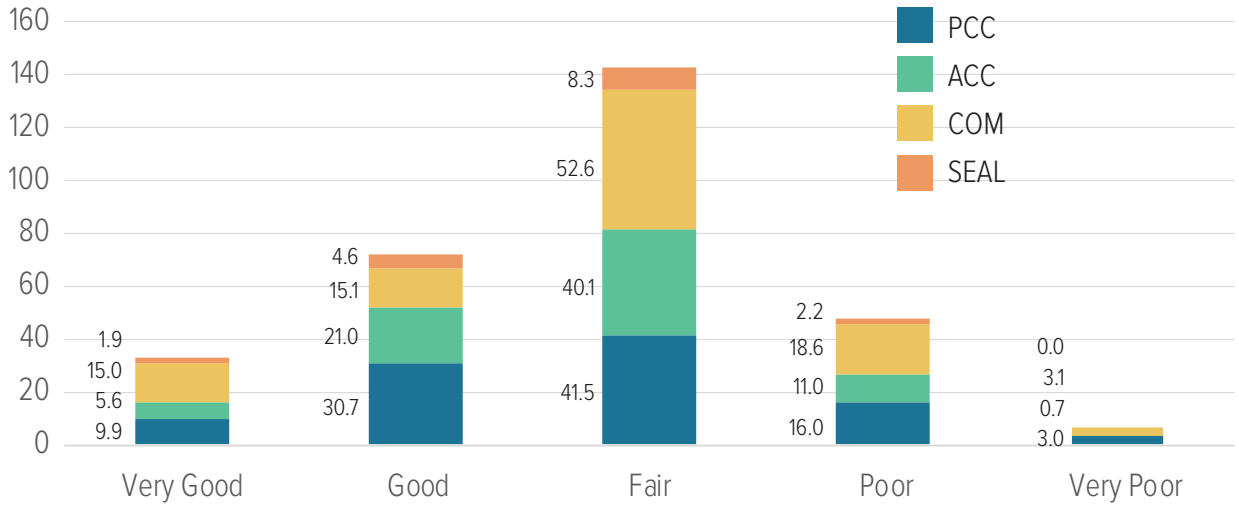


Figure 10.4 - Jefferson Street Viaduct

Table 10.6 - Streets Rated as "Very Poor" by IPMP (CityPCI < 20)

Road Name	From	To	Type	Functional Class	Roughness	PCI	Miles
Allison Ave	Mowrey Ave	Ashbury Ave	COM	7	N/A	19	0.13
Bryan Rd	N Court St	425' SE of Marilyn Rd	PCC	7	294	17	0.13
Cedar Croft	E Rochester St	Cul-de-sac	ACC	7	N/A	18	0.09
Clearview St	Bonita Ave	Elmdale Ave	ACC	7	365	19	0.09
E Highland St	N Court St	N Green St	COM	7	539	20	0.12
E Main St	Franklin St	650' SE of Franklin St	COM	4	368	20	0.12
Gladstone St	580' W of Lake Dr	West Dead End	PCC	4	572	17	0.12
Grant St	N Ash St	N Fellows St	COM	7	525	18	0.19
Herrman Ave	Main St	North Dead End	ACC	7	468	18	0.24
Indian Trail Rd	N Jefferson St	East Dead End	PCC	7	491	8	0.19
Minneaopa Ave	Albia Rd	Mowrey Ave	COM	7	N/A	10	0.25
N Adams Ave	Pennsylvania Ave	South Dead End	COM	7	437	4	0.11
N Ash St	E 2nd St	Kruger St	COM	7	485	20	0.61
N Cooper St	E 2nd St	E Plum St	COM	7	324	17	0.14
Oak Meadow Dr	Foxsauk Rd	Osage Dr	PCC	7	340	14	0.25
Queen Anne Ave	S Sheridan St	S Hancock St	COM	7	411	20	0.13
S Davis St	E Harrod Dr	W Finley Ave	COM	7	449	17	0.70
S Sheridan St	E Mary St	Clinton Ave	COM	4	466	19	0.18
S Ward St	E Harrod Dr	W Finley Ave	COM	7	360	20	0.59
S Webster St	Lewis St	W Hand Ave	COM	7	444	18	0.16
S Webster St	W Mary St	Glenwood Ave	PCC	7	548	15	0.33
Stellar Ave	N Van Buren Ave	N Walnut Ave	COM	5	385	20	0.19
Timberlane Heights	Carter Ave	North Dead End	PCC	7	446	13	0.13
W 5th St	N Wapelllo St	Pleasant St	PCC	7	N/A	19	0.08
W Mary St	Lake Rd	Morris St	PCC	4	307	12	1.00

Figure 10.5 - South Ward Street Bridge

Operations

Ottumwa is a major economic attractor in the region and a key crossroads for many different types of travel. The main generators of traffic may have the effect of creating congestion around them and along the major routes associated with them. Their locations may also introduce delays on the local network by increasing turning movements in front of the destination. Some of the larger trip generators include:

- Indian Hills Community College
- Trans-load Facility off US-34 west of town
- Trans-load Facility and Warehouse south of Main St, just off of the Des Moines River
- Ottumwa Regional Airport to the North-west of town
- JBS (2400 Employees)
- John Deere (940 Employees)
- Ottumwa Regional Health Center
- Quincy Place Mall and other commercial development along US-34 west of town, like the Walmart
- Greater Ottumwa Park
- Wapello County Courthouse

Since most of these are prominent features, they tend to be located on major thoroughfares. Most traffic in the city flows rather efficiently due to the highways around and through the city, which as a result allows lots of throughput traffic that has direct access to most of the important corridors, sending them off the highway and then along the primary network until they get to their destinations. When making operational improvements however, the aforementioned locations will likely need to be considered or even consulted especially with how they interact with the roadway network's function and safety.

Using DOT provided traffic volumes, planning-level level of service (LOS) calculations were performed for each Ottumwa street. Almost every road in the city is performing within expected parameters, based on this high level review. The only areas that indicated potential congestion issues were Wapello St (IA 149), north of the river, and US 34 between Quincy Ave and the Wapello Bridge. More in depth traffic modeling may, however, reveal additional operational issues among local streets or during peak hours of travel.

The busiest city-owned streets in Ottumwa, and most prone to potential congestion are listed in Table 7.

Table 10.7 - High Volume Streets (> 5,000 AADT) in Ottumwa sorted by Name

Local Route Name	Annual Average Daily Traffic	Local Route Name	Annual Average Daily Traffic
Albia Rd	9,800	S Market St	6,800
Bardell St	10,600	S Union St	8,300
Church St	8,500	W 2nd St	5,900
E 4th St	5,800	W 4th St	8,900
E Main St	6,500	W Mary St	6,500
E Mary St	5,400	W Woodland Ave	5,200
E Vine St	5,100	Wapello St	10,200
Madison Ave	7,900		
N Court St	7,100		
N Ferry St	16,600		
N Hancock St	5,400		
N Jefferson St	6,500		
N Quincy Ave	11,800		
Pennsylvania Ave	5300		
Richmond Ave	9,300		
S Ferry St	6,100		
S Jefferson St	6,800		

Another consideration of traffic, operations should focus on freight operations and movement. Ottumwa is centered directly on two major freight corridors (US 63 and US 34) designated as part of the Iowa DOT's Commercial/Industrial Network and lies along a major shipping route from the nearby Burlington Port and Des Moines. Both trucks and trains are commonly driven into and through Ottumwa to serve the region or continue up to Des Moines which makes the trans-load facilities critical resources to the freight network. The DOT's Iowa State Freight Plan (updated in 2018), identified some major freight bottlenecks that are located in or around Ottumwa, and have listed these locations as part of their top 80 freight improvement locations in the state. These improvement locations are:

1. U.S. 34 E/W from Quincy Ave to roundabout
2. U.S. 34 E/W @ U.S. 63 (roundabout)
3. U.S. 34 E/W from roundabout to U.S. 34/U.S. 63
4. U.S. 63 N/S @ 0.9 miles south of U.S. 34
5. U.S. 63 N/S from Ottumwa south city limits to Iowa 2

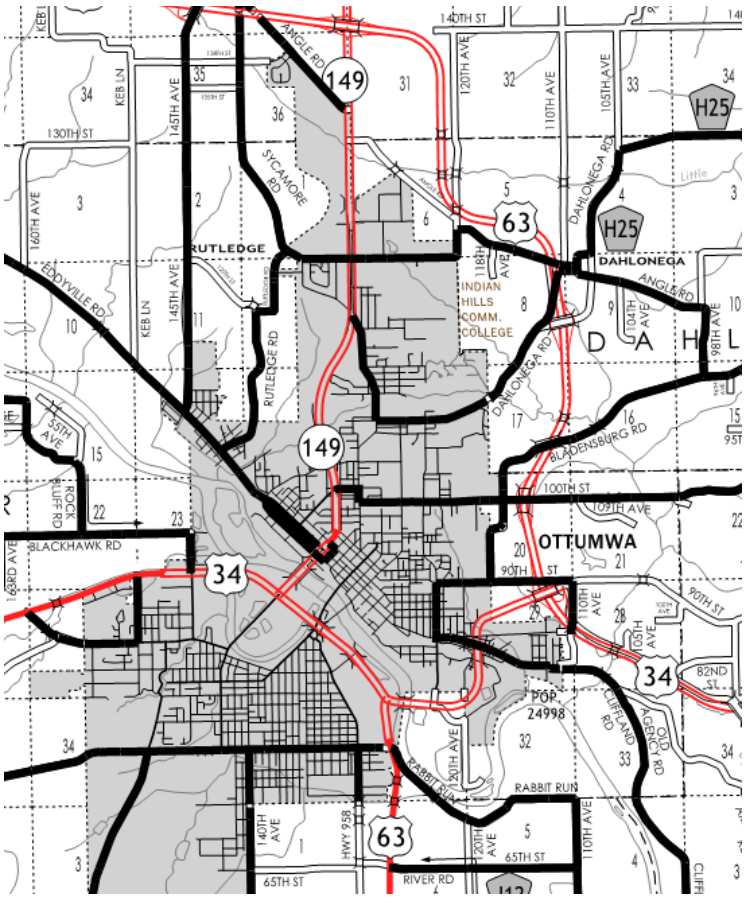
Related to freight routes are other streets with high truck volumes, most likely due to local commercial or industrial land-uses. While most of the signed highway routes have greater than normal truck traffic, they are designed to accommodate that, for the most part. Areas of concern are the locally owned streets near higher truck volume attractions. Some of the streets that might need to be considered are:

- N Quincy Ave and Venture Dr for proximity to Trans-load facility, the mall, and other large commercial uses like Walmart and Menards.
- S Jefferson St, Mill St, E Main St, and S Vine St due to the other trans-load facility and warehousing.
- S Iowa Ave due to traffic associated with JBS business.
- Vine St and N Madison Street due to the large vehicles associated with John Deere operations.
- S Madison due to location of tractor servicing business and a trucking firm.

Beyond freight concerns are designated "Farm-to-Market" (FM) routes. These routes comprise a system of roads designed to connect traffic generating areas to other primary roads and highways. These are a sort of lesser highway that typically connects rural areas to places of interest, particularly economic centers. They receive special funds to maintain and are the most likely to be used by local farmers and commercial enterprises from outside the community when traveling into Ottumwa. In Ottumwa, FM roads include the following:

- 100th Street
- 109th Avenue
- 111th Avenue
- 115th Street
- 117th Street
- 120th Avenue
- 140th Avenue
- 145th Avenue
- 90th Street
- 98th Avenue
- Albia Road
- Angle Road
- Bladensburg Road
- Bluegrass Road
- Brick Row
- Cliffland Road
- Dahlonega Road
- E Alta Vista Avenue
- E Main Street
- E Mary Street
- E Rochester Street
- Eddyville Road
- Hutchinson Avenue
- Lake Road
- N Caldwell Street
- N Court Street
- N Iowa Avenue
- N Marion Street
- N Quincy Avenue
- Old Agency Road
- Pennsylvania Avenue
- Point Isabelle Road
- Quincy Avenue
- Rabbit Run
- Rutledge Road
- S Iowa Avenue
- S Madison Avenue
- S Marion Street
- S Milner Street
- Steller Avenue
- Sycamore Road
- W 2nd Street
- W 2nd Street Conn.
- W 4th Street
- W Main Street
- W Main Street Conn.
- W Mary Street
- W Rochester Street
- W Woodland Avenue
- Wildwood Drive

Figure 10.6 - Farm to Market Map



PEDESTRIAN / BICYCLE FACILITY PLAN

Ottumwa has quite a few facilities for non-motorized travel, such as trails and bike routes, and the County has provided a number of routes within the city in addition to external connections for the facilities in the community, as well. The Bike trail facilities are concentrated around the river area and parks, with the city maintaining five (5) primary trail "systems" which are all paved, and the County providing 11 more bike routes, which are primarily unpaved. See Maps 9 and 10 for more detail.

Existing Trails

Gray Eagle Trail (+Extension), orange route, runs along north side of river out to the eastern part of town, to the eastern city limits where there is a proposed county trail connection.

Loop (Green/Yellow) runs along south side of river looping back along Madison Ave and Jefferson street. Has connection to pedestrian bridge over the Des Moines River.

North Levee Trail runs on north side of River (Orange) connects Gray Eagle to Downtown and has access to pedestrian bridge.

Ottumwa Park "Trail" System, consists mostly of low-use streets in the park but also includes a loop running around the lagoon connecting Church/ Market St to the park, near baseball diamonds. There are Several crossings of Wapello Street and a connection to the mall on the west side, as well.

Trail (Red) runs along south side of river

County Trails along Lake Rd, Mary St, N Quincy Ave, S Ferry St, Blackhawk Rd, Pennsylvania Ave, and N Jefferson St, Alta Vista, H031/Bladensburg/ Hutchinson, E Rochester St, and H041/Mary St.

The community has already performed a fair amount of planning for future improvements to the trail systems for the near and mid future. Some proposed improvements are listed here:

Proposed Trails

Ottumwa to Pave County Routes in City

Steller Ave to Hutchinson to Bladensburg out to sugar creek.

Park Ave to McPherson Park Blvd, extended to a proposed pedestrian crossing (using railroad bridge?) over the Des Moines River to connect up to Quincy Ave Trail.

Along Madison Ave up to Jefferson Street where it will connect to JD Loop

County Proposes Trails along Eddyville Road (IA 23), 87th St/Albia Rd, along US 63 to the south, Along abandoned Chicago, Rock Island, & Pacific Railroad on north side of river and along IA 149 to the north.

As for most communities, Ottumwa's largest resource for non-motorized travel is the sidewalk network. As of now, there has not been a comprehensive inventory of all sidewalk facilities in the City so it cannot be analyzed, but City personnel have recently completed an assessment of Sidewalk Ramps. Sidewalk ramps are important for accessibility purposes, so each intersection and street-crossing in the city was evaluated for presence of ramps and if they had detectable warnings compliant with the American Disabilities Act (ADA).

Table 10.8 - Ramp Inventory

	2012	2018
Ramps without Domes	1,103	1,103
No Ramps	924	198
Ramps with Domes	339	726

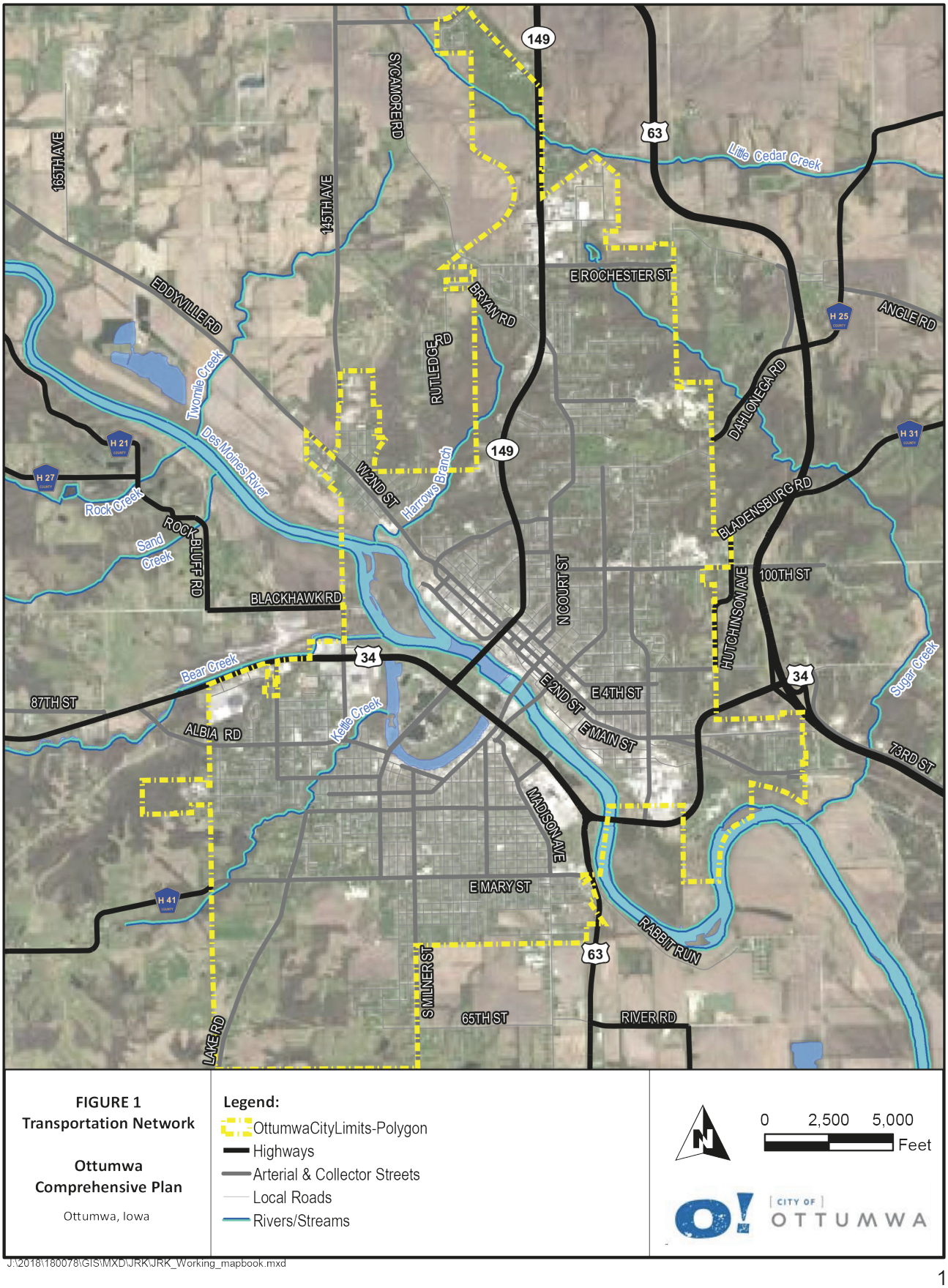


FIGURE 1
Transportation Network

Ottumwa
Comprehensive Plan

Ottumwa, Iowa

Legend:

- OttumwaCityLimits-Polygon
- Highways
- Arterial & Collector Streets
- Local Roads
- Rivers/Streams

0 2,500 5,000 Feet

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Figure 10.10 - Transportation Network

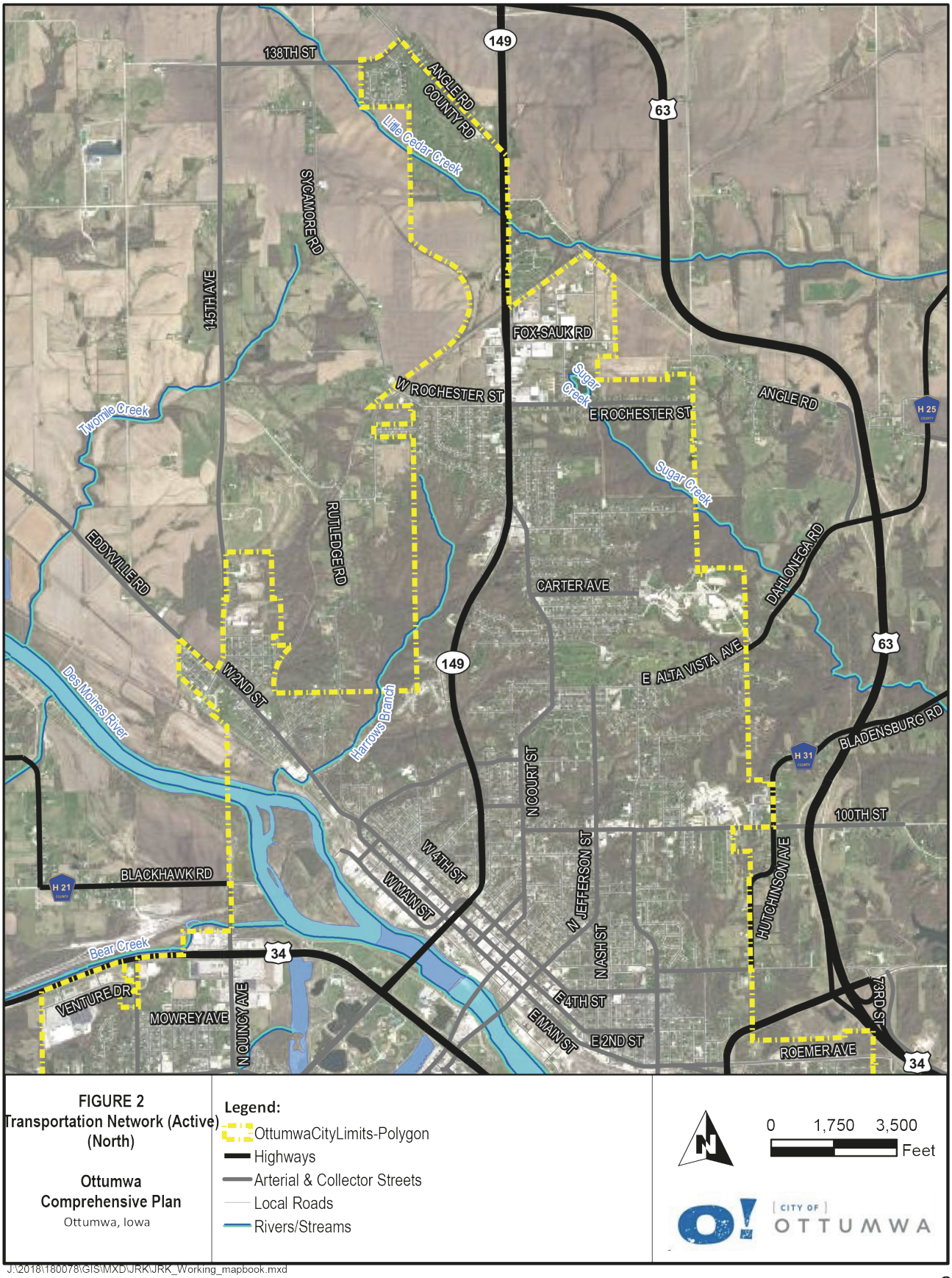

Figure 10.11 - Transportation Network (North)

