THE OTTUMWA PLAN

A Comprehensive Plan for the Future of Ottumwa, Iowa

Prepared by
RDG Crose Gardner Shukert
with the **Citizens of Ottumwa**
September, 2001

The authors gratefully acknowledge the friendship, support, and commitment of the citizens of Ottumwa. We dedicate this plan to them with best wishes for a great future for the community. We would like to express special gratitude to Barbara Reaves and Dave Shafer for their support, insight, and assistance; Mayor Dale Uehling for his leadership and vision of Ottumwa's future; the members of the Ottumwa Planning Coordinating Committee for their hours of work, matched only by their supply of insight and good ideas; students of Ottumwa High School, who participated in defining the future of their community; and the members of the City Council and Planning and Zoning Commission. We appreciate the efforts of these people and others, and area deeply excited about the future of this historic community.

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THE PLAN FOR OTTUMWA: INTRODUCTION

Ottumwa is a city of rich history and unusual quality, a city of the river and railroad that can use its special features to grow and prosper in the new century. The Ottumwa Plan is designed to provide a comprehensive vision of the city's future, based on taking community actions that will improve the lives of the city's residents

and make the city uniquely attractive for potential growth.

Iowa's cities live in a changing social and economic environment. Ottumwa's growth was based on a combination of transportation and industry, a formula that allowed the city to reach a peak of population and economic strength in 1960. Dramatic changes in these traditional areas of economic strength led to a long period of population decline. In this, the city's history resembles that of other industrial cities in the eastern and upper midwestern parts of America. However, during the 1990's, Ottumwa stabilized and took advantage of a period of significant national and local growth. In the process, the city saw a resurgence in employment and a growth in housing development. Ottumwa has also laid the foundations for downtown redevelopment with the innovative First Step project; begun the development process of a major new civic center, the Bridge View Center; and experienced a substantial increase in regional retailing. The lighting of the historic Jefferson Street Bridge during the year 2000 symbolized this resurgence. Now, Ottumwa finds itself with some of the attributes – a distinctive landscape, an attractive urban waterfront, good transportation, distinctive housing, and strong basic services – that can fuel additional growth in the new century.

Ottumwa completed its last comprehensive plan in 1982, in a very different and perhaps less optimistic environment. Today's city represents a place mobilized to take advantage of substantial opportunities. Some of these opportunities include:

- The completion of the 1996 Downtown Development Guide, which established downtown development as a major community priority.
- The coordination of all of Ottumwa's private-sector development groups under the umbrella of Partners In Progress, and a strong partnership between public and private sectors.
- A new spirit of cooperation between the City and County in addressing development issues of common interest.
- The completion of most of the Southeast Iowa Expressway, providing Ottumwa with a direct, high-speed road to Des Moines and Interstate 80.
- The beginning of major riverfront development featuring the 1992 opening of The Beach, a regional water park that is the city's premier recreational facility.
- The emergence of the Quincy Avenue corridor as a regional shopping center.

Despite these advances, major challenges face Ottumwa, including:

- The need to create the diverse, high quality jobs and entreprenuerial opportunities, need to retain young people, a priority shared by many other Iowa cities.
- The need for development of the road network necessary to unify the city and provide better access between the north and south sides of the city.
- The issues of aging infrastructure and housing stock within an older industrial community.
- The need to take advantage of the city's unique attributes and riverfront, creating a quality of life that can make Ottumwa a place to go to, as well as a place to come from.

This plan is designed to respond to the new opportunities presented to the city in the 21st century.

■ ROLES OF A COMPREHENSIVE PLAN

This comprehensive development plan for Ottumwa has two fundamental purposes. The first provides an essential legal basis for land use regulation such as

zoning and subdivision control. Secondly, this comprehensive plan presents a unified and compelling vision for a community – derived from the aspirations of its citizens – and establishes the specific actions necessary to fulfill that vision.

• ***The Legal Role***

Communities prepare and adopt comprehensive plans for legal purposes. Iowa State Statutes enable cities to adopt zoning and subdivision ordinances to promote the "health, safety, morals, and general welfare of the community." Land use regulations such as zoning ordinances recognize that people in a community live cooperatively and have certain responsibilities to one another. These regulations establish rules that govern how land is developed within a municipality and its extra-territorial jurisdiction.

However, a city may not adopt land use ordinances without first adopting a comprehensive development plan. The basis for this is the premise that land use decisions should not be arbitrary, but should follow an accepted and reasonable concept of how the city should grow.

The Ottumwa Plan provides the ongoing legal basis for the city's continuing basis to regulate land use and development.

• ***The Community Building Role***

Ottumwa's comprehensive development plan has an ultimately more significant role in the growth of a community. This plan establishes a picture of Ottumwa's future, based on the participation of residents in the planning of their community. This vision is particularly crucial at this time in the community's history. Beyond defining a vision, the plan presents a unified action program that will implement the city's goals. Indeed, the plan is designed as a working document- a document that both defines the future and provides a working program for realizing the city's great potential.

■ THE COMPREHENSIVE PLAN: APPROACH AND FORMAT

The comprehensive plan takes a thematic and goal-oriented approach to the future development of Ottumwa. The plan considers eight key areas of concern to the city, corresponding to its most important strategic development and investment issues. The traditional sections of a comprehensive plan, such as

land use, housing, infrastructure, and transportation, are interwoven, enabling the plan to tell the story of the city's future development and presenting an integrated vision of the city's growth.

The eight chapters are:

1. A Profile of Ottumwa

This chapter considers demographic and economic variables in Ottumwa, and includes forecasts of the city's future population.

2. A City for a New Century

This chapter examines the character of Ottumwa and the forces that created the city's urban pattern. It uses this character to establish a vision of the future community and to establish development principles designed to bring about that future.

3. Growth and Land Use

This theme addresses growth projections and needs for Ottumwa and establishes directions for the city's future growth and development. The theme takes the position that managed growth can produce the greatest economic and qualitative benefits for the city. It also provides a framework by which decision-makers can evaluate and act on individual land use issues.

4. A Balanced Transportation System

This theme considers transportation and street systems and relates mobility needs to other development objectives.

5. A Recreation Lifestyle

This theme describes Ottumwa's parks and sports facilities, and outdoor recreation as a way of life for residents along the Des Moines River. It presents improvement plans for new and existing parks and trails, to be integrated into the City's growth, housing, and regional tourism efforts.

6. Quality Public Services

This theme examines the quality of infrastructure and public facilities within Ottumwa. These facilities are vital to the city's ability to support growth and to serve present and future residents.

7. A Vital City Center

Downtown Ottumwa is a distinctive place, a large downtown made up of individual sub-districts and spanning a major river. This theme updates parts of the comprehensive Downtown Development Guide and addresses a variety of issues, including the public environment, building conditions and uses, redevelopment opportunities, and management strategies.

8. A City of Strong Neighborhoods

This theme examines the housing and neighborhood conditions in Ottumwa and presents a coordinated housing and community development strategy for the city.

Each chapter is presented in a uniform, easy-to-follow way. The four sections contained in each chapter include:

- ***An Introduction to the theme.***

- ***Goals.*** This section sets forth the general goals that each theme will address.

- ***Analysis of Existing Conditions.*** This section provides a detailed analysis of the facts, issues, and trends that affect the fulfillment of each theme. The facts and analysis section provides extensive information and statistics that can provide a useful basis for decisions and policy development.

- ***Policies and Actions.*** This section presents the program of detailed actions necessary to complete individual themes and their goals. The overall objective of this plan is to provide Ottumwa with the planning tool necessary to realize its potential for an exciting and distinctive future.

Chapter 1
A PROFILE OF OTTUMWA

This chapter examines important demographic and regional trends that can affect Ottumwa as it plans for its future. This analysis examines the community's population and demographic dynamics, including future population composition.

■ POPULATION AND DEMOGRAPHIC CHARACTERISTICS

Population History

Population history and population characteristics help to explain the condition of a community. This discussion presents important changes in the characteristics and dynamics of Ottumwa's population. Table 1.1 and Figure 1.1 exhibit historic population growth in Ottumwa, compared to other regional cities and Wapello County.

The Ottumwa area was settled by the Fox and Sac Tribes in the early 1800s. As westward expansion approached, the Sac and Fox tribes were pushed out and Wapello County was open for a land rush in 1843. Over 5,000 settlers came to the county to claim land for crops and livestock. About 467 acres of the Ottumwa area were settled by investors of the Appanoose Rapids Company. Over time, the name of the area changed from Louisville to Ottumwanoc and finally to Ottumwa, meaning "place of perseverance" or "land of rippling waters."

By 1844, Ottumwa was declared the county seat and within four years the city developed as a regional trade center. Ottumwa is the highest navigable point on the Des Moines River, giving the city access to steamboats and other trade vessels. When the Burlington Railroad was constructed in 1859, Ottumwa further extended its trading power and its population growth.

The population boomed from 1,632 to over 5,000 from 1860 to 1870, and continued to grow to a peak population of 33,871 in 1960, before declining to 24,488 by 1990.

- Ottumwa's population grew substantially through the middle part of the 20th Century.

During the 1930's, Ottumwa's population grew by nearly 3,500 to a population of 31,570, and continued to grow until reaching its peak of 33,871 in 1960.

- Ottumwa and Wapello County lost about 25% of their population from 1960 and 1990.

The closure of several manufacturing plants during the 1960's left a shortage of jobs in Ottumwa, forcing many people to leave the city. The Ottumwa region also suffered from agriculture crises and flooding in subsequent decades, further contributing to outmigration. As a result, the population declined from 33,871 in 1960 to under 25,000 by 1990.

- Ottumwa and Wapello County experienced small gains in population during the 1990's for the first time since the 1950's.

- Population held steady throughout the 2000s.

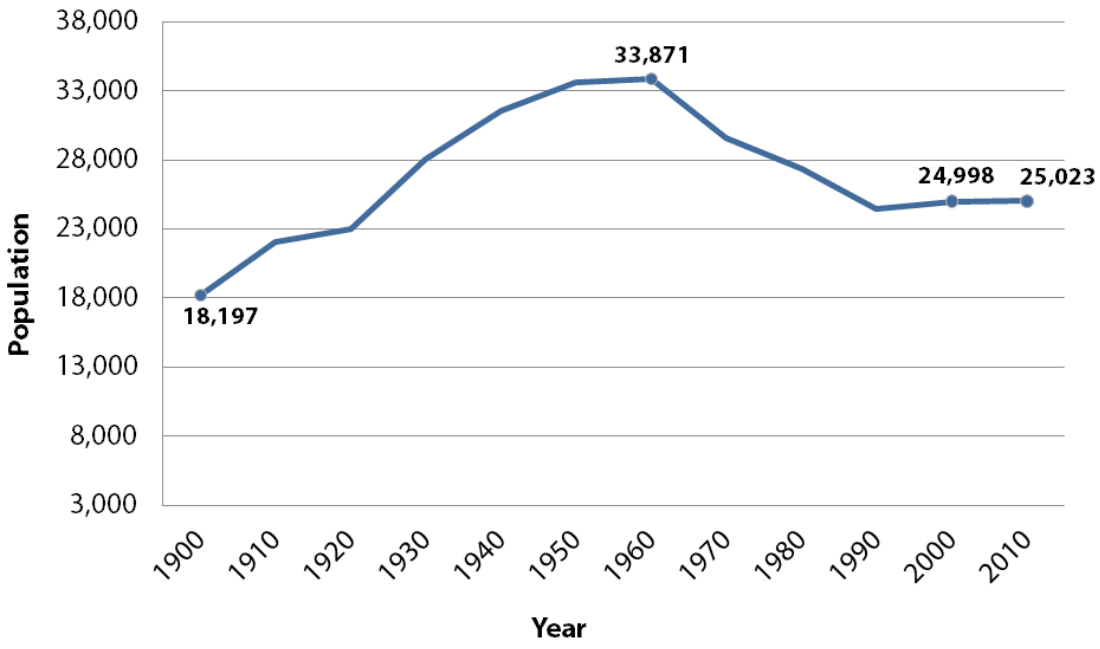

Figure 1.1 - Historical Population Change in City of Ottumwa, 1900-2010

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Table 1.1: Population Change for Ottumwa and Comparable Communities. 1960-2010

	1960	1970	1980	1990	2000	2010	% Change 1960-2010	% Change 2000-2010
Ottumwa	33,871	29,610	27,381	24,488	24,998	25,023	-26.1%	0.1%
Wapello County	46,126	42,149	40,241	34,687	36,051	36,625	-20.6%	1.6%
Burlington	32,430	32,366	29,529	27,208	26,839	25,663	-20.9%	-4.4%
Oskaloosa	11,053	11,224	10,989	10,600	10,938	11,463	3.7%	4.8%
Muscatine	19,813	22,405	23,467	22,881	22,697	22,886	15.5%	0.8%
Newton	15,381	15,619	15,292	14,799	15,579	15,254	-0.8%	-2.1%
Mount Pleasant	7,339	7,007	7,322	7,959	8,751	8,668	18.1%	-0.9%
Pella	5,198	6,668	8,349	9,270	9,832	10,352	99.2%	5.3%

Population Dynamics and Migration

Population change in a community is caused by three basic factors:

- *A comparison of births and deaths*. If more people are born in a community than die, the population of the town will tend to increase. Therefore, a city with more population in younger age groups (particularly with people in childbearing or family-formation years) will tend to grow.

- *Migration patterns*. During any period in a city's life, people move in and out. If more people come to the city than leave, its population tends to increase. Typically, communities that are building substantial new housing experience significant in-migration, which may include residents new to the area and those relocated from the surrounding rural region.

- *Annexation.* Cities sometimes grow by incorporating populated areas surrounding them. This has not been a significant source of growth for Ottumwa.

Table 1.2 (following page) displays migration patterns in Ottumwa during the 2000s. To determine its migration rate, the city's population forecast based on natural population change is compared to the actual 2010 census count.

- Ottumwa experienced a 2010 population that was very similar to what would be predicted by natural population change alone. This indicates that the city experienced very little in-migration during the 2000s.

Calculations in Table 1.2 are based on the following assumptions:

- Use of a cohort-survival method. A "cohort" is a group of people of a certain age range who are evaluated as a unit as they age together. Thus, the "cohort" of people between age 35 and 39 in 2000 will be counted in the range from 45 to 49 in 2010. This method computes how many in each cohort will survive into the next five-year period.

- Birth rates will be slightly lower than national trends, based on regional demographics.

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Table 1.2: Predicted versus Actual Population Change, 2000-2010

	Actual	Predicted
2000 Population	24,998	
Population 2010	25,023	24,983
Population Change 2000-2010	25	-15
Percent Change 2000-2010	0.10%	-0.06%

Table 1.3 and Figure 1.2 compare predicted and actual population change for each age group in the city, using the same methods as Table 1.2. The variance percentage compares the forecast to the actual population count. Most of the difference is the result of migration.

- Ottumwa experienced an influx of Young Adults (Ages 15-24) from 2000-2010. A similar increase in the Under 9 age categories is likely related to the presence of a greater number of young adults with children.

- Ottumwa also experienced a significant out-migration among the oldest seniors. This is unusual, since larger communities in rural areas typically experience in-migration of seniors seeking to be near health care and other community services.

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Table 1.3: Predicted and Actual Age Cohort Changes: All Residents, 2000-2010

Age Group	2010 Predicted	2010 Actual	Difference	% Variance
Under 5	1,641	1,806	165	10.0%
5 to 9	1,450	1,606	156	10.8%
10 to14	1,549	1,476	-73	-4.7%
15-19	1,623	1,835	212	13.1%
20-24	1,584	1,822	238	15.0%
25-29	1,860	1,680	-180	-9.7%
30-34	1,770	1,610	-160	-9.0%
35-39	1,519	1,448	-71	-4.7%
40-44	1,445	1,483	38	2.6%
45-49	1,652	1,632	-20	-1.2%
50-54	1,786	1,721	-65	-3.6%
55-59	1,629	1,602	-27	-1.7%
60-64	1,314	1,297	-17	-1.3%
65-69	1,009	977	-32	-3.2%
70-74	829	789	-40	-4.9%
75-79	801	788	-13	-1.6%
80-84	702	682	-20	-2.9%
85+	974	769	-205	-21.1%
Total	24,983	25,023	40	0.2%

Source: U.S. Census, 2010; RDG Planning & Design 2013

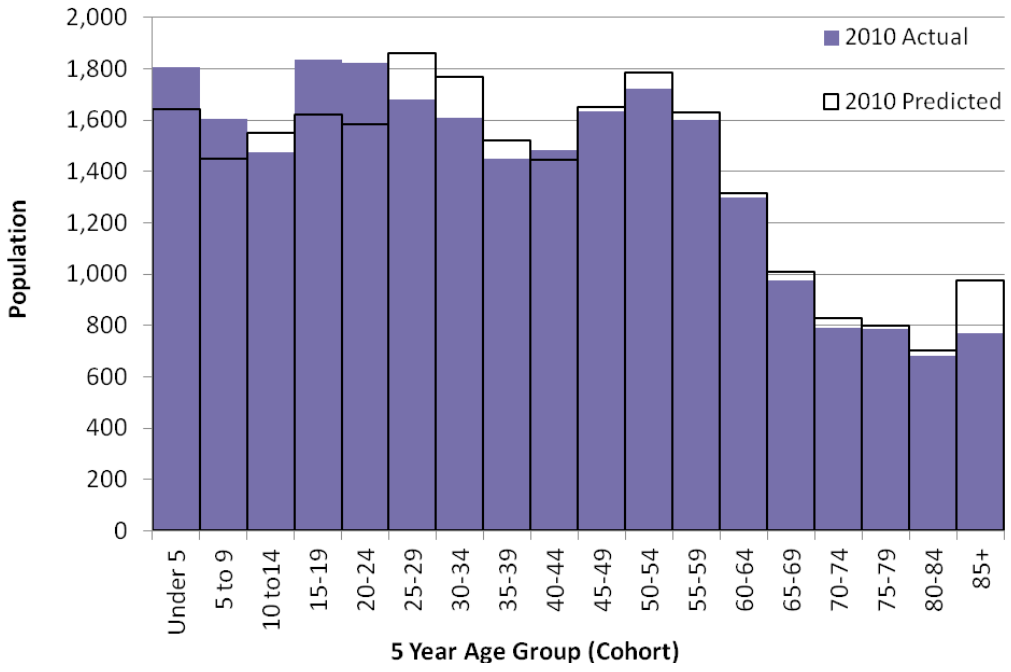

Figure 1.2 - Predicted and Actual Age Cohort Populations for Ottumwa - 2000 and 2010

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Age Distribution in Ottumwa

Table 1.4 and Figure 1.3 illustrate changes in age distribution for Ottumwa from 2000 to 2010. The general trends are:

- *A decrease in the number of the oldest adults – ages 65+*
- *As the baby boomer generation moves through the life cycle, Ottumwa saw an increase in those entering retirement years (adults ages 50-64) and a corresponding decrease in adults ages 35-49. If this trend continues, the 2020 age distribution will see a significant increase in retirees ages 65+*
- *An increase in the number of adults in typical family-formation years 25-34, and a corresponding increase in the youngest children under 5.*

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Table 1.4: Age Composition as Percent of Total Census Population, 2000-2010

Age Group	2000 Pop.	2010 Pop.	Change 2000-2010	% Change	% of Total 2010
Under 5	1,553	1,806	253	16.3%	7.2%
5 to 9	1,628	1,606	-22	-1.4%	6.4%
10 to 14	1,594	1,476	-118	-7.4%	5.9%
15-19	1,877	1,835	-42	-2.2%	7.3%
20-24	1,786	1,822	36	2.0%	7.3%
25-29	1,534	1,680	146	9.5%	6.7%
30-34	1,463	1,610	147	10.0%	6.4%
35-39	1,682	1,448	-234	-13.9%	5.8%
40-44	1,838	1,483	-355	-19.3%	5.9%
45-49	1,711	1,632	-79	-4.6%	6.5%
50-54	1,423	1,721	298	20.9%	6.9%
55-59	1,148	1,602	454	39.5%	6.4%
60-64	1,012	1,297	285	28.2%	5.2%
65-69	1,082	977	-105	-9.7%	3.9%
70-74	1,111	789	-322	-29.0%	3.2%
75-79	1,020	788	-232	-22.7%	3.1%
Over 80	1,536	1,451	-85	-5.5%	5.8%
Total	24,998	25,023	25	0.1%	100%
Median	38.2				

Source: U.S. Census 2010

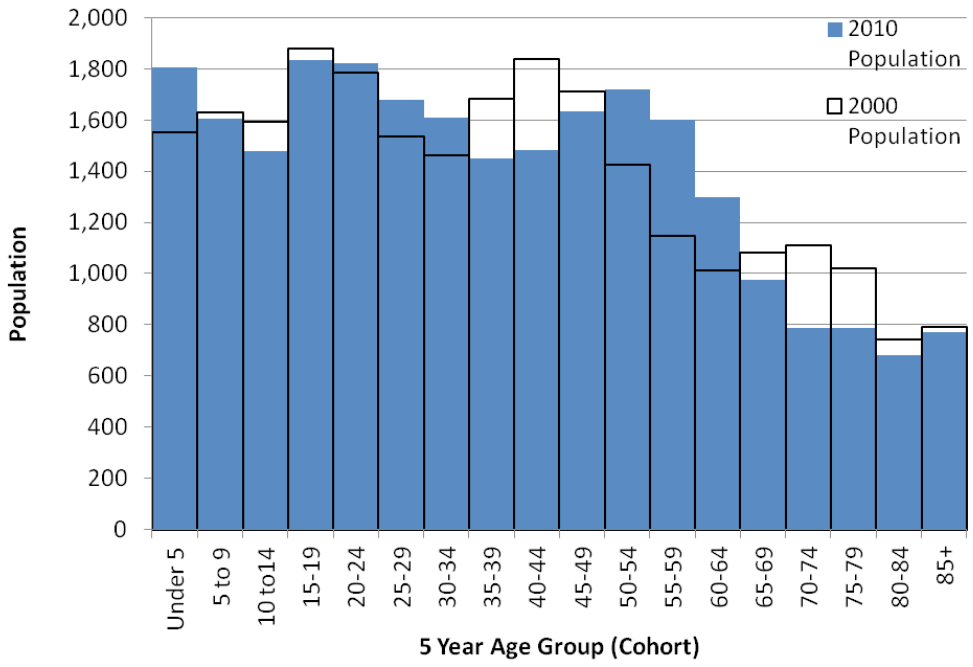

Figure 1.3 - Ottumwa Population by Age - 2000 and 2010

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■ POPULATION PROJECTIONS

Projecting the future size and makeup of Ottumwa's population is important to directing the city's planning and policy decisions on future investments and growth. Future population for Ottumwa is forecast by:

- Calculating probable changes in Ottumwa's existing population.
- Using 2010 data as a basis for forecasting population. The cohort survival method is used to project population, utilizing birth and death rates developed by the Bureau of the Census and the National Center for Health Statistics.
- 4 projection scenarios, describing the city's potential for growth.
  1. Natural Population Change based on births and deaths (no migration)
  2. A continuation of the 1960-2010 average annual rate of growth of -.06%
  3. A 0.3% growth goal, resulting in a 6% increase in population from 2010-2030
  4. A continuation of previous trends in housing construction rates

This plan uses scenario #3 as the basis for its recommendations. This scenario results in a 2030 population of 26,568. Table 1.5 and Figure 1.4 display the population projections scenarios.

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Table 1.5: Ottumwa Population Projections

	2010	2015	2020	2025	2030
Natural Population Change	25,023	25,036	25,198	25,421	25,599
1960-2010 Average Annual Rate of Change (- .06%)	25,023	24,281	23,562	22,863	22,185
0.3% Annual Growth Goal (~6% total increase)	25,023	25,401	25,784	26,173	26,568
Average Annual Construc-tion Rate (2000-2010)	25,023	25,302	25,581	25,860	26,140

Source: U.S. Census 2010; RDG Planning & Design

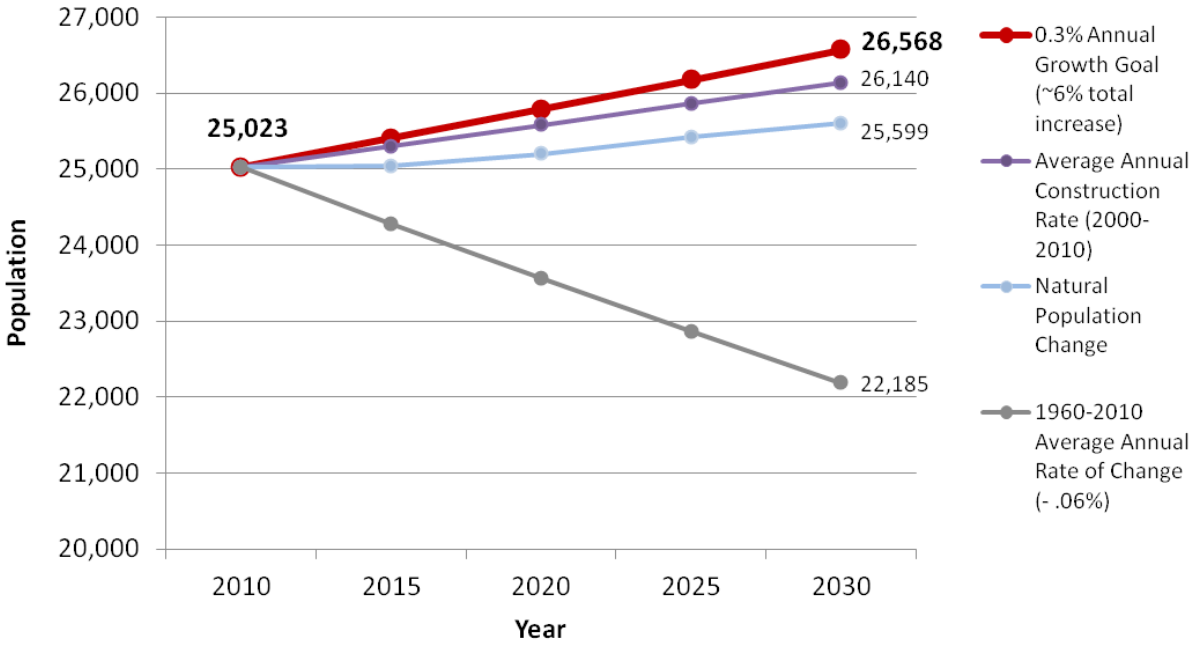

Figure 1.4 - Population Projection Scenarios for Ottumwa through 2030

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■ ECONOMIC CONDITIONS

Ottumwa's economy is based on local employment opportunities such as manufacturing, retail trade, and health services businesses. This section examines economic characteristics and dynamics of Ottumwa's population to establish a basis for economic planning.

Tables 1.6 and 1.7 compare the 2010 employment makeup of Ottumwa's residents to those of Wapello County and the State of Iowa as a whole. This comparison reveals that:

- The industries that employ the greatest number of Ottumwa residents are manufacturing, retail trade, and educational/health services. These industries are also the top employers for the County and the state as a whole. The differences between Ottumwa and Wapello County are minimal, indicating the influence Ottumwa has on the County's employment makeup.

- Compared to the State of Iowa, Ottumwa residents in 2010 are less likely to be employed in management, business, science, or arts and more likely to be employed in production, transportation, or material moving occupations.

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Table 1.6: Employment by Industry, 2010	Ottumwa		Wapello County		State of Iowa	
	2010	% of Total (2010)	2010	% of Total (2010)	2010	% of Total (2010)
Agriculture, forestry, fishing and hunting, and mining	70	0.6%	279	1.6%	62,943	4.1%
Construction	425	3.7%	688	4.1%	98,644	6.3%
Manufacturing	3,075	26.4%	4,400	25.9%	232,877	15.0%
Wholesale trade	266	2.3%	360	2.1%	50,706	3.3%
Retail trade	1,749	15.0%	2,283	13.4%	179,217	11.5%
Transportation and warehousing, and utilities	547	4.7%	1,107	6.5%	75,119	4.8%
Information	180	1.5%	212	1.2%	33,549	2.2%
Finance and insurance, and real estate and rental and leasing	613	5.3%	774	4.6%	119,194	7.7%
Professional, scientific, and management, and administrative and waste management services	457	3.9%	588	3.5%	102,220	6.6%
Educational services, and health care and social assistance	2,562	22.0%	3,657	21.5%	365,550	23.5%
Arts, entertainment, and recreation, and accommodation and food services	973	8.4%	1,376	8.1%	115,963	7.5%
Other services, except public administration	394	3.4%	674	4.0%	67,249	4.3%
Public administration	320	2.8%	589	3.5%	50,363	3.2%
TOTAL	11,631	100.0%	16,987	100.0%	1,553,594	100.0%
Source: U.S. Census 2010 ACS						

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Table 1.7: Employment by Occupation, 2010	Ottumwa		Wapello County		State of Iowa	
	Number	%	Number			
Management, business, science, and arts occupations	2,567	22.1%	4,039	23.8%	514,839	33.1%
Service occupations	2,324	20.0%	3,057	18.0%	252,779	16.3%
Sales and office occupations	2,456	21.1%	3,611	21.3%	379,912	24.5%
Natural resources, construction, and maintenance occupations	700	6.0%	1,303	7.7%	149,745	9.6%
Production, transportation, and material moving occupations	3,584	30.8%	4,977	29.3%	256,319	16.5%
Total Employed	11,631		16,987		1,553,594	100%
Source: U.S. Census ACS 2010						

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Table 1.8 displays income distributions for Ottumwa, Wapello County and Iowa.

- Ottumwa contains a larger proportion of lower income households than the county, state and nation. This can be attributed to its demographics, its status as a small or regional hub for rural migration, and the industry/ occupation mix discussed above. Only 18% of Ottumwa households have an income of more than $75,000, compared to 28% for the State.

Ottumwa's income distribution and employment characteristics suggest that future residential and economic development efforts should be concentrated on attracting professional and managerial sectors of the economy and reinforcing and accommodating the manufacturing and industrial sectors. Ottumwa's location and demographic characteristics should help to attract industries that can benefit from the educational and technical training opportunities available in Ottumwa.

Taxable Retail Sales

Ottumwa has traditionally served as the trade and economic center of an area that includes all of Wapello County and substantial parts of Southeast Iowa.

Figure 1.5 compares per capita retail sales for Ottumwa and neighboring communities in 2012. Figure 1.6 shows Ottumwa's pull factor as compared to a peer group (the peer group includes 17 Iowa cities with populations of 10,000 or greater that are located in an outlying MSA county or non-metro county). In both of these measures of retail strength, Ottumwa is performing average or better.

Table 1.9 (next page) shows estimates for retail sales by category for Ottumwa in 2013. Areas with a retail "gap" are those where retail sales are lower than the demand from residents. This indicates that Ottumwa is losing potential spending from residents in several categories:

- Furniture and Home Furnishings
- Electronics and Appliances
- Clothing and Clothing Accessories
- Sporting Goods, Hobby, Book, Music
- Foodservice and Drinking Places

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Table 1.8 - Income Distributions for Ottumwa, Wapello County and the State of Iowa

	Ottumwa	Wapello County	Iowa
Total Households	10,380	14,594	1,223,439
Less than $10,000	9.7%	7.9%	6.4%
$10,000 to $14,999	9.3%	8.4%	5.8%
$15,000 to $24,999	15.2%	14.4%	12.1%
$25,000 to $34,999	14.8%	14.6%	11.7%
$35,000 to $49,999	17.6%	16.5%	15.9%
$50,000 to $74,999	15.7%	16.8%	20.4%
$75,000 to $99,999	9.3%	9.5%	12.5%
$100,000 to $149,999	5.8%	7.9%	10.3%
$150,000 to $199,999	1.2%	1.8%	2.8%
$200,000 or more	1.4%	2.1%	2.1%
Median Income	35,653	39,192	47,961

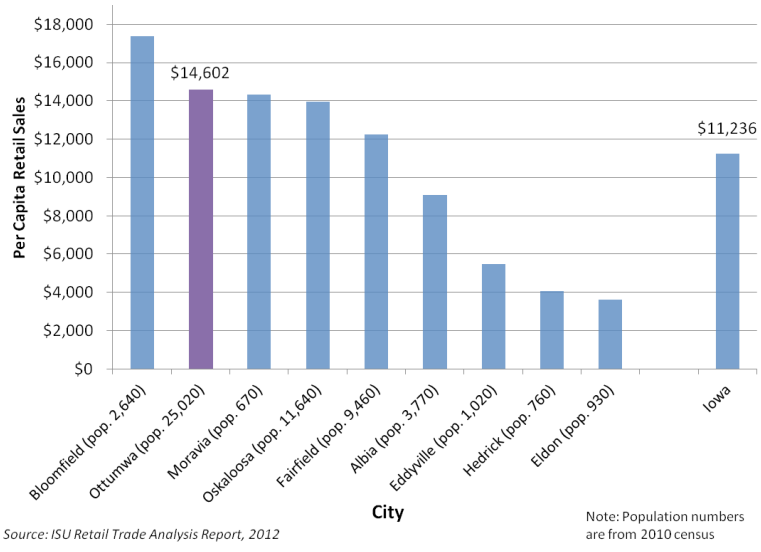
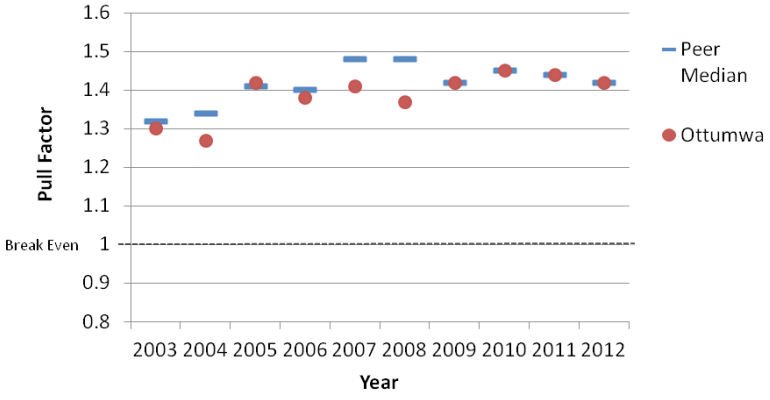


Figure 1.5 - Per Capita Retail Sales for Ottumwa and Neighboring Communities, 2012

2014 UPDATE



Source: ISU Retail Trade Analysis Report, 2012

Figure 1.6 - Pull Factor Comparison for Ottumwa and Peer Group, 2012

2014 UPDATE

2014 UPDATE

Table 1.9 – Retail Sales by Category for Ottumwa, 2013 estimates			
Retail Type	2013 Demand (Consumer Expenditures)	2013 Supply (Retail Sales)	Opportunity Gap/(Surplus)
Total Retail Sales Incl Eating and Drinking Places	366,241,605	515,641,120	(149,399,515)
Motor Vehicle and Parts Dealers	52,671,326	102,013,902	(49,342,576)
Furniture and Home Furnishings Stores	6,654,215	4,631,677	2,022,538
Electronics and Appliance Stores	7,839,412	4,913,472	2,925,940
Building Material, Garden Equip Stores	33,640,649	64,474,637	(30,833,988)
Food and Beverage Stores	50,947,794	59,207,242	(8,259,448)
Health and Personal Care Stores	23,797,185	42,615,743	(18,818,558)
Gasoline Stations	38,973,524	58,915,623	(19,942,099)
Clothing and Clothing Accessories Stores	16,002,544	13,616,235	2,386,309
Sporting Goods, Hobby, Book, Music Stores	7,067,552	1,274,969	5,792,583
General Merchandise Stores	48,823,170	129,940,665	(81,117,495)
Miscellaneous Store Retailers	11,381,773	4,840,489	6,541,284
Non-Store Retailers	29,321,466	5,463,671	23,857,795
Foodservice and Drinking Places	39,120,995	23,732,795	15,388,200

Commuting Patterns

Ottumwa residents tend to work relatively near their homes. Major industrial areas, including those located along the Des Moines River, are relatively accessible from most parts of the community. Table 1.10 notes that in 2010:

- Ottumwa residents benefit from its "small town" mobility, with a local commute of about 15 minutes to work.
- About 2% of Ottumwa workers walk to work, and a similar number work at home. This is much lower than many peer cities such as Oskaloosa

2014 UPDATE

Table 1.10: Commuting Patterns for Ottumwa and Other Regional Cites, 2010			
Community	Average Travel Time to Work	% Who walk	% Who work at Home
Ottumwa	14.9	1.9%	1.7%
Oskaloosa	15.4	6.6%	5.0%
Mason City	13.4	3.3%	3.3%
Pella	11.4	8.8%	9.9%
Albia	22.6	4.8%	4.3%
Marshalltown	14.9	3.6%	3.2%
Knoxville	19.9	2.0%	3.6%
Fort Dodge	13.3	2.9%	2.60%
Fairfield	9.8	9.1%	8.4%
Mount Pleasant	15.7	4.5%	5.5%
State of Iowa	19.1	3.6%	4.8%
Wapello County	17.5	2.2%	2.8%
Source: U.S. Census, 2010			

CHAPTER SUMMARY

- Ottumwa has grown significantly since the late 1800s, at first because of the railroad and agriculture, and later, as the result of industrial development and related services and businesses.
- The aging of traditional industries, along with a declining economic role for the railroad, agricultural crises, and floods caused a significant population decline from 1960-1990. In this, Ottumwa resembles some of the older industrial towns of the East and upper Midwest.
- Ottumwa was able to break this cycle of slow decline during the 1990s, and population has held steady since then.
- During the 2000s, Ottumwa attracted young adults, while losing older adults to migration.
- Ottumwa's diverse regional economy includes substantial employment in manufacturing, reatil, and health care.
- Incomes in Ottumwa are considerably less than the State.
- Ottumwa remains a retail hub and its retail sales are competitive with both nearby cities and peer cities across the state.

Ottumwa must assure that growth occurs in places that will provide the greatest benefits to the community and its residents. A key component of this plan is the creation of a framework for planned growth. This means that proposed development areas are designated and sized according to the amount of growth that the city can realistically expect. This approach can help assure that transportation and utility systems are designed and built in orderly and cost-effective ways, and that the city ultimately takes full economic advantage of its expansion.

Without a framework, development can be undirected and diffuse, resulting in expensive initial development costs and overextended public services. As a result, the public cost of supporting new growth is increased, also increasing the burdens placed on the city's taxpayers. Worse, if the City fails to plan for growth, a significant amount of development may take place outside of its boundaries, diverting energy and investment away from the center.

To be sure, projecting future population is an inexact science. However, the population scenarios presented in the Ottumwa Plan can help the City set priorities. A clear challenge for Ottumwa will be its ability to attract growth and accommodate it within a cost-effective and high quality community development structure.

Chapter 2
A CITY FOR A NEW CENTURY:
Development Concepts for Ottumwa

Ottumwa is a city of special qualities and physical features. The broad landscape of the river leads to a dominance by water that is possibly more reminiscent of a lakefront city. This, combined with its river bluffs environment, an historic built environment, and the rich variety of bridges that define the city's marketing image, create a unique sense of place that can be one of Ottumwa's greatest assets.

Many assets contribute to Ottumwa's unique quality. The broad expanse of the Des Moines River and its flood plain are sharply defined on the north by the bluff face, punctuated by historic structures, that rises above the valley. Major built features such as the houses of the Court Hill and 5th Street Bluff Historic Districts, Ottumwa High School, and the Wapello County Courthouse, punctuate the bluff and add definition to the natural landscape. The vital community quality of Court Street, the wooded hollows and ravines that are integral to the bluff environment, the movement of the bridges over the river, the Ottumwa Water Works dam and hydroelectric plant, the streamlined modernity of the Ottumwa Depot, the neighborhood shopping street quality of Church Street, and the five points intersection of Church, Richmond, and Vine – all these things suggest a city that grew as an intersection of eastern and western development traditions. In addition, Ottumwa has evolved as a major industrial and employment center and as a key retail and service focus in southeast Iowa.

Beyond its physical beauty and community character, Ottumwa is, for many, the quintessential expression of midwestern values and solidity. In popular culture, when the writers of the movie and television classic M.A.S.H. sought a hometown for its most solid and ingenuous character, that city was Ottumwa. When many people seek a value-based foundation for their families, Ottumwa stands out.

Yet, Ottumwa has faced forces and challenges that will affect its future. The most significant of these are economic and demographic changes that have caused the city's population to drop from a peak of about 34,000 in 1960 to a low of under 25,000 in 1990. The decline and changes in principal heavy industries that formed the core of the city's economy, the reduced importance of the railroad as a means of transportation of people and goods, changes in the agricultural economy, and the general population stagnation experienced by Iowa during those decades, have all contributed to this local population decline. As a result, Ottumwa's infrastructure of buildings and facilities is that of a city that once served more people, creating significant economic and public service stresses.

Since 1990, Ottumwa's population has managed to hold steady. The city must continue this positive trend, emerging as a strong competitor for new people and investment, while maintaining and capitalizing on the city's special qualities. This plan can help the city define and achieve a vital agenda for its future.

Note: The scope of the 2014 Plan Update is relatively limited, and focuses on Housing and Parks. A full rewrite of this plan should commence no later than 2020.

This section presents a guiding vision for Ottumwa that drives the more detailed sections of this comprehensive plan. It is a vision developed through three areas of analysis:

1. **The patterns and relationships that have defined Ottumwa's growth and made it distinctive.** By understanding these relationships, the town can define new principles to guide new growth and investment that capitalize on, and reinforce, the city's special character.

2. **The challenges that face Ottumwa as it begins a new century.** Ottumwa is a city that grew during the industrial era of the 19th century and must adapt to the information age of the 21st century. Understanding the challenges and forces that it faces can help the city define its future community agenda.

3. **A development vision for Ottumwa.** Ottumwa should follow an overall concept for growth, defining the guiding principles that can help meet its development and planning objectives.

DEVELOPMENT AND BUILDING PATTERNS

This section considers the special physical features and characteristics that help give Ottumwa a distinctive environment, one that can provide a base for further growth during the next 20 years.

- **The River.** The Des Moines River, with its broad floodplain, is Ottumwa's central feature. Once a meandering river, floods created an oxbow of the river's western bend, forming the Lagoon that is a major feature of Ottumwa Park. The river valley divides the city into two separate parts, with distinctive development patterns defined by their differing topographies. The broad vistas across the river create a sense of spaciousness that gives Ottumwa the sense of being situated along a lake. The Hydro Dam and Water Works complex are other defining features of the city.

- **Topography.** The action of the Des Moines River over time has created contrasting landforms on each bank, producing very different development patterns. A bluff face arises from the river valley on its north bank, giving way to a rugged pattern of ravines and wooded slopes to the north. Harrow's Branch is the largest stream in this ravine system, running southwest to the river. The ravine areas provide fingers of green space that permeate the north part of the city. This pattern created a dispersed development pattern, in which residential growth occurred in relatively flat areas. Court Street, climbing the side of the bluff to the north and then leveling out as a ridge line and drainage divide, became the major street connecting these development areas together. To the north and west, the pattern of wooded ravines transitions back into the gently rolling landscape more typical of this portion of Iowa.

  The southern part of the city features a far more level topography, more characteristic of the areas just above a broad flood plain. Here, most development follows a more conventional grid pattern, typical of late 19th and early 20th century town development. To the southwest, the landscape is characterized by gently rolling uplands.

  This varied and distinctive topography – related to the river and determining urban form – is one of Ottumwa's most distinctive qualities, framing views and adding value to ridgetops.

- **Crossroads and Transportation.** The Iowa segment of the Chicago, Burlington & Quincy Railroad's (now Burlington Northern & Santa Fe) mainline west from Chicago ran through Ottumwa. Ottumwa was an especially critical point in the railroad, representing an interchange with the heavy river traffic of the Des Moines River. The extension of rails to Mount Pleasant in 1856 created a land boom in Ottumwa, even though the railroad did not reach the city until 1859. From 1859 to 1865, further delays caused by bondholders opposed to financing concepts made Ottumwa the railroad's western Iowa terminus for a time. Later, three other railroads, including the Milwaukee Road, Norfolk & Western, and Rock Island, and their predecessors, extended to the city. The intersection of transportation modes had a major formative effect on Ottumwa and made the railroad a substantial employment source.

  Later, Ottumwa became a crossroads of two federal highways, north-south Highway 63 and east-west Highway 34. But the construction of Interstate 80 during the early 1960s reduced the importance of these major highways. As early as 1970, diagonal Southeast Iowa Freeway was proposed to link Ottumwa to Des Moines, following Highway 163/63 through Oskaloosa and Pella as early as 1970. This road was opened as a continuous freeway to Ottumwa in 2008.

- **The City Plan - Streets and Blocks.** The layout of Ottumwa has been influenced by topography; indeed, the interaction of landforms and the street plan created the canvas for the city's urban environment. The oldest parts of the city were platted in a relatively regular grid to Sixth Street, running roughly parallel to the Burlington Railroad and the Des Moines River. This grid was platted on the face of the bluff, creating a dramatic landscape of steep slopes and houses perched on hillsides with commanding views of the river and countryside beyond. The pattern of a grid laid over conflicting topography was typical of other cities laid out during the same period, resulting in such dramatic urban landscapes as those of Duluth and San Francisco. The historic north bank of the river hugged the railroad and river corridors, leading to a linear city form that was relatively long and shallow.

  South of the river, the flatter topography led to a more typical street plan. Church and Richmond Streets followed a bend in the Des Moines River, now the oxbow lagoon of Ottumwa Park. Church Street became a streetcar corridor and, as a continuation of Jefferson Street on the north side of the river, developed as a neighborhood commercial district. Richmond similarly accommodated commercial uses, but evolved into a more auto-oriented corridor. The rest of South Ottumwa's street pattern is determined by the section line grid defined by the Homestead Act. This pattern created key community nodes when the two patterns collided, such as at the foot of the Jefferson Street Bridge and the intersections of Church Street with Richmond Avenue, Vine Street, and Chester Avenue.

  North of Sixth Street, the later street pattern followed a broken grid, with development focused in areas that were relatively flat and developable, separated by the wooded slopes of the ravines. Court Street evolved as a north-south corridor, a spine that united such developing areas as the Vogel Place District.

- **Community Streets.** Community streets grow into centers of urban life, linking neighborhoods together and, at their best, becoming lifelines of the community that go beyond merely moving traffic. They are a characteristic of traditional community development and urban form. Frequently, community streets are lined with grand historical houses, activity centers, and major institutions. Court Street evolved as such a street for Ottumwa. Court Street begins at Central Park at Fourth Street. The street extended up the bluff to Sixth Street and then generally leveled out along a ridge line. North Court, from Sixth to Woodland, became home to some of the city's great mansions, forming a neighborhood that is now the Court Hill National Register District. Farther north, Court continued as the spine that linked developing neighborhoods, and became the principal route of the Ottumwa Electric Railroad. This streetcar line had a major influence on development, encouraging the growth of Vogel Place during the 1920's. Court continues to serve as a community street, linking neighborhoods and serving such important community features as the city's historic cemetery, the Ottumwa Country Club, and a variety of schools and churches.

  Church Street and Chester Avenue, while different in character, serve some of the same functions for South Ottumwa. Church, also an original streetcar route, evolved as South Ottumwa's major commercial district, while Chester Avenue became a grand residential avenue. The junction of these two streets became the site of the major churches that gave the commercial street its name.

- **Waterworks.** The Ottumwa Water Works is one of the city's dominant physical features. The hydroelectric dam, which has created a wide pool on the Des Moines River, is one of the city's dominant structures and image features. The multi-building Water Works complex, acting as Ottumwa's front lawn, dominates the riverfront between Market and Wapello Streets. This feature continues to be an important definer of the city's physical form.

- **Built Environment.** From its founding in 1843, the distinctive architectural characteristics of Ottumwa's built environment lent a third dimension to the canvas created by the natural component of the land and the artificial component of the street plan. Ottumwa's most distinctive built form is its urban skyline of commercial, residential, and civic buildings rising above the Des Moines River valley. This skyline includes a variety of high architectural styles that reflect the prosperity and importance of Ottumwa in its region.

  The city includes many National Register Districts, including the:

  - Court Hill Historic District, centered around Court Street, between Sixth Street and Woodland Avenue.
  - Fifth Street Bluff Historic District, focused around Fifth Street between Jefferson and Court Streets.
  - Vogel Place Historic District, including East Alta Vista, Vogel, and Vanness Avenues, from the historic St. Joseph Hospital to North Court Street.
  - Ottumwa Cemetery Historic District, including the cemetery's original 10-acre plot and key structures
  - Historic Railroad District, including the historic railroad station and Ballingall Park at the corner of River Drive and Main Street
  - North Fellows District, on the 1200 block of North Fellows Street and 1204-1212 North Elm Street

  In addition, Ottumwa has more than a dozen additional structures or sites listed on the National Register.

CHALLENGES

The previous discussion described features and relationships that contributed to the form and character of Ottumwa. But other forces, including economic and technological change, have had a significant effect on the city. These substantial challenges and changes include:

- **Population Losses.** After it reached its peak population of about 34,000 in 1960, Ottumwa has experienced substantial population losses. The city has lost about 30% of its population between 1960 and 1990, a trend shared with industrial central cities. Causes of population decline have included long-term reductions in jobs in heavy industries such as the John Deere Ottumwa Works, a sharp reduction in railroad and transportation-related employment, changes in the agricultural economy, and relatively poor highway access. These changes have resulted in chronic out-migration from the city. However, during the 1990s, the city experienced a population recovery, growing from about 24,500 to 25,000, the first ten-year population increase since the 1950s. Ottumwa sustained its population between 2000 and 2010, and grew by 25 people. Causes of the population's stabilization is the reinvestment by John Deere and other manufacturing firms. Some of the manufacturing jobs have attracted immigrants to the community, creating an influx of Hispanics moving to the community.

  Despite gains and stabilization since 1990, Ottumwa's substantial drop below peak population means that the city's built environment is relatively over-sized. As a result, the city has experienced a decline in housing units, housing disinvestment and demolition in some areas, and higher downtown commercial vacancy caused by a reduced market for building area. In addition, the reduced development density created by a declining population and a moderately expanding urbanized area increases the cost to the city of providing basic public services.

- **Transportation and Industrial Change.** Ottumwa's rapid growth during the middle and late 19th century was caused by the coincidence of the period's dominant modes of transportation – the railroad and water transportation. While water transportation declined in importance and disappeared entirely on the Des Moines River, railroads remained a vital part of the city's economic life, providing a high level of access for both people and freight movement.

  However, significant changes put into motion during the 1950's manifested themselves during the 1960's. Interstate 80, the principal transcontinental highway through Iowa, was routed through Des Moines, Iowa City, and Davenport, missing Ottumwa by 60 miles. As a result, the city was located off the State's leading commercial and industrial arterial, linked to it only by a two-lane highway. As the Interstate system became operational, much general freight movement shifted from rails to trucks. Of the city's four railroads, only the Burlington proved viable in the long run. In addition, the decline of rail passenger service, its past importance symbolized by the Burlington's distinctive 1951 depot in Downtown Ottumwa, reduced transportation access to the city. With the assumption of rail passenger service by Amtrak, Ottumwa's once frequent train service to Omaha and Chicago was reduced to one daily trip. Air service supplanted passenger trains as the major form of public transportation serving Ottumwa; however, commercial service to the city remains limited.

  During the 1970's, a Southeast Iowa Expressway was proposed to connect Ottumwa to Des Moines and Interstate 80. However, this project was delayed for lack of funding; only by 2000 did its completion appear imminent, and a continuous freeway to Ottumwa was established by 2008.