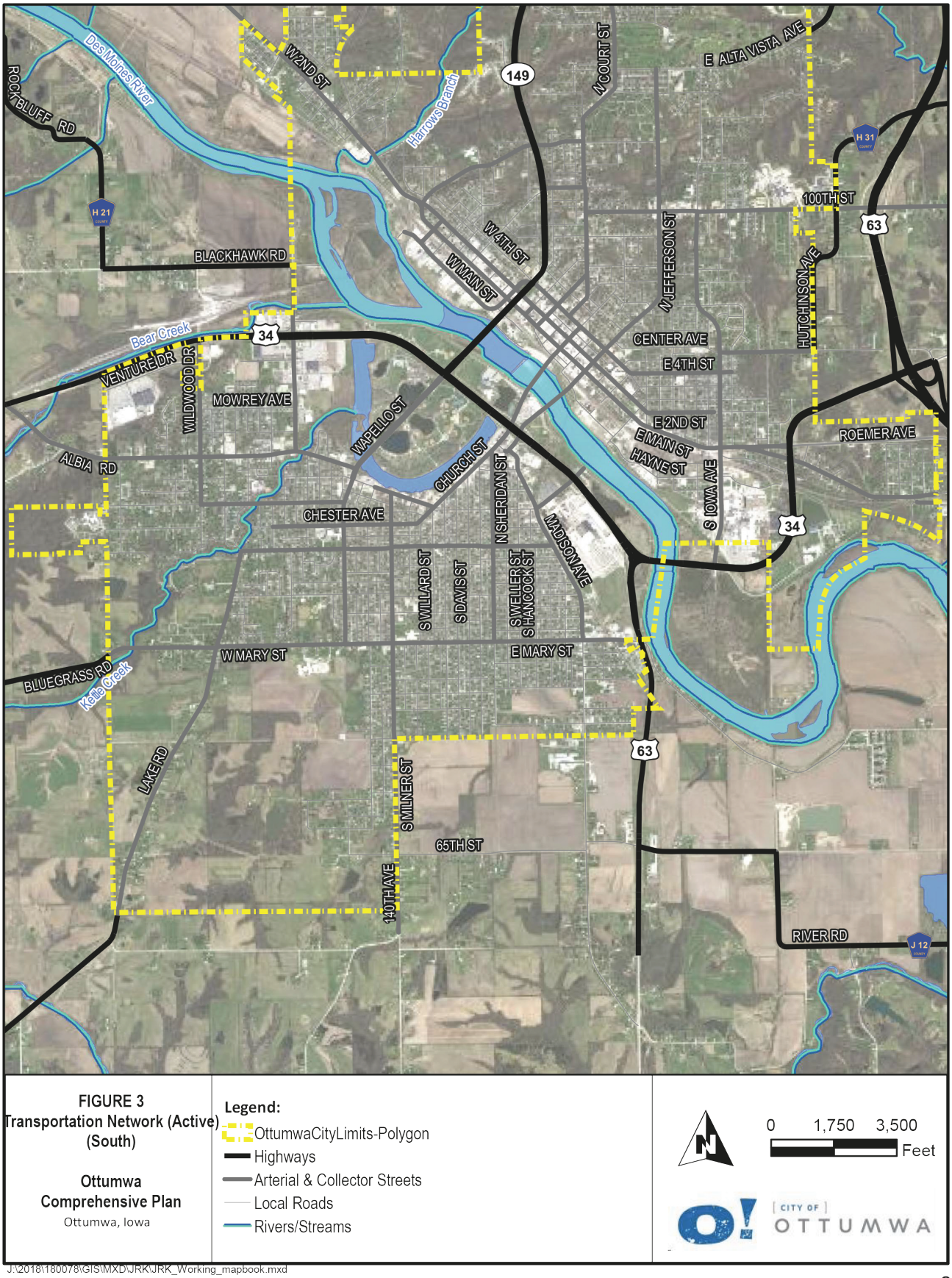

Figure 10.12 - Transportation Network (South)

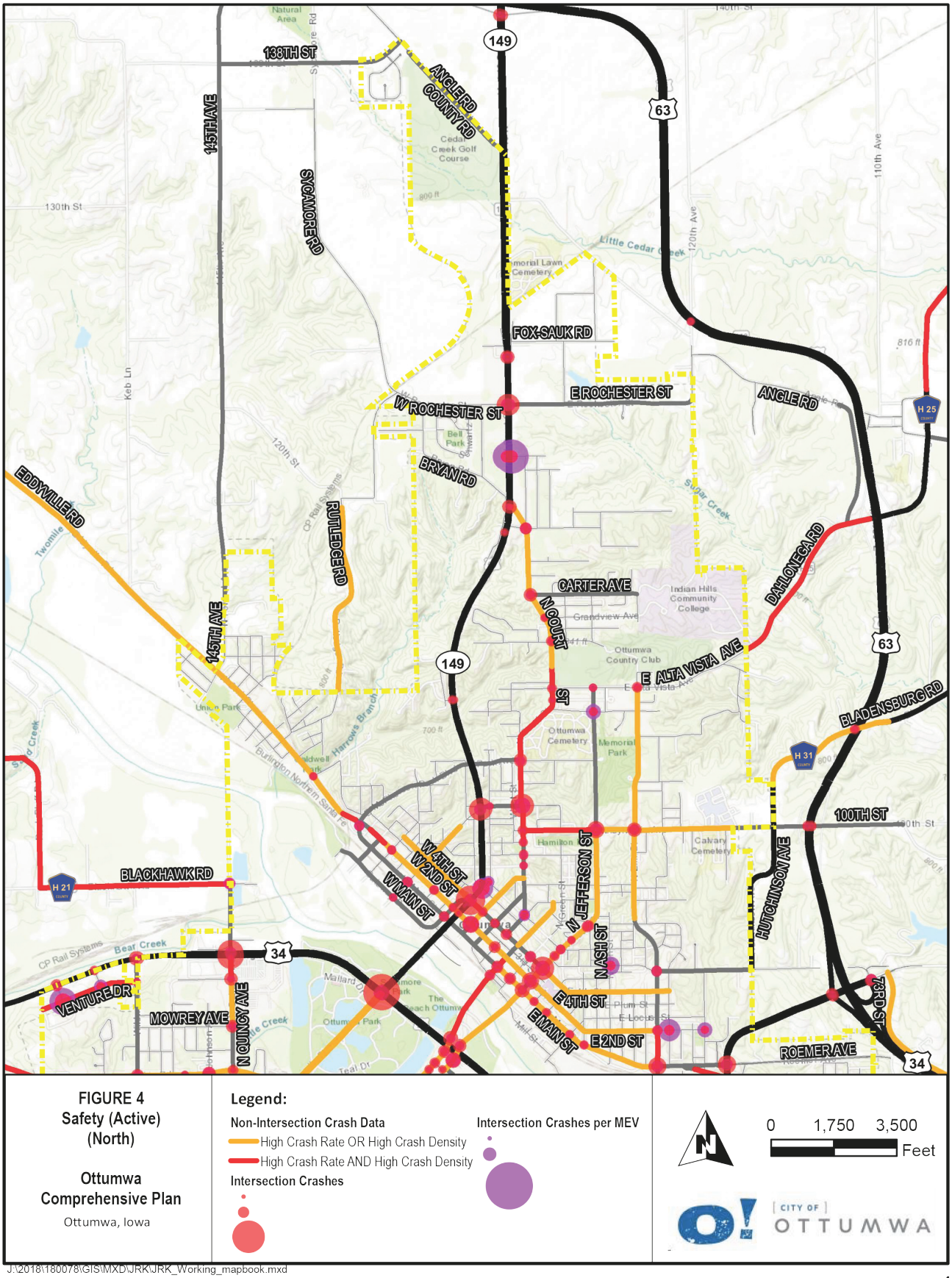

FIGURE 4
Safety (Active)
(North)

Ottumwa
Comprehensive Plan
Ottumwa, Iowa

Legend:

Non-Intersection Crash Data
- High Crash Rate OR High Crash Density
- High Crash Rate AND High Crash Density

Intersection Crashes

Intersection Crashes per MEV

0 1,750 3,500 Feet

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Figure 10.13 - Safety (North)

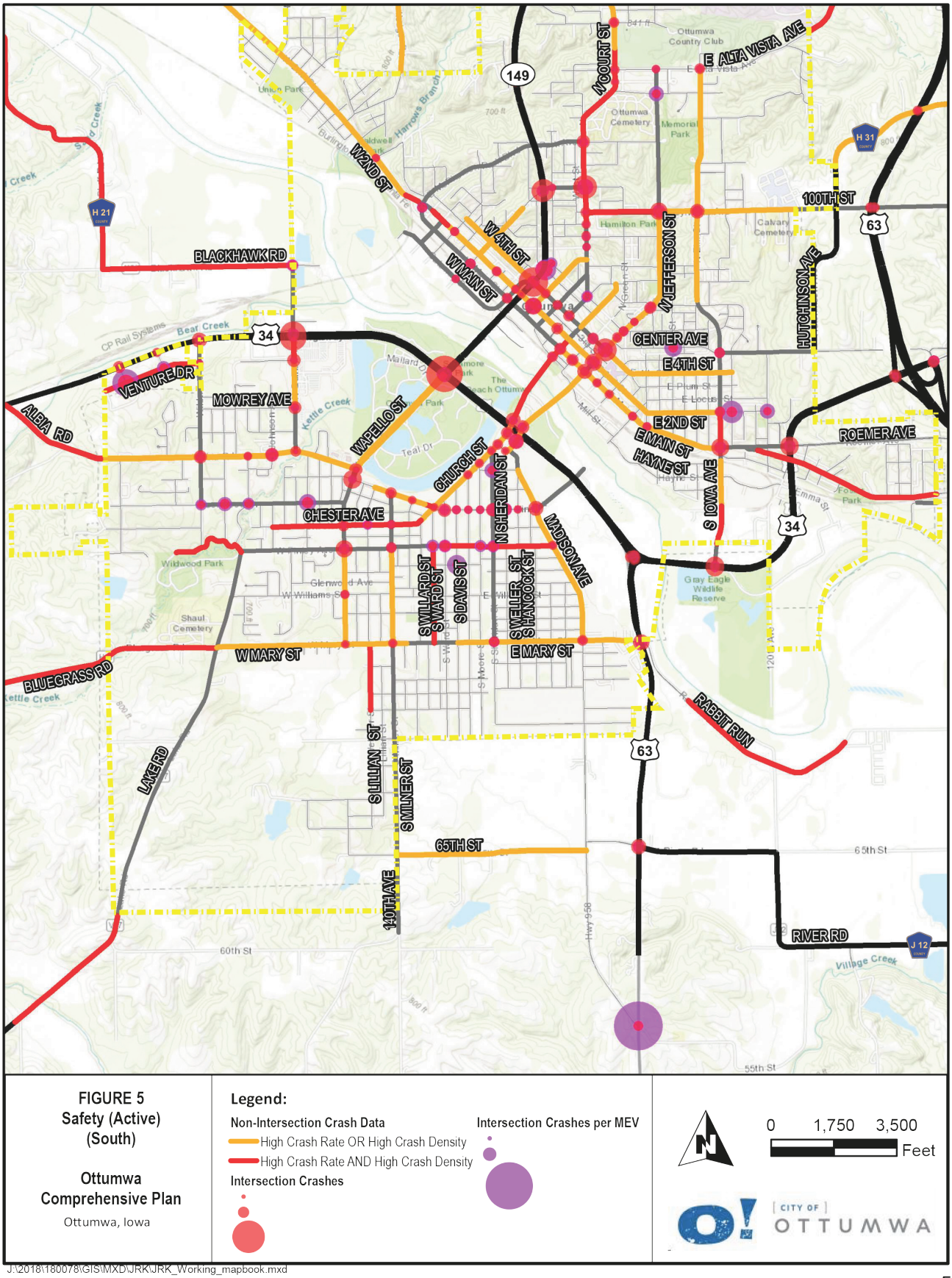

Figure 10.14 - Safety (South)

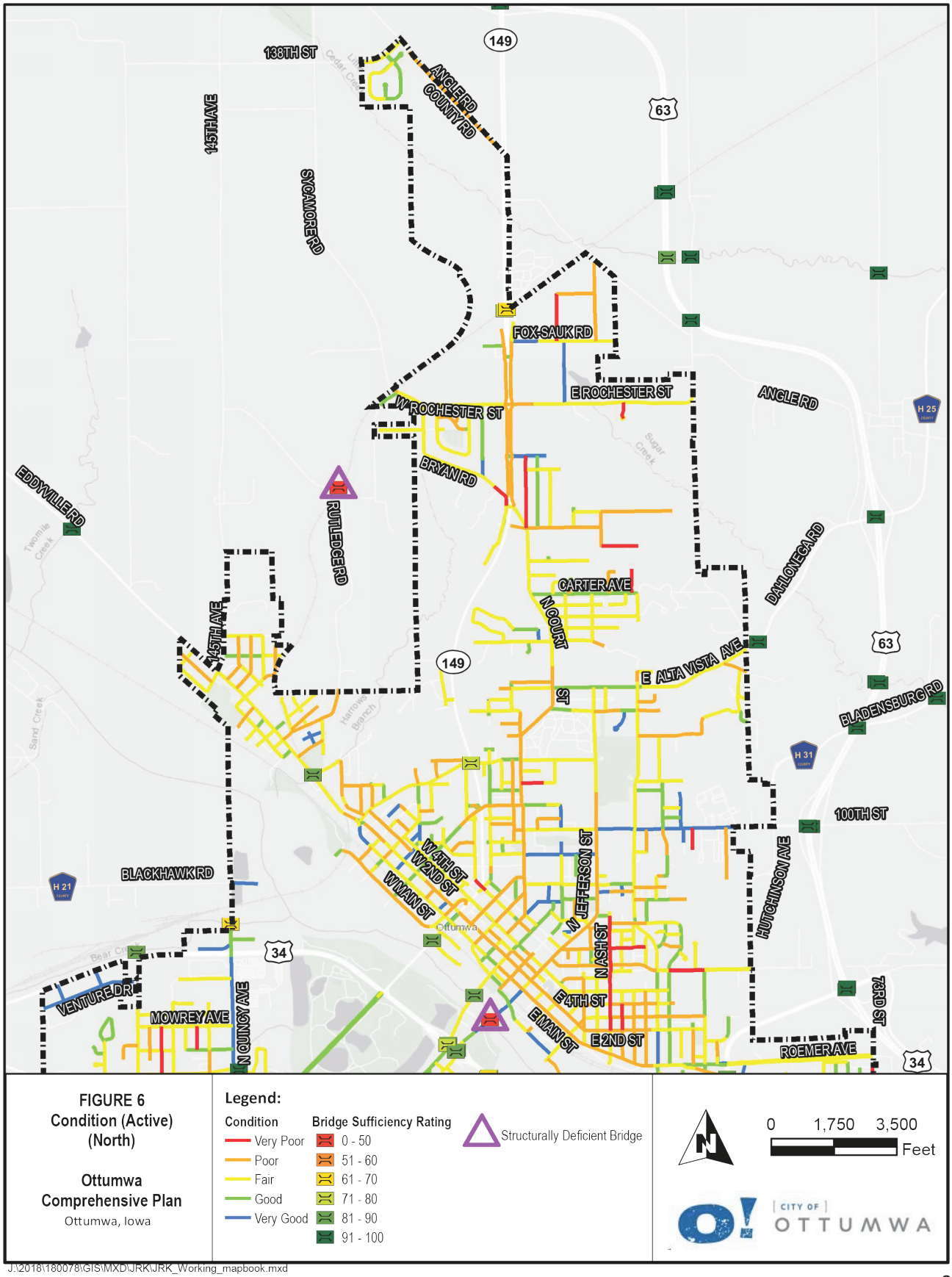

Figure 10.15 - Condition (North)

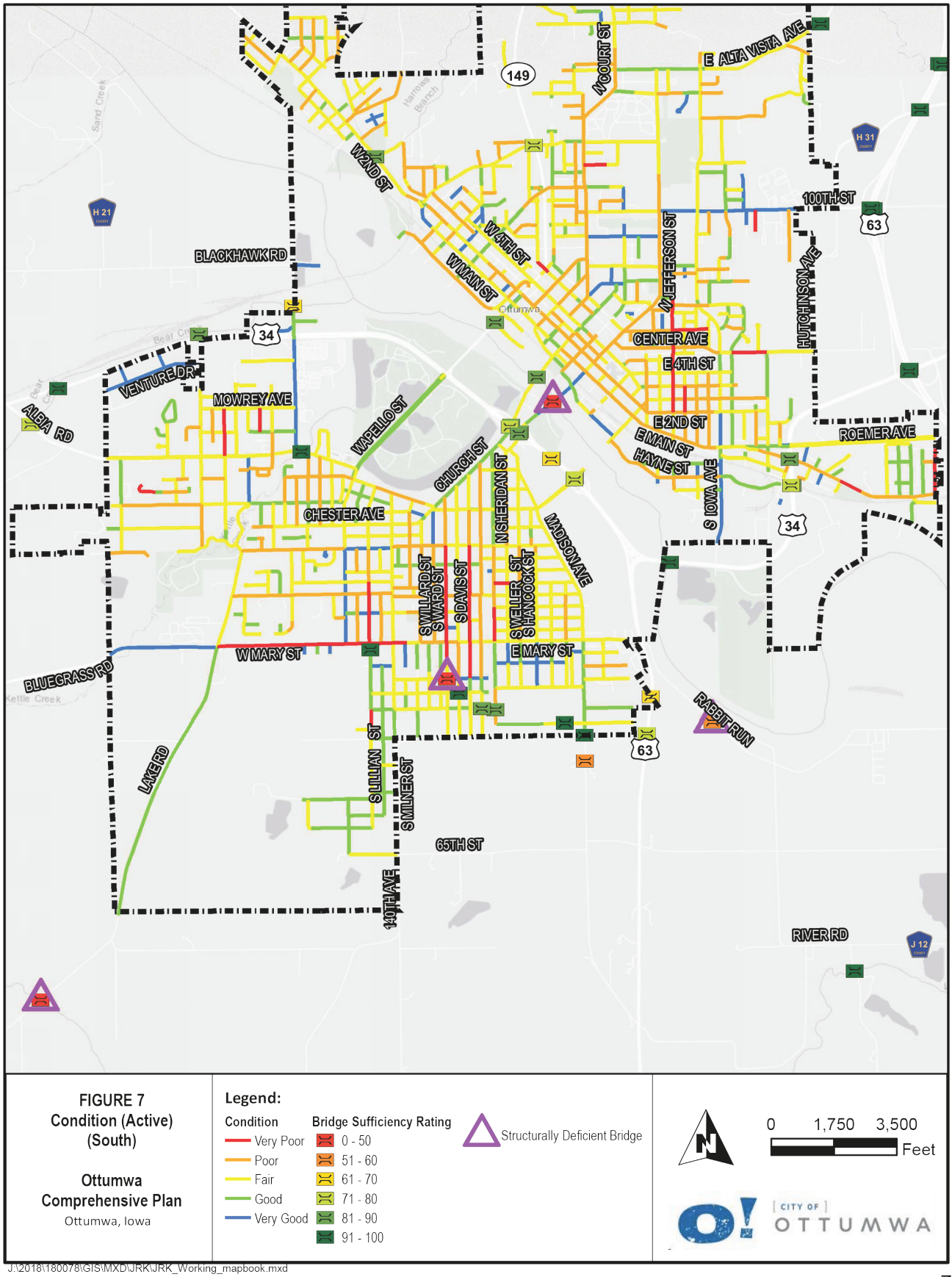

Figure 10.16 - Condition (South)

Figure 10.17 - Travel Attractors

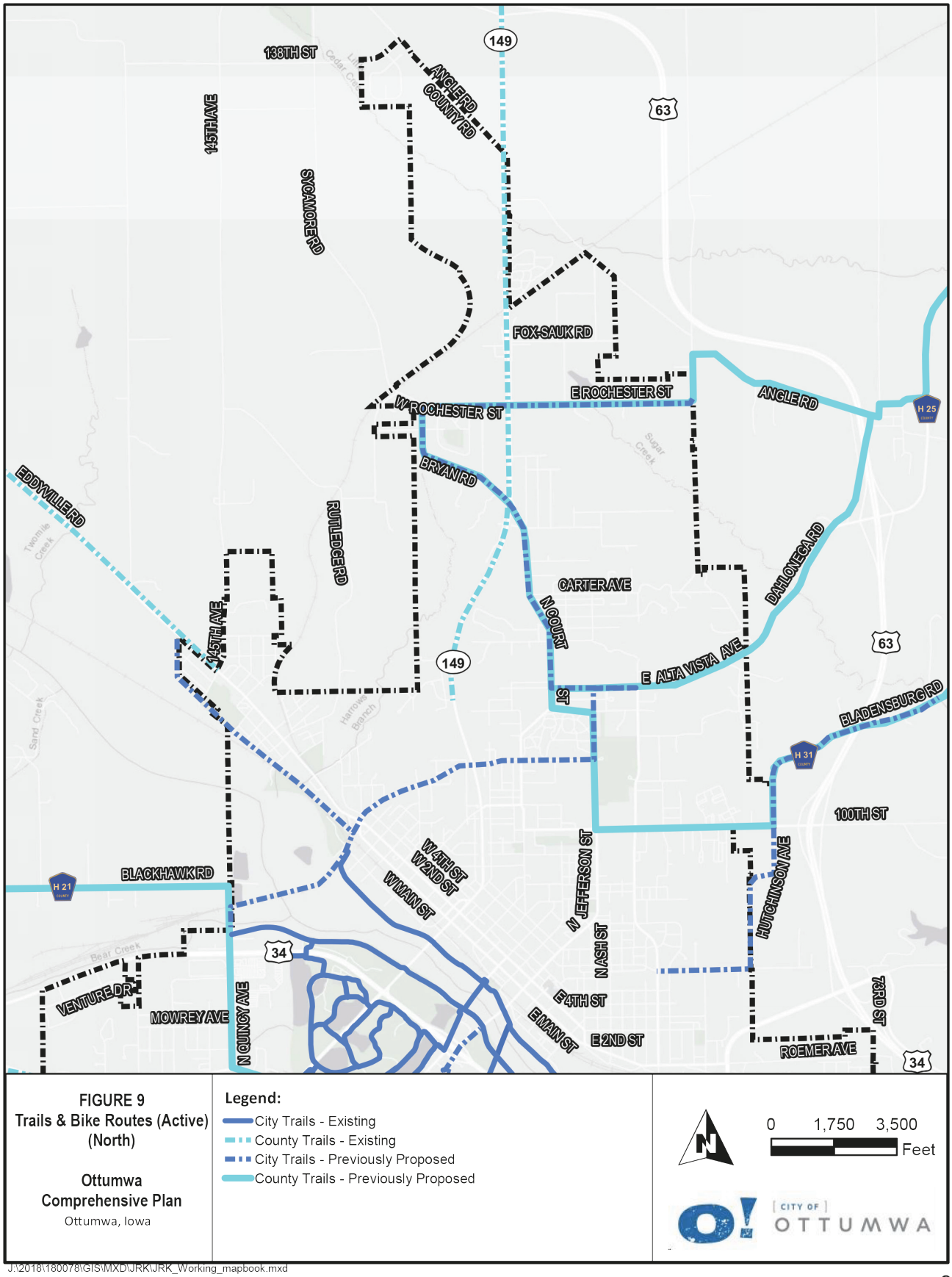

Figure 10.18 - Trails and Bike Routes (North)

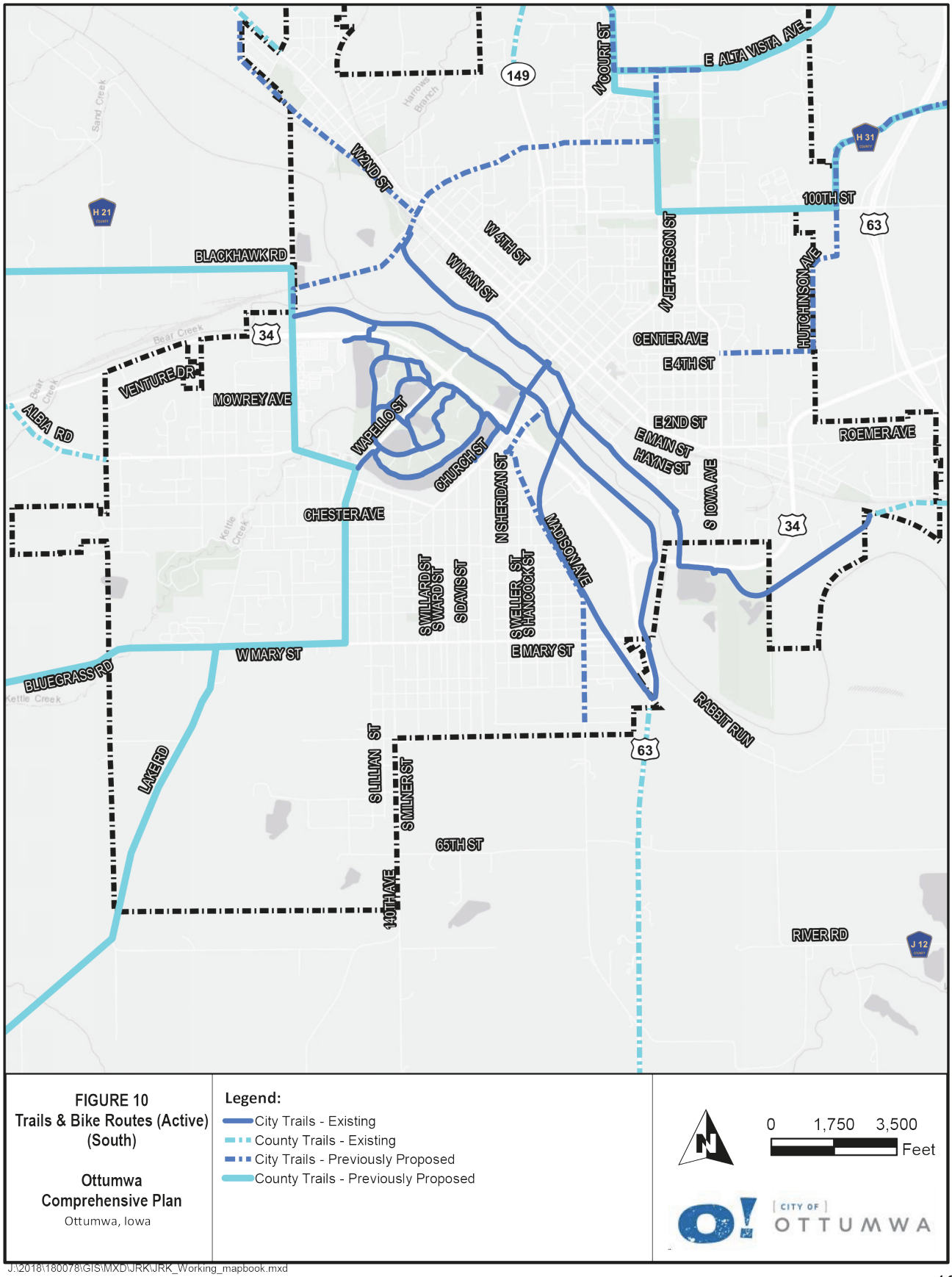

Figure 10.19 - Trails and Bike Routes (South)

TRANSPORTATION GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Transportation Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 1 Continue to enhance and improve the Downtown and Riverfront		Prioritize downtown, the Amtrak station, and the riverfront for investment in redevelopment, new development and public improvements that will improve the quality of life for all residents Expand the streetscape improvement program throughout the downtown including the installation of lighting, landscaping, wayfinding signage, street furniture, and other hardscape elements Continue to improve and expand pedestrian and bicycle circulation and connectivity throughout the downtown and riverfront area		
Goal 2 Maintain and expand the existing park and open space system, recreation programs, and trails network		Implement the Ottumwa Bicycle and Pedestrian Plan to expand the trail system within natural areas and seek opportunities to promote the trail system in Ottumwa including the addition of trail-centric retail where possible Complete sidewalk improvement, maintenance and expansion along the Priority Corridors identified in the Ottumwa Bicycle and Pedestrian Plan to enhance the ease of access and ability of residents to walk throughout the community		
Goal 5 Update the City Zoning and Subdivision regulations to reflect the goals and recommendations of the Comprehensive Plan			Require new development to extend street, water and sanitary sewer infrastructure necessary to both serve their project and allow for future development of the neighboring properties Require rural development and subdivisions to have streets built to City design standards and have at least one access point to a paved street network Adhere to smart growth principles when assessing new development proposals and annexation requests	

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 11 Develop and expand upon arts & cultural local economic development opportunities for Ottumwa residents and businesses			Integrate more public art and streetscapes to increase traffic to underutilized or struggling areas or corridors	
Goal 2 Make Ottumwa livable and enjoyable for people of all ages and abilities				Continue to ensure that public works improvements make City streets more accessible to people with disabilities by providing curb cuts, safe crosswalks, places to rest, adequate and marked accessible parking spaces and sufficient sidewalk space

Transportation – Two Year Update

Major changes in public transit followed the *Our Ottumwa Plan*. The City completed the transfer of transit operations to 10-15 Transit, the regional transit authority. This move allowed the City to eliminate the transit levy while maintaining the same public transit services.

In October 2020, the City completed the two-year, $6 million Main Street streetscape project. The project completely reconstructed the 100-300 blocks of East Main from Court Street to Jefferson. While permeable pavers at the Green Street and Market Street intersections were eventually replaced, the project design with midblock crossings, bioswales, public art and numerous planters improves the ecological and social function of one of Ottumwa's most important streets.

The City acquired ownership of the Rail Depot building in August 2022. The ownership change comes with a renewed commitment by Amtrak to continue serving Ottumwa as part of the California Zephyr line with service to Chicago, Omaha, Denver, Reno, Sacramento and other destinations. Amtrak will also commit to a major renovation of the existing platform at the Ottumwa station.

Significant design work is underway for the Highway 34 reconstruction project. City staff and the Department of Transportation have coordinated on this project and will continue that work as it becomes ready for the DOT to program. The project will improve safety for the entire Highway 34 corridor.

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11 CHAPTER Community Facilities

OTTUMWA PUBLIC FACILITIES

Public facilities are all those services that make life in Ottumwa more safe, comfortable and fulfilling. Some services, such as police and fire protection, are required to protect the health and wellness of residents. Others, such as libraries, schools and public spaces, exist to improve the quality of life in the community. Public facilities are those buildings or services that are maintained by the local government for the overall safety and well-being of the residents. Proper planning, funding and maintenance of the public facilities is needed to serve the needs of the community. This chapter assesses the following public services and facilities in Ottumwa:

For city government, fire facilities, police facilities and libraries, demand estimates for the recommended level of service (LOS) have been calculated for the present and future population scenarios. These estimates present the recommended number of personnel, facility space or land use needs. The average population projection for Ottumwa was used to predict demand for 2020 and 2040. Table 11.2 shows the population estimate and projections used throughout the LOS analysis. The LOS analysis shows the recommended number per resident or per 1,000 residents.

A full summary of Ottumwa's facility sizes and staffing levels are provided in Table 11.16 at the end of the chapter.

CITY GOVERNMENT

City Employees

The LOS for city employees is 10.9 employees per 1,000 residents. Based on Ottumwa's estimated 2017 population, the total number of government employees should be approximately 269. The employee count includes all department and levels of government. In 2030 and 2040, the estimated staffing need increases to around 282 and 316 employees, respectively. Currently, the City employs 174 full-time employees and 19 part-time employees, falling below the recommended levels.

Table 11.1 - Government Employee Demand - 2020-2040

Government Personnel Need	LOS
Cities < 50,000	10.9 / 1,000
Existing Government Personnel Needs	**2020 Demand**
Cities < 50,000	269
2030 Average Growth	**2030 Demand**
Cities < 50,000	282
2040 Average Growth	**2040 Demand**
Cities < 50,0000	316

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

City Facility Space

The LOS for overall city facility space is 0.9 square feet per resident. Based on this standard, Ottumwa should be maintaining approximately 22,235 square feet of a facility space based on current population estimates. The 2020 and 2040 estimates are also shown in Table 11.3 with between 23,245 and 26,069 square feet. The current Ottumwa City Hall is a 35,960 square foot facility, more than the recommended size.

Recreation Center and Community Center Space

The LOS for recreation center space is 0.55 square feet per resident. Based on this standard, Ottumwa should have approximately 13,588 square feet on 1.4 acres of recreation center space. The community center space LOS standard is 0.75 square feet per resident. Today, Ottumwa has a demand for approximately 18,529 square feet of community center space. There may be opportunities for a joint recreation / community center space, possibly with private-sector funding assistance, to provide an efficient and updated recreation and community center facility for Ottumwa residents.

Table 11.2 - Ottumwa Population Estimate + Projections

Year	Population
Existing (2017 est.) Population	24,705
Average 2030 Population Projection	25,828
Average 2040 Population Projection	28,966

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

Table 11.3 - Government Facility Space - 2020-2040

Existing City Hall Facility Size (Sq. Ft.)	*35,960 sq. ft.*
General Government Facility Space	**LOS**
Facility Size (Sq. Ft. Per Resident)	0.9
Land Area (Sq. Ft. Per Resident)	3.5
Existing Demand Government Facility Space	**Demand**
Facility Size (Sq. Ft.)	22,235 sq ft.
Land Area (Sq. Ft.)	86,468 sq ft.
Land Area (Acres)	2.0 acres
2030 Demand Government Facility Space	**Demand**
Facility Size (Sq. Ft.)	23,245 sq. ft.
Land Area (Sq. Ft.)	90,398 sq. ft.
Land Area (Acres)	2.1 acres
2040 Demand Government Facility Space	**Demand**
Facility Size (Sq. Ft.)	26,069 sq. ft.
Land Area (Sq. Ft.)	101,381 sq. ft.
Land Area (Acres)	2.3 acres

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

Table 11.4 - Recreation Center Facility Space - 2020-2040

Recreation Center Facility Space	LOS
Facility Size (Sq. Ft. Per Resident)	0.55
Land Area (Sq. Ft. Per Resident)	2.4
Existing Demand Government Facility Space	**Demand**
Facility Size (Sq. Ft.)	13,588 sq. ft.
Land Area (Sq. Ft.)	59,292 sq. ft.
Land Area (Acres)	1.4 acres
2030 Demand Government Facility Space	**Demand**
Facility Size (Sq. Ft.)	14,205 sq. ft.
Land Area (Sq. Ft.)	61,987 sq. ft.
Land Area (Acres)	1.4 acres
2040 Demand Government Facility Space	**Demand**
Facility Size (Sq. Ft.)	15,931 sq. ft.
Land Area (Sq. Ft.)	69,518 sq ft.
Land Area (Acres)	1.6 acres

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

Table 11.5 - Community Center Facility Space - 2020-2040

Community Center Facility Space	LOS
Facility Size (Sq. Ft. Per Resident)	0.75
Land Area (Sq. Ft. Per Resident)	4.0
Existing Demand Government Facility Space	**Demand**
Facility Size (Sq. Ft.)	18,529 sq. ft.
Land Area (Sq. Ft.)	98,820 sq. ft.
Land Area (Acres)	2.3 acres
2030 Demand Government Facility Space	**Demand**
Facility Size (Sq. Ft.)	19,371 sq. ft.
Land Area (Sq. Ft.)	102,312 sq. ft.
Land Area (Acres)	2.4 acres
2040 Demand Government Facility Space	**Demand**
Facility Size (Sq. Ft.)	21,725 sq. ft.
Land Area (Sq. Ft.)	115,864 sq. ft.
Land Area (Acres)	2.7 acres

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

FIRE / EMS FACILITIES

Fire protection services in Ottumwa are provided by the Ottumwa Fire Department. The station is located at 301 North Wapello Street. The department provides fire and safety protection services to over 24,000 people in the Ottumwa area. The department provides fire protection and emergency services to Ottumwa residents. It responds to 911 emergency medical calls and vehicle accidents within city limits.

The Ottumwa Fire Department maintains the Southeast Iowa Response Group which safely collects hazardous materials from eleven counties. The Insurance Services Office (ISO) rating for the Ottumwa Fire Department is ranked a 3 on a scale of 1 (best equipped fire departments) to 10 (least equipped). The rating is a way to rank each fire department across the country to set insurance rates for homeowners and business owners.

Fire / EMS Personnel and Facility / Land Use Needs

Table 11.7 shows two LOS standards recommended for communities, one for all cities and another for cities in the West North Central part of the United States. For each standard, there is a high and lower LOS recommendation. Fire / EMS needs will vary based on geographic location, size of the community and the relative occurrence of incidents requiring fire / ems in a community.

Current demand estimates for Ottumwa were calculated and are shown in Table 11.8. Today, Ottumwa should have between 26 and 40 fire / ems personnel employed to serve the community. The fire / ems personnel should have an approximately 9,900 square foot facility space on 1.4 acres of land. As of 2020, the Ottumwa Fire Department has 26 employees working out of two facilities with a combined total 13,636 square feet, inline with the recommended numbers.

In 2030, the number of personnel increases to between 28 and 42 and the facility size increases to approximately 10,300 square feet. By 2040, the personnel demand increases slightly to between 37 and 43 employees, a 11,600 square foot facility on 1.7 acres.

Table 11.6 - Fire/EMS Personnel, Facility + Land Use Level of Service (LOS) Standards

Fire/EMS Personnel Standards	Lower LOS	Higher LOS
West North Central Cities	1.07	1.27
All Cities	1.48	1.63
Fire/EMS Facility + Land Use Needs	**LOS**	
Facility Sq. Ft. per Resident	0.4	-
Land Area Sq. Ft. per Resident	2.5	-

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

Table 11.7 - Fire/EMS Personnel Needs - 2020-2040

Existing Fire/EMS Staff #	*26*	
Existing Personnel Needs	**Lower LOS**	**Higher LOS**
West North Central Cities	26	31
All Cities	37	40
2030 Medium Growth Needs	**Lower LOS**	**Higher LOS**
West North Central Cities	28	33
All Cities	38	42
2040 Medium Growth Needs	**Lower LOS**	**Higher LOS**
West North Central Cities	31	37
All Cities	43	47

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

Table 11.8 - Fire/EMS Facility & Land Use Needs - 2020-2040

Existing Facility Size (Sq. Ft.)	*13,636 sq. ft.*
Existing Facility Needs	**Estimated Demand**
Facility Size (Sq. Ft.)	9,882 sq. ft.
Land Area (Sq. Ft.)	61,763 sq. ft.
Land Area (Acres)	1.4 acres
2030 Medium Growth Needs	**Estimated Demand**
Facility Size (Sq. Ft.)	10,331 sq. ft.
Land Area (Sq. Ft.)	64,570 sq. ft.
Land Area (Acres)	1.5 acres
2040 Medium Growth Needs	**Estimated Demand**
Facility Size (Sq. Ft.)	11,586 sq. ft.
Land Area (Sq. Ft.)	72,415 sq. ft.
Land Area (Acres)	1.7 acres

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

POLICE FACILITIES

The Ottumwa Police Station is located at 220 2nd Street West. The department provides police and safety services to approximately 24,000 people. In 2018, the officers responded to about 30,000 calls, arrested about 4,600 suspects, and submitted about 4,500 incident reports. The department generated $509,178 in revenue. The department is comprised of 53 sworn officers and civilian employees including:

- 1 School Resource Officer (Evans Middle School)
- 2 School Resource Officers (Ottumwa High School)
- 2 Drug Task Force Investigators
- 37 Officers
- 8 Communication Specialists
- 4 Civilian Employees

Police Personnel and Facility / Land Use Needs

For the 2017 estimated population of 24,705, the police department should have 41-57 police personnel. Demand estimates for police personnel based on 2017 estimates show Ottumwa needing between 41-57 police personnel, depending on the high and lower LOS standards. By 2030 or 2040, the demand becomes between 44 and 77 personnel. As of 2020, the Ottumwa Police Department employs 51 staff, slightly above the recommended staffing levels.

More and more, fire/ems and police departments are opting to be housed in joint public safety buildings or centers to provide comprehensive and efficient service to residents. There is significant cross-over between the calls fire / ems and police are called to and financial efficiencies gained from using a joint facility. While a more detailed facility analysis plan would be needed to assess the existing condition of the facility space for both fire / ems and police, a joint facility could be a financially feasible option for Ottumwa to consider.

Table 11.9 - Police Personnel, Facility & Land Use LOS Standards

Police Personnel Standards	Lower LOS	Higher LOS
West North Central Cities	1.69	1.97
All Cities	1.98	2.65
Police Facility + Land Use Needs	**LOS**	
Facility Sq. Ft. per Resident	0.7	-
Land Area Sq. Ft. per Resident	3.0	-

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

Table 11.10 - Police Personnel Needs - 2020-2040

Existing Police Staff #	*51*	
Existing Personnel Needs	**Lower LOS**	**Higher LOS**
West North Central Cities	42	49
All Cities	49	65
2030 Medium Growth Needs	**Low LOS**	**Higher LOS**
West North Central Cities	44	51
All Cities	51	68
2040 Medium Growth Needs	**Low LOS**	**Higher LOS**
West North Central Cities	49	57
All Cities	57	77

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

Table 11.11 - Police Facility & Land Use Needs - 2020-2040

Existing Facility Needs	Estimated Demand
Facility Size (Sq. Ft.)	16,058 sq. ft.
Land Area (Sq. Ft.)	74,115 sq. ft.
Land Area (Acres)	1.7 acres
2030 Medium Growth Needs	**Estimated Demand**
Facility Size (Sq. Ft.)	16,788 sq. ft.
Land Area (Sq. Ft.)	77,484 sq. ft.
Land Area (Acres)	1.8 acres
2040 Medium Growth Needs	**Estimated Demand**
Facility Size (Sq. Ft.)	18,828 sq. ft.
Land Area (Sq. Ft.)	86,898 sq. ft.
Land Area (Acres)	2.0 acres

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

OTTUMWA PUBLIC LIBRARY

The Ottumwa Public Library is in downtown Ottumwa at 102 West 4th Street. The facility is 12,000 square feet and is a historic Carnegie Library. There are 12 total staff employed by the library, which sits across from the City Hall adjacent to Central Park in downtown Ottumwa. In 2017, there were 87,704 library visits and 3.5 visits per capita. There are 14 computers with Internet access. The Ottumwa Public Library Strategic Plan 2018-2021 was completed by the Ottumwa Public Library and the State Library of Iowa in 2018 to effectively plan how to implement the library's objectives and goals for the community for the following three years.

The library offers a variety of events and resources for the public including:

- Book Clubs
- Story Times
- Public Use Computers
- Job search online services
- Blank Park Zoo in Des Moines free passes
- Summer Reading Programs for Kids, Teens, and Adults

Library Volume, Facility Space and Land Use Needs

Table 11.2 shows the LOS standards available for libraries. The LOS analysis reviews the anticipated number of volumes and total facility space and land use needs. Based on current population estimates, Ottumwa should have available to residents approximately 49,400 volumes of books. The Ottumwa library department should have approximately 14,823 square feet on 0.35 acres of land. Given the historic nature of the current library and the demand estimates, one option to consider would be to create an addition to the existing library facility rather than a new facility in another location.

As of 2020, the Ottumwa Public Library has a 12,320 sq. ft. facility equipped with 56,844 volumes, and is staffed by 8 full-time and 5 part-time employees. While the facility is smaller than recommended, the volume numbers are above recommended guidelines.

Another consideration for the Ottumwa library is the evolving nature and role of libraries in communities. While many still rely on paper copies of books, technology has led to a massive demand for e-books which may impact the volume and space requirements listed. However, libraries are serving other important needs such as after-school activities, adult learning programs and are an important source of computer and internet service for residents that may not choose to or be able to afford internet access in their homes.

Table 11.12 - Library Volume & Facility LOS Standards

Volumes	**LOS**
Volumes per resident	2.0
Facility Size	**LOS**
Facility Space (Sq. Ft. / Resident)	0.60
Land Area (Sq. Ft. / Resident)	0.63

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

Table 11.13 - Library Volume & Facility Space - 2020-2040

Existing Library Stuff #s	*8 FTE (5 PT)*
Existing Library Volumes	*56,844*
Existing Library Facility Size (Sq. Ft.)	*12,320 sq. ft.*
Existing Volume, Facility & Land Needs	**Demand**
Volumes	49,410
Facility Size (sq. ft.)	14,823 sq. ft.
Land Area (sq. ft.)	15,564 sq. ft.
Land (acres)	0.35 acres
2030 Medium Growth	**Demand**
Volumes	51,656 sq. ft.
Facility Size (sq. ft.)	15,497 sq. ft.
Land Area (sq. ft.)	16,272 sq. ft.
Land (acres)	.37 acres
2040 Demand Government Facility Space	**Demand**
Volumes	57,932
Facility Size (sq. ft.)	17,380 sq. ft.
Land Area (sq. ft.)	18,249 sq. ft.
Land (acres)	.42 acres

Source: Planner's Estimating Guide (Nelson 2004) & City of Ottumwa

SCHOOLS

Ottumwa Community School District

The Ottumwa Community School District has one early childhood center, six elementary schools, one middle school, and one high school. There are 24 administrative staff, 338 teaching staff, and 346 support staff in the district. For students completing high school in four years the graduation rate is 88.5%, and for five years the rate is 86.3%. The schools include:

- Ottumwa High School
- Evans Middle School
- Douma Elementary School
- Eisenhower Elementary School
- Horace Mann Elementary School
- James Elementary School
- Liberty Elementary School
- Wilson Elementary School
- Pickwick Early Childhood Center

Youth-Serving Organizations

The Indian Hills Community College provides a construction technology program for Ottumwa High School students to work on construction sites to receive college credit with the Indian Hills Construction Technology. The district purchases properties from the City of Ottumwa for students to develop their trade skills by building homes. The Legacy Foundation established the Legacy Youth Alliance for high school students in Ottumwa and other Wapello County school districts. The program incorporates education, youth-led projects, and training to develop student leadership and improve Wapello County communities.