  Ottumwa also experienced substantial industrial changes. Coal mining, a significant source of local employment, ended during the mid-20th century. Similarly, major heavy employment, in both manufacturing and services related to the agricultural economy, also declined. The opening of a large Excel plant restored a substantial number of jobs to the area; yet, these packinghouse jobs generally offer a comparatively low wage scale. With the advent of information technology, Ottumwa may face yet another transitional challenge.

- **Aging Infrastructure.** Ottumwa is an historic community with old infrastructure in its original areas of development. The most significant immediate problem involves combination sewers in older parts of the city. These sewers lead to serious street overflows in lower lying areas of North and South Ottumwa and have resulted in a State order to develop a long-term plan for sewer separation. In other cases, old lines require reconstruction or rehabilitation. The high costs of infrastructure reconstruction can cause these items to dominate the city's capital budget. The city is actively separating lines as of 2013.

- **Commercial Change.** Ottumwa's original commercial structure was transit and pedestrian-oriented. Its relatively large, linear downtown, extending south of 4th Street between Wapello and Jefferson Streets, grew from the railroad depot along the Main Street axis. Church Street, fed from the north by both the Market and historic Jefferson Street Bridges, evolved as an extension of downtown, following a "streetcar strip" configuration of building development on property lines.

As automobile transportation replaced transit as the dominant means of movement in Ottumwa, the city's commercial environment changed. On the north side, clusters of auto- and visitor-oriented commercial development have occurred around the Wapello (Highway 63) and North Court intersection and north of Rochester Avenue. But Quincy Street, between Highway 34 and Albia Road, became the major emerging commercial center at the time of the 2001 Plan. This corridor's development includes the Quincy Place Mall, Ottumwa's regional shopping center, as well as an increasing number of strip centers and free-standing retailers. Since 2001, big box commercial uses - Super Wal-Mart and Menard's - developed on the western edge of Highway 34, along with individual pads of retail and restaurants. Kohl's located to Ottumwa, marking the City's successful ability to negotiate development agreements and ability to support national retailers.

The emergence of these commercial centers have changed the personality of downtown, which now experiences a declining demand for general retail space. Access to the Highway 34 West Corridor is a challenge. While close to downtown Ottumwa, it is relatively remote from the center of the city's population. Its primary regional access is Highway 34, reached from North Ottumwa by one of the three downtown bridges. This tends to channel substantial traffic through, or adjacent to, the city center.

- **Fragmented City - Development Patterns and Landforms.** While Ottumwa's landforms and physical environment create a distinctive city, they also create barriers which fragment the community. The most dominant division is obviously the river, dividing North and South Ottumwa into two distinct physical entities. While South Ottumwa is a relatively cohesive unit with the characteristics of a traditional Iowa town, the rugged landforms of the north further divide that section into discreet pockets of development.

Within this relatively fragmented configuration, circulation ribbons do link neighborhoods together. Thus, the three central vehicular bridges tie the city center to South Ottumwa; Court Street and Highway 63 connect the various development pockets of North Ottumwa; and the Second Street/Main Street corridors link parts of the linear city parallel to the north bank of the river. The Highway 63 Bypass on the east side of Ottumwa adds another significant north-to-south link.

- **Image and Maintenance.** Some features of Ottumwa's physical and built environment create significant property maintenance challenges which in turn affect the city's overall image and character. Many of the city's late 19th and early 20th century residential structures are large houses in classical architectural styles. While beautiful, they are often too large and difficult to maintain for contemporary families. Over the years, many of these houses were converted to multifamily occupancy, which often led to their deterioration.

  The hill and ravine topography of much of North Ottumwa also has led to maintenance issues. Streets that lead into the floor of ravines produce hidden lots that often suffer from poor maintenance. In addition, these short dead-end streets and steep slopes are often unpaved, reinforcing a sense of disrepair. Paving and maintenance of local streets that negotiate very steep slopes or serve few residents is also difficult for the city.

  Areas of poor property maintenance affect the image of the city and its ability to market itself to new residents. This is an issue that many residents of all ages recognize. During high school planning workshops, carried out in part of the 2001 planning process, a leading priority that emerged among students was the need to "clean up the city."

- **Highway 63.** The Highway 63 Bypass around the north and east sides of Ottumwa connects to Highway 34 on the east side of the city. Along with the construction of the Eddyville segment, this completed the long-planned Southeast Iowa Expressway to Des Moines. The bypass passes through some relatively rugged terrain and by areas that have experienced very low density residential development. The new highway provides important development opportunities and reinforces potential growth in the vicinity of the airport and interchanges. However, land use planning for the corridor should prevent the unplanned spread of residential and commercial development.

- **Zoning and Land Economics.** Neighborhood conservation and preservation of historic resources are clearly important priorities for Ottumwa. However, existing zoning of certain areas works against these priorities. In common with many older communities, zoning over the years has often followed the appraiser's concept of "highest and best use." According to this hierarchical concept, land with the fewest restrictions on use had higher value than land with the most restrictions. Thus, industrial land theoretically has a higher "value" than residentially-zoned land; similarly, land zoned for multifamily residential uses has a higher yield (and hence a higher value) than land zoned solely for lower-density residential development.

As a result, zoning was frequently used as a redevelopment and land value tool in many cities, particularly after World War II. In Ottumwa, two specific manifestations of this practice occur:

- Some residential areas (including primarily single-family areas) are zoned C-2, M-1, and M-2, appropriate for commercial and industrial uses. When established, this zoning was intended to encourage large-scale private assembly and redevelopment of residential areas that were seen as obsolete or in the way of other uses. However, this large-scale development is unlikely to occur. What remains are residential areas that are spotted with neighboring, uncontrolled industrial uses. The industrial zoning has actually served to depress, rather than to enhance, the economics of land in these areas.

- Some historic residential areas are zoned R-3 for high-density, multifamily development, even when the dominant use is single-family. Again, this zoning hastened the conversion of single-family houses to multifamily uses, often resulting in the deterioration of structures as well as stressing other public systems such as streets and sewers.

Zoning should be used as a tool to implement comprehensive plan objectives. Earlier in history, these "upzonings" might have been consistent with a short-term goal to increase the economic return on individual properties. Over the long term, however, they have tended to diminish property values and reduce the security of owning a home in some parts of Ottumwa.

DEVELOPMENT PRINCIPLES FOR OTTUMWA

Principles of the City Development Concept

The previous discussion defined patterns of the built environment that make Ottumwa distinctive, and described challenges that can affect that character and economic health. Ottumwa, in common with larger cities, faces such fundamental questions as:

- How can the city reinvest in, and strengthen, its urban foundation – traditional neighborhoods, downtown, and other commercial and industrial areas?
- How can Ottumwa capture and manage a larger share of regional growth, using its assets in such a way as to attract new investment while maintaining its distinctive community character?
- How should City Government balance needed reinvestment in its infrastructure with the need to finance new capital projects?
- Should a city that has the capacity to accommodate more population in already-established areas further expand geographically?
- What impact will various infrastructure and land use decisions have on the economic strength of the city and its ability to support necessary public services?

Trends during the 1970s and 1980s were unkind to Ottumwa and other cities with economic bases rooted in manufacturing, transportation, and agriculture. The 1990s and early 2000s have created new opportunities, where improved transportation links and a growing appreciation for Ottumwa's environmental amenities come into play. The city has stopped its slow population decline. It is now at a crossroads, with a future dependent on retention and attraction of people and financial and development resources. This section presents a development concept for Ottumwa through 2020, with 2014 updates that will continue to guide development until a full update of the plan can be completed. The concept is defined by principles that can help the city achieve its community potential. These principles include:

- A City of the River
- Use of the Landscape
- A Vital Community Core
- A Promenade Street
- A Unified Community Framework
- A Comprehensive Greenway System
- Highway 63 Economic Development Corridor
- Zoning and Land Use Consistency
- Conservation and Historic Ottumwa
- Annexation and Cooperation with the County
- 2014 Additions: New Housing Options, Recreation Complex Location, "The Loop," and Commercial/Industrial Redevelopment

A City of the River

The Des Moines River should serve as Ottumwa's principal public open space and the front yard for the city... a place for fun and activity, a place that defines the image of the community.

The Des Moines River is clearly Ottumwa's defining feature and should be used effectively as the central community space and amenity for the city. Ottumwa Park, the city's major multi-purpose open space, and The Beach, its most visible and intensively used recreational resource, are both located prominently along the river. Additionally, Ottumwa's identity as the "City of Bridges," and the meaning of the city's name (rippling waters), reinforce the centrality of water to the cityscape.

The development concept for Ottumwa extends the river as a central feature by:

- Expanding a riverfront greenway and trail system, integrating it into other potential corridors in the city.
- Increasing the number and quality of pedestrian and recreational crossings over the river.
- Using the unique open space resource of Turkey Island as a resource for passive recreation and environmental study.
- Increasing the accessibility and use of the Downtown waterfront.

These features, developed as discussed elsewhere in the plan, can reinforce the river's role as the focus of the city. It can create a place that becomes a focus for community activity and fun - a feature that makes it a pleasure to live in Ottumwa.

Use of the Landscape

Ottumwa should utilize its unique and rugged landscape as a major community resource, using it to link and unite the city's neighborhoods.

From the point of view of traditional community form, Ottumwa's rugged topography of ravines and wooded slopes divides the city into small development pods. However, this can become a system of greenways and natural environments that pervade the entire community and, served by walking trails, can link the city's neighborhoods and natural environments together. The Development Concept calls for a network of trails that could together form an "Ottumwa Trail (OT)," modeled after the famed Appalachian Trail (AT) that connects Georgia with Maine through the Appalachian Mountains. Like the AT, the "OT" is generally not conceived as a multi-purpose trail, although some of its key segments may be part of the city's multiuse trail system. Rather, it is a network of blazed trails, potentially following easements rather than city-owned property, that capitalizes on the character of the land. The OT also could connect with such major community features as the Indian Hills Community College campus, the hospital, the historic cemetery, Memorial Park, the city's historic districts, and Downtown Ottumwa.

The OT concept also borrows from other major urban trail systems such as the San Francisco Bay Ridge Trail, by combining blazed trails in "wilderness" areas with sidewalks and streets in connecting urban neighborhoods.

A Vital Community Core

Downtown Ottumwa should continue to develop as a unique regional mixed use district, combining traditional retail, office, and civic uses with significant quality features.

Downtown Ottumwa is a unique mixed use district, combining a rich mix of land uses, architectural forms, and civic activity. It remains a central focus and image center for the whole city, and literally unites the north and south sides of the river. In 1996, the City published the Downtown Development Guide, a master plan for downtown development to the year 2010. The plan envisioned significant retail, office, and residential development, as well as construction of public amenities. Some portions of the plan have been implemented, including a major city-sponsored mixed use project and a streetscape program along Market Street. Yet, Downtown's relatively large size and extensive building stock create challenges as the demand for downtown space has decreased over the years.

The Downtown Development Guide proposed the development of signature features to create an environment that attracts new investment and downtown users. Key to this system is the opening of the Downtown riverfront and the Bridge View Center, which opened in 2006. Riverfront development can be especially critical to restoring vitality in downtown. The Downtown Development Guide proposes construction of a Riverfront Parkway. This Development Concept proposes a less expensive and more pedestrian-friendly river walk in place of a parkway. But the fundamental concept remains the same – the opening of the north riverfront to extensive public use and connecting it to the rest of Downtown Ottumwa.

A Promenade Street

Court Street, the Market Street Bridge, Church Street, and Chester Avenue should be components of a continuous promenade street, combining vehicular and pedestrian movement with a distinctive urban environment that links many centers of city life.

Court Street and Church Street have special roles to play in both north and South Ottumwa. In the north, Court Street follows a ridgeline that along its route connects major city neighborhoods, three residential National Register Districts, neighborhood commercial clusters, the historic Ottumwa Cemetery, the Ottumwa Country Club, and the Government Center before terminating at Central Park. The street serves as a major conduit for civic life and movement, and accommodates cars, public transportation, bicycles, and pedestrians.

On the south side of the Des Moines River, Church Street extends downtown in the form of a neighborhood business district. The Lagoon and adjacent trail form a back door for this streetscape and provide a direct pedestrian and bicycle access to the street. Church Street terminates at Chester Avenue, in an environment of distinctive churches and commercial buildings.

These two streets together form an unusual link between north and South Ottumwa. This link is further cemented by the Market Street Bridge, for which the Downtown Development Guide proposes pedestrian enhancements. It can be extended along Chester Avenue, lined by its distinguished houses and continuing west to Kettle Creek. Together, these components create a connected "promenade" street that connects north and South Ottumwa and many of the city's most distinctive features. Characteristics of a promenade street, experienced by people on wheels and on foot, include:

- Consistent streetscape features, landscaping, and special lighting.
- Special graphics, including historic interpretation.
- Pedestrian amenities.
- Street furniture.

A Unified Community Framework

Ottumwa, through its comprehensive plan, should adopt a framework of future streets and open spaces.

Ottumwa's original plat established the street network, the size and layout of lots, and the fundamental rhythms of the town. This official map platted the city grid south of Sixth Street and established a framework of streets, lots, and blocks, and features such as Central Park. The official map created a pattern for future construction, guiding the individual actions of the eventual builders of the city. People who built houses in town fit into this community pattern. As Ottumwa grew, its neighborhoods became more diverse in physical form and largely responded to the exigencies of topography. However, new growth areas in Ottumwa are less likely to be limited by topography. Here, planning should provide an underlying framework of major circulation ways, greenways, local inter-neighborhood connections, and public space.

For Ottumwa to accommodate growth successfully, it should assure that growth enhances, rather than alters, the sense of the town. Historically, as American towns were established, they adopted an Official Map that laid out the pattern of streets, lots, and open spaces on a community-wide basis prior to construction. Development occurred within the context established by the Official Map. The tradition of the Official Map should be revived in a contemporary form, defining the major streets and open spaces that create the context for individual development decisions.

Comprehensive Greenway and Trails System

Open space pervades Ottumwa. The natural environment and its relationship to the city should be signatures of Ottumwa's quality-of-life, with the power to recast the image of the community.

The river and its related system of ravines and bluffs are Ottumwa's key natural features and should become focuses of a city development policy. These major facilities should be reinforced by a greenway and trails system that links them together, and touches all neighborhoods in the city. Important connecting parts of such a system include:

- *South Ottumwa Loop,* including the Kettle Creek Corridor, Highland Park, a green space around an existing lake in a southwest growth area, and the Jefferson Street Drainage Corridor. This loop connects the east and west part of a greenway along the southern bank of the Des Moines River.
- *Harrow's Branch Trail,* which would link growth areas in the northwest part of the city with the riverfront and Turkey Island.
- *Sugar Creek Trail,* serving areas whose growth will be encouraged by the completion of the Highway 63 Bypass.
- *Airport Trail,* which extends from the intersection of Rochester Street and Bryan Road up to the Airport Innovation District.

These trail expansions and other park network improvements are discussed in further detail in the parks chapter.

Highway 63 Economic Development Corridor

Ottumwa should use the Highway 63 Corridor as a catalyst for significant development. However, this development should complement, rather than compete with, Ottumwa's major existing activity centers.

Highway 63 has opened a limited-access travel corridor in parts of the city that have previously had poor transportation connections. Some of the corridor's terrain is relatively rugged, and much is especially beautiful. A major improvement in access can be both a challenge and opportunity. It can create significant incentives for growth, but can also encourage decentralized development and take strength away from established parts of the city. Ottumwa's policy should encourage development in the corridor which complements, rather than dilutes, existing areas. The Bypass corridor should be a way to add value, rather than simply redistribute strength away from the established city.

Major opportunities that the corridor opens include:

- *Airport Innovation District.* Easy access to the highway and airport improvements have created a premier location for new business park and industrial development.
- *Residential areas in the northeast,* on readily developable land east of the existing Ottumwa Industrial Park.
- *The hospital corridor, opened up by the Pennsylvania Avenue interchange.* This major corridor, which includes commercial uses at the Jefferson Street intersection, should not be a commercial strip. Instead, it should develop as a mixed use corridor, with office, research, and higher density housing development anchored by Ottumwa's major medical complex.
- *North Side Business Park.* A business park could be built into the existing industrial park on the north side.
- *The area surrounding the interchange at Dahlonega Road.* Opportunities include the reconstruction as a residential growth area of the historic Dahlonega Village, commercial services at the interchange, and an office/business park opportunity along Sugar Creek and adjacent to the Indian Hills campus.

Zoning and Land Use Consistency

Zoning should be a tool for the implementation of comprehensive plan concepts, and should not be an obstacle to achieving such desirable objectives as neighborhood revitalization.

Zoning in Ottumwa followed a pattern of many older communities, using a "highest and best use" model. The basis of this model is that land use is a hierarchy from lower intensity uses (usually agriculture and low-density residential) to higher intensity uses (such as heavy industry). This approach, which assumes that land which allows the greatest number of uses is most "valuable," led to a number of over-zoned areas, where areas of residential use are actually zoned for commercial and industrial development. Ironically, this makes the primary use in some neighborhoods (usually single-family residential) non-conforming. In other residential settings, single-family neighborhoods are zoned for multifamily development.

These mismatched zoning categories threaten the health of residential neighborhoods. In current experience, over-zoning rarely encourages large-scale assembly and redevelopment of land in areas with diverse ownerships, which is difficult for any business to undertake without redevelopment assistance. Instead, it encourages spot incompatibilities, such as a cottage industrial use becoming established in a residential area, or the undesirable conversion of single-family houses into apartments. Zoning should be re-evaluated in such areas, to be sure that it is consistent with the primary and desired use of a neighborhood. In particular, the target revitalization areas identified in Maps 2.1 and 2.2 should be checked for over-zoning or other regulatory barriers to neighborhood health.

The city should undergo a general review and revision of the zoning ordinance and subdivision regulations to remove any unnecessary impediments to the implementation of this plan.

Conservation of Historic Ottumwa

Ottumwa should place a high priority on conserving its existing urban neighborhoods and on reclaiming its urban fabric where it has eroded.

Ottumwa's urban character and housing stock are both great assets and important problems. The city's population decline and relative stagnation until the 1990s has placed serious stress on many of the city's historic neighborhoods. Problems of a large supply of housing, presence of big houses, overly intense zoning, lag in income growth, and difficulty in enforcing local codes have manifested themselves in many ways – large numbers of vacant lots in older neighborhoods, declining housing conditions, and poor site maintenance. A 1998 windshield survey of housing in Ottumwa concluded that only about one-third of the city's housing supply was in good condition and free of repair or rehabilitation needs. About half the supply was judged in fair condition, and identified as the primary focus for conservation programs.

Ottumwa has carried out an effective residential rehabilitation program. The City must use these experiences as a foundation for a concerted neighborhood conservation effort, which includes:

- Continued and accelerated activity in rehabilitation and home improvements.
- New affordable housing construction to take advantage of vacant lots.
- Programs directed toward the special issues involved with economic rehabilitation of large, historic houses.
- Improved code enforcement and site maintenance standards.
- Phasing out of incompatible land uses that discourage reinvestment.

A few key neighborhoods for residential reinvestment focus have been identified on the 2014 updated development concept in Map 2.2. These include:

- The area bounded by Jefferson and Elm on the west and east, and Center and Main on the north and south
- Main Street corridor mixed-use area
- Lower Court Street, north of 4th

Chester Avenue should be explored as a potential new historic district and Ottumwa should continue its historic preservation efforts for neighborhoods such as Vogel Street.

Chapter 8 provides additional strategies for re-investing in the existing housing stock.

Annexation and City–County Cooperation

Ottumwa and Wapello County are partners in the development process. The governments must work cooperatively, understanding that Ottumwa's sound growth and economic wellbeing is vital to that of Wapello County.

Ottumwa and Wapello County have common interests and common fates. Indeed, the economic health of the entire County is dependent on the health of its largest city. Major development areas, including office parks and developed residential areas, often demand the security and predictability of urban services. As a result, key development areas that are currently outside of the city limits should be considered for annexation during the planning period. In order to address these issues successfully on an inter governmental level, City and County government should develop a unified policy framework. This framework should identify:

- *Areas with a high probability of urban development during the 20-year planning period.* These areas include the land around interchanges and west and south of the Highway 63 Bypass Corridor, northwest growth areas, the Dahlonega area, and the region around the Airport. These areas should be specifically designated for annexation with both City and County support. In special target areas like Dahlonega, the City and County should act as partners to bring about high quality development.
- *Areas which may not develop during the immediate planning period but fall within the eventual urbanized area of Ottumwa.* These areas should be designated for long-term annexation.
- *Areas which are unlikely to receive full urban services and are likely to remain in the County's jurisdiction.*

Continued, cooperative monitoring of growth and marketing of projects are also high inter-governmental priorities. Both the City and County have too much at stake to divide their development efforts.

Other important areas for cooperative City-County planning and implementation include:

- *Zoning policy and designations.* Zoning classifications and development standards administered in the city and the County should be consistent, particularly in developing areas around the city limits.
- *Trail and recreational development.*

2014 Additions

The update to the comprehensive plan, as approved in 2014, identified 4 additional priority issues for development in a 5-year planning time frame. These priorities are illustrated in Map 2.2 and described below:

Build New Housing in Strategic Locations

While there will likely not be many major housing developments during the 5-year planning time frame, the concept identifies a number of strategic smaller locations for potential new housing on vacant and under-utilized sites throughout Ottumwa. These sites combined provide more land than will be needed in the 5-year planning horizon, but this list provides a base for developers or nonprofits looking for site options.

Prime locations for new residential development include three areas in the southwest:

- Liberty Elementary School Area. The lots immediately to the east and west of Liberty school would work well for single family lots.
- Pickwick School Site. The former site of Pickwick school is a great opportunity for infill development, given its proximity to Liberty School and Wildwood Park. Single family homes are the most likely use for this area.
- Wildwood School Site. The old school could be used for multi-family housing. The building could potentially be eligible for historic tax credits. Surrounding the school could be small lot single family homes or attached single family (townhomes).

Other possible locations for new residential development include:

- Agassiz School site. The old school building could be redeveloped as townhouses.
- St. Joseph's site. Plans are already underway to clear the old hospital. Once cleared, the site could provide a nice option for new urban housing on the north side.
- Rochester and Bryan. This triangular site on the far north side has good access to 63 and would work well for higher density housing, such as apartments.
- Angle road. The area east of the industrial park could be a residential development centered around a new elementary school. This area provides direct access to 63.
- Franklin School Site. The old Franklin school site on Walnut, between Main and Center, could be redeveloped with townhouses. The site is currently being used by a nearby church.

Locate Recreation Complex on South Madison

Planning for a new sports complex is underway, but the question of location is still unanswered. There are a number of factors to consider when siting such a high impact use, including the effect of lights, traffic and parking on the surrounding area. This plan recommends locating the complex on South Madison. Reasons for this decision and additional discussion of park and trail improvements are included as part of the parks chapter.

Enhance "The Loop" Commercial District

Around the southern perimeter of Ottumwa Park, there are four existing commercial districts, a neighborhood business district, a main street district, an older commercial strip and a contemporary strip, all connected with the park as a back yard. Ottumwa should take better advantage of the commercial "loop" formed by the Church, Richmond, Albia and Quincy districts.

The Loop should be ***branded*** to read as a connected core district. The brand can be defined with streetscaping, signage or artistic features at key intersections, and a name.

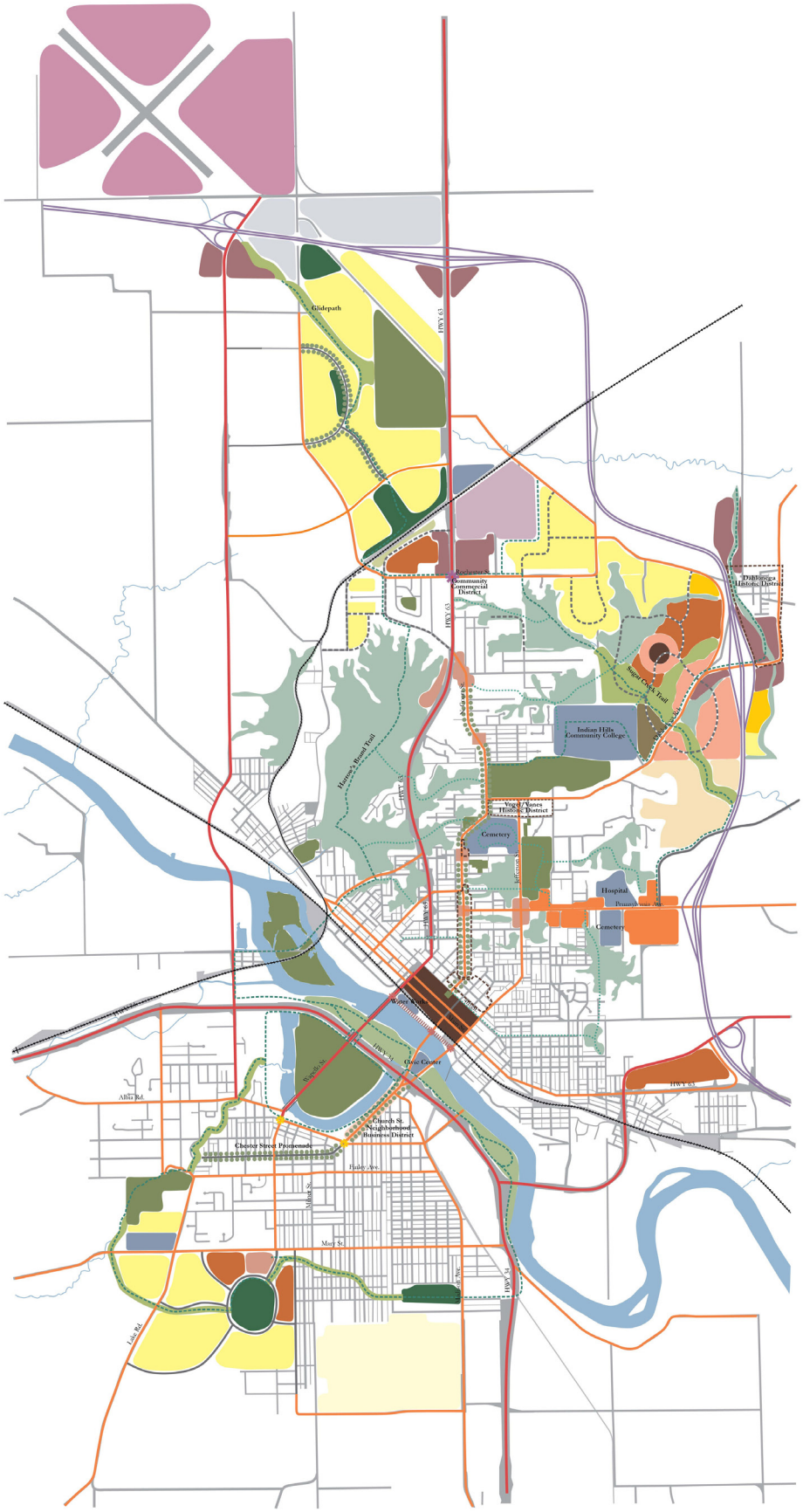
The area can be ***connected*** via a bike/pedestrian path along the back sides of these districts, along the park lagoon. Pedestrian bridges could connect the commercial districts to the park. There would be an interesting opportunity to put restaurants with outdoor dining along the park side, particularly in areas that are less intensively used, like Richmond. "The Loop" is just a short distance from downtown by road or trail.