Colleges

The Indian Hills Community College (IHCC) is a public community college with campuses in Ottumwa and Centerville, Iowa. It is ranked in the top 500 community colleges in the United States. There were 4,090 students enrolled in Fall 2017. A total of 3,634 of the students were Iowa residents and 456 students were non-Iowa residents. It holds a 10:1 student to faculty ratio. The primary IHCC campus is located in northwest Ottumwa. There are two secondary campuses including Centerville Campus located in Centerville, IA and North Campus located north of Ottumwa. The IHCC offers services in ten nearby Iowa counties through their County Service Centers. Each center provides course registration, computer lab access, and college credit courses for high school students

Ottumwa Job Corps Center

The Ottumwa Job Corps Center is located on a 27-acre lot in the industrial area near the Ottumwa Regional Airport. The Jobs Corps Center provides skill training at no cost to participants. It is a career technical training program administered by the U.S. Department of Labor. The program is designed for peoples age 16 to 24 with the mission to teach eligible young people the skills they need to become employable

Table 11.14 - Ottumwa Community School District Enrollment

Academic Year	Total Enrollment	% Increase
2016-2017	4,643	-
2017-2018	4,612	-0.6%
2018-2019	4,655	0.93%
2019-2020	4,717	1.3%

Source: Ottumwa Community School District

Table 11.15 - Ottumwa Community School District Facts

Staffing	Total
Administrative Staff Members	29
Teaching Staff	310
Support Staf	296
Budget	**Total**
Annual Budget 2019-2020	$85,089,047

Source: Ottumwa Community School District

and independent. Vocational training includes facilities maintenance, certified nurse assistant, network cable installation, material handling and distribution, and medical administrative assistant, among others.

OTHER PUBLIC AMENITIES

Bridge View Center

The Bridge View Center holds a variety of events, such as conventions or trade shows, all year around. It has a 664-seat theater, multiple meeting rooms, a multi-purpose exposition hall. The Bridge View Center commonly corresponds with the City of Ottumwa for community events. It is located at 102 Church Street. In 2022, construction of a new hotel adjacent to the Bridge View Center is slated to complete construction. Once the hotel is operational, the ability for Ottumwa to attract larger conferences will be greatly enhanced.

Ottumwa Regional Airport

The Ottumwa Regional Airport is a 1,440-acre complex located on Highway 63 north of Ottumwa. It is a General Aviation airport with two runways, rental hangars, and full aviation services including certified mechanics. The nearby industrial park contains several manufacturing, trucking and other industrial businesses.

American Gothic House

The historic house is located at 300 American Gothic Street, Eldon, IA. The painter Grant- Wood painted the historic home to become the famous painting American Gothic. There are educational exhibits and information on Grant Wood with a memorabilia gift shop.

Community Events

A few of the annual community events Ottumwa offers are:

- Central Park Cinema (offering free movies at Central Park)
- Wapello County Farmers Market
- Annual Family Fest
- Ottumwa Pro-Balloon Race

Table 11.16 - Ottumwa Facility Size & Staffing Levels

Facility	Sq. Ft.
Beach Ottumwa	18,576 sq. ft.
Bridge View Center	93,000 sq. ft.
City Hall	35,960 sq. ft.
Fire Station Number 1	10,184
Fire Station Number 2	3,452
Library	12,320
Parking Ramp	30,284 sq. ft.
Public Works Number 1	17,136 sq. ft.
Public Works Number 2	26,160 sq. ft.
Parks & Recreation	6,238 sq. ft.
Recycling Plant	20,666 sq. ft.
Transit	18,405 sq. ft.
TOTAL	292,381 sq. ft.
Department	**Staffing Levels**
Police Department	51
Fire Department	26
Public Works	54 (+1 part-time)
Airport	2 (+1 part-time)
Health	6
Library	8 (+5 part-time)
Parks	6
Cemetery	3
Planning	1
Administration	2 (+7 part-time)
Clerk	2
Finance	6
Solid Waste	7 (+5 part-time)
TOTAL	174 (+19 part-time)

Source: City of Ottumwa

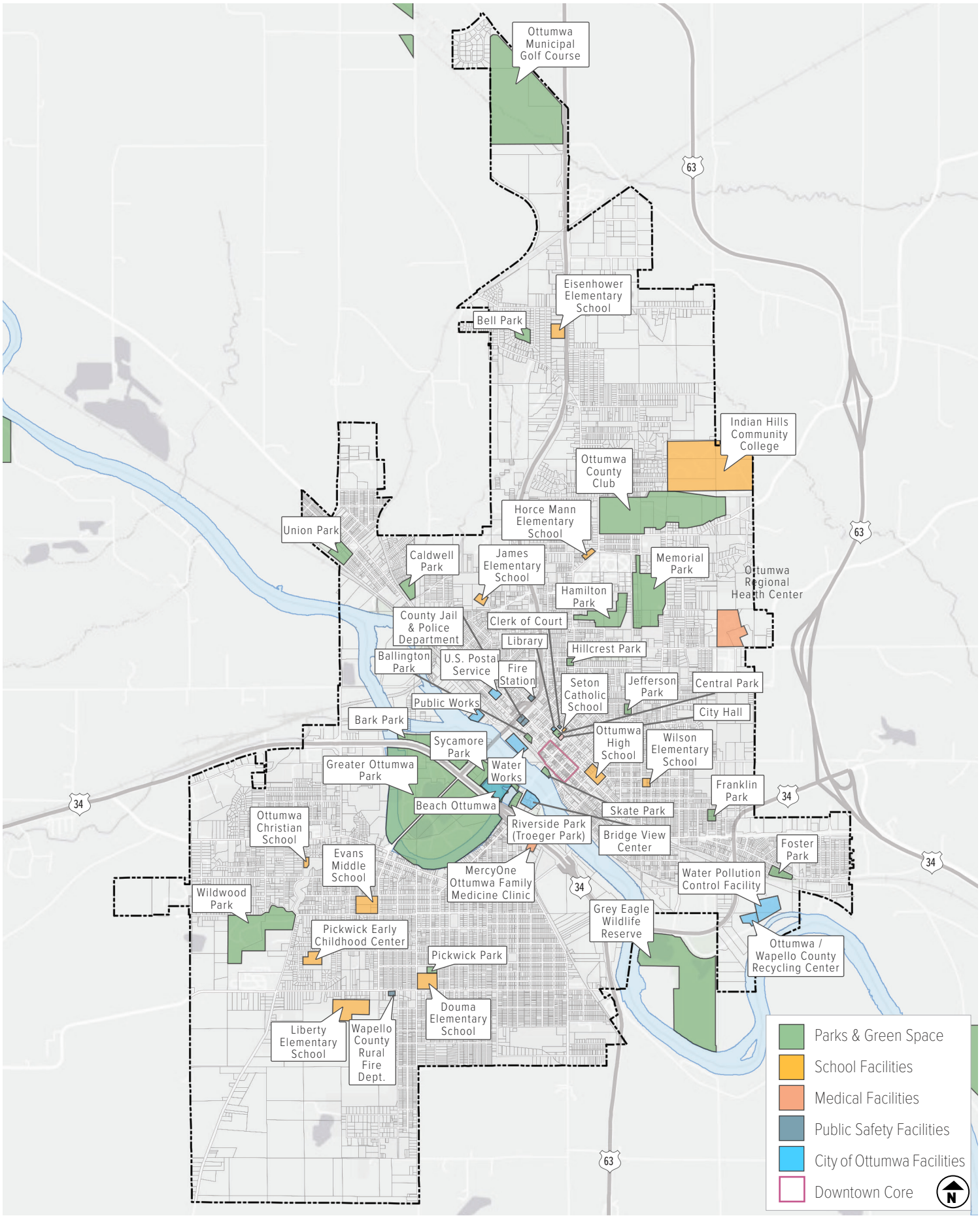

Figure 11.1 - Ottumwa Community Facilities Map

COMMUNITY FACILITIES GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Community Facilities Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 2 Maintain and expand the existing parks and open space system, recreation programs, and trails network		Continue to evaluate existing park facilities and recreation programs to ensure they meet the changing needs of the community Expand recreational activities for the entire community including indoor and outdoor winter activities and afterschool programs Look for opportunities to share park facilities and operating and maintenance costs with the school district and other community and volunteer organizations Complete sidewalk improvement, maintenance and expansion along the Priority Corridors identified in the Ottumwa Bicycle and Pedestrian Plan to enhance the ease of access and ability of residents to walk throughout the community		
Goal 1 Continue to enhance and improve the Downtown and Riverfront		Support and foster the establishment of new restaurants, a hotel connected to the Bridge View Center, and upper story housing		
Goal 3 Develop additional library and community meeting space to serve the changing needs of Ottumwa		Evaluate opportunities and seek partnerships for new library and community space throughout the community		
Goal 6 Preserve the historical and cultural heritage of Ottumwa		Creatively reuse and preserve historic structures		
Goal 7 Promote community pride and stewardship of place		Complete an arts and culture master plan for Ottumwa Inventory, assess, and map all Ottumwa's artistic and cultural characteristics and places Support and promote cultural programs such as workshops, performances and interactive classes		

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 1 Secure an economic leadership role for Ottumwa in its seven-county region			Leverage Bridge View Center as a venue for regional economic planning events	
Goal 7 Continue to partner with the Legacy Foundation and Indian Hills Community College to support job training and business development / incubation				
Goal 8 Invest in Airport infrastructure for commercial and industrial development			Conduct a feasibility study for the Ottumwa Airport to assess future expansion and development possibilities	
Goal 9 Seek opportunities to make improvements that will create long-term savings in cost and energy use			Install energy efficient equipment and make energy efficient improvements in City facilities as part of regular building and equipment repair and replacement Evaluate the practicality and return on investment for installing solar power generation on City facilities Expand the fiber optic capabilities available in Ottumwa	
Goal 1 Invest in women, immigrant, veteran and minority entrepreneurs				Distribute the City's development manual to local organizations representing immigrants and other minorities and devote staff time and resources to helping minority entrepreneurs access development incentives
Goal 3 Celebrate diversity in our community				Ensure that City marketing materials reflect the diversity of the community
Goal 4 Treat all Ottumwans fairly and justly				Create a Spanish language version of the City of Ottumwa website and offer multiple language versions of City forms, rules and regulations Identify existing interpreting services or explore ways in which bilingual/multilingual staff or professional interpreting services can support communication when language is a barrier

Goal	Housing	Quality of Life	Growth	CelebraDiver-sit
Goal 4 Treat all Ottumwans fairly and justly				Review Civil Service procedures, job descriptions and hiring practices to encourage recruiting bilingual/ multilingual staff to eliminate implicit or systemic bias in hiring Progressively review police policies, tactics and procedures to focus on equal, equitable, unbiased, fair and consistent services for all Ottumwans and assign a police department staff member to provide community engagement and communication Explore restoring the Ottumwa Civil Rights Commission by identifying ways in which the Commission could perform tasks that promote equity in the community rather than simply forwarding issues to the state commission Support and seek community donations to fund an equity coordinator to implement diversity initiatives for the City and to serve as a liaison to community organizations, or else specifically assign those duties to City staff and support that work Work with community organizations to score the City of Ottumwa on the Human Rights Campaign's Municipal Equality Index, which scores how inclusive cities are of LGBTQ residents, and work to improve that score Build capacity for youth to participate on existing boards and commissions and explore creating a youth council empowered to make recommendations to the City Council and undertake projects that increase youth community engagement

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12 Infrastructure

CHAPTER

CHAPTER SUMMARY

This desktop watershed assessment is part of a package to inform the City of Ottumwa in preparing the 2018 Comprehensive Plan. The assessment covers watersheds within the planning jurisdiction and corporate limits of the City. The focus is to review the current health of the watersheds with respect to natural resources and stormwater management, including flood risk, waterbody impairments, natural resource protection, existing stormwater infrastructure, land use and zoning, and management alternatives.

The assessment includes maps and published data and reports on flood risk, waterbody impairment, and soil type and condition. It also includes an overview of potential stormwater management strategies for natural resource protection.

There are flood prone areas within city limits and within potential annexation areas. However, a federal flood insurance study of Ottumwa has not been updated since the 1980s.

Two stream segments and one waterbody within the area of interest are impaired waterways with tier IV TMDL priorities for E. coli and biological impairment. The other assessed segments are at least partially supporting all of their designated use classes.

Federal soils data updated in 2018 show that the majority of classified soils within Ottumwa city limits have low to very low infiltration rates. Also, a majority of classified soils are assessed with a moderate or severe potential erosion hazard, with the severe category mostly located north of the Des Moines River.

There is a network of existing trails both within Ottumwa city limits and surrounding Wapello County. Future planning and development should consider these trails, especially with respect to limiting negative impacts and maintaining integrity of the surrounding natural areas.

Existing stormwater infrastructure is extensive, and ongoing efforts have been made to complete separation of storm sewers from sanitary sewers. Future projects should follow existing capital improvement plans and infrastructure master plans to continue separation as necessary.

Land use and zoning within the city limits is mostly residential and commercial with some mixed-use areas downtown and dispersed throughout the city. Industrial areas are concentrated along the Des Moines River downstream from the low head dam and at the northern edges of the city. Land use and zoning in surrounding Wapello county is primarily crop land, with additional zoning for industrial and commercial zones along highway corridors and adjacent to existing

municipalities. Potential annexation areas to the north of the city will likely include areas currently zoned for agricultural, commercial highway service, and industrial use.

Potential stormwater management techniques include regional and localized detention and other small scale approaches. Given the widespread impermeability of soils within the city, infiltration-only options are not optimal, and alternative infiltration strategies including small-scale best management practices may be more effective.

FLOOD RISK ASSESSMENT

Floodway and Floodplain Limits

The National Flood Hazard Layer, which shows the flood prone areas delineated by the Federal Emergency Management Agency (FEMA), is not available for Wapello County. To approximate the flood prone areas from the 1980 Flood Insurance Study (FIS) for Ottumwa, Iowa (Appendix D), digital copies of the Flood Insurance Rate Maps (FIRMs) were georeferenced using street intersections. The associated error can be up to 100 feet. Consequently, the flood prone area maps in Appendix A should not be used for emergency planning purposes. They are provided for context within the watershed. In addition, FIRMs of Wapello County are also included in Appendix A. The City of Ottumwa is currently working with FEMA to ensure all city-owned and operated flood levees are certified.

Future expansion of the City of Ottumwa corporate limits could include "Special Flood Hazard Areas" identified by the county FIRMs, especially along Little Cedar Creek, Cedar Creek, Bear Creek, Village Creek, Little Soap Creek, Sugar Creek, and the Des Moines River. Additional flood risk assessments should be performed for these areas for more detailed planning initiatives.

Soils and Sensitive Ecological Areas

The National Resources Conservation Service of the United States Department of Agriculture (USDA-NRCS) periodically publishes data and reports on the soils of the US. While the most recent USDA-NRCS report on the soils of Wapello County was published in 1981 (Appendix C), updated data were made available via the NRCS Web Soil Survey website (websoilsurvey.nrcs.usda.gov) in 2018. Watersheds were overlain with the updated USDA-NRCS Web Soil Survey data to characterize the soils, wetland potential, and erodibility of the subwatersheds (Appendix A).

Classification data are available for 80% of the soils within the Ottumwa city limits. Of the soils with available data, about 1/4 (23%) have moderate infiltration, while the remaining 3/4 (77%) have slow to very slow infiltration. This suggests relatively large areas within city limits could have significant runoff in rain events. About 2/3 of the classified soils within city limits have been identified with either severe (27%) or moderate (42%) potential erosion hazard. Generally, areas of severe potential erosion hazard are located north of the Des Moines River, and areas of moderate potential erosion hazard are distributed in the uplands on both sides of the Des Moines River.

Table 12.1 - USDA-NRCS 2018 Web Soil Survey Hydrologic Soil Groups for Soils within Ottumwa City Limits

Hydrologic Soil Group [a]	Infiltration Rate	Percent of Total Area within City Limits	Percent of Classified Area [b]
Null / No Data / Not Rated	-	19.9	-
A / D	High / Very Low	0.1	< 0.1
B	Moderate	18.2	22.7
B / D	Moderate / Very Low	0.6	0.8
C	Low	18.0	22.5
C / D	Low / Very Low	9.8	12.3
D	Very Low	33.4	41.7

[a] In dual groups, the first letter is for drained areas while the second is for undrained areas
[b] Percent of classified area refers to the percentage of area with soil classification data other than null / no data / not rated

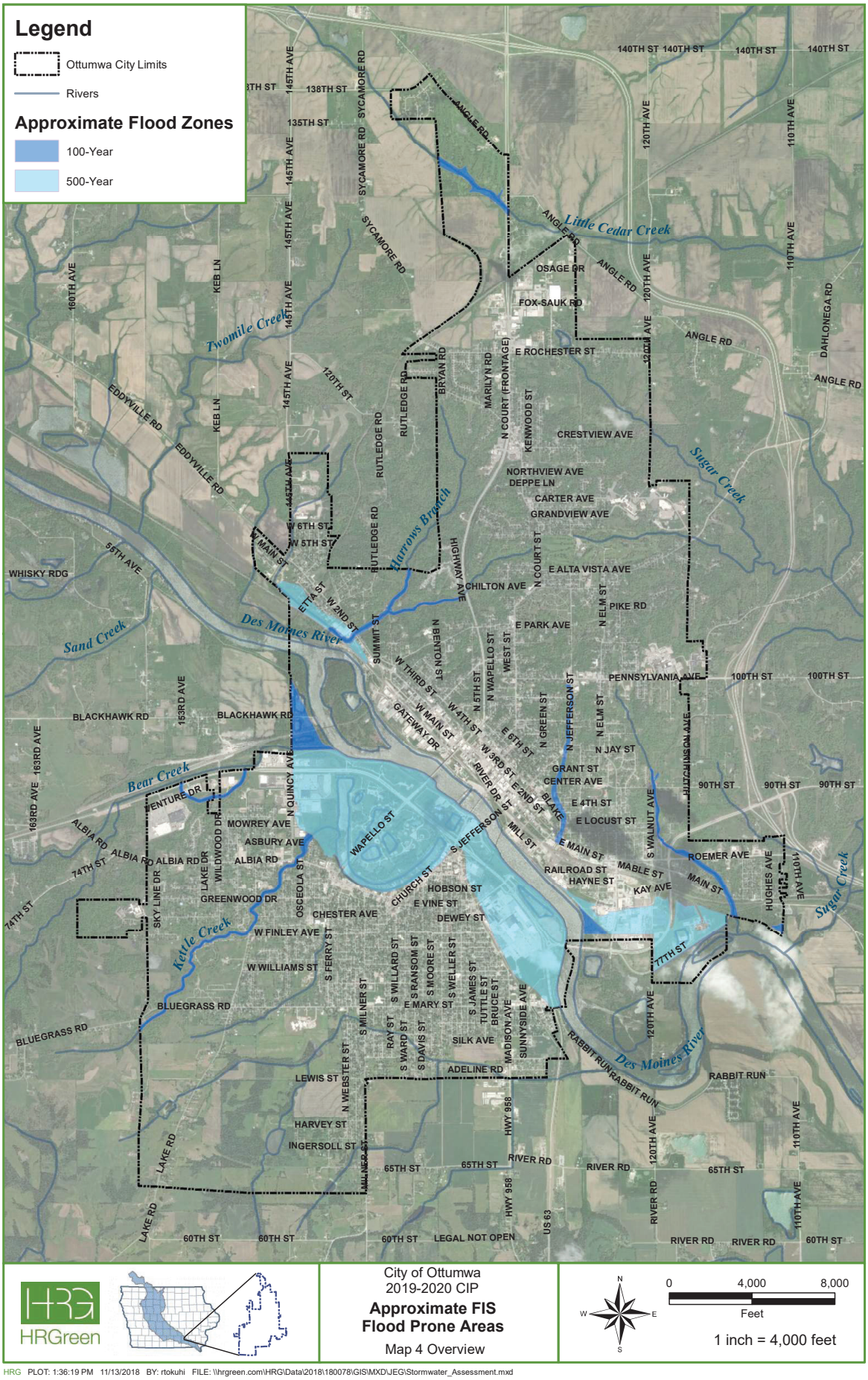

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Figure 12.1 - Approximate FIS Flood Prone Areas

Table 12.2 - USDA-NRCS 2018 Web Soil Survey Potential Erosion Hazard Groups for Soils within Ottumwa City Limits

Potential Erosion Hazard	Percent of Total Area w/in City Limits	Percent Classified Area [a]
Null / No Data / Not Rated	19.9	-
Severe	22.0	27.5
Moderate	33.8	42.2
Slight	24.3	30.3

[a] Percent of classified area refers to the percentage of area with soil classification data other than null / no data / not rated.

There are multiple parks and trails in and around the city limits, including the Ottumwa park trail, the Bridge View Trail, the North Levee Trail, the Gray Eagle Trail, and various Wapello County trails, as well as plans for future extensions of the existing trail system (Map 5, Appendix A). Future development should consider impacts to these areas as part of the planning process.

Similarly, there are wooded riparian areas throughout city limits, especially along the Des Moines River. These areas are adjacent to aquatic habitats with designated uses. Impacts to these areas should be considered in future development plans.

WATERBODY IMPAIRMENT ASSESSMENT

All waters of the state are to be protected for livestock and wildlife watering, aquatic life, noncontact recreation, crop irrigation, and industrial, agricultural, domestic and other incidental water withdrawal uses according to state law. Streams, rivers, lakes, reservoirs, and wetlands are classified as general or designated use according to their size, flow, and condition. Perennial waters have additional designated uses including contact recreation (e.g., swimming or boating), aquatic life use (e.g., sustaining game fish or other aquatic life), drinking water (e.g., municipal water supply), and human health (e.g., fish consumption).

Intermittent waters are classified as general use only. Iowa DNR (IDNR) performs regular Use Attainability Assessments for named waterbodies. If these assessments identify a waterbody that cannot fully support its designated use, then the waterbody is listed as impaired.

Five (5) named streams and two named lakes reside within the City of Ottumwa corporate limits. The streams are Bear Creek, the Des Moines River, Harrows Branch, Kettle Creek, Little Cedar Creek, and Sugar Creek, and the reservoirs are the Ottumwa Park Ponds and the Ottumwa Lagoon. Little Cedar Creek is a tributary of the Cedar River, and the other creeks are tributaries of the Des Moines River, which flows through the heart of Ottumwa. The ponds and lagoon are located in parks in central Ottumwa adjacent to the Des Moines River.

IDNR has published 2016 assessments for Bear Creek, Sugar Creek, the Des Moines River, Ottumwa Park Ponds, and the Ottumwa Lagoon. These assessments are available via Iowa DNR Water Quality Assessment Database (ADBNet) and are included as Appendix B.

Stream Assessment

The five named streams within Ottumwa city limits are designated for primary contact recreation, aquatic life use, drinking water, human health (i.e., consumption of fish), and general use (Table 3). Two of the five (Bear Creek and the upper segment of the Des Moines River) are in need of a Total Maximum Daily Limit (TMDL) evaluation, based on observed impairments. Assessments for 2018 have not yet been published at the time of this report, but will be valuable in decision-making moving forward.

Bear Creek

Bear Creek is impaired by organic enrichment, and a TMDL is needed because it only partially supports aquatic life, including game fish. Impairment was first observed in 2008, based on low fish and invertebrate index of biological integrity scores. Dissolved oxygen levels below the acute criterion were observed in 2010, which can kill or impair growth of aquatic life. This triggered a Tier IV TMDL priority. Bear Creek was not assessed for the A1 and General Use classes.

The Des Moines River

There are two segments of the Des Moines River that are partially within the city limits of Ottumwa. The lower segment goes down from the low head dam at Ottumwa to the confluence with Soap Creek. The upper segment goes from the low head dam at Ottumwa up to the confluence with Cedar Creek. Both of these segments of the Des Moines River are assessed as impaired.

The lower segment was assessed as partially supporting primary contact recreation due to high counts of E. coli (since 2004), and partially supporting of aquatic life due to a fish kill (since 2006) and poor index of biological integrity scores (since 2014). TMDL is needed for this segment (Tier IV priority). The lower segment fully supports primary contact recreation and drinking water supply, but was not assessed for human health or General Use.

The upper segment was assessed in 2014 as not supporting aquatic life use, based on poor index of biological integrity scores. The upper segment was also impaired with high E. coli counts for several years, but was recently delisted based on reduced E. coli counts during the 2012-2014 assessment period. It is now assessed as fully supporting primary contact recreation. The upstream segment of the Des Moines River also fully supports human health and was not assessed for the General Use class.

Sugar Creek

Sugar Creek was not assessed for primary contact recreation, aquatic life use, and General Use classes. The insufficient data yields no determination for whether or not the designated uses are met. A fish kill was observed on or before June 17, 2004, and the cause was identified as an industrial chemical spill from an overturned truck of sulfuric acid.

Lake and Wetlands Assessment

There are two named waterbodies within City of Ottumwa corporate limits: Ottumwa Park Ponds and Ottumwa Lagoon. Ottumwa Park Ponds are a group of 5 ponds totaling about 37 acres in size and assessed as a group. Their designated uses are A1 (Primary Contact Recreation), B(LW) (Aquatic Life Use, Lakes and Wetlands), and HH (Human Health). The Ottumwa Lagoon is approximately 59 acres and has designated uses of A1, B(LW), and HH as well. Both named waterbodies were assessed in 2016 (Table 4).

Ottumwa Park Ponds

The Ottumwa Park Ponds are partially supporting of aquatic life use. A 2006 fish kill triggered a 3b partial impairment code for the 2008assessment. The fish kill was attributed to naturally occurring hypoxia due to ordinary stratification of the pond. Additional data are necessary to further evaluate other designated uses.

Ottumwa Lagoon

The Ottumwa Lagoon is impaired and not supporting of both primary contact recreation and aquatic life use. TMDLs have been completed for both turbidity and algal growth, which impair primary contact recreation. A TMDL is still required for pollutant caused impairment of aquatic life use due to an observed petroleum spill in 2008. Aquatic life use in the lagoon is also impaired by the previously mentioned algal growth. The lagoon was assessed in 2016 as fully supporting of human health. While no pollutants in fish tissue were observed above criterion levels in the current assessment period, a fish consumption advisory for the Ottumwa lagoon was in place from 2000 to 2010 for elevated levels of chlordane in collected catfish. Future planning efforts should consider potential runoff impacts to this waterbody.

Table 12.3 - Iowa DNR ADBNet 2016 Stream Assessments for Selected Streams Intersecting Ottumwa City Limits

Waterbody	A1 Recreation, Primary Contact	B (WW-1) Aquatic Life Warm Water Type 1 [a,b]	C Drinking Water [a,b]	HH Human Health [a,b]	General Use [a,b]	Overall Assignment Designation [a,b]
Bear Creek	-	P			-	5
Des Moines River, segment 1011 upstream of Ottumwa Low Head Dam	F	X	F	-	-	3
Des Moines River, segment 1010 downstream of Ottumwa Low Head Dam	P	P		F	-	5
Sugar Creek	-	-			-	3

a Shading indicates designated uses.
b F indicates fully supporting, P indicates partially supporting, and X indicates not supporting. A dash indicates waterbody not assessed.
c 5 indicates water is impaired or threatened, and a TMDL is needed. 3 indicates insufficient data exist to determine whether designated uses are met.

Table 12.4 - IDNR ADBNet 2016 Stream Assessments for Selected Waterbodies within Ottumwa City Limits

Waterbody	A1 Recreation, Primary Contact	B (WW-1) Aquatic Life Warm Water Type 1 [a,b]	C Drinking Water [a,b]	HH Human Health [a,b]	General Use [a,b]	Overall Assignment Designation [a,b]
Ottumwa Park Ponds	-	P		-	-	5
Ottumwa Lagoon	X	X		F	-	5

a Shading indicates designated uses.
b F indicates fully supporting, P indicates partially supporting, and X indicates not supporting. A dash indicates waterbody not assessed.
c 5 indicates water is impaired or threatened, and a TMDL is needed. 3 indicates insufficient data exist to determine whether designated uses are met.

STORMWATER MANAGEMENT

Subwatersheds in Ottumwa

Ottumwa is predominantly in the Des Moines (HUC 8) watershed, with a portion in the Upper Mississippi-Skunk-Wapsipinicon watershed. Ninety-two percent (92%) of the 14,459 square mile Des Moines River watershed drains through the city. While the City of Ottumwa contributes to water quality and quantity on the Des Moines River, natural resource preservation and water quality projects are better described in relation to the smaller creeks (Bear Creek, Sugar Creek, Harrow's Branch, and several unnamed tributaries) than the Des Moines River.

Fifteen (15) subwatersheds with areas ranging 0.16 to 27.4 sq. mi. were identified for this assessment using the USGS StreamStats tool (Appendix A). Areas not shown on the watershed delineation map either drain directly to the Des Moines River, or are in the uplands of Little Cedar Creek, which does not drain towards Ottumwa.

Land Use and Zoning

About two-thirds (68%) of Wapello County is crop land, and the majority of land in the county is zoned for agriculture. Additional zoning for commercial and industrial use is located along highway corridors and adjacent to existing municipalities. Land within Ottumwa city limits is zoned primarily for residential and commercial use. There are mixed-use areas downtown and in several locations throughout the city. Areas zoned for industrial use are concentrated along the Des Moines River below the low head dam and at the northern edge of the city. The area on the right (southern) bank of the Des Moines River upstream of the low head dam is zoned primarily as agriculture, including several parks and waterbodies. Maps of county and city zoning are included in Appendix A.

Annexation Alternatives

The City of Ottumwa's 2019-2020 Capital Improvement Plan includes funding for annexation of parcels at the City's northern boundary. Based on published projections of expansion from the Ottumwa Courier (*Ottumwa May See Expansion Opportunities*, 2017), expansion areas may include parcels adjacent to and including the Highway 63 corridor, the Ottumwa Regional Airport, and Dahlonega Township (Appendix A). These areas are currently zoned for agriculture, highway service commercial, and industrial use. Figure 12.2 shows the proposed expansion areas.

Existing Stormwater Infrastructure

Ottumwa currently has over 77 miles of stormwater gravity mains, 822 stormwater manholes, 7 stormwater pump stations, and 190 stormwater discharge locations (Appendix A). Portions of the existing storm sewer infrastructure drain to sanitary sewer lines. Sewer separation has been an ongoing effort, and additional sewer separation projects are anticipated. Future storm sewer projects should follow existing capital improvement and sewer master plans, with a focus on continued separation of storm water infrastructure.

Potential Stormwater Management Techniques

Regional detention means using large ponds to collect and detain runoff from entire development areas (regions), instead of smaller, more frequent "local" detention ponds. Because they usually serve multiple small watersheds, regional basins are usually located low in the watershed, often within existing streams. The feasibility of using regional (or "online") detention was evaluated throughout the study area and it was not deemed feasible for most of it since detention or retention is not allowed in mapped, regulatory floodplains. Regional detention may be feasible higher within the watershed where commercial and higher density land use is specified and site by site detention may not be as cost effective. These regional detention areas could be installed within existing drainage ways in areas zoned as open space. Regional detention basins can also be designed as multi-use areas, for example a soccer field could be located in a large basin that is flooded only occasionally. The area west of the Covington Road interchange is one area that may conducive to regional detention. USDA soils information for this area indicate pockets of Sand and Sandy Loam, which are very favorable for infiltration basins.

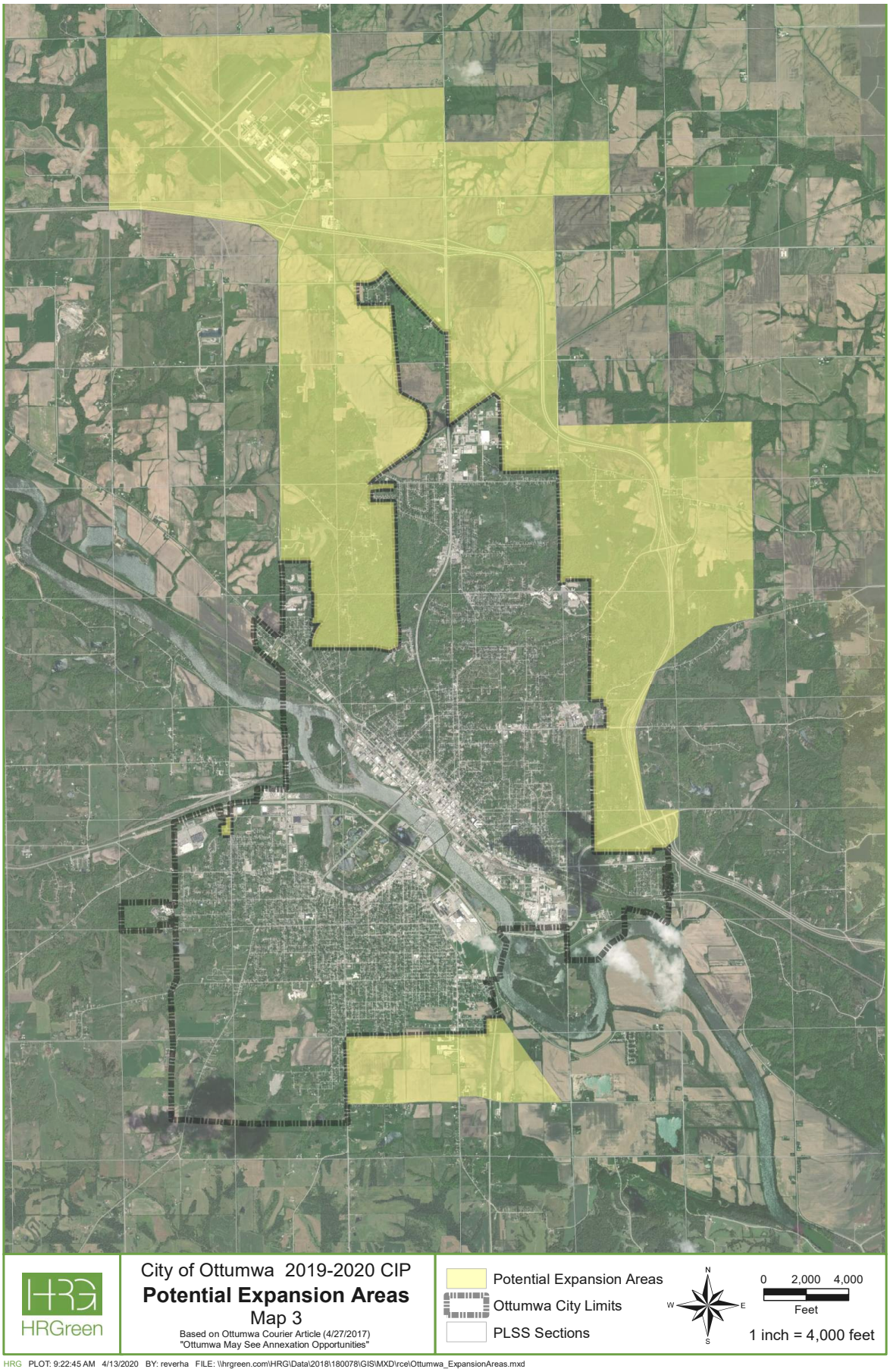
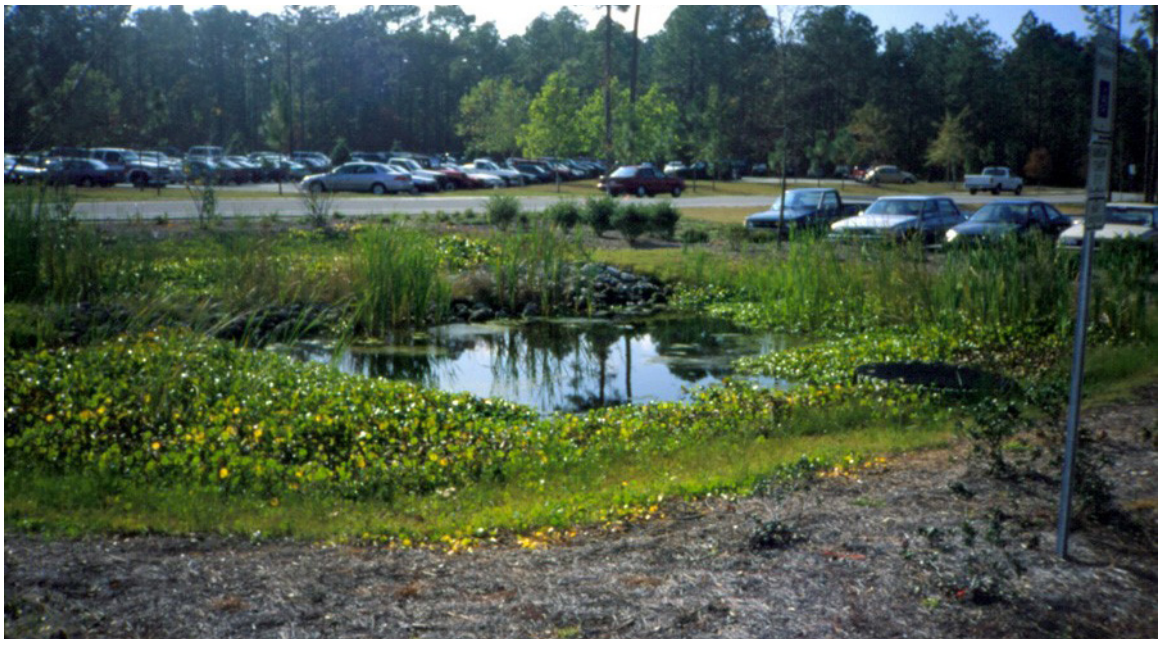


Figure 12.2 - Potential Expansion Areas

Figure 12.3 - Example of an "online" regional detention pond (image courtesy of rvtcorp.com)

Figure 12.4 - Small constructed wetland for stormwater detention and water quality improvement (image courtesy of uncs.edu)



Local detention is recommended for most of the project area. Developments should be required to adhere to the City standard of limiting the rate of runoff from the 5-year through 100-year frequency storm events to the existing, pre-developed peak runoff from a 5-year event. Enforcing this standard would ensure that the cost of detention is included in the development of each site. Emphasis should be placed on detention that also improves water quality – such as bio-filters, wet ponds or wetlands – or reduces runoff volume such as infiltration oriented practices. In commercial and high density areas, permeable pavement and underground facilities such infiltration chambers may be a better fit than conventional detention practices that take up valuable land area. Outlet structures from detention and retention facilities should be multi-stage to allow for controlled release of the water quality and channel protection volumes (the runoff from 1.25 and 2.4 inch storms, respectively).

Small-Scale Stormwater Management Techniques

The use of smaller, more numerous practices, such as bioretention cells, rain gardens, native landscaping, rain barrels, and other small scale stormwater treatment techniques (often called Best Management Practices or “BMPs”) should be incorporated into site development whenever possible. These types of practices offer the best downstream results when they are distributed across the landscape, each unit serving a relatively

small drainage area. These stormwater management techniques are intended to infiltrate water close to the source, thus reducing both the rate and volume of stormwater reaching the drainageways and creeks and ultimately reducing downstream erosion and pollutant loading. It is recommended that developments be required to utilize these types of facilities to infiltrate the Water Quality Volume at a minimum. Ideally, the Channel Protection Volume would be treated and/or infiltrated onsite (the concepts of Water Quality volume and Channel Protection volume are described thoroughly in the Iowa Stormwater Management Manual). While the City requirement of releasing at the 5-year pre-development rate is excellent for reducing downstream flooding, it is the smaller, more frequent storms that have been shown to cause the most erosion and water quality degradation in channels, creeks, and rivers. These practices will promote healthy, attractive waterways and allow stormwater that does not infiltrate to function as an amenity instead of a nuisance.

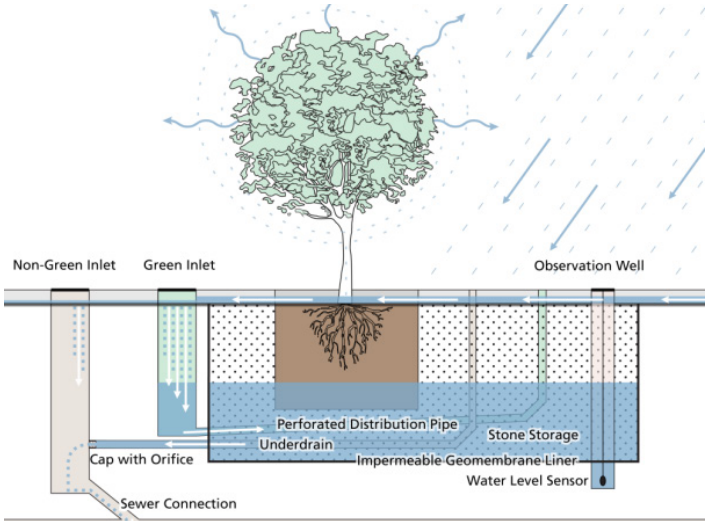
Transportation Network

The transportation network has been designed in a way to minimize waterway crossings and, where possible, to follow ridgelines. Stormwater discharge from the roadways will discharge into the existing waterway areas zoned as open space. If possible, roadways should be designed to include some detention, retention, or infiltration to further minimize impacts on the waterways. Examples of BMP techniques applicable to roadway design include bio-swales, curb-cut rain gardens, permeable pavement, minimizing pavement width, and underground storage. In rural applications, simply using a native seed mix in ditches can significantly reduce peak volumes and flows. Another creative solution is the installation of open-bottom manholes in areas where high infiltration rates exist. Often the cost of these practices is offset by cost savings in smaller storm sewer piping.

GLOSSARY OF STORMWATER BEST MANAGEMENT PRACTICES

1. Infiltration Trenches – These are trenches filled with highly porous aggregate that receive directed runoff from small sites. Infiltration is promoted and some water quality improvement is provided by filtration. One special type suited to parking lots are called “Tree Trenches” wherein pavement runoff is intercepted by long grates over the trenches. The trenches then slope toward tree or landscaping clusters placed in parking medians or other spaces unusable for parking.

Figure 12.5 - Aerial view and cross section of "tree infiltrtation trenches" which are often used to drain and cool parking lots



2. Infiltration Basins – These are shallow basins, typically dry and covered in grasses, that receive runoff from impervious areas, or small watersheds. Infiltration of rainwater is promoted by native soil porosity (only applicable for sites with suitable soil), and an overflow structure is usually provided for high flow events. Water quality is improved by filtration; infiltration is promoted so long as sediment clogging is avoided.

3.Bioretention Cells / Rain Gardens – These are similar to infiltration basins except they are typically shallower yet, and planted with aesthetically appealing vegetation. Soil is amended to maximize porosity and non-buoyant hardwood mulch is placed around the plantings. They are typically designed to fill to just below an overflow structure in a 1.25 inch rain event, then infiltrate and drain within 24 hours afterward. Significant water quality improvement is provided by the combination of filtration, nutrient uptake by plants, and sequestration /immobilization of metals and some organic compounds.

Figure 12.6 - Examples of bioretention cells and rain gardens

4. Native Landscaping – This simple concept involves retaining or mimicking the existing undisturbed landscape. An existing floodplain, grassland, or forested area may be left undisturbed – or replicated if not previously existing – or native plant species may be used in conventional development areas. Native species and long-established landscaping tend to infiltrate and retain runoff well and be well-suited to the local climate, requiring little maintenance. Water quality improvement varies with the application.

5. Dry Detention Basins – Dry ponds are similar to infiltration basins except they may be sized for temporary storage of runoff from larger storm events. Water quality is typically improved by settling of particulate matter only.

6. Wet Detention Basins – Wet ponds are similar to dry ponds except infiltration is not promoted such that at least part of the basin maintains a permanent pool. The design typically provides for additional storage and slow release of stormwater runoff. Settling of particulate matter is expected, and some uptake of nutrients by algae and aquatic plants occurs.

7. Stormwater Wetlands – This is basically a wet pond with additional plants and emphasis on biodiversity. More water quality improvement is expected than with a wet pond because the additional aquatic plants (and the microorganisms that they support) provide rapid uptake of nutrients, mineralization of some organic compounds, and sequestration of metals. Not to be confused with a natural wetland, these are designed and constructed for specific functionality; they also tend to harbor less total biodiversity than a natural pond. Note that existing, natural wetlands are not typically permitted to be converted for stormwater detention in excess of the natural capacity. See Figure 2 above for a visual example

8. Grassed Swales – A swale is a long depression that slopes gently toward one end. It is used to direct the flow of runoff while slowing and infiltrating runoff with vegetation. Some pollutant removal occurs during low flow events.

9. Wet Swales – A wet swale is similar to a grassed swale except that it is more wet due to limited infiltration. Some stormwater detention may be provided, and additional water quality improvement is expected compared to a typically dry swale.

10. Vegetated Filter Strips – These are similar to swales except they are not always used to direct the flow of runoff, sometimes their primary purpose is to slow sheet flows from adjacent impervious surfaces. Filtration of sediment, infiltration of runoff, and uptake of nutrients may also occur.

11. Underground Detention Chambers – These are constructed underground voids for temporary storage of runoff. They can be formed by pre-fabricated vaults, open bottom arch structures, large pipes, or simply by filling a pit with “open-graded” rock. They can be configured for water reuse such as irrigation, or for slow release to a typical storm sewer system pursuant to onsite detention regulations.

Figure 12.7 - Example of underground detention system

12. Green Roofs – These are low-pitch or flat roofs that are covered with a growth medium and hardy, drought-tolerant plants. Runoff from the roof is retarded by the system and atmospheric pollutants are reduced as the water passes through it. Some buildings with green roofs include rooftop public spaces for combined use benefits.

13. Online Water Quality Devices – These are storm sewer system appurtenances that provide one or more types of treatment of water already in the storm sewer system. While volume and rate of runoff are not attenuated, concentrated pollutant removal is the goal. Typical applications include sequestering floating debris, settling out suspended solids and capturing oil and grease. These tend to be relatively expensive and are typically specified where known high pollutant loading is expected (industrial sites, parking ramps, etc.).

Figure 12.8 - Example of an underground detention system

14. Permeable Pavement / Paver Brick – Permeable pavement is a rapidly growing practice for improving rainwater infiltration and reducing runoff rate and volume. Few other practices are as immediately effective because the typical source of rainwater runoff is impermeable surfaces, such as pavement itself. Rainwater falling on the pavement continues through to an open-graded rock layer below where it is then infiltrated or directed to a detention or conveyance means (perforated subdrains are often used to control saturation). While permeable pavements may require occasional maintenance – such as cleaning by vacuum truck – they also require less conventional maintenance, less winter treatment (ice doesn't accumulate), and less, if any, storm sewer system. The only application not currently recommended for permeables is high-speed, high-usage (speeds over 45 mph) streets.