Invest in Commercial and Industrial Redevelopment in Strategic Locations

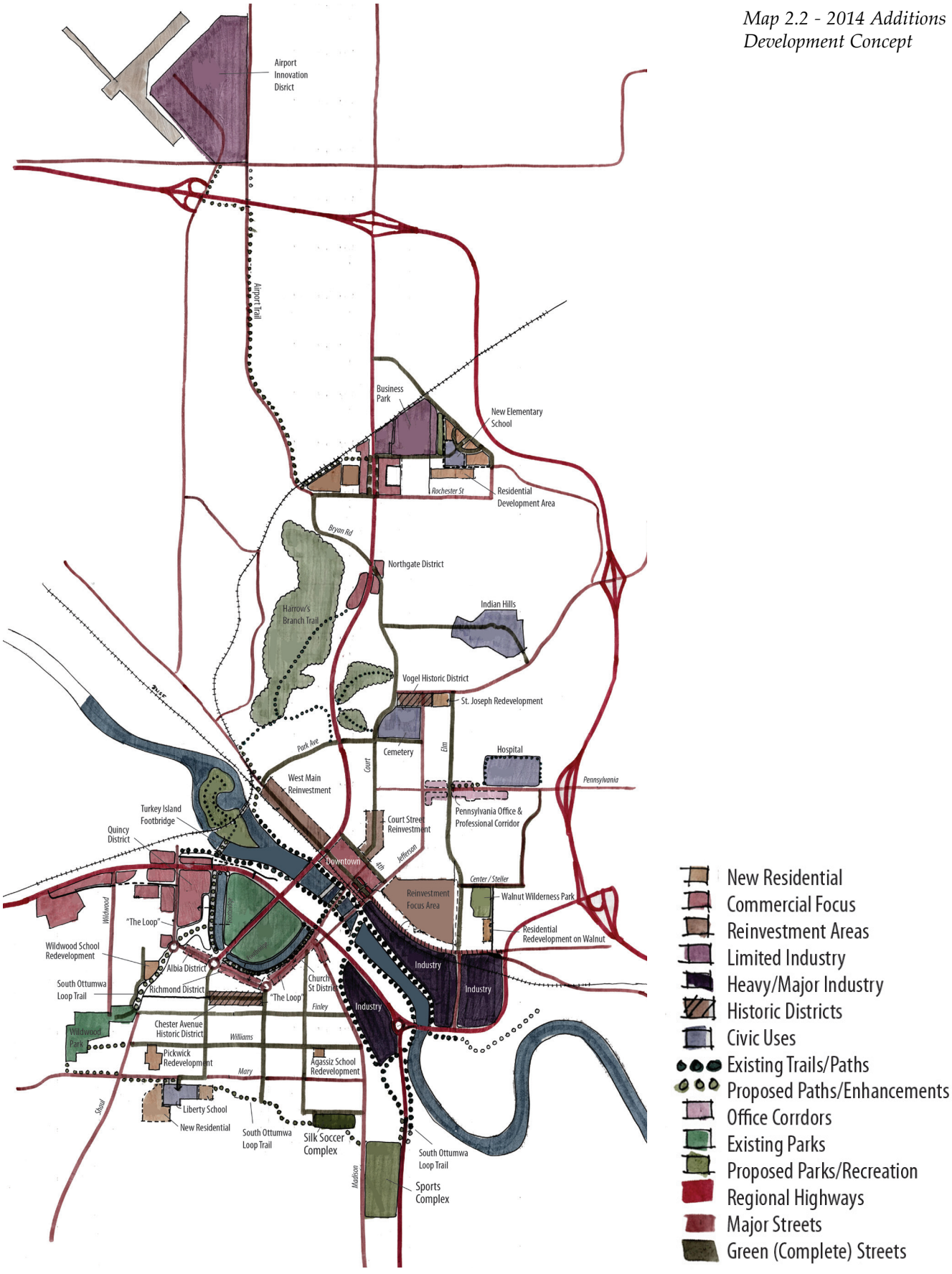
Commercial on 34 has grown dramatically since the comprehensive plan was adopted. Significant commercial and industrial growth is not expected during the 5-year planning horizon established for this update, but there are several existing areas that should be the focus of commercial investments. These include the following:

- Quincy & 34
- Downtown - see previous section
- "The Loop" - see previous section
- Highway 63 Development Corridor - see previous section
- East Main - An area on East Main is transitioning away from residential and is zoned for heavy industry. The proximity to the River makes this an appealing area for industrial development and redevelopment.
- Northgate District (Bryan Rd and Old 63) - This district currently provides a nice neighborhood commercial district for the north side. The area works well, but could be made more pedestrian friendly and better connected to the neighborhood.

Map 2.1 - 2001 Development Concept

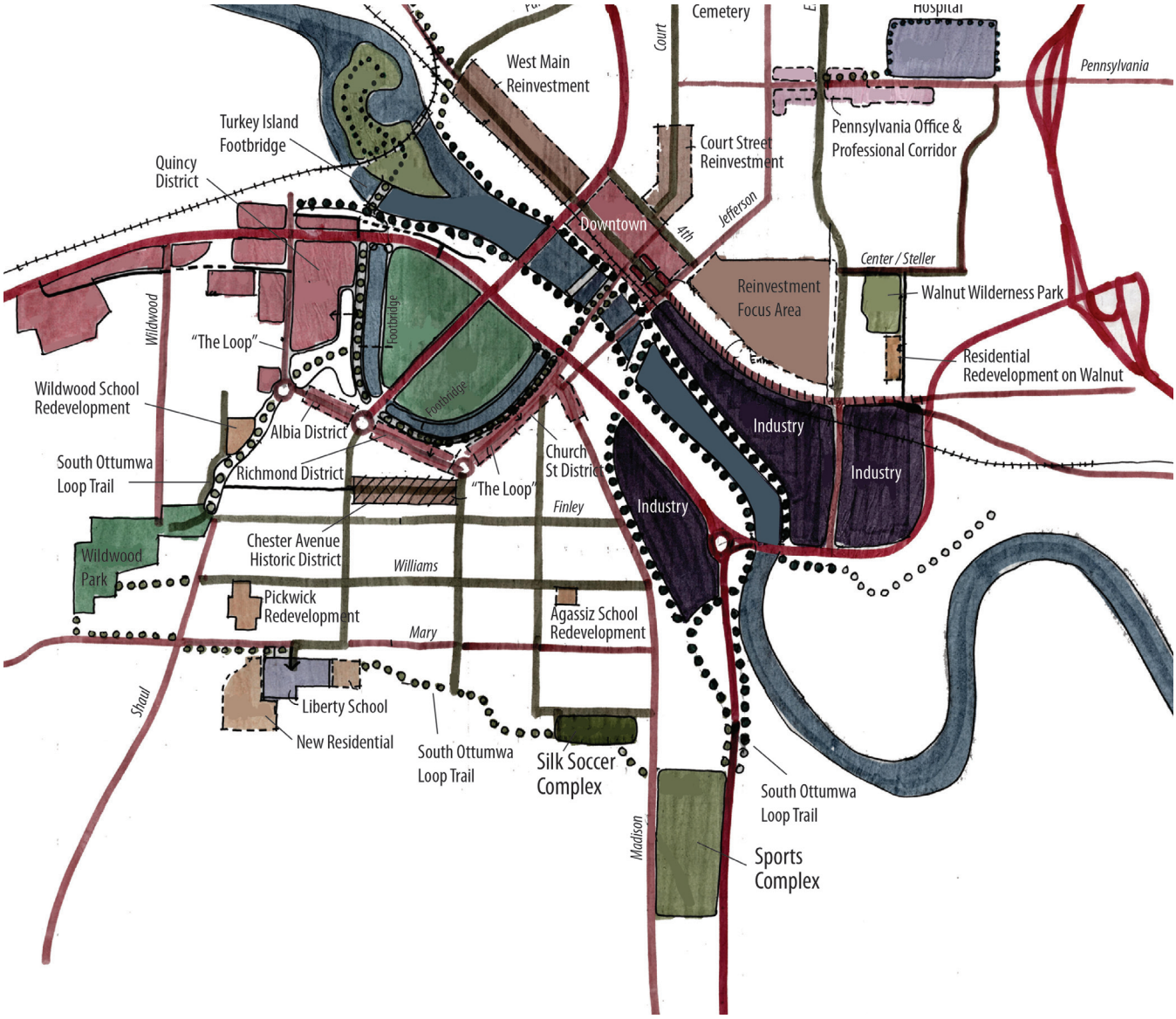


Map 2.2 - 2014 Additions to Development Concept



Map 2.3 - 2014 Additions to Development Concept: Close-Up of North Side

- New Residential
- Commercial Focus
- Reinvestment Areas
- Limited Industry
- Heavy/Major Industry
- Historic Districts
- Civic Uses
- Existing Trails/Paths
- Proposed Paths/Enhancements
- Office Corrdors
- Existing Parks
- Proposed Parks/Recreation
- Regional Highways
- Major Streets
- Green (Complete) Streets



Map 2.4 - 2014 Additions to Development Concept: Close-Up of South Side

- New Residential
- Commercial Focus
- Reinvestment Areas
- Limited Industry
- Heavy/Major Industry
- Historic Districts
- Civic Uses
- Existing Trails/Paths
- Proposed Paths/Enhancements
- Office Corrdors
- Existing Parks
- Proposed Parks/Recreation
- Regional Highways
- Major Streets
- Green (Complete) Streets

GROWTH AND LAND USE:

An Assessment of Land Use Needs and Policies

This chapter considers existing land use characteristics in Ottumwa and projects the amount of additional land that will be needed to stabilize its population declines of the last two decades and maintain a target population in the range of 25,000 to 28,000 during the next 20 years. It also considers the condition of existing neighborhoods and

concludes by identifying the growth areas that will experience significant development during this period.

■ GOALS

In considering its future land use needs, Ottumwa should:

• PROVIDE ADEQUATE LAND FOR PROJECTED AND POTENTIAL GROWTH

Land use projections should anticipate future growth needs and permit a reasonable amount of flexibility to accommodate possible changes in trends and provide adequate choice to developers. Land use planning should neither designate too little land for development, thereby inflating land costs, nor too much land, resulting in a loss of control over utility and infrastructure extension costs and the development process.

• ASSURE THAT NEW DEVELOPMENT CREATES THE GREATEST ADVANTAGES FOR BUILDING THE COMMUNITY

The city should continue to benefit from the vitality and energy created by development and investment. New growth areas should be designated which will provide maximum advantages to all parts of the city. Growth should create excellent new residential environments, and help to improve the city's existing residential and business neighborhoods. Development directions should enhance positive features of the city, rather than create new patterns which turn away from Ottumwa's unique character.

• ENCOURAGE THE CONSERVATION OF THE EXISTING HOUSING STOCK

Residential growth includes measures to rehabilitate and conserve Ottumwa's supply of older, often historically significant homes. Numerous single-family homes in the community need some type of rehabilitation. These homes represent a substantial

housing resource that cannot be replaced at present costs. Moreover, the conservation of these units is vital to the health of traditional neighborhoods. In some cases, new housing development can support these rehabilitation efforts by giving lower income persons the opportunity to secure "move-up" housing in better quality units. The community can expand housing opportunities for all by preserving its housing supply of affordable units.

• ENCOURAGE ECONOMICAL EXTENSIONS OF INFRASTRUCTURE AND SERVICES

Efficient growth patterns conserve limited public funds. A compact urban form helps accomplish this goal by using existing public facilities, gravity flow sewers, and incremental extensions of existing public utilities. Incremental utility extensions: reduce development costs, long-term maintenance and capital expenses, and tax burdens; make housing more affordable to buyers; and enable the city to annex new developments in a timely manner. If infrastructure is financed by the city, incremental extensions also mean that new development creates a larger return on public investment.

• ADD VALUE TO THE COMMUNITY BY INVESTING IN AND MARKETING MAJOR QUALITY OF LIFE FEATURES.

Ottumwa finds itself in competition with other communities and regions for both human and investment resources. The land use concept should capitalize on Ottumwa's natural assets to create an array of quality-of-life enhancements that attract these resources. Other industrial cities such as Duluth, Minnesota, with which Ottumwa shares important physical attributes, have transformed their images by

building on the physical assets of waterfronts and rugged topography. This image transformation, in turn, can lead to a rebirth of community growth.

■ EXISTING LAND USE

This section describes land use characteristics and trends that can help determine the amount of land needed to accommodate future development in Ottumwa. In addition, it will project the community's probable housing demand and residential land requirements for the next 20 years.

The Existing Land Use Map and Table 3.1 summarize current land uses in Ottumwa. This data is based upon a detailed field survey completed in 2000 as part of this planning process. In addition to providing acreage and percentage breakdowns by general land use categories, the survey provides detailed information on specific uses.

Residential Uses

Residential uses make up Ottumwa's largest land use, accounting for approximately 44% of the city's developed land area. Over 90% of this land is taken up by urban density single-family residential

Table 3.1: Land Use Distribution in Ottumwa and the Extra-Territorial Jurisdiction, 2000

	City		Jurisdiction	
	Acres	% of Developed Land	Acres	% of Developed Land
Residential	2,675.49	43.63	262.89	75.92
Rural Residential	105.44	1.72	139.03	40.15
Single Family Urban Residential	2,415.80	39.40	122.97	35.51
2-4 Plex/Townhouses	50.15	.82	0.00	0.00
Multi-Family Residential	71.83	1.17	0.00	0.00
Mobile Home Residential	32.27	0.53	0.89	0.26
Office	32.11	0.52	1.31	0.38
Commercial	268.73	4.38	15.37	4.44
Downtown	23.03	0.38	0.00	0.00
General Commercial	238.45	3.89	15.37	4.44
Neighborhood Commercial	7.25	0.12	0.00	0.00
Industrial	343.44	5.60	26.03	7.52
General Industrial	272.57	4.44	19.78	5.71
Salvage	25.97	0.42	0.00	0.00
Light Industry	44.90	0.73	6.25	1.80
Civic	1,277.98	20.84	40.68	11.75
Schools	216.52	3.53	0.00	0.00
Public Facilities and Utilities	23.05	0.38	4.04	1.17
Other Civic Uses	321.15	5.24	26.73	7.72
Parks and Rec	717.26	11.70	9.91	2.86
Transportation	1,534.70	25.02	0.00	0.00
Road Right of Way	1,391.39	22.69	0.00	0.00
Rail Right of Way	143.11	2.33	0.00	0.00
Total Urban and Developed	6,132.25	100.00	346.28	100.00
Agriculture and Open Space	3,862.05			
Vacant Buildings	32.93			
Vacant Urban Land	450.58		4.25	
Mining/Resource Extraction	0.00			
Total Undeveloped Land	4,345.56		4.25	
Total Land	10,477.81		350.53	

Source: RDG Crose Gardner Shukert Field Survey, 2000

development in the city and surrounding subdivisions. Most of the balance is used for rural residential, mobile homes, and multi-family residential development. Much of the city's multi-family development occurs to the north and west of downtown Ottumwa.

Because of topographic issues and development phasing, the physical form of various residential areas in Ottumwa differ. Historic Ottumwa, on the north bank of the Des Moines River, climbs the side of the bluff to Sixth Street. Later early 20th century growth extended north along the Court Street corridor, up to the historic cemetery. These older development areas are punctuated by the bluffs and ravines that tended to divide the city into pods of developable areas. Farther north, post World War II development in developable areas follows the curvilinear street patterns with larger lots characteristic of more contemporary urban development.

In contrast, land use patterns in South Ottumwa follow the regular grid layout more typical of traditional midwestern and eastern communities. More contemporary development patterns and some new residential growth occur west of Kettle Creek, generally oriented around Willowood Drive.

The city's housing supply was largely single-family in 1990. The 1990 census indicated that about 80% of all housing was in single-family detached units, with 2- to 4-unit structures, multifamily structures, and mobile homes each accounting for about 7% of the total housing supply. Several significant multifamily developments occurred during the 1990's. In 1990, about 25% of Ottumwa's occupied housing was renter-occupied.

Urban density single-family housing accounts for about 90% of all land in residential use. As-built multifamily development accounts for only about 2.7% of residentially used land. Large-lot residential development primarily occurs in hilly areas in the northeast part of the city. These areas are likely to be influenced by the future construction of the Highway 63 Bypass.

Commercial Uses

Commercial development accounts for about 4.4% of all urbanized land in Ottumwa. Much of this land area is located in auto-oriented, general commercial areas, with an orientation to access by automobiles. However, some commercial areas, most notably

downtown (including Church Street and the West Second Street Corridor, and Church Street maintain their original character as urban business districts. Their compact character causes these districts to use far less land per square foot of building use than their lower-density, auto-oriented counterparts.

Major commercial areas in Ottumwa can be divided into several categories: general retail areas, providing full services for local and regional residents; highway service areas, which combine local business with services related to highway travel; and neighborhood commercial clusters.

General Retail Areas include:

The Downtown District, a relatively large and diverse district generally bounded by Fourth Street, the river, Wapello Street, and Jefferson Street. The Ottumwa Waterworks, the BNSF Railroad, and governmental facilities make up a large part of the area of Downtown Ottumwa. Higher density commercial uses are generally focused in the eastern part of the district, with Market Street and Main Street making up the heart of the traditional retail area. Ottumwa experienced substantial urban renewal during the 1960's, replacing some traditional main street buildings with new, single-story development. Many of these renewal-era buildings are currently in office and government use.

The Church Street District, a "streetcar strip" extending from the Market and Jefferson Street Bridges south to Richmond Avenue. The Coliseum and a vacant motel are located at the north edge of this district, at the approaches to the Market Street and Jefferson Street Bridges. This site is the probable location of the new Bridge View Center events facility. Church Street is an extension of downtown, in the form of a neighborhood shopping street. Businesses along the

street have trail access via the outside bank of the Lagoon.

The Richmond Avenue and Albia Road corridors, older auto-oriented commercial strips extending generally from Church to Quincy along Richmond, and from Quincy to Minnesota Avenue along Albia Road. The Richmond corridor follows the south bend of the Lagoon and shares trail access with the Church Street District. Albia Road once was the route of Highway 34 east and displays the older commercial strip pattern typical of such a highway routing. Contemporary commercial development has tended to move away from this older strip, resulting in some vacancy of commercial buildings.

The Quincy Avenue Corridor, Ottumwa's major emerging regional commercial district. The largest single project in this area is Quincy Place Mall, a regional center on the southeast corner of Highway 34 and Quincy. Contemporary strip center development and pad sites also are clustered at this intersection, a major gateway to the Ottumwa urban area from the west. More recently, significant single-user detached retail development (often called "big box" retailing) has occurred south of Highway 34 to Albia Road. This major commercial district adjoins the west bend of the Lagoon and is accessible by trail from the riverfront system. As a result, it enjoys a unique link to downtown, Ottumwa Park, and important city image features.

Highway Service Areas include:

- *East Highway 34, along Roemer Avenue east of the Highway 34 bridge.* This older visitor service area along the main approach from Burlington and the east will be seriously affected by the final design of the Highway 63 interchange with Highway 34. The final design should maintain good access to these commercial uses.

- *North Court Street and Rochester Avenue north to the CP Rail (old Soo Line) Viaduct.* This area includes some local services, including a major grocery store, and has become the city's primary lodging corridor. This area will be convenient to, but removed from, the mainline of Highway 63 after completion of the Bypass.

Neighborhood Clusters include:

- *The North Court/Highway 63 intersection.* Here, North Court diverges from Highway 63 and begins its role as a local community street leading to Downtown. A variety of neighborhood service, office, retail, and fast food restaurants have clustered at this location. The Court Street corridor, south to Fourth Street, is a mixed use community street, with commercial clusters and uses at key points along its route. Generally, these commercial uses are integrated into the surrounding residential areas and add texture and interest to the street.

- *The Jefferson and Pennsylvania intersection, and Pennsylvania from Jefferson to Elm Streets.* This is a neighborhood service and office cluster that serves the hospital area and the northeast side of Ottumwa. The Pennsylvania corridor, with future interchange access to the Highway 63 Bypass, will be a strategic development area in the future.

- *West Second Street.* West of downtown, parts of Second Street have the characteristics of a neighborhood commercial corridor, although these uses share frontage with more automobile oriented development. West Second provides a secondary regional route to Eddyville. High-rise senior housing development provides a market for some neighborhood-related services.

Industrial Uses

Over 5% of Ottumwa's developed land is in industrial use. Industrial uses in Ottumwa are concentrated in four areas:

- *The Burlington/North Bank corridor,* generally defined by the BNSF mainline and the river and its floodplain. While this area accommodates a variety of industrial users, the largest single industry is the Excel packing plant, northeast of Iowa Avenue and Highway 34. This area also includes major wastewater treatment facilities. The Burlington

mainline and Ottumwa's status as a railroad division point with substantial yards once consumed a large land area. The diminishing of this role with the mergers of the former CB&Q into larger systems has greatly reduced land requirements, leaving a large quantity of surplus railroad land.

- *The John Deere Ottumwa Works and surrounding area on the south bank of the river* between Highway 34/63 and Madison Avenue. This major facility remains a cornerstone of Ottumwa's industrial and employment base and accounts for about one-fourth of the city's total industrial land.

- *The Ottumwa Industrial Park,* a more contemporary industrial and business park developed by the Ottumwa Area Development Corporation (OADC). This park is located along North Highway 63 from Fox-Sauk Road to the CP Rail line and hosts a mix of light industrial and office uses. The facility is currently about 50% developed.

- *The Ottumwa Industrial Airport Area,* north of the Highway 63 Bypass alignment. The airport's potential for significant industrial development has not been fully tapped. The area includes a number of World War II vintage buildings, some of which are in marginal storage uses. Some industrial establishments have also become rooted in the airport area.

Civic Uses

Civic uses, including public and semi-public lands, account for over 20% of land use in the City of Ottumwa. Major civic land users include:

- *The City's park and recreation system.* Parks and recreational uses account for over 700 acres of land in Ottumwa, headlined by the superb 380-acre Ottumwa Park, the riverfront park system, and the Municipal Golf Course. Memorial and Wildwood Parks also provide the city with substantial park spaces.

- *Indian Hills Community College.* The Indian Hills campus occupies a scenic site of about 70 acres north of Alta Vista/Dahlonega Road in northeast Ottumwa.

- *Other major civic spaces* include the Ottumwa Country Club, Ottumwa Cemetery, and Memorial Lawn Cemetery.

Comparisons Among Quadrants of the City

For convenience in evaluating land use patterns, four quadrants are defined using Highway 63/Wapello Street, Richmond Avenue and Milner Street as the east west boundary and the Des Moines River as the north/south boundary.

Tables 3-2 compare land use within each of the quadrants.

- *Northwest Ottumwa.* Northwest Ottumwa contains almost 291 acres of developed residential land, making it the dominant land use in the quadrant. The Northwest Quadrant also has 42% of all mobile homes, mostly located within Leisure Living Mobile Home Park. Civic uses comprise 213 acres within this quadrant, most of which is dedicated to parks and the Ottumwa Municipal Golf Course. The Northwest quadrant also has the two largest civic uses outside city limits – the Ottumwa Industrial Airport and the Ottumwa/Wapello County Landfill.

- *Northeast Ottumwa.* The Northeast quadrant is Ottumwa's largest quadrant with over 2,523 acres. With 1,055 acres in residential use, the quadrant has the most residential development including 61% of all the multi-family development in the city. Commercial development also makes up a significant proportion of the quadrants development. Downtown Ottumwa is located within the Northeast quadrant, which also has 70 acres of general commercial development.

The northeast quadrant leads industrial land over all other quadrants. Industrial development predominately borders the railroad and along the northern shoreline of the Des Moines River.

- *Southwest Ottumwa.* The Southwest quadrant has significant rural residential, general commercial, and parks and recreation land uses. Rural residential development located along Lake Road in the southern edges of the quadrant accounts for 13% of residential development in the quadrant. Commercial development is dominated by the some of the newest commercial enterprises in the city, adjacent to West Highway 34. The Southwest quadrant also includes Wildwood Park and part of Ottumwa Park. With almost 1,500 acres of open space, the southwest quadrant also provides an excellent opportunity for green space in conjunction residential and commercial development.