CONCLUSIONS AND IMPLEMENTATION STRATEGY RECOMMENDATIONS

Conclusions

There are mapped floodways and floodplains within City of Ottumwa limits and special flood hazard areas in areas of potential expansion. These areas should be considered in future planning.

Soils within city limits are generally impermeable, and the upland soils are generally erodible, especially north of the Des Moines River. Stormwater controls and erosion protection will be important factors in future planning.

There are named waterbodies with designated uses within City of Ottumwa limits and some of them have current impairments and total maximum daily load (TMDL) requirements. These impairments should be addressed where possible, and further impairment should be avoided. The City should review stormwater and related ordinance and enforcement with an emphasis on sustainability and the use of best management regarding both soil and sedimentation control and stormwater runoff. The implementation of a stormwater utility fee could serve as a moderate and dependable program resource for undertaking both the regulatory and administrative burden of a more sustainable stormwater approach, as well as continued infrastructure rehabilitation in concert with the City's water utility and private development investments.

Future expansion areas to the north, specifically parcels within and adjacent to the Highway 63 corridor, the Ottumwa Regional Airport, and the Dahlonega Township, may include areas along Little Cedar Creek, Cedar Creek, Bear Creek, Village Creek, Little Soap Creek, Sugar Creek, and the Des Moines River. Additional flood risk assessments should be performed for these areas for more detailed planning initiatives.

Implementation Strategy Recommendations

Future stormwater projects should follow existing Capital Improvement and Development plans. Additionally, since the majority of classified soils within city limits are relatively impermeable, infiltration-only practices such as infiltration basins and trenches, raingardens and bioretention cells, and native landscaping are not optimal for much of the city. Detention-only practices such as wet detention basins, wetlands, wet swales, underground detention (sealed), and green roofs may be applicable, and alternative infiltration practices may hold the most promise for future storm water management. The City should review existing publicly owned properties and new developments for potential project areas, with elevated stormwater impacts, focused on stormwater detention and wetlands conservation.

As indicated above, various practices exist for the management of stormwater and the reasoning for selecting each type varies by site and the scale of contributing drainage area. In general, the denser the development, the smaller and more unobtrusive the practice must be. However, higher-density development correlates with increased fraction of the land surface that is made up of impermeable surfaces, thereby increasing the total volume of stormwater runoff that must be treated, retained, etc. per unit area. Because the volume of runoff is greater, and the practices must

have smaller footprints, these areas tend to require more frequent, well-distributed practices, usually one or more per parcel. The types of practices in these developments tend to more diverse also, because they need to blend into each specific application. At the highest level of development density, stormwater practices tend to be combined with other development features, such as green roofs, underground detention chambers, or sub-pavement tree trenches below parking lots.

Lower density development caters to practices with larger footprints that blend in with the existing landscape because these practices tend to cost less per unit volume of runoff treated, and they blend aesthetically with their surroundings. Lower density development also presents the opportunity to incorporate measures to reduce and sometimes eliminate the need for storm drainage infrastructure. Using native landscaping, adding at least four to six inches of quality topsoil under lawns, and using small distributed practices such as rain gardens can sequester rainfall onsite, reduce the need for storm infrastructure, and also reduce landowners' maintenance burden.

With proactive land use planning stormwater runoff from low density development can often be directed to green spaces, or other marginal land where natural infiltration is provided essentially for free. With this design philosophy care must always be taken to ensure that runoff from heavy rain events is not concentrated in a manner that damages these natural areas, so some type of "hard infrastructure" is often provided for conveyance of larger events only, allowing small event runoff to bypass and infiltrate naturally.

WATER AND WASTEWATER SYSTEM EVALUATION

The following discussion provides a high-level assessment of the City of Ottumwa's existing water and wastewater infrastructure, including the sewer collection system, wastewater treatment, potable water treatment, storage, and distribution. Information was obtained from interviews with the Ottumwa Water and Hydro General Manager, Mike Heffernan, and Water Pollution Control Superintendent, Kam Reeves. Operational information was also obtained from the Iowa Department of Natural Resources (IDNR) and Environmental Protection Agency (EPA).

Water System

The Ottumwa Water Works facility is owned and operated by Ottumwa Water and Hydro, a separate entity from the City of Ottumwa municipal government. The Water Works facility is located in the center of Ottumwa, just north of the Des Moines River. The plant serves the entire population within the city limits and an additional 98 residents outside of the corporate limits. Rural Water has historically purchased water from the Ottumwa Water Works, however, this purchase agreement will discontinue in 2021.

Source water is blended from the Des Moines River and Ottumwa Reservoir. The surface water is treated using conventional precipitative lime softening, filtration, and ultraviolet disinfection. The finished water is pumped through the distribution system via high service pumps located at the treatment plant.

Water Distribution System

There are approximately 9,800 service connections and 154 miles of water distribution piping in Ottumwa. The water main consists of ductile iron, cast iron, PVC, and high density polyethylene (HDPE) piping. The system operates on five pressure zones. There are five storage tanks located throughout the distribution system and one finished water clearwell located at the Ottumwa Water Works facility. The combined storage capacity is approximately 13.55 million gallons (MG). The storage tanks are summarized in the following table.

Table 12.6 - Water Storage Summary

Location	Storage Type	Capacity
North Elm Street	Elevated	0.4 MG
Treatment Plant	Ground	0.85 MG
Maple Street	Ground	7.0 MG
Greenwood	Ground	3.5 MG
Fox / Sauk	Ground	1.5 MG
Airport	Ground	0.3 MG

The Ten State Standards require a minimum normal working pressure of 35 pounds per square inch (psi) throughout the distribution system that is directly serving customers. A minimum pressure of 20 psi is required under all operating conditions (e.g., fire flows, hydrant flushing, etc.) and for transmission mains that do not directly serve customers. The Ten State Standards recommends normal operating pressures in the range of 60 to 80 psi. The City should perform hydrant testing annually to ensure that the system is providing adequate pressure. The City should perform hydrant testing more regularly if there are any known pressure issues or public complaints about the system pressures.

According to the Insurance Services Office (ISO), a minimum residential fire flow of 1,000 gpm at 20 psi is required for 120 minutes. The City appears to have adequate fire flow capacity to meet the ISO requirements.

Pump Stations

There are six pressure boosting pump stations located in the distribution system and five high service pumps located at the Ottumwa Water Works facility. Pumping information is summarized in the following table.

Table 12.7 - Pump Station Summary

Location	Number of Pumps	Pumping Capacity
Webster	2	320 gpm
Treatment Plant	5	17,000 gpm
Maple Street	3	3,000 gpm
Greenwood	2	1,200 gpm
Fox / Sauk	2	2,000 gpm
Airport	5	3,600 gpm
McClean	2	4,400 gpm

The ages of the pump stations is unknown at this time. The City should conduct annual inspections on each pump station to evaluate the electrical system, controls, pumps, etc. It is recommended that the City conduct more frequent inspections if the pump stations are greater than 20 years old or have any known issues.

Water Main Maintenance and Improvements

The City's water maintenance program is primarily focused on replacing the transmission pipes. The following water main projects have recently been completed or are planned for the next year:

- Replace 12-inch loop on north court downtown
- Add a second run to the west side so it is no longer isolated
- Add a 16-inch main under the Des Moines River
- Add a second feed to West 2nd St.
- Replace water main and upsize the 16-inch main at Blakes Branch

The City replaces approximately 2 miles of water main each year. If the City were to continue replacing 2 miles of water main each year, it would take 77 years to replace the 154 miles of water main in the City. A typical design life for water distribution systems is between 50 and 100 years. Therefore, the City is on target with their annual water main replacement schedule of 2 miles per year.

It is recommended that the City implement a regular flushing program to eliminate sediment and biological growth and to improve water quality and age. Dead end mains should be flushed bi-annually or more often if there are water quality issues in these areas. There are two types of flushing programs that are used to target specific problems. Conventional flushing targets coloration, disinfectant residual, and water age issues and consists of opening hydrants one at a time without the use of valves. Unidirectional flushing (UDF) addresses solid deposits and biofilm and involves closing valves to direct flow with multiple hydrants. Flushing velocities should be greater than 3 ft/sec (5-10 ft/sec is ideal) when using the UDF technique to ensure sediment removal.

Each of the City's raw water pumping stations should be inspected and tested frequently for potential mechanical, structural, and quality problems.

Water Treatment Facility

Surface water from the Des Moines River is blended with the Ottumwa Reservoir to lower the overall nitrates in the source water. Water from the Des Moines River is screened at the intake location to keep large items out of the source water. A turbidimeter is located on the intake to monitor turbidity. Water from the Ottumwa Reservoir is mixed with a liquid copper sulfate compound (Earthtek) to control taste and odors.

The Ottumwa Water Works facility previously used two additional raw water sources that have since been abandoned: Black Lake and Ox Bow Lake. Black Lake now serves as a storm water receiving basin for John Deere while the Ox Bow Lake periodically receives diluted wastewater from combined sewer overflows. For human health reasons, the connections to these raw water sources have been disconnected. In their 2016 sanitary survey, the IDNR recommended that the pumps be removed from both of these locations and to ensure that there is no longer a direct connection to either of these water sources.

The IDNR also recommended in their 2016 sanitary survey that a second intake and additional transmission line be constructed at the Des Moines River and Ottumwa Reservoir to provide redundancy in case the existing infrastructure becomes unusable.
The blended surface water is treated using conventional precipitative lime softening (rapid mix, coagulation, flocculation, sedimentation, clarification, re-carbonation, and filtration) followed by ultraviolet disinfection. Chlorine and ammonia are added following filtration to provide a chloramine disinfectant residual.

Capacity

According to the IDNR sanitary survey in 2016, the facility treats an average daily demand of 6.27 MGD and a maximum daily demand of 12 MGD. The highest water consumption rates come from the Airport, golf course, hospital, and Rural Water. Rural Water will no longer purchase water from Ottumwa Water and Hydro beginning June 30, 2021. This will free up approximately 10% of the existing plant capacity for future growth. The Ottumwa Water Works facility appears to have adequate capacity for the current water demands. Ottumwa Water and Hydro should re-evaluate the source water and treatment capacity in conjunction with any future growth plans to ensure that the plant maintains adequate capacity.

Capital Improvements Plan

The City has a six-year Capital Improvements Plan (CIP) for the water plant and distribution system through year 2023. These improvements are summarized in the following table.

Table 12.8 - Water System 6-Year CIP

Location	2018	2019	2020	2021	2022	2023
Water Plant	$526,960	$4,310,000	$410,000	$2,260,000	$110,000	$120,000
Distribution System	$2,655,000	$2,152,000	$1,545,000	$1,545,000	$1,545,000	$1,595,000
Hydro Plant / Dam	$10,000	$100,000	$100,000	$100,000	$100,000	$100,000
Business Office	$10,000	$10,000	$5,000	$5,000	$5,000	$5,000

WASTEWATER SYSTEM

The City's sanitary sewer system is combined with the storm sewer system. During wet weather events, storm water enters the combined system and causes sewer back-ups and combined sewer overflows (CSO) throughout the city.

There are currently nine permitted CSO outlets in the City that allow the combined sewer to bypass the WWTP and overflow onto roads, ditches, and nearby waterways. CSO descriptions from the facility's most recent National Pollutant Discharge Elimination System (NPDES) permit are summarized in the following table.

Table 7.9 - CSO Descriptions

CSO No.	CSO Description	Receiving Stream	Stream Designation
003	North Side Interceptor Diversion Chamber	Des Moines River	A1, B(WW1), HH
004	Blakes Branch Interceptor Diversion Chamber	Des Moines River	A1, B(WW1), HH
005	Finley Avenue Storm Water Pump Station	Des Moines River	A1, B(WW1), HH
006	Mary Street Interceptor Diversion Chamber	Des Moines River	A1, B(WW1), HH

Table 12.9 - CSO Descriptions continued

CSO No.	CSO Description	Receiving Stream	Stream Designation
007	Orchard Street Storm Water Pump Station	Des Moines River	A1, B(WW1), HH
008	Walnut Avenue Pump Station	Des Moines River	A1, B(WW1), HH
009	Richmond Avenue Pump Station	Ottumwa Lagoon	A1, B(LW), HH
011	Grandview Pump Station	Sugar Creek	A1, B(WW1)
015	East Main Street	Des Moines River	A1, B(WW1), HH

1. CSO information was obtained from the facility's most recent NPDES permit (No. 9083001) issued July 1, 2018.

Due to the human health and environmental concerns associated with CSOs, the City is under an Administrative Order (No. 2011-WW-14) with the IDNR to eliminate all CSOs. The Order was issued on September 7, 2011 and provides a schedule for the City to complete their Long Term Control Plan (LTCP) in ten phases through year 2036. These phases and project statuses are provided in the following table.

The City began separating the combined sewer system in 2006 prior to the Administrative Order to remove all CSOs. The sanitary sewer on the south side of the city has since been completely separated. The north side separation is currently underway. 100% of the CSOs are anticipated to be eliminated by December 31, 2036.

Table 12.10 - Administrative Order Schedule

Separation Phase	Description	Deadline	Status	Project Cost
1	Basin 11 – Moore St.	Prior to Consent Order	Completed	$8.7 M
2	Basin 11 – Moore St.	Prior to Consent Order	Completed	$6.3 M
3	Basin 11 – Moore St.	December 31, 2011	Completed	$7.7 M
4	Flood Protection Project	December 31, 2015	Completed	$15.4 M
5	Lagoon Stormwater Pumps	December 31, 2019	Completed	$5 M
6	Clean Box Sewer	December 31, 2014	Completed	$10 M
7	Basin 10 - Richmond	December 31, 2016	Completed	$5 M
8	Blakes Branch	December 31, 2025	Planning	Est. $8 M
9	Extend Blakes to Airport	December 31, 2036	Planning	Est. $8 M
10	Annual I/I Reduction	December 31, 2036	Ongoing	$0.1 M

1. Information in table was obtained from the NPDES permit rationale, dated June 23, 2015 and Figure 19 in the City's CSO Project Costs report. Phases 5 and 7 have been switched from the original Consent Order, per agreeance with the IDNR.

Sanitary Sewer Collection System

The City's sanitary sewer system serves the entire population within the city limits as well as the Ottumwa Regional Airport. Wastewater is conveyed to the Wastewater Treatment Plant (WWTP) via gravity sewer and a series of lift stations.

In general, the Des Moines River divides the sewer system into two main drainage areas. The City's wastewater south of the Des Moines River collects in a 36-inch sewer that crosses under the Des Moines River, where it is then pumped to the WWTP via 24-inch force main. The majority of the City's wastewater on the north side of the Des Moines River gravity flows to the WWTP. A portion of the sewer on the north side of the Des Moines River is pumped to the WWTP via 24-inch force main.

According to information obtained from the City and Geographic Information system (GIS) data, the sewer system consists of approximately 787,400 linear feet (LF) of 4-inch to 108-inch gravity sewer (not including strictly storm sewer), 2,934 manholes, 21 lift stations, and 49,700 LF of 2-inch to 24-inch force main piping. The City's sewer system is shown in the following figure.

The City's GIS data only includes 11 lift stations. It is recommended that the GIS lift station data be updated to include all of the lift stations, including lift station name, address, back-up power status, generator size, and date installed. The following items are also absent from the City's GIS sewer data: material type, pipe slope, invert elevations, and installation date. It is recommended that these fields be added to the GIS geodatabase in order to provide a more comprehensive data set that can assist in future planning.

Lift Stations

According to the City's Sewer Pump Station document, dated January 7, 2016, there are 21 lift stations located throughout the City. The lift stations are needed to pump wastewater from low areas in the City where gravity sewer would be impractical. The lift stations are summarized below.

Table 12.11 - Lift Station Summary

Station Name	Address	Backup Power	Generator Size (kW)	Install Date
Airport (Main)	15650 6th Street	Yes	125	July 1994
Airport (South)	-	Yes	40	September 2013
Alta Vista	#14 Country Club Place	Yes	30	October 2010
Babe Ruth	Ottumwa Park	Not Required	-	
Cambridge Court	20 Cambridge Court	Yes	50	November 2010
Crestview	604 Crestview	Yes	50	November 2010
Elm Street	555 South Elm	Yes	200	October 2010
Fairport Sanitary	2235 Samantha	Yes	60	August 2013
Grandview	542 Indian Trail Road	Yes	150	August 2010
Kmart	100 North Quincy	Yes	80	August 2012
Madison	446 North Madison	Yes	60	May 2015
Midwest Little League	Union Park	Not Required	-	-
Milner & Finley	110 South Milner	No	-	-
Moore Street	415 Garfield	Yes	80	August 2011
OADC	2942 Pawnee Drive	Yes	60	June 2012
Quail Creek	25 Pinehurst Circle	Yes	50	July 2011
Richmond	519 Richmond	Yes	125	May 2011
Rochester	278 E. Rochester	Yes	60	August 2012
Shelter House	Ottumwa Park	Not Required	-	-
Silk & James	802 Silk	No Storm	-	-
WPCF	2222 Emma Street	Yes	800	1998

The design life of a lift station can vary depending on usage, maintenance, and quality of construction. In general, lift station pumps typically operate for 5-15 years if they are well-maintained. The lift station structure itself should last for 50+ years if the wastewater is non-corrosive. However, the electrical components will likely need to be upgraded and replaced at some point throughout the lift station's life.

The City's oldest lift station is the Airport (Main) and WPCF, built in 1994 and 1998, respectively. The remaining 19 lift stations are less than 20 years old. The City should conduct annual inspections on each lift station to evaluate the electrical system, controls, floats, pumps, etc. It is recommended that the City conduct more frequent inspections of the Airport (Main) and WPCF lift stations due to their age.

All lift stations should have redundant pumps and a back-up power source to avoid sewer back-ups if a pump were to fail or the power were to go out.

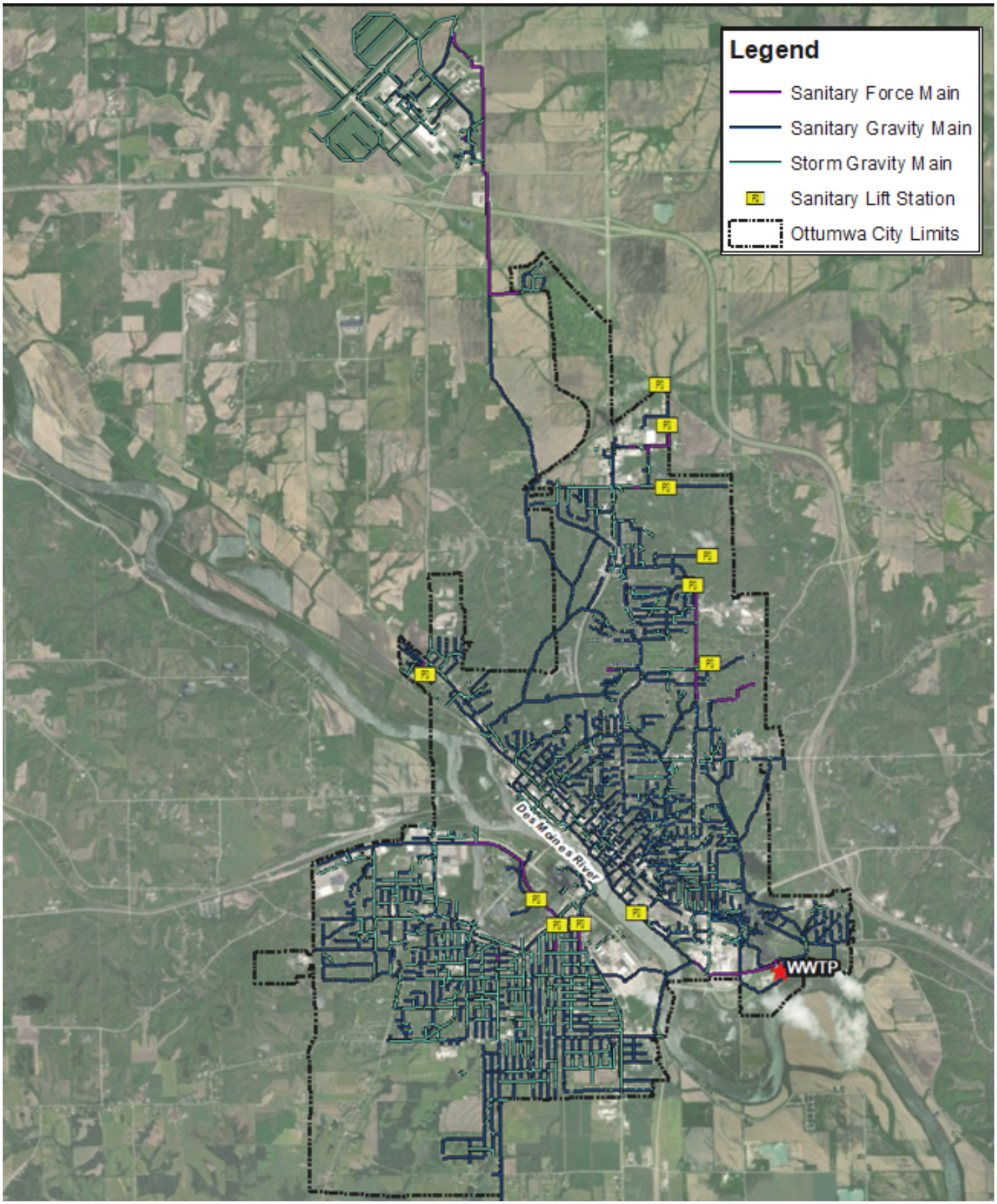


Figure 12.9 - Sanitary and Storm Sewer System

Sewer System Maintenance and Improvements

The City is required to operate and maintain their wastewater system in accordance with the Nine Minimum Controls, or NMC's, as required by the CSO Control Policy published in April 19, 1994 Federal Register. These controls are summarized below.

1. Conduct Proper Operation and Regular Inspection and Maintenance Programs
2. Maximize Use of Collection System for Storage
3. Review Pretreatment Requirements to Minimize CSO Impacts to Nondomestic Dischargers
4. Maximum Flow to the Treatment Plant During Wet Weather
5. Elimination of Dry Weather CSOs
6. Control of Solids and Floating Materials in CSOs
7. Pollution Prevention to Reduce Impact of CSOs
8. Public Notification of CSO Events
9. Monitoring to Characterize CSO Events

The City inspects pipe and manholes on a routine schedule, and replaces or rehabilitates the pipe and manholes, as needed. In addition to improvements that are required by the Administrative Order, the City has completed the following sewer infrastructure improvements:

- Pennsylvania Ave. Reconstruction: new storm and sanitary sewer; separates a previously combined area
- Ferry St. Reconstruction: 1,853 LF of new storm sewer and 332 LF of new sanitary sewer
- Maple St. Reconstruction: separate combined sewer
- Randolph Sewer: miscellaneous sewer repairs
- Industrial Airport Rehabilitation: line 9,222 LF of existing sanitary sewer, line 30 manholes, install; 11 new manholes
- Locust St.: miscellaneous sewer repairs
- John Deere Plant: re-route 63-acre drainage area that used to go to the Finley Ave. box sewer

There is approximately 787,400 LF (149 miles) of 4-inch to 108-inch sanitary gravity sewer and 49,700 LF (9.4 miles) of 2-inch to 24-inch sanitary force main piping in Ottumwa. Sewer lengths were obtained from GIS data for "Sanitary_Gravity_Main" and "Sanitary_Pressurized_Main" shapefiles within the City's sanitary sewer system utility geodatabase.

In 2015, the City lined a total of 37,021 LF (7 miles) of 8-inch to 24-inch sanitary sewer. Assuming the City lines or replaces 37,000 LF of sanitary sewer each year, it would take 22 years to line or replace the entire sanitary system. A typical design life for sanitary sewer systems is around 50 years. The City would not necessarily need to replace/line the sewer every 22 years and could extend this replacement/maintenance period to 40-50 years to lower annual construction costs. For instance, the City could plan to line 15,000 to 16,000 LF of pipe each year so the sewer is rehabilitated a minimum of every 50 years.

Wastewater Treatment Facility

Wastewater from a mix of residential, commercial, and industrial properties is conveyed to the WWTP, located along the east edge of the City. The current WWTP consists of an extended aeration activated sludge process with a three-cell primary clarifier, two anaerobic digesters, a four-cell vertical loop reactor (VLR), two secondary clarifiers, one UV disinfection system, two aerobic sludge conditioning tanks, and one 75' x 225' covered biosolids storage pad. The treated wastewater effluent is discharged into the Des Moines River through 340 ft of pipe that is located approximately 3-ft below grade. The outfall is equipped with a diffuser to provide ample oxygen to the effluent prior to reaching the Des Moines River.

The City typically land applies the biosolids generated from the facility. The biosolids have historically met the Iowa Code Land Application of Biosolids requirements, including ceiling limits for metals. The City has a sludge management plan that is updated every five years or after a change in operation.

Capacity

The Elm St. lift station is located directly upstream of the WWTP and backs up flows in excess of 12.5 mgd during wet weather flows. Wastewater from the Elm St. lift station enters a flow metering pit upstream of the WWTP where up to 10 mgd is sent through the treatment system while the flow in excess of 10 mgd is sent to the equalization pond north of the WWTP for temporary storage. The WWTP capacity, according to the facility's most recent NPDES permit, is provided in the following table. The NPDES permit lists plant capacities for flow, 5-day biochemical oxygen demand (BOD), total kjeldahl nitrogen (TKN), and total suspended solids (TSS).

The Average Dry Weather (ADW) flow is defined as the daily flow when there is no runoff and the groundwater table is low. The Average Wet Weather (AWW) flow is based on the highest average 30-day flow rate. Similarly, the Maximum Wet Weather (MWW) flow is calculated based on the maximum total flow received in a 24-hour period.

Table 12.12 - WWTP NPDES Capacity

Design Parameter	Design Value
ADW	6.0 mgd
AWW	10.0 mgd
MWW	12.5 mgd
BOD	11,613 lbs / day
TKN	2,247 lbs / day
TSS	29,570 lbs / day

Once the entire sewer system is separated and the CSOs are eliminated, the Elm St. lift station could potentially need to be upsized to handle the additional flow that would have previously overflowed out of the system. This would only be necessary if the sanitary sewer system were undersized and/or has I/I issues that result in overflow events during wet weather. The Elm St. lift station and WWTP capacity will need to be re-evaluated after the entire sewer system has been separated to verify that the headworks can handle the peak flow from the sanitary sewer system.

Treatment Capability

According to data obtained from the EPA Enforcement and Compliance History Online (ECHO), the WWTP has consistently complied with the NPDES permit effluent limits between January 2014 and January 2019. The IDNR is currently requiring the City to collect total nitrogen (TN), TKN, and total phosphorus (TP) samples from the raw wastewater to determine if effluent nutrient limits are necessary. Depending on the nutrient levels in the raw wastewater, the IDNR may require the WWTP to initiate nutrient removal treatment in the next NPDES permit.

Industrial Contributors

The City manages its own pretreatment program and currently permits four Significant Industrial Users (SIU) to discharge industrial wastewater to the City-owned WWTP: John Deere, American Bottling Company, AL-Jon equipment manufacturing, and L.L. Parks livestock equipment cleaning facility. There are an additional ten non-significant industrial users that contribute wastewater to the WWTP. Together, the industrial users contribute approximately 5.0 mgd of flow to the WWTP (83% of the WWTP ADW capacity of 6 mgd).

The American Bottling Company and AL-Jon contribute the most significant amounts of BOD I the system. According to 2014 Monthly Operating Report (MOR) data, the American Bottling Company and AL-Jon discharged an average BOD loading of 6,466 lbs/day and 550 lbs/day, respectively. This accounts for 60% of the WWTP raw BOD capacity of 11,613 lbs/day. Due to frequent BOD pre-treatment violations, the American Botting Company is currently implementing their own pretreatment facility to treat 75% of their effluent in order to meet pre-treatment requirements and ultimately reduce BOD entering the City-owned WWTP.

Capital Improvements Plan

The City collects random samples from the 14 industries throughout the year and issues non-compliance letters as well as $1,000/day non-compliance fines. The City should continue to collect random samples from their industrial sources and should re-evaluate potential SIU sources on an annual basis.

The City has a 2019-2020 CIP for the WWTP. This plan includes approximately $582,333 of improvements including sampling equipment, flow meters, chemical pumps, lift station improvements, office equipment, and equipment repairs and replacement.
The City's current rate structure became effective on July 1, 2013 and issues a base charge of $14.50 per user per month plus an additional $4.75 per 100 cubic feet of wastewater generated to account for operation, maintenance, debt service, and replacement of the sanitary sewer infrastructure. Industrial contributors have additional charges based on BOD and TSS concentrations in their effluent. The American Bottling Company is required to pay $5.95 per 100 cubic feet as a commodity charge. Sewer user rates should be re-evaluated each year in conjunction with the CIP to ensure that the City is maintaining adequate revenue for the CIP projects and remaining sewer separation.

BROADBAND ANALYSIS

Good broadband has become increasingly important. Education, health, work, attracting and retaining businesses and residents, ability to stay at home, retaining our young people have all become significantly influenced by broadband. People today are choosing where they live, where they work and where they start a business with broadband as part of the decision. In many communities, broadband has even become part of their identity and "brand".

Our definition of good broadband is that it is fast, reliable and affordable. The Federal Communications Commission has defined the minimum speed that can be considered broadband as 25 Megabits per second (Mbps) download (what a user bring to their device from the internet) and 3 Mbps upload (what a user sends from their device into the internet). Reliable and affordable are more subjective measures to be determined by an individual community. Broadly, these criteria are the lens through which we evaluate Ottumwa's broadband.

Analysis & Availability of Broadband Services

Telecommunications providers are required to report their assets, offerings and coverage to the FCC in Form 477. This data becomes public and there are industry organizations that evaluate it and do some limited confirmation. This is particularly relevant because there is some good information available, but there are also concerns over the accuracy of the data.

The data usually lags a year or two behind because of the reporting process. From this public data, below is what is published for Ottumwa.

Table 12.13 - Ottumwa Broadband Service Provider Summary

Provider	Coverage Percent	Speed Mbps	Medium	Rating	Pricing	Data Caps
RESIDENTIAL						
Mediacom	90.1	1,000	Cable	2.5		Yes
CenturyLink	85	20	DSL	2	$45 / month	Yes
Lisco	16	3	DSL	4.5		No
Lisco	9.6	100	Fiber	4.5	$74	No
Rise	99.99	15	Fixed Wireless		$29.95	Yes
King	98.6	1	Fixed Wireless			Yes
Exede	100	25	Satellite		$50	Yes
HughesNet	100	25	Satellite		$59.99-$69.99	Yes
BUSINESS						
Mediacome	100	1,000	Cable		$129.95	
Rise	100	15	Fixed Wireless		$69.96	
CenturyLink	34.8	20	DSL		$89.99 - $99.99	
Windstream	5.7	100	DSL			
Lisco	2	100	Fiber			

Source: Public Data for Ottumwa - www.broadbandnow.com

With a population of approximately 25,000 people, Ottumwa would typically be considered in the range of what would be attractive for investment by telecommunications providers. Because of that, there are some surprises in the above chart:

Fiber – fiber is only available in 9.6% of the City and from one provider. The "Medium" is important in future-proofing a community. Fiber has the most capacity and least latency (slowness to respond) of all mediums. Cable is next but has limitations that fiber does not. DSL has capacity and distance limitations. Fixed Wireless and Satellite can have capacity and interference issues. The lack of fiber could be expected to limit what customers will be able to do now and, particularly in the future. This could also have an impact on economic development as many businesses look for fiber connectivity and tech related companies often rely on it.

Customer Satisfaction - although there were not satisfaction responses for all providers, the ones who cover most of the City received very low ratings. The only fiber provider received much better ratings, but are only available in a very small part of the City. If these ratings are consistent across the City and providers do not have plans to expand fiber, then there could be a pent up demand for better service.

Pricing - Plan data was not available (or clear) for all providers. For the basic packages, pricing doesn't seem too bad unless there are sharp increases in the other plan options. This can be an important factor in looking at ways to solve broadband shortcomings – if prices are low, that can limit prices of new services. More analysis would need to be done to determine the intricacies of the existing providers' plans to know if that was a real concern.

Effect of Current Competition - there are quite a few carriers and it appears that this competition has kept pricing down. But, in comparison with speeds that are available and satisfaction ratings, it appears that competition has not led to better services

Data Caps - data caps are likely a problem – the vast majority of the City has limits. This can be problematic in how customers can use broadband and limit their creativity with broadband.

County - in a brief analysis, it appears that the County has greater broadband concerns than the City. That can be helpful in discussions of how to solve broadband problems

City Rights of Way - ROW's could be congested. With this many providers, our expectation would be that there are ROW's that are problematic. That will likely get worse with the coming 5G/Small Cell steps that some providers are taking. Examining ways that ROW's can be better utilized, with any eye towards how the City can further its broadband goals could prove useful.

Gig Speeds – Mediacom reports having Gig speed in some parts of the City, but reporting practices make it difficult to know what speeds are available in how much of the City. If a Gig speed is available in most or all of the City (and is reliable and is affordable), then that would help the City know it has connectivity that is significantly above average. However, if a Gig is only available in a small part of the City (or to a limited number of users) and/or is not affordable, then the City might want to explore options as to how to continue to improve connectivity.

The industry also produces statistics about communities that is also publicly available. Broadband Now provides the following data:

- 4,000 people in Ottumwa only have access to 1 or fewer wired internet providers
- There are 12 internet providers in Ottumwa with 9 of those offering residential service
- Ottumwa is the 328th most connected city in Iowa
- 10% of people living in Ottumwa have residential fiber service available to them
- Approximately 3,000 people in Wapello County don't have access to any wired internet
- Approximately 5,000 people in Wapello County don't have access to 25 Mbps wired broadband

As with the data previously shown in the charts above, these statistics seem to indicate a good amount of competition in most of the City, but not as much in the County. It might be good to look closer into who has what services provided. The first statistic of 4,000 people only having access to 1 or fewer wired providers might indicate signs of a digital divide. This could be because of geography or terrain, but it could also be indicative of broadband "haves" and "have nots". Further research into who has good broadband available might be a good step to see if there is a digital divide and what might be able to be done about that.

From a discussion with the City IT director, Edward Wilson, there are some nuances to this data. There are areas within the City that, because of connections and distance, in reality only have one provider. Some of those connections are problematic enough that the City provided connections to their facilities through their own point to point equipment in those locations. This was the case for a majority of the City's facilitie and within the City, these show a lack of fiber. This will be discussed in more detail below, but as the need for good broadband increases, systems that can't provide those capacities and speeds can hold the City, citizens and businesses back.

And, within the City, these show a lack of fiber. This will be discussed in more detail below, but as the need for good broadband increases, systems that can't provide those capacities and speeds can hold the City, citizens and businesses back.

From conversations with City Leaders, it seems that CenturyLink and Mediacomm do cover most of the City, with mainly DSL. Their services seem to be fairly reliable in the core of the City. Depending on distance from the core of the City appears to determine capacity and speed. Feedback indicated that there can be possibilities of getting greater capacity and speed (particularly in the core of the City), but the costs of those upgrades can be significant.

Lisco is an interesting provider in Ottumwa. In their home city of Fairfield, they have fiber in most of the City for business and residential. In Ottumwa, it seems that their fiber has been geared mainly towards business (which is a typical early step). They did install more fiber in Ottumwa in 2018, so they are continuing to invest in fiber in the City. Something to watch is that Lisco lists several communities that they either serve at some level or are planning to serve. Their funding levels and breadth of communities they are working to serve could impact investment in Ottumwa.

Perhaps the most surprising statistic is that Ottumwa ranks 328th in the most connected cities. With Iowa containing 947 incorporated cities, this puts Ottumwa in approximately the top third. But, with 327 cities in the state with better connectivity, it could be good to see how that ranking might be improved.

Overview of Trends in Fiber & Broadband

To provide a perspective on internet usage, the first website went live on December 20, 1990. According to Our World in data:

- By 1995, the number of internet users increased to 44 million
- In 2000, that number climbed to 413 million
- And, by 2016, the number of internet users had shot up to 3.4 billion
- In June of 2018, there were 4.2 billion (Internet World Stats)

In terms of usage, the Maine Broadband Coalition cited these statistics in a report in 2015:

- There are 5.9 billion searches on Google every day, 100 times more than 2000
- The number of text messages sent every day is double the population of the planet
- The amount of new technical information is doubling every two year
- 95% of all of the data in the world has been created in the last two years!

And, the average number of connected devices per house is expected to reach 13 in 2018.
Usage and reliance on broadband has been rapidly increasing and is expected to continue that trend exponentially. New uses, apps, the increasing connection of the Internet of Things, telemedicine, business uses, education, sensors, autonomous vehicles, etc. are all expected to continue to grow dramatically.

These all take broadband capacity and speed. Telecommunications networks will need to be able to expand to meet this capacity. If they cannot, then users will either be limited in what is available or face more severe and expensive caps (paying more in some form to have greater capacity and/or speed).

Fiber is the infrastructure with the greatest speed and least latency available. Capacity and speed at this point are limited by the equipment on the ends of the fiber. Providers with fiber will be able to increase their capacity as the needs continue to grow.

With Ottumwa having only limited fiber, there could be concerns about how future-proof the broadband infrastructure is in the community. This could limit economic development and business retention in the future. And, with the developments in broadband applications, limited capacity and speed could also impact quality of life uses as mentioned earlier.

For example, a hospital in a community was awarded a telemedicine grant to take advantage of new applications developed to help older members of the community stay in their homes longer. Unfortunately, the broadband in the community did not have the speed and capacity to support the hospitals uses. The hospital had to return the grant money.

To increase capacity and speeds, several telecommunications providers are developing and deploying small cell and 5G infrastructure. The concept in small cell/5G is a denser network of cells can receive cellular and wifi traffic and move that into fiber. The denser that is, the faster that digital traffic can be, because it is moved into fiber more rapidly.

In an effort to make this more uniform (enabling it to be done faster), states and the FCC have developed rules that local governments are required to follow. These contain requirements on how long a city has to respond to applications for permits, how much cities can charge, and what guidelines they have to go by in what can be approved and what cannot.

Cities do have leeway in certain areas of the rules. It can be important to know what those areas are and what leeway a city has. The FCC ruling on small cell/5G has been challenged in court by several cities. Because of that it is difficult to know what the final rules will be and when they will be

enforced. But, as that is moving through the legal process, cities can determine their rights and operate accordingly. There is a pending deadline of April 15, 2019 for cities to have their policies in place for 5G/small cell.

Phone Call with City IT Manager

The City IT Director, Edward Wilson, was very helpful in proving perspective and information on broadband in Ottumwa. The City has one main broadband internet connection for the Police Department. Because of costs and connectivity issues, the majority of City facilities are connected through City owned fixed wireless that provides speeds that average 100 Mbps combined capacity (includes both upload and download) and higher.

In the past, there was some City facility interconnection with City owned fiber (just to connect City facilities) that was installed on Alliant poles. There was need to replace some of that fiber and, rather than pay the full costs of new fiber installation, the City teamed with Ottumwa Fiber. In that arrangement, Ottumwa Fiber installed the fiber with cost sharing with the City and used the City pole attachments. The City keeps the pole attachments (which is important due to pole capacity) and the City pays a reduced rate for their need of the 144 count fiber that was installed.

OVERALL OBSERVATIONS

Fiber

Right now, Ottumwa doesn't appear to have as much fiber as might be expected in a community of its size. There are gaps in coverage and areas that don't have the competition that could be possible.

Projected Needs

Because capacity needs are only going to increase and the most future-proof infrastructure is fiber, a lack of fiber is something to address

ROW

in the areas where CenturyLink, Mediacom and Lisco overlap, there probably are ROW congestion issues. This will only get worse as 5G continues to proliferate. ROW telecommunications management is something to monitor.

5G

if the City does not have 5G/Small cell policies in place, the deadline is April 15 (which could change with legal challenges)

Provider Investment

There could be partnership arrangements that could help advance the City's fiber goals as providers consider investment. Steps that Lisco and Ottumwa fiber are taking are particularly interesting, but plans of all providers could be considered.

Policy

There are policies that can help in working with infrastructure installation and ROW management that could help further the City's broadband goals. Typically, policies can be broken into the following categories:

- Revenue Producing (or cost reducing) - an example being dig once and pavement degradation
- Broadband incentivizing - an example being a streamlined permit processing for desired routes
- 5G/Small Cell management - examples being aesthetic polices, design guidelines, or health risk controls (although care should be taken to ensure these conform with State and federal guidelines)
- Right-of-Way (ROW) Management - examples being congested ROW definitions and categorizations and duct banks

INFRASTRUCTURE GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Infrastructure Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 2 Maintain and expand the existing parks and open space system, recreation programs, and trails network		Promote sustainable land stewardship in Ottumwa by identifying areas within the City's parks and trail system where low maintenance native species can be planted		
Goal 4 Protect and enhance the community's natural resources		Continue to invest in stormwater infrastructure repair, replacement, and improvements Consider adoption of stream buffer, slope preservation, and tree canopy preservation ordinances to protect the natural areas and the City's watersheds from overdevelopment Prohibit development within the floodplain, except where protected by certified levees Require new development to use a wide variety of native plant species to increase biodiversity, reduce the impact of plant disease, and improve the natural appearance of Ottumwa Educate residents, businesses, and property owners on best practices in water conservation and surface water pollution prevention Implement best practices for stormwater management including the adoption of a stormwater utility to help fund stormwater infrastructure improvements such as combined sewer separation Incentivize green infrastructure solutions to stormwater management by lowering any existing or future fees related to stormwater management		
Goal 5 Improve the City's Sanitary Sewer Infrastructure		Continue to prioritize the investments in the combined sanitary sewer separation program		

INFRASTRUCTURE GOALS & ACTION ITEMS

Goals and action items related to Natural Resources are listed below under the guiding principle them they fall under.

Infrastructure Related Goals & Action Items

Goal	Housing	Quality of Life	Growth	Celebrating Diversity
Goal 1 Secure an economic leadership role for Ottumwa in its seven-county region			Consistently lobby for regional infrastructure decisions that emphasizes Ottumwa as regional hub	
Goal 5 Update the City Zoning and Subdivision Regulations to reflect the goals and recommendations of the Comprehensive Plan			Require new development to extend street, water, and sanitary sewer infrastructure necessary to both serve their project and allow for future development of neighboring properties Encourage rural development annex into the City and connect to City water and sanitary sewer service	
Goal 6 Complete strategic annexations to ensure an adequate supply of land for future development, especially around the airport and highway interchanges			Discourage rural subdivisions within the City's 2-mile extra territorial review area that do not meet the City's subdivision regulations or are not consistent with the Comprehensive Plan Require any proposed development that cannot connect to City sewer and/or water provide dry sewer mains, easements, plans, and agreements to connect at some point in the future when service is available	
Goal 8 Investi in Airport infrastructure for commercial and industrial development			Conduct a feasibility study for the Ottumwa Airport to assess future expansion and development possibilities	
Goal 9 Seek opportunities to make improvements that will create long-term savings in cost and energy use			Install energy efficient equipment and make energy efficient improvements in City facilities as part of regular building and equipment repair and replacement Evaluate the practicality and return on investment for installing solar power generation on City facilities Expand the fiber optic capabilities available in Ottumwa	

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13 Implementation

CHAPTER

IMPLEMENTATION

The implementation of the Our Ottumwa comprehensive's plan is a critical component of the success of this planning effort. To assist in implementation, a series of goals and action items have been created for the plan.

Goals

Goals are objectives or aims which may be broad or specific.

Action Items

Action items are specific steps and activities the City should take in furtherance of reaching each goal.

The goals and action items have been categorized under the four guiding principles identified in Chapter 1 Community Profile:

- Housing
- Quality of Life / Community Character
- Growth
- Celebrate Diversity

In addition to supporting the guiding principle under which it is categorized, the goals and action items also support different chapters included in the Our Ottumwa Comprehensive Plan. Each goal and action items have been listed previously in the chapters of this report starting in Chapter 4 Natural Resources. In this chapter, the goals and action items are categorized by guiding principle and include a priority, timeframe, and entity responsible.

Priority

Each action item has been assigned a priority level. The priority levels are Regular and Urgent. Regular priorities are still important but may either take a longer time to accomplish or are less pressing than other action items.

Timeframe

Each action item has been given a timeframe for estimated completion. The timeframe categories used for this report are Ongoing, 1 Year, 1 - 3 Years, 1 - 5 Years, or 1 - 10 Years.

Entity Responsible

The entity responsible column highlights the department, group or individual who will play an important role in accomplishing the action item in question. There may be more than one entity listed in many instances.