Table 3.2: City of Ottumwa Land Use Distribution: By Quadrants, 1999

Quadrant	NW		NE		SW		SE	
Land Use Category	Acres	% of Developed Land	Acres	% of Developed Land	Acres	% of Developed Land	Acres	% of Developed Land
Residential	291.12	4.75%	1055.96	17.22%	825.36	13.46%	503.07	8.20%
Rural	0.00	0.00%	0.00	0.00	105.44	1.72%	0.00	0.00%
Single Family	249.48	4.07%	980.58	15.99%	705.80	11.51%	479.95	7.83%
2-4 Plex /Townhouse	8.64	0.14%	33.31	0.54%	0.59	0.01%	7.61	0.12%
Multi-Family	19.60	0.32%	41.05	0.67%	5.49	0.09%	5.69	0.09%
Mobile Home	13.40	0.22%	1.02	0.02%	8.04	0.13%	9.82	0.16%
Office	5.17	0.08%	15.73	0.26%	1.60	0.03%	8.50	0.14%
Commercial	29.46	0.48%	94.20	1.54%	90.85	1.48%	54.21	0.89%
Downtown	0.00	0.00%	23.03	0.38%	0.00	0.00%	0.00	0.00%
General commercial	29.46	0.48%	70.15	1.14%	90.36	1.47%	48.48	0.79%
Neighborhood	0.00	0.00%	1.02	0.02%	0.49	0.01%	5.73	0.09%
Industrial	75.51	1.23%	129.27	2.11%	9.57	0.16%	119.54	1.95%
General Industrial	43.24	0.71%	121.63	1.98%	8.67	0.14%	115.46	1.89%
Light Industry	32.27	0.53%	7.64	0.12%	0.90	0.01%	4.08	0.07%
Civic	29.34	0.48%	391.98	6.39%	113.41	1.85%	25.99	0.42%
Schools	5.41	0.09%	180.68	2.95%	22.26	0.36%	8.17	0.13%
Public facilities/Utilities	0.00	0.00%	22.77	0.37%	0.00	0.00%	0.28	0.00%
Other Civic Uses	23.93	0.39%	188.53	2.97%	91.15	1.49%	17.54	0.29%
Parks & Rec	189.38	3.09%	181.98	2.97%	197.90	3.23%	148.00	2.41%
Transportation	282.31	4.62%	653.63	10.66%	273.50	4.46%	343.18	5.60%
Total Developed Area	902.28	14.27%	2522.75	41.14%	1512.19	24.66%	1202.49	19.61%
Ag/Open Space	999.17		1176.69		1489.93		223.04	
Vacant	137.88		246.84		34.91		61.70	
Total Area	2008.70		3946.28		3037.03		1487.23	

- *Southeast Ottumwa*. The Southeast quadrant is the geographically smallest area but possesses more developed land than the Northwest quadrant. The quadrant is dominated by residential development but also includes a significant part of Ottumwa Park and the John Deere Ottumwa Works. Its major commercial area is the Church Street District.

Comparison with Other Cities

A comparison of Ottumwa's land use distribution with that of other communities offers additional insights into the city's growth patterns and its characteristics. Tables 3.3 and 3.4 compare land use in Ottumwa with that of other comparable communities in Iowa and Nebraska. These comparisons include Oskaloosa, Pella, and Marion, Iowa and Fremont and Kearney, Nebraska.

Ottumwa's overall density is comparable to these comparable cities. Some key differences between Ottumwa and the other communities in this comparison include the following:

- Ottumwa provides more acres of residential land per 100 residents at 11.01. This classifies Ottumwa as a low- to medium-density community, resulting from the character of the city's land and the distribution of development across a difficult landscape. "Compact" towns display a density of 6 to 9 residential acres per 100 residents; medium-density towns range from 9 to 11 acres per 100; and low-density towns exceed 11 acres. For example,

Land Use Projections

Table 3.3: Comparative Land Use in City Limits by Proportion: Ottumwa and Five Communities (% of Developed Area)

	Ottumwa	Oskaloosa (1999)	Pella (1997)	Marion, IA(1997)	Kearney, NE (1995)	Fremont, NE (1997)
Residential	43.63	35.79	30.04	41.00	38.72	40.78
Commercial	4.90	6.64	2.80	4.96	8.33	6.71
Industrial	5.60	6.39	8.24	5.01	4.91	4.81
Civic/Semi-public	20.84	19.12	27.19	18.53	38.45	19.19
Transportation	25.02	25.38	24.57	23.21	24.67	25.92
Total Developed Area	100	100	100	100	100	100

Source: RDG Crose Gardner Shukert, 2000

Table 3.4: Comparative Land Use in City Limits by Population Ratio: Ottumwa and Five Communities (Acres/100People)

	Ottumwa	Oskaloosa (1999)	Pella (1997)	Marion, IA (1997)	Kearney, NE (1995)	Fremont, NE (1997)
Residential	11.01	9.35	9.32	7.73	9.83	6.97
Commercial	1.24	1.73	.87	.93	2.11	1.14
Industrial	1.41	1.67	2.56	.94	1.25	.82
Civic/Semi-public	5.26	4.99	8.44	3.49	6.25	3.28
Transportation	6.31	6.63	7.62	4.38	5.95	4.43
Total Developed Area	25.23	26.13	31.03	18.85	25.39	17.08

Source: RDG Crose Gardner Shukert, 2000

Fremont, Nebraska, a city of about Ottumwa's size characterized by a compact urban grid, uses 6.97 residential acres for each 100 people. Kearney, Nebraska, a growing city of about 28,000 in central Nebraska with a substantial university presence and an active development market uses 9.83 residential acres per 100 people.

Ottumwa is a composite of development patterns. Thus, South Ottumwa has a development density that is typical of efficient, compact cities. North Ottumwa, with a substantial amount of skipped over land and a development pattern highly influenced by topography, displays a far lower density. Density can be important because it affects the cost of providing urban services. Typically, compact towns can be served more economically because of the lower marginal cost of building and maintaining a unit of development. In more compact towns, more houses are served by a length of sewer or road, and public safety staff have fewer miles of distance to patrol.

- While Ottumwa's industrial base is large, it dedicates a proportionately smaller area of land than some smaller cities such as Oskaloosa or Pella. Ottumwa's larger population and residential area somewhat dilute the influence and density of industrial development on a per capita basis.

■ LAND USE PROJECTIONS

Using Ottumwa's population and existing land use ratios, forecasts of land development over the next 20 years can be developed. Projections are summarized in Table 1.6, predicting a population of 26,290 by 2020.

Tables 3.5 and 3.6 present the projected 20-year housing demands for this scenario. The analysis is based on the following methods and assumptions:

- The basic method used in projecting annual demands is to compare the number of units needed in a given year (number of households plus projected vacancy rate) with the number of units available during that year (housing supply during the year, less the units that leave the housing supply and must be replaced). Twenty-year demands are based on multiples of the five-year demand calculated in this section.

- Household size in Ottumwa is expected to decrease moderately during the 20-year period from 2.34 in 2000 to about 2.30 people per household in 2020.

- The city's non-household population (people in student dormitories, institutions, groups quarters, or nursing homes) does not produce a demand for conventional housing. These forecasts project that the non-household population will remain at its 1990 rate of 2.70% of the city's population.

Table 3.5: Projected 2000-2009 Housing Development, Probable Growth Scenario For Ottumwa

	2000 -2010	2010 -2020	Total, 2000 -2010
Population at End of Period	25,519	26,290	
Household Population at End of Period	24,764	25,579	
Average Persons per Household	2.32	2.3	
Household Demand at End of Period	10,665	11,121	
Projected Vacancy Rate	5.98	5.99	
Unit Needs at End of Period (Household Demand + Vacancy)	11,383	11,830	
Replacement Need	150	200	350
Cumulative Need during Period	484	647	1,131
Average Annual Construction	48	65	57

- Ottumwa's 1990 vacancy rate of 5.93% will stay approximately stable, increasing slightly to 6% during the planning period.

- The projection model assumes that between 2000 and 2010, 15 units annually will be lost to demolition, redevelopment, or conversion to other uses; and between 2010 and 2020, the annual loss will increase to 20 units.

- Higher-density housing forms that maintain single-family characteristics (single-family attached and townhouse configurations) will grow in popularity, accommodating an aging "baby-boomer" and empty-nest population.

- Affordable housing development may increasingly include townhouses and multi-family development.

- Mobile homes will be a relatively small component of Ottumwa's housing supply. Manufactured housing on permanent foundations is categorized as single-family housing.

Based on these projections, Ottumwa will have a cumulative demand of 1,131 residential units during the next 20 years. Based on the 2000 Census and national trends, 60% of these units should be developed for owners (predominantly in single-family detached and attached housing) and 40% should accommodate renters (predominately in multi-family duplex, townhomes, and mobile home units).

Table 3.6: Required Residential Land for Ottumwa, 2000-2020

Housing Type	%	2000 -2010 Units	2010 -2020 Units	Total	Gross Density (units /acre)	Hard Land Needs (acres)	Desig-nated Land (acres)
Single-Family	60	290	388	679	3.5	194	388
Urban Family	10	48	65	113	6	19	38
Multi-Family	25	121	162	283	12	24	47
Mobile Homes	5	24	32	57	6	9	19
Total	100	484	647	1131		246	491

Source: RDG Crose Gardner Shukert, 2000

Required Residential Area

Residential land projections estimate the amount of land that will be needed to accommodate growth during the next 20 years. Projections are based on the following assumptions:

- Typical gross densities will be 3 units per acres for single-family, 6 units per acres for attached housing and mobile homes, and 12 units per acres for multi-family.

- Land designated in the land use plan for residential development over a 20-year period should be about twice the area that new growth actually needs. This is necessary to preserve competitive land pricing.

Table 3.7 presents the amount of new area that will be required for additional development. Annual actual absorption of residential land will be in the range of 12 acres. Using the rule of designating land at a rate of two times the amount of land actually needed for residential development (or "hard demand"), this suggests a total reservation of land for residential development of about 491 acres during the next 20 years.

Commercial Development

This plan does not include a comprehensive retail market analysis. However, probable development needs and the plan's overall policy of encouraging appropriate development suggest that Ottumwa will require additional commercial space during the next 20 years. Two methods can be used to help project commercial land needs:

- *A population service relationship*. This method relates commercial growth to population projections. It

assumes that the absolute amount of commercial land per 100 people will remain relatively constant, and that new commercial development will grow in proportion to population growth.

- *Residential use proportion*. This assumes a constant relationship between the amount of land used for residential and commercial purposes, thereby relating commercial growth directly to residential development rates.

Table 3.8 compares the results of these two methods. In order to provide alternative sites, the land use plan should designate 1.5 times the amount of land actually needed for commercial purposes (or "hard demand"). Projections, based on these methods, indicate that a range of 41 to 101 acres of land should be designated for future commercial development.

Industrial Development

The need for industrial land is not directly related to population growth, making it much more difficult to predict. A single major corporate decision can dramatically increase (or decrease) the projected industrial demand in a community. In addition, a decision by the City to pursue industrial development aggressively can affect industrial land needs.

The projection methods used to predict commercial demand may also be used to approximate industrial needs. New industry is often attracted to areas along Highways and major corridors. Highway 63 will probably attract new industrial growth because of its north/south connections and proximity to the Ottumwa Industrial Airport.

Table 3.7: Required Residential Land for Ottumwa, 2000-2020

Housing Type	%	2000-2010 Units	2010-2020 Units	Total	Gross Density (units/acre)	Hard Land Needs (acres)	Designated Land (acres)
Single-Family	60%	290	388	679	3.5	194	388
Urban Family	10%	48	65	113	6	19	38
Multi-Family	25%	121	162	283	12	24	47
Mobile Homes	5%	24	32	57	6	9	19
Total	100%	484	647	1131		246	491

Source: RDG Crose Gardner Shukert, 2000

Table 3.8: Required Commercial Land for Ottumwa, 2000-2020

	2000	2000 -2010	2011 -2020	20 year Need	Designated
POPULATION PROPORTION					
Projected Population	27998	25519	26290		
Comm Use/100 res.	1.20	1.30	1.40		
Projected Commercial Land Need	300.84	331.75	368.06	67.22	100.83
RESIDENTIAL USE PROPORTION					
New Residential Land (A)	2675.49	2780.64	2921.21		
Comm Land/Res Land Ratio	0.112443	0.112443	0.112443		
Projected Comm Use (A)	300.84	312.66	328.47	27.63	41.44

Source: RDG Crose Gardner Shukert

Table 3.9: Required Industrial Land for Ottumwa, 2000-2020

	2000	2000 -2010	2011 -2020	20 Year Need	Designated
POPULATION PROPORTION					
Projected Population	24998	25519	26290		
Ind Use /100 res.	1.37	1.47	1.57		
Projected Industrial Land Need	343.44	375.13	412.75	69.31	207.94
RESIDENTIAL USE PROPORTION					
New Residential Land (A)	2675.49	2780.64	2921.21		
Ind Land/Res Land Ratio	0.128365	0.128365	0.128365		
Projected Ind Use (A)	343.44	356.94	374.98	31.54	94.63

Source: RDG Crose Gardner Shukert

Table 3.9 below calculates additional industrial land needs within the city or areas to be considered for annexation. Based on population and residential use proportion methods previously described, Ottumwa should absorb about 69 acres of new industrial land in, and adjacent to, the city. In order to provide maximum flexibility, the land use plan should designate about three times the "hard demand" for industrial use. Therefore, the plan should provide about 208 acres of industrial and business park land in, and adjacent to, the city. For Ottumwa, most of this can occur through the redevelopment and expanded use of the Ottumwa Industrial Airport.

THE LAND USE PLAN

This section presents land use strategies that can help Ottumwa plan successfully for projected growth and respond to the pressures of internal land use change and external developments such as the completion of Highway 63. Overall development patterns should reinforce the functional and aesthetic values of the historic community, even while new development extends out into the surrounding landscape. New development should be designed to provide a high degree of pedestrian and vehicular mobility. In addition, Ottumwa's growth program should take maximum advantage of existing features, including vacant lots that are already served by utilities and the City's substantial investment in an expanding airport.

The City's growth program should:

- Designate growth areas for residential development, designed to provide the appropriate amount of land for urban conversion.
- Ensure that new development maintains continuity and linkages among neighborhoods.
- Encourage adequate commercial growth to respond to potential market needs in Ottumwa.
- Provide adequate land to support economic development efforts that capitalize on Ottumwa's growing transportation and environmental attractions.
- Maintain development patterns in lower density areas that conserve the natural landscape and preserve the long-term growth prerogatives of the city.
- Prevent or discourage uncontrolled development that can siphon energy and investment away from previously established areas without adding to the city's net economy.

The components of this program include:

- **ADEQUATE LAND SUPPLY**
- **COMPACT DEVELOPMENT PATTERN**
- **GROWTH CENTERS**
- **CONSERVATION DEVELOPMENT**
- **CITY AMENITIES**
- **MIXED USE URBAN CORRIDORS**
- **COMMERCIAL NODES**
- **INDUSTRIAL GROWTH AREAS**
- **LAND USE REGULATION WHICH IMPLEMENTS POLICY GOALS**
- **ANNEXATION POLICY**

Each component of land use policy is described below. The Land Use Plan describes the concepts presented in these policies and recommendations.

■ ADEQUATE LAND SUPPLY

Ottumwa should designate enough land for new development to meet a year 2020 population target of about 25,000 people.

Tables 3.7, 3.8, and 3.9 display the amount of land needed for residential, commercial, and industrial uses to serve a target population of about 25,000. This is a modest growth goal that is based on reversing a 20-year trend of population decline. In an era of declining household size because of aging and establishment of new, small households by the children of "baby boomers," maintaining this population will nevertheless require substantial growth in the number of households, generating real demand for new development.

The proposed land supplies approximate the demand closely enough to allow managed growth, while providing adequate choices of sites to developers. The Ottumwa Land Use Plan proposes five general development zones, implementing the principles of managed growth discussed previously in this section:

• *The Existing Urbanized Area,* corresponding to the built-up portion of Ottumwa. This area is particularly important because of the relatively large amount of vacant residential and underused industrial land in the city. City policy should encourage infill development of these sites, including construction of affordable housing, and redevelopment of industrial lands.

• *An Urban Development Zone.* This area corresponds to the projected land needs between 2000 and 2020. These areas together account for about 450 acres of residential development and represent areas that can be feasibly provided with urban services. The specific growth centers for urban development are presented later in this section. In addition, the land use concept map designates additional land as a secondary urban development area. Generally, these areas are either served or could be served by sanitary sewer, but are likely to develop after the year 2020. However, a development with urban services proposed in one of these areas would be considered consistent with this plan.

• *An Urban Reserve Zone.* This corresponds to areas that can be served by municipal utilities in the long term, but are unlikely to experience development until after the year 2020. These areas should generally be preserved in current agricultural and open space use, with extension of urban services programmed in the future. Any development that occurs in this area should be designed to avoid conflicts with future urban growth. Urban Reserve Zones are generally located around the concentric urban development zones.

• *A Conservation Development Zone.* These areas are likely to experience large-lot or rural density development, or be maintained within agricultural use. In these zones, topography makes conventional urban development difficult or unfeasible. Within this district, when development occurs, conservation subdivision design practices should be followed, permitting low-density development while maintaining the character of a rural landscape. In some cases, large-lot development is considered a mature end use, rather than a transitional zone to future conventional urban development. Conservation

zones are located in the eastern part of the proposed development area in portions of the Sugar Creek Watershed. While a sewer can provide service to these areas, their topography and wooded character make conventional subdivision development difficult.

• *Agricultural Zones.* These areas will not be required for urban development in the long term and should be preserved in agricultural use.

New development in Ottumwa should be focused in those areas designated by the Land Use Plan. Such a disciplined approach will help to insure cost-effective, efficient land use patterns that maximize the benefits of development to the community by taking advantage of existing infrastructure investments. Additionally, development should occur within the context of the transportation and open space framework presented in this plan.

■ COMPACT DEVELOPMENT PATTERN

Ottumwa should encourage compact growth that generally grows incrementally from previously developed areas.

Ottumwa's traditional development pattern differs on its north and south sides. South Ottumwa follows a compact urban grid while North Ottumwa above the original city displays a more irregular pattern, with developable areas separated by ravines and wooded slopes. More contemporary development extended in several directions, with the majority of post World War II growth occurring to the north and east. Most of the city's postwar residential development occurred north of the Ottumwa Country Club, with larger lot residential growth occurring in clearings within the northeastern slopes. Some more contemporary development also occurred adjacent to previously urbanized parts of South Ottumwa, generally southwest of Ferry Street and Finley Avenue and west of Kettle Creek.

The completion of the Highway 63 Bypass will also become a significant determinant of growth. Growth around the Bypass should be managed in a way that takes advantage of the improvement but does not encourage uncontrolled sprawl which the city cannot afford. Therefore, the Development Concept envisions integrating the corridor into future development, with the Bypass serving as an eastern development edge for the foreseeable future.

Public policies which execute a strategy of Compact Development should:

• To the greatest degree possible, define and channel growth into development areas contiguous to existing or planned infrastructure, existing developments, and with street patterns consistent with the city development concept.

• Encourage residential development that builds from existing community investments. The City should encourage growth which uses existing sanitary sewers or takes advantage of improvements which can have multiple benefits, such as a Sugar Creek interceptor sewer. Additional growth adjacent to remote developments on the edges of the city's urbanized area must be contiguous to existing subdivisions and should not exceed the carrying capacity of planned infrastructure.

• Limit outlying development in areas that is inconsistent with the City's development policies. Ottumwa should discourage the expansion of urban residential, commercial, or industrial development beyond areas served by existing or potential sewer extensions except when identified for conservation development.

■ GROWTH CENTERS

Ottumwa should establish a framework of growth centers connected to one another by collector streets and greenways, designed to create better neighborhoods and improved linkages.

A major theme of the development principles presented in Chapter Two is to accommodate potential growth, while strengthening overall community character. These principles can be realized by conceiving of the city's developing areas as distinct growth centers, each providing a balance of development types and community services as essential parts of the whole, and each requiring community investments and features that create desirable living environments.

Growth centers in Ottumwa are defined by natural and man-made features, including topography, ravines and drainage corridors, major streets, community institutions, and the Highway 63 Bypass. The Growth Center concept defines these development areas as neighborhoods, connected to

one another by collector streets and greenways. Attributes of the Growth Centers include:

- A mixture of housing types and lot sizes.
- Organization of new neighborhoods around continuous street patterns, often including a community boulevard or greenway that links civic, educational and park facilities.
- Dedication of new neighborhood parks, trails and ballfield areas, designed as central open spaces that are focuses of the neighborhood.
- Development of higher-density residential and limited commercial, service, and civic uses at nodes along boulevards and open spaces, or at strategic locations that link neighborhoods.
- Care in establishing setbacks, landscaping, and streetscape standards along boulevards to ensure the appearance of a traditional community promenade.

The elements of these systems are woven throughout the themes of this plan.

The four Growth Centers include:

Northwest Growth Center.

This area extends the north edge of major residential development, and would occur north of the CP Rail line and east of County Road V3H/Bryan Road to Highway 63. This growth center takes advantage of the adjacent Municipal Golf Course, access from Highway 63, and proximity to the airport as major assets. It has gentle topography and can be relatively easily served by infrastructure. Primary development in this growth area would be residential, with travel-oriented commercial uses at the 145th Street interchange with Highway 63. Elements of the framework to support this growth center include:

- A street system that provides an east-west link between the existing Highway 63 alignment and 145th Street, possibly reusing a portion of the abandoned Milwaukee Road spur to the airport. A local parkway system should link County Road V3H to 145th Street, providing access to potential lots with frontage along the golf course.

- Connection of 145th Street south with a new westside bridge and link to Quincy Avenue.

- A greenway trail system along Harrow's Branch and connecting the Northwest Growth Center into that system, a part of the proposed "Ottumwa Trail" concept. A potential linkage route would follow Bryan Road to Rochester Avenue; cross the CP Rail line at County Road V3H and continue back along a buffer along g the rail line. The link would then extend along the proposed local parkway system to Quail Creek and continue along the creek to the airport area.

- A neighborhood park linked to the greenway trail.
- An outfall sewer along Quail Creek and extension of the sewer in the county road to provide sanitary sewer service to the growth area. This system may be connected to the proposed Sugar Creek sewer, allowing these new flows to bypass the existing system of lift stations and the combined sewer system in downstream parts of the city.
- Replacement of a 12-inch water line along Angle Road, construction of new distribution mains, and looping of the northside water distribution system.

Northeast Growth Center

This growth area includes areas south of Angle Road and east of Highway 63. This area is readily developable north of Rochester Avenue and is adjacent to and north of Sugar Creek. Land use in the area envisions re-emergence of the Rochester and North Court intersection as a community commercial center, full build-out of the Ottumwa Industrial Park, and residential development in the balance of the district. Framework improvements to encourage development in this area include:

- Development of the Sugar Creek Interceptor Sewer. While the sewer is not necessary to serve development here, it eliminates the need for lift station service and can relieve combined flows in the older part of the system downstream.
- Improvement of Sugar Creek as a mixed use corridor, including trail development along with sewer construction.
- Looping of the water system serving the north part of the city.
- Completion of a local street system to serve the development area.

Dahlonega Growth Center

The Dahlonega area centers around the planned interchange of Dahlonega Road and Highway 63. Portions of the area are adjacent to Indian Hills Community College, which influences the development of an office and research park in the area. The historic village of Dahlonega is also adjacent to the interchange. The West Village Land Use Plan, developed for the Wapello Board of Supervisors by Dunbar/Jones Partnership and Garden and Associates in February, 2000 outlines a master land use plan and design standards for the Dahlonega Growth Center. Proposed uses include restoration and development of Dahlonega as a residential village, potentially using the design principles of New Urbanism to guide growth; commercial uses at the interchange; an office and research park west of the Bypass, related to the Community College; residential development of various density; and park and open space uses. Improvements necessary to encourage development at the Dahlonega growth center include:

- Completion of Highway 63.
- Development of a local street network related to Dahlonega Road to serve the Growth Center.
- Construction of the Sugar Creek Interceptor.
- Construction of the Sugar Creek Trail.
- Development of the Ottumwa Trail System.

Southwest Growth Center

This area is located in the southwestern corner of the city, southwest of Mary Street and Webster Street. Anticipated uses call for a balanced urban neighborhood, with neighborhood commercial and office development along Mary Street, with residential development in other parts of the growth area. The concept calls for development of a central urban park, featuring an existing pond. The park would be tied into a greenway system along the Jefferson Street Ditch and Kettle Creek. Improvements necessary to encourage development in this area include:

- Development of the planned neighborhood park as a community focus.
- Modifications to Mary Street to handle mixed use development.
- Trail development along the Jefferson Street Ditch and connecting west to Kettle Creek.
- Separation of sewers to relieve flooding during storm events of South Ottumwa neighborhoods.

Infill Development

Infill development on vacant lots should be an important part of the City's development policy. These individual lots may be most effectively reutilized for new single-family or rent-to-own housing development. These programs, which often involves a public-private partnership between the city and a nonprofit developer such as a Community Development Corporation (CDC), are discussed in more detail in Chapter Eight.

In infill developmnet programs, the City may buy the property and convey it to the CDC. The City and CDC may offer deferred second mortgages, using Community Development Block Grant (CDBG) or HOME Investment Partnership funds. A variant may involve acquiring lots and conveying them to private builders. Public resources may assist with acquisition, clearance and preparation of the site, and deferred second mortgages.

■ CONSERVATION DEVELOPMENT

Residential development in environmentally-sensitive areas should conserve the quality of the rural landscape.

Significant large-lot single-family development has occurred in the hill and ravine environments of the east edge of Ottumwa. Some of these areas cannot accommodate conventional urban development because of rugged topography and the cost of providing urban services. Here, conservation subdivision techniques are recommended to guide low-density development. Conservation subdivisions provide the same gross densities permitted for conventional projects by the underlying zoning. However, smaller permitted lot sizes allow a substantial portion of the total land area to be preserved as open space, placed in agricultural, recreational, or common open space use.

Conservation subdivisions are designed on a specific parcel, using a four-step process:

1. Identifying potential conservation areas on a site specific basis. These include such features as:

- Soils which do not support residential development.
- Wetlands.
- Floodplains.
- Wildlife habitats.
- Significant stands of trees.
- Class I and Class II farmlands, as defined by the Soil Conservation Service.
- Historic sites.
- Ridgelines and view corridors.

2. Locating house sites, taking best advantage of views or adjacency to significant site resources. Streets should maximize the design quality of the site and should generally be interconnected.

3. Designing the street and trails system to serve the residential sites.

4. Drawing in parcel lines.

■ CITY AMENITIES

Ottumwa should use an amenity system to reinforce residential development.

The development of a network of amenities can reinforce neighborhood development by attracting new residents and retaining old ones. The city has significant attractions such as the Beach, two symphony orchestras, and the waterfront. Key components of Ottumwa's amenity system can or should include:

• The Riverfront recreation system, featuring new park and trail development, Turkey Island access, and the Downtown Riverwalk concept between Jefferson and Wapello Streets.

• Other components of a comprehensive trail system, including both multiuse trails along Sugar Creek, Harrow's Branch, and trails parallel to significant streets such as Dahlonega Road. These connect areas of special significance and the Ottumwa Trail, crossing the rugged land of the city's north side and using neighborhood streets as linkages.

• Neighborhood parks within growth areas.

• The promenade streets of North Court, the Market Street Bridge, Church Street, and Chester Avenue to Kettle Creek.

• The Bridge View Center project at the current Coliseum site. This site strongly relates to the sequence of community street network proposed in Chapter Two, and straddles the north and south banks of the river.

■ MIXED USE URBAN CORRIDORS

Ottumwa's major urban corridors should act as extensions of downtown that link to major community entrances, accommodating mixed uses and providing an attractive public environment.

Mixed use corridors include traditional streets such as North Court, Church Street, and West Second Street, and emerging corridors such as Pennsylvania Avenue after interchange development. Land development policy should assure that these streets maintain their mixed use character, permitting several uses without threatening the environment and scale of a residential neighborhood. Components of this policy include:

• Implementing land use regulations which permit mixed uses, generally including residential, office, civic, and low-impact commercial uses. The emergence of commercial strip patterns along these corridors should be avoided.

• Adopting land development standards which limit parking that is directly visible from the corridors and permit small setbacks from property lines.

• Instituting design standards and review of projects, potentially implementing a performance standard system to regulate development and land use patterns.

• Maintaining a quality public environment, with attractive sidewalks, landscaping, street graphics, and lighting.

■ COMMERCIAL NODES

Ottumwa's commercial development should be located within well-defined districts, each with a unique and complementary role.

Commercial uses are important both economically and as centers for community activity. In order to maximize its twin business and city-building roles, commercial growth should occur in specific districts, each with a specialized function. Together, these districts will furnish the equivalent of about 60 acres of new commercial sites for Ottumwa to the year 2020.

Commercial strategies are linked to the function that different commercial areas fill for the city. This plan envisions a hierarchy of commercial areas, with distinct roles to play. Growth of each area will result from a combination of new construction, public improvements, changes to land and building use, conversions and redevelopment, and improved zoning and subdivision processes and regulations. Zoning regulations, specifically, should be precise enough to describe the specific roles of proposed commercial districts.

Major Commercial Districts

Ottumwa's major regional commercial center will continue to be the traditional downtown and the emerging Quincy Avenue Corridor. Other major commercial districts anticipated by the Land Use Plan include:

• The Church Street District.

• Richmond Avenue.

• The Rochester and North Court intersection, with travel and other retail services (including lodging and restaurants) continuing north to the CP Rail right-of-way.

• East Highway 34, with older travel service establishments. The final design of Highway 63 should continue to provide convenient access to these businesses.

• Interchange commercial districts, related to Highway 63. These include 145th Street and a possible thematic district at the Dahlonega exit.

• Planned new commercial areas, including the Mary and Webster corner to serve South Ottumwa.

Secondary Commercial Areas

While most development in Ottumwa should be concentrated in these major commercial districts, other areas should accommodate limited neighborhood services and complement the city's major commercial centers. These sites provide limited convenience and neighborhood services (such as small food stores, personal services, and small retailers) on sites that are appropriately located in growth areas. Potential neighborhood service districts, related to growth centers, include:

• Commercial clusters along North Court.
• Jefferson and Pennsylvania.

- Elm and Pennsylvania
- The Second Street West corridor.

■ INDUSTRIAL GROWTH AREAS

Ottumwa should provide attractive sites for future industrial and business park development, placing special emphasis on airport redevelopment.

With a strong, but relatively narrow industrial base, Ottumwa must continue to provide diverse economic opportunities for its residents. Economic development efforts should take maximum advantage of the community's primary assets — its quality-of-life, physical environment, and good regional transportation access with the completion in of the Highway 63 Bypass.

The land use plan proposes expansion of Ottumwa's existing patterns of industrial development. Major industrial areas should include:

• Redevelopment at Ottumwa Industrial Airport. This facility includes a commercial and general airport facility which has abundant land and excellent access, and should undergo significant upgrades. Its redevelopment, including the clearance of surplus World War II-era buildings or their reuse where feasible, should be an important community priority. The airport area can be Ottumwa's leading future source of quality industrial and business park sites.

• Completion of the Ottumwa Industrial Park.

• Redevelopment of underused industrial land in the BNSF corridor.

• Development of an business park west of the planned Dahlonega Exit of Highway 63.

Development policies which support high quality industrial development include:

• Promoting master planning for industrial and business park projects, relating buildings to one another and providing common parking and pedestrian plans.

• Enacting land use regulations that limit development to office, research uses, and appropriate industrial uses at the Dahlonega Business Park site. This site should be linked by trail to the community amenity system and to Indian Hills Community College.

• Integrating industrial parks into the City's planned recreation trails and open space system.

■ FRAMEWORK FOR DECISION-MAKING

Ottumwa's future land use map and policies should provide both guidance and flexibility to decision makers in the land use process.

A Future Land Use Plan provides a development vision for the city that guides participants in the process of community building. However, it cannot anticipate the design or specific situation of every rezoning application. Therefore, the plan should not be taken as a literal, lot-by-lot prescription of how land is to be utilized. Rather, it provides a context that helps decision-makers, including City administrative officials, the Planning and Zoning Commission, and the City Council, make logical decisions which implement the plan's overall principles.

The Land Use Plan establishes a number of categories of land uses, some of which provide for single primary uses while others encourage mixed uses. Two tables are included in this section to help approving agencies interpret the intentions of the Land Use Plan. Table 3.10 presents and defines the various categories proposed in the plan and establishes criteria for their application. It also considers the appropriate zoning districts within Ottumwa's Zoning Ordinance for each use category, or recommends new zoning policies where necessary. Tables 3.11 and 3.12 presents a land use compatibility guide which assesses the relationships between adjacent land uses and provides a basis for review of land use proposals based upon their surroundings. These tables together form a framework for findings by the Planning and Zoning Commission and City Council to provide both needed flexibility and consistency with the plan's overall objectives.

LAND USE COMPATIBILITY ISSUES

Some of the most difficult issues in planning implementation arise at boundaries, where more intensive uses are proposed adjacent to less intensive uses. Tables 3.11 and 3.12 provide a Land Use

Land Use Plan Categories

Table 3.10: Land Use Plan Categories and Use Criteria

Land Use Category	Use Characteristics	Features and Location Criteria
Agriculture and Open Space	- Generally in agricultural or open space use. - Agriculture will remain the principal use during the planning period. - Extension of urban services is unlikely during the foreseeable future.	- These areas should remain in primary agriculture use. Urban encroachment, including large lot subdivisions, should be discouraged. - Primary uses through the planning period will remain agricultural. - An agricultural district will be needed to apply to areas maintained in reserve if the city annexes more widely than its current corporate limits.
Urban Reserve	- Generally in agricultural or open space use. - Areas may be in the path of future urban development after the 20-year planning period considered in this plan. - Very low density residential uses may be located in the area.	- These areas should be reserved for long-term urban development. - Primary uses through the planning period will remain agricultural. - Any interim large lot residential development should avoid obstructions to future urban development. - Typical zoning would be Agricultural .
Conservation Development	- Restrictive land uses, emphasizing housing and open space. - Civic uses may be allowed with special use permits.	- Applies to wooded or hill environments with significant environmental features. Golf course subdivisions share characteristics of conservation development. - Development regulations should promote reservation of common open space and design of projects to take best advantage of open space resources. - Gross densities will generally be less than two units per acre, although lot clustering may produce smaller individual lots. - Typical zoning is R-1 or R-2, often in PUD's, with special regulations to promote conservation developments.
Large Lot Residential	- Restrictive land uses, emphasizing housing and open space. - Civic uses may be allowed with special use permits.	- Includes areas that have developed to low densities, but utilize conventional subdivision techniques. - Applies to areas where conventional large-lot subdivisions have been established. - Most houses use individual wastewater systems and are unlikely to experience extensions of urban services. - Gross densities will generally be less than one unit per acre. - Typical zoning is R-1.
Single-Family Residential	- Restrictive land uses, emphasizing single-family detached development, although unconventional single-family forms may be permitted in planned developments. - Civic uses are generally allowed, with special permission for higher intensity uses.	- Primary uses within residential growth centers. - Should be insulated from adverse environmental effects, including noise, smell, air pollution, and light pollution. - Should provide a framework of streets and open spaces. - Typical densities range from 1 to 6 units per acre. - Typical zoning is R-1.

Table 3.10: Land Use Plan Categories and Use Criteria

Land Use Category	Use Characteristics	Features and Location Criteria
Moderate-Density Residential/Urban Residential	- Restrictive land uses, emphasizing housing. - May incorporate a mix of housing types, including single-family detached, single-family attached, and townhouse uses. - Limited multi-family development may be permitted with special review and criteria - Civic uses are generally allowed, with special permission for higher intensity uses.	- Applies to established neighborhoods of the city which have diverse housing types, and in developing areas that incorporate a mix of development. - Developments should generally have be small in scale and maintain the identity of individual units. - Develop in projects with adequate size to provide full services. - Tend to locate in complexes, but should include linkages to other aspects of the community. - Typical maximum density is 6 to 10 units per acre. - Innovative design should be encouraged in new projects. - Typical zoning is R-2, R-3, or CON-1.
Mobile Homes	- Accommodates mobile homes which are not classified under State law as "manufactured housing, - Single-family, small lot settings within planned mobile home parks.	- Develop in projects with adequate size to provide full services. - Tend to locate in complexes, but should include linkages to other aspects of the community. - Typical maximum density is 8 units per acre. - A new zoning district and updated regulations should be established to govern development of mobile home facilities. - Zoning is R-MHP. Development proposals always require Planned Development designations.
High DensityResidential	- Allows multi-family and compatible civic uses. - Allows integration of limited office and convenience commercial within primarily residential areas.	- Locate at sites with access to major amenities or activity centers. - Should be integrated into the fabric of nearby residential areas, while avoiding adverse traffic and visual impacts on low-density uses. - Traffic should have direct access to collector or arterial streets to avoid overloading local streets. - Requires Planned Development designation when developed near lower intensity uses or in mixed use developments. - Developments should avoid creation of compounds. - Attractive landscape standards should be applied. - Typical density is in excess of 10 units per acre. - Typical zoning is R-3 or OA-1 in mixed use areas.

Land Use Plan Categories

Table 3.10: Land Use Plan Categories and Use Criteria

Land Use Category	Use Characteristics	Features and Location Criteria
Mixed Use	- Incorporates a mix of residential, office, and limited commercial uses.	- May apply to urban corridors, including Court, West Second, and Church Streets. - Also applies to planned areas in new districts which incorporate an urban mix of residential, office, and commercial uses. - Developments should emphasize relationships among parts. - Pedestrian traffic should be encouraged and neighborhood scale retained when applicable. - Projects should avoid large expanses of parking visible from major streets. - Signage and site features should respect neighborhood scale. - Commercial and office development in mixed use areas should minimize impact on housing. - Current O-A and C-1 districts partially accommodate mixed uses. A new district for mixed uses, including residential, office and limited commercial uses with good development and signage standards should be implemented.
Limited Commercial/ Neighborhood Business District	- Includes a range of low-impact commercial uses, providing a variety of neighborhood services. - Includes low to moderate building and impervious coverage. - May include office or office park development.	- Should be located at intersections of major or collector streets. - Should avoid a "four corners" configuration, except within neighborhood business districts. - Development should emphasize pedestrian scale and relationships among businesses. - Uses should be limited in terms of operational effects. - Good landscaping and restrictive signage standards should be maintained. - Good pedestrian/bicycle connections should be provided into surrounding areas. - The dominance of automobiles should be moderated by project design. - Typical zoning is C-1. A new district may be considered for neighborhood business districts.
Community Commercial	- Includes a variety of commercial uses. - Establishes larger buildings and parking facilities than Limited Commercial uses.	- Should be located at intersections of arterials or other major streets. - Should avoid a "four corners" configuration. - Traffic systems should provide alternative routes and good internal traffic flow. - Negative effects on surrounding residential areas should be limited. - Good landscaping and restrictive signage standards should be maintained. - Good pedestrian/bicycle connections should be provided into surrounding residential service areas.

Table 3.10: Land Use Plan Categories and Use Criteria

Land Use Category	Use Characteristics	Features and Location Criteria
Main Street Mixed Use	- Traditional downtown district of Ottumwa. - Includes mix of uses, primarily commercial, office, upper level residential, and warehousing/industrial uses. - Primary focus of major civic uses, including government, cultural services, and other civic facilities.	- Establishes mixed use pattern in the traditional city center. - Recognizes current development patterns without permitting undesirable land uses. - District may expand with development of appropriately designed adjacent projects. - New projects should respect pedestrian scale and design patterns and setbacks within the overall district. - Historic preservation is a significant value. - Typical zoning is C-2.
Limited Industrial/Business Park	- Limited industrial provides for uses which do not generate noticeable external effects. - Business parks may combine office and light industrial/research uses.	- Limited industrial uses may be located near office, commercial, and, with appropriate development standards, some residential areas. - Strict control over signage, landscaping, and design is necessary for locations nearer to low intensity uses. - Most proposed industrial locations in the Ottumwa Plan are relatively isolated from residential uses. - Typical zoning is M-1. A new district for business parks, including office and office/distribution uses with good development and signage standards should be implemented.
General Industrial	- General industrial provides for a range of industrial enterprises, including those with significant external effects.	- General industrial sites should be well-buffered from less intensive use. - Sites should have direct access to major regional transportation facilities, without passing through residential or commercial areas. - Developments with major external effects should be subject to Planned Development review. - Typical zoning is M-2.
Civic	- Includes schools, churches, libraries, and other public facilities that act as centers of community activity.	- May be permitted in a number of different areas, including residential areas. - Individual review of proposals requires an assessment of operating characteristics, project design, and traffic management.
Public Facilities and Utilities	- Includes facilities with industrial operating characteristics, including public utilities, maintenance facilities, and public works yards.	- Industrial operating characteristics should be controlled according to same standards as industrial uses. - When possible, should generally be located in industrial areas.

Compatibility Guide, assessing the relationships between existing land uses and providing a basis for review of land use proposals based on their context.

Compatibility Rating Key

5: Identical to pre-existing land uses or totally compatible. Development should be designed consistent with good planning practice.

4: The proposed use is basically compatible with the pre-existing adjacent use. Traffic from higher intensity uses should be directed away from lower intensity uses. Building elements and scale should be consistent with surrounding development.

3: The proposed use presents potential conflicts with existing adjacent uses, which may be remedied or minimized through project design. Traffic and other external effects should be directed away from lower-intensity uses. Landscaping, buffering, and screening should be employed to minimize negative effects. A Planned Unit Development may be advisable.

2: The proposed use has significant conflicts with the pre-existing adjacent use. Major effects must be strongly mitigated to prevent impact on adjacent uses. A Planned Unit Development is required in all cases to assess project impact and define development design.

1: The proposed use is incompatible with adjacent land uses. Any development proposal requires a Planned Unit Development and extensive documentation to prove that external effects are fully mitigated. In general, proposed uses with this level of conflict will not be permitted.

ANNEXATION POLICY

Table 3.11: Land Use Compatibility Guide: Proposed Uses against Existing Residential Uses

	Existing Adjacent Land Use					
Proposed Land Use	Residential Units/Acrefor Proposed Residential Uses	Large Lot Residential	Low-Density Residential	Moderate-Density Residential	Medium-Density Residential	High-Density Residential
Large Lot Residential	<1	5	5	4	4	2
Low-Density Residential	1-6	4	5	4	3	2
Moderate-Density Residential	6-8	3	4	5	4	3
Medium-Density Residential	8-16	3	3	4	5	5
High-Density Residential	>16	2	2	3	4	5
Office		2	2	3	3	4
Limited Commercial		1	2	3	3	4
General Commercial		1	2	2	3	3
Limited Industrial		1	1	1	2	2
General Industrial		1	1	1	1	1
Civic		3	3	3	3	4
Utilities		2	2	2	2	2

Table 3.12: Land Use Compatibility Guide: Proposed Uses against Existing Non-Residential Uses

	Existing Adjacent Land Use						
Proposed Land Use	Office	Limited Commercial	General Commercial	Limited Industrial	General Industrial	Civic	Utilities
Large Lot Residential	2	1	1	1	1	4	2
Low-Density Residential	2	2	2	1	1	4	2
Moderate-Density Residential	3	3	2	2	1	4	2
Medium-Density Residential	4	4	3	2	1	4	2
High-Density Residential	4	4	3	2	1	4	2
Office	5	5	5	4	3	4	4
Limited Commercial	5	5	5	4	3	3	4
General Commercial	5	5	5	4	3	2	5
Limited Industrial	4	3	5	5	5	2	4
General Industrial	3	2	3	4	5	1	3
Civic	4	3	3	2	1	5	2
Utilities	2	2	3	4	5	2	5

Ottumwa should implement an annexation policy that incorporates areas of future community growth.

The City Development Concept for Ottumwa is predicated on significant community growth, generated by a sound economy and greater success at community marketing. The development concept calls for urban development on sites that are currently beyond the corporate limits. As a result, sound community growth will require significant annexation to accommodate land needs during the planning period.

In addition, annexation in advance of development may be needed to assure implementation of this comprehensive plan. This need is created by the fact that Ottumwa does not currently control land use in its future urban growth areas. Under current conditions, Ottumwa has the power to approve subdivisions within the jurisdiction, but does not exercise zoning or other land use controls. Because of these conditions, the community should adopt an annexation policy that establishes objective criteria for annexation and identifies probable areas for incorporation into the City. Areas considered for annexation should meet at least one of the following criteria:

• AREAS WITH SIGNIFICANT PRE-EXISTING DEVELOPMENT. Areas outside the city that already have substantial commercial, office, or industrial development are logical candidates for annexation. In addition, existing residential areas developed to urban densities (generally higher than 2 units per acre) should be considered for potential annexation.

• A POSITIVE COST/BENEFIT ANALYSIS: The economic benefits of annexation– including projected tax revenues–should compensate for the additional cost of extending services to newly-annexed areas. With development contiguous to the city, the cost of providing municipal services is relatively marginal. In these cases, annexation is usually feasible. In outlying and low-density areas, the capital and operating costs related to providing public services may be relatively high. This financial analysis:

- Identifies tax revenues from existing and probable future development in areas considered for annexation.
- Calculates the costs and financing features for public improvements necessary to serve newly-annexed areas.
- Calculates the added annual operating costs for urban services, including public safety, recreation, and utility services, offered within newly-annexed areas.

The analysis should be structured as a ten-year operating statement. Generally, areas that reach an accrued break-even point meet an economic criterion for annexation.

• PUBLIC SERVICES. In many cases, public service issues can provide compelling reasons for annexation. Areas for consideration should include:

- Parcels that are surrounded by Ottumwa, but remain outside of its corporate limits. In these situations, City services may provide enhanced public safety with improved emergency response times.
- Areas that are served by municipal infrastructure. Ottumwa's sewer system can provide direct service to a number of areas that are currently outside the corporate limits, but are designated for urban development by the Comprehensive Plan. This is especially true if the Sugar Creek Interceptor is developed. These include potential growth centers within the Northeast and Northwest Growth Centers.
- Areas to be served in the short-term by planned improvements, including trunk sewer lines and lift stations.

• LAND USE CONTROL. In outlying areas, including areas with rural density subdivision development, land use control is exercised by Wapello County, rather than by the City. Extension of land use control to these areas may be necessary to implement the recommendations and growth directions of the comprehensive plan. In addition, some areas that have experienced low-density residential development may experience further subdivision, particularly with the potential extension of urban services. In other cases, proximity to previous developments or to scenic and environmental amenities may also encourage development. City land use controls of these adjacent areas may be desirable to assure that residential densities are consistent with the capacity of wastewater disposal systems.

In addition, land use control may be desirable in outlying areas to discourage very low density development on septic systems in the path of future urban

development; to ensure that low density development maintains development standards that preserve the rural or scenic character of land or to maintain land with significant open space value.

• COMMUNITY UNIFICATION. While difficult to quantify, a split between people who live inside and outside the corporate limits can be harmful to the town's critical sense of community and identity. Establishing unified transportation and open space systems and maintaining a common commitment to the city's future can be important factors in considering annexation. Areas that appear to be consistent with one or more of these criteria include:

• Areas from the east city limits to the Highway 63 Bypass, including Dahlonega. In considering annexations in these areas, the City and County should address:

- *Previous County investments in the master planning of the Dahlonega development area.* These expenditures have included master planning, transportation studies, infrastructure improvements, land negotiations and acquisition, and other project-related expenses. Annexation of this development area should proceed on a cooperative basis between City and County, providing the County with the opportunity for a return on its investment in the project.

- *Sugar Creek Interceptor.* This interceptor, needed to open much of the Bypass corridor to development, will extend into areas that are not currently in the City. Construction of this and other city sewers that extend beyond the corporate limits should be addressed cooperatively by the City and County.

• Areas west of the Municipal Golf Course to Bryan Road. Ultimate annexation should incorporate 145th Street.

• Ottumwa Industrial Airport and surrounding redevelopment areas. The City and County should cooperate to resolve outstanding contractual agreements with the County and to provide for supporting infrastructure at the Airport and surrounding areas.

• An area south of Jefferson Park in southeast Ottumwa.

A BALANCED TRANSPORTATION SYSTEM

Ottumwa's transportation system must provide good local circulation around and through town. Transportation is also an important formative element – the concepts identified in the future land use plan require support from the transportation network. Finally, streets are important public spaces in communities, and are a key part of the public environment.

This chapter proposes a transportation system concept designed to meet these various roles.

The system is designed to :

• Solves existing and emerging circulation problems.

• Unifies various parts of the city, assuring that the community grows together as it grows larger.

• Helps to define desirable development patterns and land uses.

• Links activity and employment centers in Ottumwa with neighborhoods and with one another, and provides access to them from the larger region.

• Continues to supplement automobile transportation with alternative modes, including public transportation, and non-motorized transportation.

■ GOALS

As Ottumwa's combined pattern of land use and transportation systems develop, it must strive to:

• MAINTAIN A BALANCED TRANSPORTATION SYSTEM THAT PROVIDES ALL RESIDENTS WITH SAFE AND CONVENIENT MOBILITY.

Safety is a fundamental consideration for all elements of a transportation system. Transportation conflicts and a mixture of turning movements create traffic "friction" that slows travel and increases the probabilities of accidents. A traffic system that sorts out these varied demands and provides alternatives will become a safer and more expeditious system.

Automotive transportation is supplemented by other methods of moving around Ottumwa. The city has an excellent and functional public transportation system which, unlike other small community systems, is highly integrated into the life of the city. Bicycle and pedestrian transportation are also important. For example, a bicycle trail around the "outside" bank of the lagoon provides direct, non-motorized access to major commercial development along Church Street, Richmond Avenue, and Quincy Street. Continuing to

provide balanced transportation that provides mobility for all residents depends on continuing and enhancing these alternative modes. This chapter will address these concerns, provide solutions for identified problems and suggest direction for future needs that emerge from community change.

• ASSURE THAT THE TRANSPORTATION SYSTEM IS ADEQUATE TO MEET THE DEMANDS PLACED UPON IT.

In Ottumwa, capacity and congestion issues are secondary to the development of a continuous street network. Natural and man-made barriers, including creek and drainage corridors, topography, the Des Moines River, and Highways 34 and 63, interrupt street continuity. A lack of a complete street network focuses most trips on arterial streets. In addition, it complicates access between neighborhoods, and reduces the overall connectedness of the community.

• USE THE TRANSPORTATION NETWORK TO SUPPORT DESIRABLE PATTERNS OF COMMUNITY DEVELOPMENT.

Transportation systems do more than move people from one place to another. They also form the structure of the community and are a very important implementation tool in the comprehensive planning process. Reserving transportation corridors provides structure for new development in the city and channels growth into areas that can be provided with public services. In addition, transportation availability determines the location of major activity centers.

• DEVELOP A TRANSPORTATION SYSTEM THAT RESPECTS STREETS AS IMPORTANT FEATURES WITHIN THE PUBLIC ENVIRONMENT.

Streets in cities have traditionally been important parts of the public environment. Many of Ottumwa's streets have a scale, quality, and landscaped environment that make them important features of the cityscape. Streets with a civic quality to them include Court Street, Second Street, Church Street, Chester Avenue, and Richmond Avenue. However, contemporary street design often does not address the public character of streets, instead viewing them solely as conduits for cars. Streets should be conceived as community corridors that can create special places and add, rather than detract, from their surrounding neighborhoods.

This section examines important elements of the transportation system that will assist in developing specific projects and policies. It discusses the structure of the city's street system and the role that its individual parts play.

■ THE STRUCTURE OF THE STREET NETWORK

Ottumwa's historic street system forms a grid on the north bank and parallel to the Des Moines River. This creates a linear city on the side of the bluff that rose above the river's flood plain, a street patternsomewhat typical of waterfront cities. The Second and Main Street corridors, running east and west, are the principal axes of this linear city. The flatter terrain south of the Des Moines River follows the more traditional section line grid, adapted to the sharp bend in the Des Moines River that floods severed from the main channel, creating the oxbow lake now referred to as the Lagoon in Ottumwa Park.