FOUR GUIDING PRINCIPLES

- **Housing**
- **Quality of Life / Community Character**
- **Growth**
- **Celebrate Diversity**

HOUSING GOALS & ACTION ITEMS

No.	Goal / Action Item	Priority	Timeframe	Entity Responsible
1	**Maintain and improve the existing residential neighborhoods**			
a	Update the zoning code regulations to add incentives for existing multi-family home conversions to revert back into single-family housing units	Regular	1 - 5 Years	Planning
b	Annually identify and target neighborhoods for cleanup assistance, code enforcement, nuisance abatement, and demolition of dilapidated structures	Regular	Annual and Ongoing	Building Inspection / Code Enforcement, Planning
c	Create a neighborhood identity and branding program to promote the creation of positive neighborhood identities and neighborhood groups focused on the improvement and celebration of their neighborhood	Regular	1 - 5 Years	Planning, Rippling Waters, Legacy Foundation
d	Develop a home maintenance and improvement program to assist homeowners and landlords in fixing and improving their homes	Regular	1 - 5 Years	Planning, Building Inspections
e	Promote local home ownership education programs that highlight and explain the benefits of home ownership, the steps necessary to become a successful homeowner, and basic income maintenance and improvement skills	Regular	Ongoing	Planning, Administration, Rippling Waters, and other Nonprofit Partners
f	Perform a housing study that comprehensively reviews and inventories the existing housing stock to identify target redevelopment strategies	Urgent	1 Year	Planning, Legacy Foundation
g	Work with local landlords and Ottumwa Housing Authority to improve rental properties so that they can qualify for the federal government's housing voucher program that assists low-income families, seniors, and people with disabilities to afford decent housing in the private market	Regular	1 - 5 Years	Planning, Building Inspection / Code Enforcement, Ottumwa Housing Authority, and Nonprofit Partners
h	Improve community outreach and communication regarding home improvement and housing assistance programs available to Ottumwa residents and residential developers	Regular	Ongoing	Planning, Building Inspection / Code Enforcement
2	**Foster investment and growth in new housing in call categories and prices**			
a	Create an enhanced programs to acquire and award blighted or vacant residential lots for in-fill development	Urgent	1 - 3 Years	Planning
b	Identify infill areas for new single-family, townhome, apartment, and senior-oriented housing	Regular	Ongoing	Planning and Rippling Waters
c	Develop a tiered incentives program and policy to support new residential construction	Urgent	1 - 3 Years	Planning
d	Continue to see partnerships with the development community, such as Rippling Waters, to build new housing	Regular	Ongoing	Planning and Rippling Waters

QUALITY OF LIFE GOALS & ACTION ITEMS

No.	Goal / Action Item	Priority	Timeframe	Entity Responsible
1	**Continue to enhance and improve the Downtown and Riverfront**			
a	Continue to coordinate and partner with downtown interests to implement downtown and riverfront improvements and programs	Regular	Ongoing	Administration, Public Works, Main Street Ottumwa, Legacy Foundation, GOPIP, Nonprofit Partners
b	Prioritize downtown, the Amtrak station, and the riverfront for investment in redevelopment, new development, and public improvements that will improve the quality of life for all residents	Regular	1 - 10 Years	Administration, Public Works, Main Street Ottumwa, Legacy Foundation, GOPIP, Nonprofit Partners
c	Expand the streetscape improvement program throughout downtown including the installation of lighting, landscaping, wayfinding signage, street furniture, and other hardscape elements	Regular	1 - 10 Years	Public Works, Planning, Legacy Foundation
d	Support and foster the establishment of new restaurants, a hotel connected to the Bridge View Center, and upper-story housing	Regular	1 - 5 Years	Administration, Planning, Legacy Foundation, Main Street Ottumwa
e	Continue to improve and expand pedestrian and bicycle circulation and connectivity throughout the downtown and riverfront area	Regular	1 - 10 Years	Planning, Public Works, Parks, Trails Council
2	**Maintain and expand the existing parks and open space system, recreation programs, and trails network**			
a	Continue to evaluate existing park facilities and recreation programs to ensure they meet the changing needs of the community	Regular	Ongoing	Parks
b	Expand recreational activities for the entire community including indoor and outdoor winter activities and after school programs	Regular	1 - 10 Years	Parks, Administration, Ottumwa Community School District
c	Promote sustainable land stewardship in Ottumwa by identifying areas within the City's parks and trail system where low maintenance and native species can be planted	Regular	1 - 5 Years	Parks
d	Look for opportunities to share park facilities and operation and maintenance costs with the school district and other community and volunteer organizations	Urgent	1 - 5 Years	Parks, Administration, Ottumwa Community School District
e	Implement the Ottumwa Bicycle and Pedestrian Plan to expand the trail system within natural areas and seek opportunities to promote the trail system in Ottumwa including the addition of trail-centric retail where possible	Regular	1 - 10 Years	Parks, Trails Council
f	Complete sidewalk improvement, maintenance and expansion along the Priority Corridors identified in the Ottumwa Bicycle and Pedestrian Plan to enhance the ease of access and ability of residents to walk throughout the community	Regular	1 - 5 Years	Public Works
3	**Develop additional library and community meeting space to serve the changing needs of Ottumwa**			
a	Evaluate opportunities and seek partnerships for new library and community space throughout the community	Regular	1 - 10 Years	Library, Administration, Planning
4	**Protect and enhance the community's natural resources**			
a	Continue to invest in stormwater infrastructure repair, replacement and improvements	Urgent	Ongoing	Public Works
b	Consider adoption of stream buffer, slope preservation and tree canopy preservation ordinances to protect the natural areas and the City's watersheds from overdevelopment	Regular	1 - 5 Years	Public Works

QUALITY OF LIFE GOALS & ACTION ITEMS

No.	Goal / Action Item	Priority	Timeframe	Entity Responsible
c	Prohibit development within the floodplain, except where protected by certified levees	Regular	Ongoing	Planning, Building Inspection / Code Enforcement, Public Works
d	Require new development to use a wide variety of native plant species to increase biodiversity, reduce the impact of plant disease, and improve the natural appearance of Ottumwa	Regular	1 - 5 Years	Planning, Building Inspection / Code Enforcement
e	Educate residents, businesses, and property owners on best practices in water conservation and surface water pollution prevention	Regular	Ongoing	Planning, Building Inspection / Code Enforcement, Public Works
f	Implement best practices for stormwater management including the adoption of a stormwater utility to help fund stormwater infrastructure improvements such as combined sewer separation	Urgent	1 - 5 Years	Public Works, Administration, Planning
g	Incentivize green infrastructure solutions to stormwater management by lowering any existing or future fees related to stormwater management	Regular	1 -5 Years	Public Works
5	**Improve the City's sanitary sewer infrastructure**			
a	Continue to prioritize the investments in the combined sanitary sewer separation program	Urgent	Ongoing	Public Works, Administration
6	**Preserve the historical and cultural heritage of Ottumwa**			
a	Engage community residents in a storytelling exercise to identify shared needs and values	Regular	Ongoing	Planning, Administration, Nonprofit Partners
b	Create a community mural to celebrate Ottumwa's rich history	Urgent	1 - 5 Years	Administration, Nonprofit Partners, Planning
c	Creatively reuse and preserve historic structures	Regular	Ongoing	Planning, Building Inspection / Code Enforcement
7	**Promote community pride and stewardship of place**			
a	Complete an arts and culture master plan for Ottumwa	Regular	1 - 5 Years	Planning, Parks, Administration, Nonprofit Partners
b	Inventory, assess, and map all Ottumwa's artistic and cultural characteristics and places	Regular	1 - 5 Years	Planning, Nonprofit Partners
c	Support and promote cultural programs such as workshops, performances and interactive classes	Regular	Ongoing	Administration, Planning, Nonprofit Partners

GROWTH GOALS & ACTION ITEMS

No.	Goal / Action Item	Priority	Timeframe	Entity Responsible
1	**Secure an economic leadership role for Ottumwa in its seven-county region**			
a	Seek out opportunities for advancing Ottumwa's economic leadership role	Urgent	Ongoing	Administration, Planning, GOPIP, Nonprofit Partners
b	Leverage Bridge View Center as a venue for regional economic planning events	Regular	1 - 5 Years	Planning, GOPIP, Bridge View Center
c	Consistently lobby for regional infrastructure decisions that emphasizes Ottumwa as a regional hub	Regular	Ongoing	Administration, Public Works, Airport
2	**Focus on new industrial and commercial development to grow the community's tax base**			
a	Continually evaluate and update the package of economic development incentives available to new companies and business expansions	Regular	Ongoing	Planning, Administration
b	Maintain economic development information and materials on the City and Legacy Foundation websites to market the strengths of Ottumwa as a place to do business	Urgent	Ongoing	Planning, Legacy Foundation
c	Identify and target new venues in which to market Ottumwa to a broad array of businesses	Urgent	Ongoing	Planning, Main Street Ottumwa, Nonprofit Partners
3	**Retain quality employers and make Ottumwa their first choice for any business expansion**			
a	Pursue open and mutually supportive relationships with existing Ottumwa employers	Regular	Ongoing	Administration
b	Proactively solicit feedback on employer goals, needs and complaints	Regular	Ongoing	Administration
c	Include employers early and often in community-wide planning and policy discussions	Regular	Ongoing	Administration, Planning
4	**Grow and support the community's labor pool**			
a	Work alongside existing programs to proactively solicit feedback on employer goals, needs and complaints, and continue an open and mutually supportive relationship with existing employers	Regular	Ongoing	Planning
b	Implement the recommendations included in the Regional Workforce Attraction Plan to market Ottumwa, including a branding and marketing plan	Regular	1 - 10 Years	Planning, Nonprofit Partners
5	**Update the City Zoning and Subdivision regulations to reflect the goals and recommendations of the Comprehensive Plan**			
a	Require new development to extend street, water, and sanitary sewer infrastructure necessary to both serve their projects and allow for future development of the neighboring properties	Urgent	1 - 5 Years	Planning, Public Works
b	Encourage rural development annex into the City and connect to City water and sanitary sewer service	Regular	1 - 10 Years	Planning, Public Works
c	Require rural development and subdivisions to have streets built to City design standards and have at least one access point to a paved street network	Urgent	1 - 5 Years	Planning, Public Works
d	Craft new zoning districts and regulations to encourage and support downtown and mixed-use development, and purpose-built accessory dwelling units on single-family residential properties intended for use by extended family members	Urgent	1 - 5 Years	Planning
e	Adhere to smart growth principles when assessing new development proposals and annexation requests	Regular	Ongoing	Planning, Public Works

GROWTH GOALS & ACTION ITEMS

No.	Goal / Action Item	Priority	Timeframe	Entity Responsible
6	**Complete strategic annexations to ensure an adequate supply of land for future development, especially around the airport and highway interchanges**			
a	Discourage rural subdivisions within the City's 2-mile extra territorial review area that either do not meet the City's subdivision regulations or are not consistent with the Comprehensive Plan	Regular	Ongoing	Planning
b	Require any proposed development that cannot connect to City sewer and/or water provide dry sewer mains, easements, plans, and agreements to connect at some point in the future when service is available	Regular	Ongoing	Planning, Public Works
7	**Continue to partner with the Legacy Foundation and Indian Hills Community College to support job training and business development / incubation**			
8	**Invest in Airport infrastructure for commercial and industrial development**			
a	Conduct a feasibility study for the Ottumwa Airport to assess future expansion and development possibilities	Regular	1 - 5 Years	Airport
9	**Seek opportunities to make improvements that will create long-term savings in costs and energy use**			
a	Install energy efficient equipment and make energy efficient improvements in City facilities as part of regular building and equipment repair and replacement	Regular	1 - 5 Years	Administration, Public Works
b	Evaluate the practicality and return on investment for installing solar power generation on City facilities	Regular	1 - 5 Years	Administration, Public Works
c	Expand the fiber optic capabilities available in Ottumwa	Urgent	1 - 10 Years	Planning, Administration, Public Works
10	**Promote a viable and economically resilient Quincy Place area, with updated tenants, improved pedestrian appeal, and a broader mix of uses**			
a	Engage the mall owner in discussions of mall activation and re-tenanting and explore public and private-sector investments in updated design and redevelopment of aging malls	Regular	1 - 5 Years	Planning, Administration
11	**Develop and expand upon arts & cultural local economic development opportunities for Ottumwa residents and businesses**			
a	Create and provide maps, signs and other products that educate consumers on locally owned businesses	Regular	1 - 5 Years	Planning, GOPIP
b	Integrate more public art and streetscapes to increase traffic to underutilized or struggling areas or corridors	Regular	1 - 10 Years	Planning, Public Works, Nonprofit Partners
c	Provide cultural assets such as public art in affordable housing developments	Regular	Ongoing	Planning, Ottumwa Housing Authority, Legacy Foundation, Private Partners

CELEBRATE DIVERSITY GOALS & ACTION ITEMS

No.	Goal / Action Item	Priority	Timeframe	Entity Responsible
1	**Invest in women, immigrant, veteran and minority entrepreneurs**			
a	Identify partners that help develop, incentivize and incubate women-, veteran-, racial minority- and immigrant-owned businesses	Regular	Ongoing	Planning, Nonprofit Partners
b	Distribute the City's development manual to local organizations representing immigrants and other minorities and devote staff time and resources to helping minority entrepreneurs access development incentives	Regular	1 Year	Planning
c	Identify strategies to help support minority-owned restaurants and retail stores in Ottumwa.	Regular	1 - 5 Years	Planning, Nonprofit Partners
2	**Make Ottumwa livable and enjoyable for people of all ages and abilities**			
a	Promote the development of accessible, senior housing across the continuum of care and accessible housing for people with disabilities	Urgent	1 - 10 Years	Planning
b	Continue to ensure that public works improvements make City streets more accessible to people with disabilities by providing curb cuts, safe crosswalks, places to rest, adequate and marked accessible parking spaces and sufficient sidewalk space	Regular	Ongoing	Public Works
3	**Celebrate diversity in our community**			
a	Place an emphasis on understanding and promoting local and national Black history, women's history, Native American history, LGBTQ history and the immigrant experience, and other minority groups in the development of the Historic Preservation Plan and celebrate that history not only during Black History Month, Women's History Month, Pride Month, Asian American and Pacific Islander Month, Historic Preservation Month but at all occasions throughout the year	Regular	1 - 5 Years	Planning, Historic Preservation Commission
b	Ensure that public art projects include women and minority artists	Regular	Ongoing	Nonprofit Partners
c	Promote community festivals and celebrations that center diverse cultures as well as educational events that promote equity	Regular	Ongoing	Administration, Nonprofit Partners
d	Continue to be a Home Base Iowa community by welcoming veterans and providing the services they need to connect with career opportunities, start businesses or transition to the civilian community	Regular	Ongoing	Administration
e	Ensure that City marketing materials reflect the diversity of the community	Regular	Ongoing	Administration, GOPIP
f	Explore honorary secondary street names and other local designations that celebrate local history and diversity	Regular	1 - 5 Years	Planning, Public Works
g	Promote the development of historic and cultural learning tools and resources, including the lessons and voices of minority groups, so that residents and visitors of all ages can learn and understand the diverse history of Ottumwa	Regular	1 - 5 Years	Historic Preservation Commission, Nonprofit Partners
4	**Treat all Ottumwans fairly and justly**			
a	Create a Spanish language version of the City of Ottumwa website and offer multiple language versions of City forms, rules and regulations	Urgent	1 - 5 Years	Administration
b	Identify existing interpreting services or explore ways in which bilingual/multilingual staff or professional interpreting services can support communication when language is a barrier	Urgent	1 - 5 Years	Administration
c	Review Civil Service procedures, job descriptions and hiring practices to encourage recruiting bilingual/multilingual staff to eliminate implicit or systemic bias in hiring.	Urgent	1 - 5 Years	Administration

CELEBRATE DIVERSITY GOALS & ACTION ITEMS

No.	Goal / Action Item	Priority	Timeframe	Entity Responsible
d	Progressively review police policies, tactics and procedures to focus on equal, equitable, unbiased, fair and consistent services for all Ottumwans and assign a police department staff member to provide community engagement and communication.	Urgent	1 - 5 Years	Police
e	Investigate and partner with developers to provide appropriate incentives for housing projects that include units for permanent and transition housing for people experiencing homelessness or who are at risk of homelessness	Regular	1 - 10 Years	Planning
f	Take steps to build capacity for women and minority residents to serve on boards and commissions, review meeting times and board qualifications that may create barriers to board or commission service and set measurable goals or standards to ensure that City boards and commissions have equal representation for women and reflect the diversity of the community	Urgent	1 - 5 Years	Administration
g	Build new housing, incentivize rental housing renovation and explore a “legal source of income” ordinance to ensure that all Ottumwans who qualify for federal housing choice vouchers can find quality places to live	Regular	1 - 5 Years	Planning
h	Explore restoring the Ottumwa Civil Rights Commission by identifying ways in which the Commission could perform tasks that promote equity in the community rather than simply forwarding issues to the state commission	Regular	1 Year	Administration
i	Support and seek community donations to fund an equity coordinator to implement diversity initiatives for the City and to serve as a liaison to community organizations, or else specifically assign those duties to City staff and support that work	Regular	1 - 5 Years	Administration
j	Work with community organizations to score the City of Ottumwa on the Human Rights Campaign’s Municipal Equality Index, which scores how inclusive cities are of LGBTQ residents, and work to improve that score.	Regular	1 Year	Planning
k	Build capacity for youth to participate on existing boards and commissions and explore creating a youth council empowered to make recommendations to the City Council and undertake projects that increase youth community engagement.	Regular	1 - 5 Years	Administration
l	Focus on authenticity by prioritizing diverse representation in community feedback during planning and ensuring the community is leading decision-making.	Regular	Ongoing	Planning, Administration

Our Ottumwa 2040 Comprehensive Plan

Implementation – Two Year Update

In the last two years, progress has been made on most of the items in the work plan included in Chapter 13. Some goals, such as completing a housing study, have been completely achieved. Others are on pace for completion while some items have experienced disruption. In 2022, the City will launch the *Our Ottumwa Comprehensive Plan* public dashboard powered by Envisio. Each staff member tasked with working on a different action item in the plan will provide a quarterly progress update which will be reflected in progress updates shared on the dashboard. The dashboard will be a permanent link on the City's homepage at www.ottumwa.us.

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14 Amendments

CHAPTER

AMENDMENTS

The Our Ottumwa Comprehensive Plan was adopted by the Ottumwa City Council on August 18, 2020. This chapter will list all amendments made to the document since adoption.

September 1, 2020 Amendments

The Our Ottumwa Comprehensive Plan was amended on September 1, 2020 by the City Council. Amended sections are shown below in red text.

1. Amendment to Celebrate Diversity Goal 3 Action Item A and adding an Action Item G

No.	Goal / Action Item	Priority	Timeframe	Entity Responsible
3	**Celebrate diversity in our community**			
a	Place an emphasis on understanding and promoting local and national Black history, women's history, Native American history, LGBTQ history and the immigrant experience, and other minority groups in the development of the Historic Preservation Plan and celebrate that history not only during Black History Month, Women's History Month, Pride Month, Asian American and Pacific Islander Month, Historic Preservation Month but at all occasions throughout the year	Regular	1 - 5 Years	Planning, Historic Preservation Commission
g	Promote the development of historic and cultural learning tools and resources, including the lessons and voices of minority groups, so that residents and visitors of all ages can learn and understand the diverse history of Ottumwa	Regular	1 - 5 Years	Historic Preservation Commission, Nonprofit Partners

2. Change number two (2) was updating text in Chapter 4 Natural Resources in the Floodplain Section under subheader Impact of the Levees.

Impact of Levees

Several areas within Ottumwa are protected via levees. The City has many upcoming improvement projects along the Levee System. These projects are geared toward maximizing both public and private land use of the area along the river, while managing potential flood conditions and the ecosystem of the riverway. The Levee System is an integral key to the quality of life in Ottumwa through flood protection, recreation, and facilitating increased economic development. These three components feature prominently in the City's future planning for the downtown river area. Through grant efforts, such as the Build Grant Initiative, and public/private projects involving mixed-use developments, the City is coupling public infrastructure rehabilitation and new development opportunities in order to maximize land use of this formerly underutilized community asset, while improving the quality of river community life.

CITY OF OTTUMWA
Staff Summary

** **ACTION ITEM** **

Council Meeting of : Sep 1, 2020

Zach Simonson
Prepared By

Planning & Development
Department

Kevin C. Flanagan
Department Head

City Administrator Approval

AGENDA TITLE: Resolution No. 189-2020 Amendment 1 to the Our Ottumwa Comprehensive Plan.

****

☐ **Public hearing required if this box is checked.**

RECOMMENDATION: Pass and adopt Resolution No. 189-2020.

DISCUSSION: When the Council adopted the Our Ottumwa Comprehensive Plan at the August 18, 2020 meeting, the Council requested amendments that incorporated feedback from public comments made during the public hearing. Resolution No. 189-2020 makes amendments that incorporate that feedback, as well as an amendment to the floodplain portion of plan.

There are three amendments in total:

Source of Funds: **Budgeted Item:** ☐ Budget Amendment Needed:

*** NOTE: Staff Summaries will not be accepted for inclusion on the agenda without prior approval from the City Administrator. ***

1. Amend Celebrating Diversity Goal Three Item A from:

Place an emphasis on understanding and promoting local Black history, women's history, Native American history, LGBTQ history and the immigrant experience in the development of the Historic Preservation Plan and celebrate that history not only during Black History Month, Women's History Month, Pride Month, Asian American and Pacific Islander Month, Historic Preservation Month and throughout the year.

To:

Place an emphasis on understanding and promoting local and national Black history, women's history, Native American history, LGBTQ history, the immigrant experience, and other minority groups in the development of the Historic Preservation Plan and celebrate that history not only during Black History Month, Women's History Month, Pride Month, Asian American and Pacific Islander Month, Historic Preservation Month but at all occasions throughout the year.

2. Amend Celebrating Diversity Goal Three by adding new Item F:

Promote the development of historic and cultural learning tools and resources, including the lessons and voices of minority groups, so that residents and visitors of all ages can learn and understand the diverse history of Ottumwa.

3. Amend Chapter 4 Natural Resources Floodplain Section Impact of the Levees from:

Impact of the Levees
Several areas within Ottumwa are protected via levees. At the time of this report, select areas from Wapello St. to Market St. along the levees near the downtown along the Des Moines River had recently been under scrutiny. The City was notified by FEMA that the timeline of the City's provisional accreditation status concerning these select portions of the levee, north of the river primarily, was nearing a critical date. The City's Provisionally Accredited Levee Agreement (PAL) had expired on October 5, 2011 and FEMA was preparing to perform updated mapping in all areas effected by PAL agreements beginning in2023 and ending approximately in 2025. These areas, known as areas of seclusion, were to be mapped in conjunction with FEMA's mapping update process nationwide, already well underway.

Prior to 2023, the City is required to provide the data and documentation related to levee certification acceptable to FEMA allowing for these areas to attain Levee Accreditation in future mapping processes. The City has this Levee project in its Capital Improvement Plan and has engaged private engineering consultancy on the project. The City and its consulting engineer are working with FEMA officials directly and the project is scheduled for completion prior to mapping commencement in 2023.

This project is one of many the City will have undertaken over decades in order to maximize the land use of the areas along the river, while managing flooding and the ecosystem of the riverway. The Levee System is an integral key to the quality of life in Ottumwa through flood protection,recreation, and facilitating increased economic development. These three components

feature prominently in the City's future planning for the downtown river area, through grant efforts, such as the Build Grant Initiative, and public/private projects involving mixed-use developments, the City is coupling public infrastructure rehabilitation and new development opportunities in order to maximize land use of this formerly underutilized community asset, while improving the quality of river community life.

To:

Impact of the Levees
Several areas within Ottumwa are protected via levees. The City has many upcoming improvement projects along the Levee System. These projects are geared toward maximizing both public and private land use of the area along the river, while managing potential flood conditions and the ecosystem of the riverway. The Levee System is an integral key to the quality of life in Ottumwa through flood protection, recreation, and facilitating increased economic development. These three components feature prominently in the City's future planning for the downtown river area. Through grant efforts, such as the Build Grant Initiative, and public/private projects involving mixed-use developments, the City is coupling public infrastructure rehabilitation and new development opportunities in order to maximize land use of this formerly underutilized community asset, while improving the quality of river community life.