North of the original city, topography determines the direction of both roads and development. The unifying artery was the regional link to Des Moines, the military road through Oskaloosa and Pella that later became Highways 163 and 63. This route originally followed Court Street into the center of the city. Later, a limited access arterial following a pass in the hills between the present Bryan Avenue / Court Street intersection and Fourth Street supplemented the Court Street route.

Later development extended the city grid to the north and south. Northward expansion followed Court Street during Ottumwa's early history and the grid began to break up as a result of topography and the self-contained design of more contemporary subdivisions. This left Court Street and the later Highway 63 arterial as the primary north-south links between the downtown and the northeast activity centers including Indian Hills Community College. A combination of section line roads (such as Alta Vista, Rochester, and Pennsylvania) and county road routes off the grid (Dahlonega Road, Bladensberg Road) linked the north-south arterials to the countryside on the east.

South of the river, a re-routed Highway 34 provides principal east-west access. This new route provides a semi-limited access facility, crossing the river on the east side of the city. Development to the south accounted for much of the city's postwar growth. Here the street grid extended, but while the north-south street pattern remained strong, continuity among east-west links often broke down, forcing traffic onto Richmond and Chester Avenue and Albia Road. Farther to the south, Mary Street (County Road H41) provides the single east-west crosstown connection.

Street Classifications

Streets in Ottumwa are placed in the following functional classifications by the Iowa Department of Transportation:

• ***Interstate Highways.*** Ottumwa has no Interstate facilities.

• ***Other principal arterials.*** Principal arterials provide major regional highway connections and high speed or limited access links through the city. They include non interstate expressways and regional arterials characterized by divided road sections with limited median cuts and access points. Principal arterials in Ottumwa form the spines of the city's traffic system

Structure of the Street Network

and include:

- North Highway 63, including the bypass alignment from North Court Street west and the limited access North Court Street / Wapello Street alignment to Highway 34. This system provides a limited number of at-grade signalized intersections, including Rochester Street, North Court Street, Fourth Street, and Highway 34. Between Court Street and Rochester Avenue, parallel frontage roads are provided.

- Highway 34, a four-lane divided section across the city. The highway follows the south bank of the river to a bridge east of the Highway 63 junction.

- South Highway 63 , a four-lane divided section from the Highway 34 junction.

- The planned east Bypass to Highway 34 east which will be a full limited access facility with interchanges at Dahlonega Road, Pennsylvania Avenue, and Highway 34.

• ***Minor Arterials.*** These roads provide connections to the regional highway system needs and connect major activity centers. Minor arterials in Ottumwa include:

North Side

North-South
- 145th Street
- Jefferson Street from Madison Street in South Ottumwa across the bridge to Pennsylvania Avenue.
- Market Street across the bridge to Church Street.
- Iowa Avenue and Morrell Street from Highway 34 to Pennsylvania Avenue.
- Bladensberg Road (County Road H31)

East-West
- Second Street from Market Street in downtown to the west city limits. This street continues as a county road to Eddyville.
- Main Street from Second Street through downtown to Highway 34.
- Fourth Street from Wapello Street to Iowa Avenue.
- Woodland Avenue from Court to Highway 63
- McPherson Park Road and Park Avenue from Second Street to North Court Street.
- Pennsylvania Avenue from North Court Street to County Road H31.

South Side

North-South
- Quincy Avenue, emerging as a principal commercial corridor, between Highway 34 and Albia Road.
- Wapello Street from Highway 34 through Ottumwa Park to Richmond Avenue.
- Milner Street from Richmond Avenue to Mary Street.
- Church Street from the Market Street bridge to Richmond.
- Madison Avenue from Church to Mary.
- Shaul Avenue / Lake Road from Finley to the south city limits.

East-West
- Albia Road from Quincy to Wapello.
- Richmond Avenue from Wapello to Church Street.
- Vine Street north from Madison, providing access to the John Deere plant.
- Finley Avenue from Lake Road to Madison.
- Mary Street from lake Road to Madison.

• ***Collectors.*** The collector system links neighborhoods together and connects them to arterials and activity centers. Collectors are designed for relatively low speeds (30 mph and below) and provide unlimited local access. Collectors in the current Ottumwa system follow:

North Side

North-South
- Connecting roads into Ottumwa Industrial Airport
- Angle Road northwest of Highway 63
- Hutchinson Avenue and Bladensberg Road from Steller to Pennsylvania
- Washington Street from Main to Court

East-West
- State Highway 389
- Rochester Street from Highway 63 to Dahlonega
- Curtis Avenue east of Court Street.
- Alta Vista Avenue and County Road H25 to Dahlonega
- Pennsylvania Avenue east of County Road H31
- Gateway Drive from Clay Street to Kitterman Avenue
- Second Street from Jefferson to Vine
- Main Street from Roemer Avenue east
- Steller Avenue from Iowa to Hutchinson

South Side

North-South
- Wildwood Drive from Highway 34 to Greenwood Drive
- Ferry Street from Mary to Richmond Avenue
- Sheridan Avenue from Mary to Church Streets
- Milner Street south of Mary Street

East-West
- Albia Road from Quincy to the west city limits
- Greenwood Drive from Ferry Street to Wildwood Drive
- Mary Street (County Road H41) west of Shaul Avenue
- Chester Avenue from Ferry to Church Street

■ TRAFFIC VOLUMES AND SYSTEM PERFORMANCE

Overall System Characteristics: A Qualitative Evaluation

Within the constraints of topography, Ottumwa has developed an effective road network. The system effectively distributes traffic and efficiently moves vehicles through the city and to major activity centers. Its major features include:

• *A north-south limited access arterial that parallels local, slower speed arterials.* Highway 63, from the bypass interchange on the north side of the city to Fourth Street in the city center, includes four-way, signalized intersections only at Rochester, North Court, and Woodland Avenue. This provides expeditious travel from the extreme north part of the city to its center and ultimately to Highway 34 on the south side of the river. Local circulation is provided by streets which parallel Highway 63. These include frontage roads that parallel the highway between the Rochester and North Court intersections; North Court Street from the highway to Fourth Street; and Jefferson Street from Alta Vista to downtown.

This system is extremely effective at separating the local and regional traffic streams and effectively reduces conflicts between types and speeds of traffic. The expressway portion of Highway 63 generally operates well within its capacity limits.

• *An east-west limited access arterial that also effectively separates local and through traffic streams.* This arterial is provided by Highway 34, a four-lane divided facility which features a grade separated interchange at its junction with Jefferson Street and Market Street, two minor arterials which link the north and south sides of the city together. While Highway 34 is not a full expressway, it has a limited number of full intersections, again permitting relatively smooth traffic movement. Local traffic is provided by the Main Street / Second Street system on the north side of the river and by the local street grid on the south side.

• *Four crossings over the Des Moines River, including bridges at Wapello Street (Highway 63), Market Street, Jefferson Street, and Highway 34.* These bridges effectively link the central and eastern parts of Ottumwa together over the river.

• *Future development of a north and east bypass.* This bypass, forming a critical link of the long-planned Southeast Iowa Expressway, will connect Highway 63 to Oskaloosa and continues on to Des Moines through Pella and Monroe via Highway 163. Extended to the east, the expressway will incorporate Highway 34 to Burlington. As of 2000, the Eddyville segment remains the major gap between Ottumwa and Des Moines.

An analysis of Ottumwa's traffic circulation system raises the following conclusions:

1. In general, the system is extremely effective at separating local and through traffic streams. This is particularly important because topography sharply limits the number of continuous north-south corridors available. Thus, the Highway 63 limited access arterial between the North Court and Fourth Street intersections carries faster traffic, allowing North Court to function successfully as a local arterial. As a result, North Court successfully accommodates slower moving neighborhood and school traffic, pedestrians, and public transportation. Highway 34 fulfills the same kind of "expressway" role for east-west regional

movements.

2. Ottumwa lacks convenient north-south access on its west side. This tends to channel much traffic, including traffic bend for the growing Quincy Avenue commercial corridor, through the westernmost of the city's four vehicular bridges – the Highway 63 bridge at Wapello Street. This issue contributes to a potential capacity problem at the grade level intersection of Highways 63 and 34 at the south approach to the bridge. It also can create a similar capacity problem for westbound to southbound movements at Highway 34 and Quincy Avenue.

3. Ottumwa has limited north-south circulation on its east side, although this will ultimately be remedied by the northeast Bypass. Currently, the Iowa Street / Elm Street system functions as the easternmost through street, connecting Highway 34 with Alta Vista Avenue. The bypass will provide a high speed north-south connection that is likely to segregate regional traffic from local traffic streams.

4. Ottumwa's street pattern creates some confusing intersections, causing potential problems. While this pattern, following topographic and geographic features, adds considerable character to the city and creates attractive urban spaces, it can contribute to confusing geometrics which can reduce capacity and create safety problems. The most serious of these may be the convergence of the Market and Jefferson Street Bridges at Church Street in South Ottumwa. This problem is worsened by the grade separated intersection with Highway 34 and accompanying ramps, all within a very small space. The development of Bridge View Center development should include improvements to this complicated interesction.

5. The Bypass may have significant transportation effects on some corridors. This can create problems because of the city's lack of east-west through streets north of the original city grid. This effect is particularly likely along Pennsylvania Avenue, which will become the most direct route into the city center from the bypass. This will increase traffic on the Pennsylvania corridor and will place additional traffic loads on the intersections of Jefferson and Court Streets.

6. South Ottumwa has relatively limited connections between western commercial districts and eastern residential development. Kettle Creek and newer residential development create boundaries between residential development and commercial development. As a result, significant traffic is directed to Albia Road, the only major street that crosses the creek and links directly to the Quincy Avenue corridor.

■ TRAFFIC VOLUMES AND CAPACITY ANALYSIS

The most recent available traffic volume counts were completed in 1998 by the Iowa Department of Transportation. These counts lead to the following conclusions:

• The heaviest loads in Ottumwa's street system occur along Highways 63 and 34 corridors. Average daily traffic (ADT) was recorded at 19,700 vehicles per day (vpd) at the intersection of Highways 63 and 34 and also at the intersection of Highway 63 and Second Street. Volumes on the two major highways never drop below 6,200 within city limits. However, these volumes are well within the capacities of both arterials.

• While Ottumwa recorded 24 locations with traffic volumes over 10,000 vpd, only 5 occurred south of Highway 34.

• Traffic volumes on segments of Second, Church Jefferson, Wapello, North Court and Market Streets, Albia Road and Quincy Avenue also were over 10,000 vpd.

• Thirty-seven locations within the city average between 5,000 and 10,000 vpd.

The completion of the Highway 63 bypass will direct a large amount of regional traffic around the city. The dramatic difference in traffic volume between the northern and southern sections of the city may also decrease with a Highway 63 bypass.

Capacity Analysis

A capacity analysis compares the traffic volumes on a street segment with the design traffic capacity of that segment. The ratio of volume over capacity (V / C) corresponds to a "level of service" (LOS), which describes the quality of traffic flow.

Measures of Level of Service (LOS)

System performance of a street is evaluated using a criterion called the "level of service" or LOS. LOS is a qualitative measure that examines such factors as speed, travel time, traffic interruptions, freedom of maneuvering, safety, convenience, and operating costs

of a road under specific volume conditions. A ratio of volume to capacity (that is how much traffic the street carries divided by how much traffic the street was designed to carry) provides a short method for determining LOS. LOS categories are described as follows:

• LOS A: This describes free-flowing operation. Vehicles face few impediments in maneuvering. The driver has a high level of physical and psychological comfort. Minor accidents or breakdowns cause little interruption in the traffic stream. LOS A corresponds to a volume/capacity ratio of 0 to 0.60.

• LOS B: This condition is a reasonably free-flowing operation. Maneuvering ability is slightly restricted, but ease of movement remains high. LOS B corresponds to a V/C ratio of 0.60 to 0.70.

• LOS C: This level provides stable operation. Traffic flows approach the range in which increases in traffic will degrade service. Minor incidents can be absorbed, but a local slow-down of traffic will result. In urban settings, LOS C is a good level of service to work toward. It corresponds to a V/C ratio of 0.70 to 0.80.

• LOS D: This level borders on an unstable traffic flow. Small traffic increases produce substantial service deterioration. Maneuverability is limited and comfort levels are reduced. LOS D represents a V/C ratio of 0.80 to 0.90. LOS D is frequently used as a compromise standard in dense urban settings.

• LOS E: LOS E represents typical operation at full design capacity of a street. Operations are extremely unstable, because there is little margin for error in the traffic stream. LOS E corresponds to a V/C ratio of 0.90 to 1.00.

• LOS F: LOS F is a breakdown in the system. Such conditions exist when queues form behind a breakdown or congestion point. This condition occurs when traffic exceeds the design capacity of the street.

Cautions about the LOS System

The LOS measure is essentially a measurement of traffic speed. Clearly, LOS is an important measure, because the basic purpose of streets is to move traffic efficiently. However, LOS is insensitive to other important values, including neighborhood preservation, environmental quality, economic vitality and access, energy conservation, and efficient development patterns. Indeed, a dispersed development pattern may actually improve LOS, but may also cause people to drive longer distances. This can increase the total amount of traffic, the amount of street that the city must maintain, and the length of average trips. In some situations, like downtowns, a poor LOS may be desirable from an urban or economic point of view. Thus, while LOS is a useful measurement tool, it should not be used to the exclusion of other values. The transportation system should serve, rather than dominate, the overall city environment.

Capacity Issues

In general, Ottumwa's street system functions at a high level of service. Capacity problems (measured by LOS "D" or below) are very spotty and are limited to the following areas:

• Locations in and around the edge of downtown, most notably Fourth Street east of Wapello, Second Street on both sides of Wapello, and downtown segments of Market and Jefferson Streets.

• North Court Street around the Pennsylvania Avenue intersection. The Bypass is likely to place additional traffic on Pennsylvania, which becomes the most direct route into the center of town. This is likely to add stress to this intersection and to North Court Street in an area that is already busy.

• Street segments at the south approach of the Market and Jefferson Street Bridges, particularly along Church Street.

• A portion of Albia Road between Wapello Street and Quincy Avenue. This reflects the growth of commercial development along Quincy and the use of the two-lane Albia Road as a principal approach to the south part of this commercial corridor.

■ OTHER TRANSPORTATION MODES

Public Transportation

The Ottumwa Transit Authority (OTA) operates a high quality, scheduled bus service that is highly integrated into the city's life and provides an important supplementary transportation service. Services generally run on a 12-hour day during weekdays, from about 6:00 am to about 6:00 pm. OTA operates four routes:

• *The North Route (Route 1)* operates from Downtown to the Ottumwa Regional Health Center, Indian Hills Community College, and Rochester Avenue (Hy Vee) via the Elm Street and North Court Street corridors. It operates on 40 to 50 minute frequencies.

• *The East-West Route (Route 2)* operates from Herrman and Main in the extreme eastern part of the city through downtown to Second and Taft near the western city limits. The route serves a number of features, including senior high-rise apartments, located on the north side of the river. It typically maintains 40 to 50 minute frequencies.

• *The Sheridan/Ward Route (Route 3)* operates from Downtown and serves the John Deere Ottumwa Works via Madison Avenue. Its route includes three interconnecting loops that serve South Ottumwa residential neighborhoods. Service extends as far west as Williams and Shaul, near Wildwood Park in the southwestern part of the city. This route provides service on 50 minute headways.

• *The Chester/Ferry Route (Route 4)* operates from Downtown, along Church Street and along a southwest loop that serves the Quincy Avenue corridor and generally uses Richmond Avenue, Albia Road, Chester Avenue, and Greenwood Drive. The route generally maintains 50 minute headways.

OTA also provides Saturday service on all four routes, running from about 10:00 am to about 4:00 pm. All OTA routes interconnect at the new Market Street Transit Center, along Market near Main Street. The system does not provide through north to south service. OTA also operates a variety of special services, including demand-responsive paratransit and special shopper shuttles from senior housing to grocery and discount stores.

Sidewalks

Ottumwa maintains a relatively complete sidewalk system within its traditional grid. However, this system breaks down in outlying development areas, suffering from some of the same discontinuities as the local and collector street system. The steeper slopes north of the Des Moines River include sidewalks on one side of the street and in many cases a lack of sidewalks entirely. Gradual adaptation of major pedestrian corridors to full accessibility will be an important priority for Ottumwa's pedestrian system. Providing links through Ottumwa's natural barriers will be important to completing the system.

Ottumwa's current subdivision regulations require construction of sidewalks in new developments.

Trails and Bicycle Transit

Ottumwa's primary trail facility is the popular Ottumwa Park Trail. This off-street facility follows the Lagoons around Ottumwa Park and into South Ottumwa. While the primary purpose of these trails is recreational, the trail link along the south side of the Lagoon also provides direct access to commercial development along the Church Street and Richmond Avenue, with a possible extension to the Quincy Avenue corridor. Thus, Ottumwa has positioned itself to allow bicycle transportation to provide a significant supplementary role in the city's system.

The levee system along the Des Moines River is also open to pedestrian and bicycle use, extending from Iowa to Blackhawk Streets on the north side of the river and Mary Street to Quincy Avenue on the south side. The city has also developed a designated bike route proposal, extending from Wildwood Park in the southwest to Dahlonega. The proposed routes uses

Shaul Avenue, Finley Avenue, Adella Street, the Lagoon Trail, the Market Street Bridge, Mill and Hayne Streets, Iowa Avenue and Elm Street, ultimately extending northwest along Hutchinson Avenue and Dahlonega Road.

■ CONCLUSIONS

This analysis suggests that:

• *Ottumwa's transportation system generally provides good service, despite the city's difficult topography and limited corridors.* This is largely the result of effective separation of local and through traffic streams in both north-south and east-west directions.

• *A major transportation priority (and one that causes some of the limited congestion problems that exist in the system) is better westside connectivity, especially to the growing commercial development along the Quincy Avenue corridor.* This can relieve pressures on Wapello Street south of Fourth Street and at the Wapello Street / Highway 34 intersection by creating an alternative north to south route.

• *Some intersections, most notably the complex interchange between Market, Jefferson, Highway 34, and Church Street at the entrance to South Ottumwa, create user confusing and difficult traffic conditions.*

• *The bypass development will cause some problems related to the redistribution of traffic.* One probable impact is an increase in traffic on Pennsylvania Avenue, which may become the route of choice into the city center. This could have additional effects on the Jefferson Street and Court Street intersections. Court Street's performance at the Pennsylvania intersection is already marginal. In addition, a nearby school and a commercial cluster at the intersection inject significant pedestrian activity.

• *Supplemental transportation modes, including public transportation, bicycle transit, and sidewalks are particularly important in Ottumwa and must continue to be part of a balanced transportation program.*

THE TRANSPORTATION PLAN

The transportation program for Ottumwa should meet current and future mobility needs, while enhancing the character of the city's urban environment. This general policy includes:

• Maintaining and enhancing good traffic circulation through the city, including addressing potential trouble spots created by development trends such as commercial development and bypass construction.

• Providing alternative transportation routes to avoid funneling all movements through a single conduit.

• Addressing confusing or unclear intersections.

• Continuing and enhancing Ottumwa's exemplary public transportation system.

• Developing a continuous network of facilities to accommodate non-automobile transportation.

• Developing street corridors which serve other community and economic development objectives, including leading visitors from regional approach routes to major commercial and cultural destinations within the community.

The components of this program include:

- **STREET CLASSIFICATION SYSTEM**
- **WESTSIDE CONNECTION**
- **STRATEGIC TRAFFIC SYSTEM IMPROVEMENTS**
- **LOCAL CONNECTIVITY**
- **STREETS AS PUBLIC SPACES**
- **PEDESTRIAN AND TRAIL SYSTEM**
- **CROSSTOWN TRANSIT**
- **COMMUNITY GATEWAYS AND CORRIDORS**

■ STREET CLASSIFICATION SYSTEM

Ottumwa should define the roles of various streets within its traffic system.

The Street Classification Plan defines the various functions that major street segments have in the Ottumwa system, and establishes the city's TEA-21 (or successor program) eligible system. The plan recommends maintaining the current classification system established in the Iowa Department of Transportation's 1993 map, with the following additions:

• A minor arterial link should be established to connect 145th Street to Quincy Avenue, including a new high water bridge over the Des Moines River.

• The proposed north and east bypass should be indicated as a principal arterial.

• Pennsylvania Avenue, between the bypass interchange and Hutchinson Avenue, should be classified as a minor arterial.

• Dahlonega Road and Alta Vista Avenue should be classified as minor arterials to the proposed bypass interchange.

• Rochester Street and Bryan Road (County Road V3H) should be classified as collectors and aligned to connect to the extended 145th Street.

• An east-west link between North Court (existing Highway 63) and 145th Street should be designated as a collector.

• Montagne Lane, between Madison Avenue and Milner Street, should be designated as a collector.

• A future southwest connector between Mary Street and Highway 34 should be designated as a collector.

■ WESTSIDE CONNECTIONS

Ottumwa's major transportation system priority should be a west side river crossing, linking 145th Street with Quincy Avenue.

While Ottumwa's street system once had a low capacity bridge at Black Hawk Street, the 1993 floods caused the permanent closure of that structure. As a result, the Wapello Street Bridge at Highway 69 is now the city's westernmost river crossing. Despite this, the city's primary, contemporary commercial district has developed along Quincy Avenue between Highway 34 and Albia Road. As a result, most trips from North Ottumwa to the Quincy Avenue corridor are channeled across the Wapello Street Bridge. This is creating growing congestion at the large Highway 34 intersection and, to a lesser degree, along Albia Road. Additional development to the north can aggravate the situation.

A westside connection, linking 145th Street to Quincy Avenue benefits the city by:

• Providing an alternative route from the north side of town to the Quincy Avenue area.

• Linking the 145th Street interchange on Highway 63 to Quincy Avenue.

• Providing direct access from South Ottumwa to the airport and potential industrial and business park development in that area.

A north road link between Highway 63 and 145th Street is important to making a west side connection work. A possibility is an extension of Rochester Avenue to the west, tying County Road H3V into this connecting system. H3V should be realigned to connect to 145th Street.

A secondary, long-term potential might include a north-south collector from Mary Street to Highway 34 on the western city limits. This can serve potential southwest growth and provide the only crosstown link in South Ottumwa west of Ferry Street.

■STRATEGIC TRANSPORTATION SYSTEM IMPROVEMENTS

Except for the west side connection and the bypass, most of Ottumwa's traffic issues can be solved with a program of strategic improvements, rather than major construction projects.

Ottumwa's traffic system generally functions well, the result of planning and project development which successfully separated local from regional traffic flows. The major proposed westside projects and the construction of the Highway 63 Bypass will further reinforce this pattern. Additional issues can be addressed through a program of focused improvements, directed at specific problem areas. These projects include:

• *Improvement of the Market Street/Jefferson Street/Church Street/Highway 34 intersection.* This complex intersection is confusing to users and can be hazardous. The Bridge View Center project will also introduce more traffic will be focused in this area. Redesign of this intersection is recommended, along with improved directional information. The conversion of the Market Street Bridge to a facility for pedestrians and low speed traffic, proposed by the Downtown Development Guide, can help to untangle the traffic flows into this intersection.

• *Monitoring and potential widening of Pennsylvania Avenue.* After the bypass is completed, traffic flows on Pennsylvania Avenue should be monitored. A widening to three lanes with a center left-turn lane should be considered to handle additional traffic. Intersection improvements at Elm and Jefferson Streets should also be included in a potential street improvement project.

Traffic planning in the Pennsylvania corridor should encourage traffic to use Elm and Jefferson Streets, rather than continuing through to North Court Street. Court Street's terminus at Fourth Street and its mixing of local traffic, pedestrians, and transit complicate its ability to handle through traffic. Design and regulatory devices should be employed to reduce traffic on the Jefferson to Court segment. These may include preferential left turn movements onto southbound Jefferson Street.

Land use planning can have an effect on the character and effectiveness of Pennsylvania Avenue. Thus, implementation of the land use plans recommendations to view Pennsylvania as a mixed use, office / residential corridor will result in more controlled curb cuts and fewer traffic conflicts than potential evolution into a commercial corridor.

• *Performance review and redesign of key intersections, including Church and Richmond and Fourth and Wapello.* Some of these intersections are confusing to users. Better geometrics and directional information can improve conditions. At other locations, such as Fourth and Jefferson, northbound traffic climbing the steep hill from the river valley has the right-of-way over other movements. These unusual movements must be clearly marked to prevent safety hazards.

■ LOCAL CONNECTIVITY

The local street network in developing residential areas should be designed with multiple connections and relatively direct routes.

Within the framework of higher-order streets (arterials and collectors), local street systems will develop to serve individual developments. These systems should be designed with clear circulation patterns that preserve the quiet qualities of local streets while providing residents, visitors, and public safety and service vehicles access which is comprehensible and direct. This can be done by incorporating the following standards or techniques in local street design:

• *Hierarchy and Cueing.* Local street networks should have a natural order to them that provide cues, leading residents and visitors naturally to their destinations. Hybrid street networks combine the ease of use of a grid with the privacy of a contemporary suburban street pattern.

• *Connectivity.* The street network should have segments which connect to one another internally and to collector streets. Several measures to evaluate the connectivity of street networks have been developed. One measure is the ratio of the number of street links divided by the number of nodes (intersections or cul-de-sac heads). A target ratio of 1.40 produces a good neighborhood mix of connectivity and privacy.

• *Alternatives to Cul-de-Sacs.* Cul-de-sacs are often valued by developers and homebuyers for their privacy, but are difficult and expensive to serve with public safety and maintenance. Alternatives are available which maintain the positive characteristics of cul-de-sacs while limiting some of the liabilities. These include:

- Access loops, that provide two points of access.

- Circles or bulbs at the corners of streets or access loops. These provide many of the features of cul-de-sacs, including safe environments observed by a cluster of houses.

- T-intersections, which reduce the number of traffic / pedestrian conflicts.

- Short cul-de-sacs, shorter than 300 feet in length.

• *Design for Low Speeds.* Traffic in a local street system

should move at slow speeds. This can be accomplished by:

- Providing local streets with design speeds that are the same as speed limits. This produces self-enforcing speed limits, by which motorists drive at appropriate speeds.

- Using traffic calming devices. Such devices include narrowing at mid-block, neckdowns at intersections, speed tables (a more gradual and spread out version of the speed bump), traffic circles, and gateways.

■ STREETS AS PUBLIC PLACES

Major streets in Ottumwa should have multiple uses, becoming well-landscaped, attractive corridors that link the "rooms" of the city.

In addition to moving vehicular traffic, streets are also important public spaces, providing the front yards for homes and businesses. Yet, cities rarely consider this quality in street design. Those cities that historically considered the public quality of streets, such as Minneapolis, have produced environments of special distinction and value.

Some of Ottumwa's major streets have traditionally been more than conduits for vehicles. They have been important locations for commercial and civic activity as they pass through neighborhoods. These community streets, identified as part of the promenade system in the development principles, should emphasize their other role as significant public spaces by including:

• *Features such as ornamental lighting, landscaped medians, and additional greenway width and landscaping.*

• *Parallel facilities for pedestrians and bicyclists.* This often includes wider than standard sidewalks on at least one side of the street to accommodate both pedestrians and recreational users. Paths may include gentle curves and street furniture to provide interest and accommodations for users. In business districts, corner nodes and streetscaping may be used to reduce the distances that pedestrians must negotiate.

• *Transit facilities, including bus shelters and graphics.*

The "Promenade System," incorporating North Court, Market Street, the Market Street Bridge, Church Street, and Chester Avenue, is the top priority for community street treatment. Other candidates for special aesthetic and pedestrian treatment include:

- Main Street / Second Street from the east to west corporate limits.
- Mary Street.
- Ferry Street.

Community streets may also be integrated into the design of new areas, making them central features for growing neighborhoods.

■ PEDESTRIAN AND TRAIL NETWORK

Ottumwa should maintain a supplemental system of trails, sidewalks, and pedestrian ways to augment the vehicular transportation system.

A multi-use trail and walkway system can complement automobile trips by providing a good environment for non-motorized transportation. The trail aspects of the system are described in more detail in the Parks and Recreation element of this plan. The system includes several levels of facilities:

• *Off-Street Trails, providing exclusive paths separated from parallel streets.* The major off-street trail links would include:

- The Riverfront Trail system, using levees and parklands on both sides of the river. Primary crossings would be reconstruction of the former Black Hawk Street bridge at Turkey Island for non-vehicular use; and adaptation of the Market Street Bridge for pedestrian and bicycle use.

- An extended Lagoon Trail on both sides of the lagoons, providing direct access to the Church Street, Richmond Avenue, and Quincy Avenue commercial corridors. This trail can provide safe, non-vehicular access to the Quincy Place Mall.

- A south trail loop, using the Jefferson Street Ditch, a new greenway through the southwest growth center, and the Kettle Creek corridor.

- A Harrow's Branch Trail linking the river with northwest growth areas and ultimately industrial development around the airport.

- A Sugar Creek Trail.

• *On-Street Trails, providing trail facilities parallel to streets.* These trails generally include a wide, multi-use sidewalk, and are proposed for :

- Dahlonega Road from Dahlonega to Indian Hills Community College and through the cemetery to Court Street.
- Hutchinson Avenue

• *Share-the-Road segments and sidewalks, including designated routes for pedestrian and bicycle use.* Ottumwa should consider a system of numbered bicycle routes leading to specific destinations. These can be used to route cyclists of all ages and capabilities onto streets that have manageable grades, experience relatively low or moderate traffic and gentle geometries, and lead to key destinations.

In addition, Ottumwa should view sidewalks along significant streets and community corridors as a vital utility, rather than as a special benefit. Generally, continuous sidewalks should be provided along the city's minor arterials and collectors, and gaps along these major facilities should be filled. Major routes that link these streets to schools, parks, and other activity centers should also have high priority for sidewalk continuity.

■ SIDEWALKS IN DEVELOPING AREAS

Ottumwa should require sidewalks in newly developing areas.

The previous policy identifies the need for a basic pedestrian system, establishing sidewalks as a public utility along major streets and routes to activity centers. But newly developing areas, most notably residential subdivisions and other projects that are likely to attract significant pedestrian traffic, should also include sidewalks as part of their public improvement systems. Pedestrian activities are increasing in popularity for people of all ages. By installing sidewalks as a requirement of new development, Ottumwa can avoid the difficult problem of trying to require sidewalk construction after the fact. New subdivision regulations should be enacted which require sidewalks in new subdivisions.

■ CROSSTOWN TRANSIT

Ottumwa should maintain its excellent transit service, but consider a north-to-south through route. In addition, the city may consider a circulator route connecting parts of the city center as part of an overall tourism network.

Ottumwa is a relatively small city to operate a viable transit system, but it does so successfully. It is vital that this service continue as part of the city's balanced transportation system.

All routes interchange at the Market Street Transit Center. However, trips from north to south Ottumwa require a transfer at this center. The city should consider a through route that links the two sides of the river together. In addition, growth in tourism, proposed as part of the economic development strategy, may benefit from a shuttle or circulator service that links features such as the railroad depot, downtown, riverfront and water works, Ottumwa Park, the Beach, the Church Street district, the proposed Bridge View Center, and Quincy Place Mall.

The Market Street Transit Center should also be upgraded to include shelters and attractive graphics. This center attracts considerable use at pulse times, the periods when buses serving different routes are scheduled to converge. It could also be an important center

if a visitor shuttle were instituted to accommodate a growing tourism business. The transit center may also provide a place for activities – impromptu musical performances, art shows, and other activities that can enliven a city.

■ GATEWAYS AND CORRIDORS

Ottumwa should maintain the design quality of its major community corridors, allowing them to serve as attractive gateways into town and positive business and community environments.

Principal corridors that link the center of Ottumwa to major highway routes provide major gateways into the community, as well as providing critical functional links in the city's transportation system. These key auto-oriented corridors include the existing Highway 63 (North Court / Wapello Street), Quincy Avenue, Richmond Avenue, Highway 34, and Albia Road. A program to maintain the attractive character and good functioning of these key corridors should include:

• Improvement of sidewalks and improved, glare-free lighting.

• Where possible, consolidation of access points to reduce the number of curb cuts and traffic conflicts. This can be especially important along emerging corridors such as Pennsylvania Avenue and 145th Street.

• Definition of community entrances with community signs and features at the entrance interchanges and the corporate limits.

• Directional signage, leading visitors to major community attractions.

Downtown Transit Center Concept.

Enhancement of the Bus Stop, Ottumwa's downtown transit center at Market and Main can help reinforce the use of Ottumwa's excellent bus system. In addition, it can provide a headquarters stop for the proposed Circulator, a special bus that can link the north and south parts of the City Center.

Traffic Capacity Analysis

A capacity analysis compares the traffic volumes on a street segment with the capacity of that segment. The ratio of volume over capacity (V/C) corresponds to a "level of service" (LOS), which describes the quality of traffic flow. LOS categories are described as follows:

- **LOS A: free-flowing operation (V/C < 0.6).** Vehicles face few impediments in maneuvering. Minor accidents or breakdowns cause little interruption in the traffic stream.
- **LOS B: reasonably free-flowing operation (V/C=0.6-0.7).** Maneuvering ability is slightly restricted, but ease of movement remains high.
- **LOS C: stable operation (V/C=0.7-0.8).** Traffic approaches the range in which increases in traffic will degrade service. Minor incidents can be absorbed, but a slow-down of traffic will result. In urban settings, LOS C is a good goal.
- **LOS D: bordering on unstable traffic flow (V/C=0.8-0.9).** Small traffic increases produce substantial service deterioration. Maneuverability is limited and comfort levels are reduced.
- **LOS E: full capacity/unstable (V/C=0.9-1.0).** Operations are extremely unstable, because there is little margin for error in the traffic stream.
- **LOS F: breakdown in the system (V/C > 1.0).** LOS F indicates that traffic exceeds the design capacity of the street.

Cautions about the LOS System

LOS provides a rough measurement of traffic flow, but is insensitive to other important values, including neighborhood preservation, environmental quality, economic vitality and access, energy conservation, and efficient development patterns. Actions intended to improve LOS, such as a dispersed development pattern, may cause people to drive longer distances, thus increasing the total amount of traffic in the city, the amount of street that the city must maintain, and the length of average trips. In some situations, like downtowns, a poor LOS may be desirable from an urban or economic point of view. Thus, while LOS is a useful measurement tool, it should not be used to the exclusion of other values.

Capacity Issues

In general, Ottumwa's street system functions at a high level of service. Potential capacity problems (measured by LOS "D" or below) are limited to the following areas:

- S Wapello Street/149 on the bridge (northeast of 34)
- Richmond Avenue, between Church Street and 149.
- Albia Road between Quincy Avenue and Johnson Avenue. This reflects the growth of commercial development along Quincy and the use of the two-lane Albia Road as a principal approach to the south part of this commercial corridor.

There are two LOS C street segments that are close to a 'D' rating: 1) Hwy 34 west of 149; 2) Court Road between Golf Ave and Alta Vista Ave (next to Country Club). All other roads in Ottumwa are a LOS A, B or C.

Impact of Bypass on In–Town Traffic Volume

The opening of the new Highway 63 bypass in 2007 decreased the traffic levels through town on 149 (Old Highway 63). In comparison to 2006 traffic counts, 2010 traffic levels on Old Highway 63/149 were about 30% lower on the north end of town and about 20% lower in the central part of town.

The traffic decrease can be seen as both a negative and a positive. The negative effect is that travelers may be less likely to stop in Ottumwa, while the positive effect is that the demands on Ottumwa's streets are reduced, thereby reducing potential congestion problems and maintenance needs.

OTHER TRANSPORTATION MODES

Public Transportation

Ottumwa Transit operates a high quality, scheduled bus service that is highly integrated into the city's life and provides an important transportation service. 4 bus routes run every 30-50 minutes from 6:45 am to about 6:00 pm. on weekdays, and 2 routes run every hour from 9:30 a.m. to 4 p.m. on Saturdays. Ottumwa Transit also provides on-demand para-transit for riders with mobility impairments.

Sidewalks

Ottumwa maintains a relatively complete sidewalk system within its traditional grid. However, this system breaks down in outlying development areas, suffering from some of the same discontinuities as the local and collector street system. The steeper slopes north of the Des Moines River include sidewalks on one side of the street and in many cases a lack of sidewalks entirely. Gradual adaptation of major pedestrian corridors to full accessibility will be an important priority for Ottumwa's pedestrian system. Providing links through Ottumwa's natural barriers will be important to completing the system.

Ottumwa's current subdivision regulations require construction of sidewalks in new developments.

Trails and Bicycle Transit

Ottumwa offers paved trails along the levee system on the Des Moines River. Trails along the south levee run from Qunicy Avenue to the eastern city limits. Along the north levee, a trail runs from the Gray Eagle Nature Preserve to the Market Street Bridge and beyond. A trail connects the Wabash Bridge south to Madison Avenue and around the John Deere Plant. Memorial Park, Wildwood Park, and Ottumwa Park also feature trails.

While the primary purpose of these trails is recreational, the trail link along the south side of the Lagoon also provides direct access to commercial development along the Church Street and Richmond Avenue, with a possible extension to the Quincy Avenue corridor. Thus, Ottumwa has positioned itself to allow bicycle transportation to provide a significant supplementary role in the city's system.

The levee system along the Des Moines River is also open to pedestrian and bicycle use, extending from Iowa to Blackhawk Streets on the north side of the river and Mary Street to Quincy Avenue on the south side. The city has also developed a designated bike route proposal, extending from Wildwood Park in the southwest to Dahlonega. The proposed routes uses Shaul Avenue, Finley Avenue, Adella Street, the Lagoon Trail, the Market Street Bridge, Mill and Hayne Streets, Iowa Avenue and Elm Street, ultimately extending northwest along Hutchinson Avenue and Dahlonega Road.

CONCLUSIONS

This analysis suggests that:

- **Ottumwa's transportation system generally provides good auto-oriented service, despite the city's difficult topography and limited corridors.** This is largely the result of effective separation of local and through traffic streams in both north-south and east-west directions.
- **A major transportation priority is better westside connectivity, especially to the growing commercial development along the Quincy Avenue corridor.** This can relieve pressures on the Wapello Street/Highway 34 intersection by creating an alternative north to south route.
- **Some intersections, most notably the complex interchange between Market, Jefferson, Highway 34, and Church Street at the entrance to South Ottumwa, create user confusing and difficult traffic conditions.**
- **The bypass development has decreased the amount of through-traffic in Ottumwa.** This can be seen as both a negative and a positive. The negative effect is that travelers may be less likely to stop in Ottumwa, while the positive effect is that the demands on Ottumwa's streets are reduced, thereby reducing potential congestion problems and maintenance needs.
- **Supplemental transportation modes, including public transportation, bicycle transit, and sidewalks are important for Ottumwa and must continue to be part of a balanced transportation program.**

Chapter 5
A RECREATION LIFESTYLE

An outdoor lifestyle is integral to Ottumwa. Residents enjoy extraordinary access to excellent City and regional parks, along with the Des Moines River Valley. Parks in the community should provide settings for a range of activities, including organized sports, informal recreation, walking, bicycling, and quiet contemplation.

A QUALITY PARK SYSTEM

The vision for Ottumwa's park system is to provide a balance of nature and recreation, along with a basic connectedness between the city, its existing green spaces and the river.

Parks and natural resources within a community affect both the health of the local economy and the satisfaction that residents gain from their city. Parks add value to the community, enhancing both the experience of living and the value of property. Parks can be major factors in the stabilization of existing neighborhoods and the development of high-quality new residential areas. Studies find that a high-quality, diverse recreational system ranks second only to the educational system in attracting new residents to a community. Ottumwa's parks and natural resource system should be integrated into the city's development pattern and should provide recreational opportunities for all citizens.

GOALS

To enhance its facilities and continue to use its open space system as a central element contributing to community quality, the City of Ottumwa should fulfill the goals below.

CREATE A LINKED PARK NETWORK OF GREENWAYS AND CIVIC STREETS TO CONNECT OPEN SPACES, NEIGHBORHOODS, AND ACTIVITY CENTERS.
A linked network can help define the city and provide convenient access to its parks and open spaces. It is particularly important in Ottumwa, where resources like Memorial Park and Ottumwa Park are located on opposite sides of the city ,with limited pedestrian access across the river. Benefits of a linked park system include:

- Accommodating popular recreational activities such as bicycling, walking/hiking, and cross-country skiing.
- Increasing safe access to recreational facilities by non-motorized modes, and increasing the service coverage of existing outdoor recreation facilities
- Linking various parts of Ottumwa

PROVIDE RECREATIONAL FACILITIES TO MEET THE NEEDS OF NEWLY DEVELOPING AREAS
In growth areas, Ottumwa should provide both parks and other recreational experiences, such as nature interpretation, resource conservation, trail systems, and other passive activities. It is vitally important to set aside quality parkland and open space during planning stages of new residential developments. Planning of these neighborhood park spaces should ensure safe, convenient, and desirable pedestrian access from neighborhoods to parks. Parks should fit within the framework of the greenway concept mentioned above.

DISTRIBUTE ACTIVE RECREATION USE EVENLY ACROSS THE GEOGRAPHICAL AREA OF THE CITY.
The adequacy of park services is measured in both numbers and by geographic distribution. Parks that are inaccessible to neighborhoods prevent easy access and provide a lower level of service.

ESTABLISH SERVICE STANDARDS IN GROWTH AREAS AND A FINANCING SYSTEM FOR PARK ACQUISITION AND DEVELOPMENT.

Acquiring and developing new parks in growth areas can be a major challenge. Service standards establish a basis for determining how much parkland and what kinds of facilities are needed in growth areas. A park finance program should ensure that new development finances a fair share of the demand that it creates for new park facilities.

BALANCE ACTIVE AND PASSIVE RECREATION OPPORTUNITIES FOR ALL PEOPLE OF OTTUMWA

The City should maintain a balance between active and passive recreation. Preservation of the Harrow's Branch and Sugar Creek areas and development of trails through these wooded areas can balance active recreational facilities on the north side of the city. Development of a greenway system in South Ottumwa will also complement the heavily-used Ottumwa and Wildwood Parks.

USE PARKS AND OPEN SPACES TO ENCOURAGE NEIGHBORHOOD REINVESTMENT AND TO HELP TO REINFORCE OTTUMWA'S URBAN FORM.

Parks and open spaces can help to provide structure for a growing community. In traditional towns, the green or commons was a focus for both civic life and community amenity. Park development can have equal value for contemporary development, adding a public aspect to life in new residential areas.

PARKS AND RECREATION ANALYSIS

Park facilities are evaluated in three ways:

- Classification. Parks are classified into different categories to determine the area and purpose they should serve.
- Geographic Distribution. The service radius of each facility is analyzed to identify geographic gaps in service.
- Levels of Service. Analyzes the amount of park acreage and recreational facilities as compared to number of residents.

Parks Classification

The park classification system developed by the National Recreation and Park Association (NRPA) is used to classify the facilities in Ottumwa's system. These categories include:

Mini-Parks
Mini-Parks are less than one acre in size and have a service radius of less than .25 miles. They generally address niche recreation or open space needs.

Neighborhood Parks
Neighborhood parks are the basic unit of the park system and provide a recreational and social focus for residential areas. These parks provide space for informal active and passive recreational activities. They are typically 5-10 acres and provide a service radius of 0.25 to 0.50 miles. A rough estimate for the amount of neighborhood parkland needed is 1-2 acres per 1,000 residents.

Only two of Ottumwa's eight neighborhood parks exceed five acres, but several smaller parks have amenities that put them in the neighborhood park category. When selecting a site for a new neighborhood park, criteria include ease of access, neighborhood location, and connection to greenways.

Community Parks
Community parks meet community-based recreation needs, may preserve significant natural areas and often include areas suited for intense recreation facilities. Community parks typically include a special attraction that draws from a larger area, such as a swimming pool, lake, ice skating rink, trails, environmental or cultural features, or specialized sports complexes. Community parks contain between 10 and 50 acres and the typical service radius is approximately 0.5 to 3 miles. A rough estimate for the amount of community parkland needed is 5-8 acres per 1,000 residents.

School Parks
School parks combine the resources of schools and city agencies to provide joint social and recreational facilities.

Special Use Parks
Special use parks cover a broad range of facilities oriented to a single use, including cultural or social sites, or specialized facilities. For example, The Beach Ottumwa provides both indoor and outdoor aquatic experiences and traditional community park facilities such as playground equipment, shelters, picnic tables and basketball courts.

Table 5.1 summarizes Ottumwa's parks and facilities by category. Table 5.2 identifies recreation facilities at each of the Ottumwa Public Schools.

Table 5.1: Ottumwa Parks and Recreation Facilities		
	Acres	**Facilities**
MINI-PARKS		
Ballingall Park (River Drive and Main Street)	1.0	Benches; fountain
Central Park (Fourth and Court Street)	0.9	Picnic tables; performance stage
TOTAL MINI-PARKS	1.9	
NEIGHBORHOOD PARKS		
Pickwick Park (Keota and Schuyler Streets)	1.5	Shelter, picnic tables; playground (1)
Jefferson Park (Jefferson and Gara Streets)	1.8	Picnic tables; basketball court (1); playground (1)
Franklin Park (Second and Walnut Streets)	2.0	Playground (1)
Hillcrest Park (North Court and Albany Streets)	2.0	Playground (1); Shelters; picnic tables
Bell Park (River Drive and Main)	5.3	Playground (1); Shelters; picnic tables
Caldwell Park (West Main and Arrison Streets)	7.6	Playground (1)
Foster Park (East Main and Foster Streets)	4.0	Playground (1); Shelter, picnic tables; restrooms
Troeger Park (200 Block of Church Street)	3.0	Playground (1); Shelters, Horseshoes; restrooms; Tennis Courts (4)
TOTAL NEIGHBORHOOD PARKS	27.2	
COMMUNITY PARKS		
Memorial Park (N. Jefferson and N. Elm)	46.8	Playgrounds (2); Basketball Court (1); Tennis Court (1); Shelters (2), picnic tables; restrooms (2), trail; cabin
Ottumwa Park (Highways 34 and 63 Junction)	346	Shelters (8); Basketball Courts (2); Tennis Courts (6); Baseball Fields (5); Softball Fields (7); Playgrounds (2); Picnic tables; Restrooms (5); trails; sculpture; horse arena; camping; sand volleyball; ice skating; fenced in dog park (Bark Park)
Union Park (West Main and Fairview)	15.4	Playground (1); Basketball Court (1); Shelter, picnic tables, restrooms
Wildwood Park (Shaul and Finley Streets)	72.5	Playground (2); Baseball back-stops (2); Shelters (3); Basketball Court (1); Restrooms; trails; disc golf
TOTAL COMMUNITY PARKS	480.7	
TOTAL NEIGHBORHOOD, COMMUNITY & MINI PARKS	509.8	*20.4 acres per 1,000 residents*
SPECIAL USE PARKS		
Ottumwa Municipal Golf Course (13120 Angle Road)	156	Eighteen-hole course; picnic tables; restrooms; clubhouse
The Beach Ottumwa (101 Church Street)	13	Wave pool; slides; sand volleyball; indoor pool and lagoon access; Basketball court (1); Playground (1)
Skate Park (Market St at River)	1	Mini-ramps, spine ramp, street course
TOTAL SPECIAL USE PARKS	170	
Baseball and Softball Facilities Maintained by Parent Associations		National League (West of Ottumwa Coliseum); American Little League (Adjacent to Pickwick School); Memorial Field (Adjacent to Union Park)
Undeveloped Green Space	80.5	Turkey Island (Blackhawk Road: 75.4 acres); Hamilton (North Court St: 5.1 acres)

Table 5.2: School Recreation Facilities in Ottumwa

Public School Sites	Facilities
Agassiz School- 608 E. William St.	Basketball court with 3 backboards; 2 playgrounds
Alternative School - 907 Gateway	
Douma School- 307 W. Mary St.	Soccer field, 5 basketball backboards; 2 playgrounds; volleyball court
Eisenhower School- 2624 Marilyn Rd.	Soccer field, baskeball court, playground
Evans Middle School - 812 Chester Ave.	Softball field, soccer field
Horace Mann - 1523 N. Court	Soccer field, basketball court, playground
James School - 1001 N. Benton St.	Basketball court, 2 playgrounds
Lincoln School - 458 N. Court St.	Basketball court, 2 playgrounds
Pickwick School - 1306 W. William	Baseball field, soccer field, basketball court, 3 playgrounds
Wildwood School - 438 Mckinley Ave.	Softball field, 3 basketball courts; playground, volleyball court
Wilson School - 1102 E. Fourth St.	Basketball court, 2 playgrounds
Ottumwa High School - 501 E. Second St.	Football field
Administration Offices - 422 McCarroll Dr.	2 soccer fields

Geographic Distribution

Geographic park service areas are estimated as follows:

- Neighborhood Parks: 1/4 -1/2 mile radius
- Community parks: 1- to 2-mile radius

Based on the above standards:

- Ottumwa's distribution of parks provides service coverage to nearly every part of the city. The southern sections of the city lack neighborhood parks, but this gap is compensated for with the large community parks.
- Development of a greenway will extend existing park service areas through increased accessibility.
- Residential growth areas on the northern and southwest fringes of the city should be accompanied with neighborhood park development to prevent gaps in service coverage.

Levels of Service Conclusions

Ottumwa's public park system contains approximately 510 acres, or approximately 20 acres per 1,000 residents. Table 5.3 estimates the number of park acres needed to maintain the existing level of service if/when the population grows to the 2030 projection of 26,568.

Conclusions regarding the level of service for Ottumwa's park system are as follows:

- If the 2030 population projection of 26,568 occurs, Ottumwa would need to add approximately 30 acres of parkland to maintain the same level of service (park acres per 1,000 residents) it has today. However, Ottumwa's level of service is relatively high and the current amount of parkland is likely sufficient for the near-to-mid-term future.
- The City should require quality land to be set aside for future neighborhood parks and other facilities as Ottumwa grows.
- The opportunity for expanded community open spaces along the wooded northern hills will augment the existing park amenities.
- While Ottumwa has a somewhat low level of service for neighborhood parks, it compensates with a high level of service for community parks on both sides of the Des Moines River.

Table 5.4 estimates what new facilities will be needed to serve the growing population through 2030. The table shows that Ottumwa exceeds national standards for most facilities, with a few exceptions:

• Ottumwa experiences a deficit for:
- Volleyball
-Tennis courts

Other future needs the Ottumwa should consider include:

- Unconventional uses. Ottumwa, in common with other communities, must be flexible enough to respond to new recreational needs. For example, the growing popularity of skateboarding among young people led the City to develop a facility on the downtown riverfront at Market Street. This relatively low cost facility has proven to be extremely popular and should be upgraded as part of an overall riverfront development program.
- Trails. The city lacks a significant multi-use recreational trail system. The city does maintain trails in both Ottumwa and Memorial Park, but these trails are not linked together. The Des Moines River acts as a barrier between Ottumwa's two major parks; a linked trail system can extend recreational opportunities to residents throughout the city. The city should continue the momentum started by private development of trails by John Deere on the south side of Ottumwa.

2014 UPDATE

Table 5.3: Future Parkland Needs for Ottumwa

Park Type	Existing Acreage	Existing Acres Per 1,000 Residents (Level of Service)	Additional acreage needed in 2030 to maintain current standard
Neighborhood/Mini Parks	29.1	1.2	1.8
Community Parks	480.7	19.2	29.7
Total Park and Recreation Area	509.8	20.4	31.5

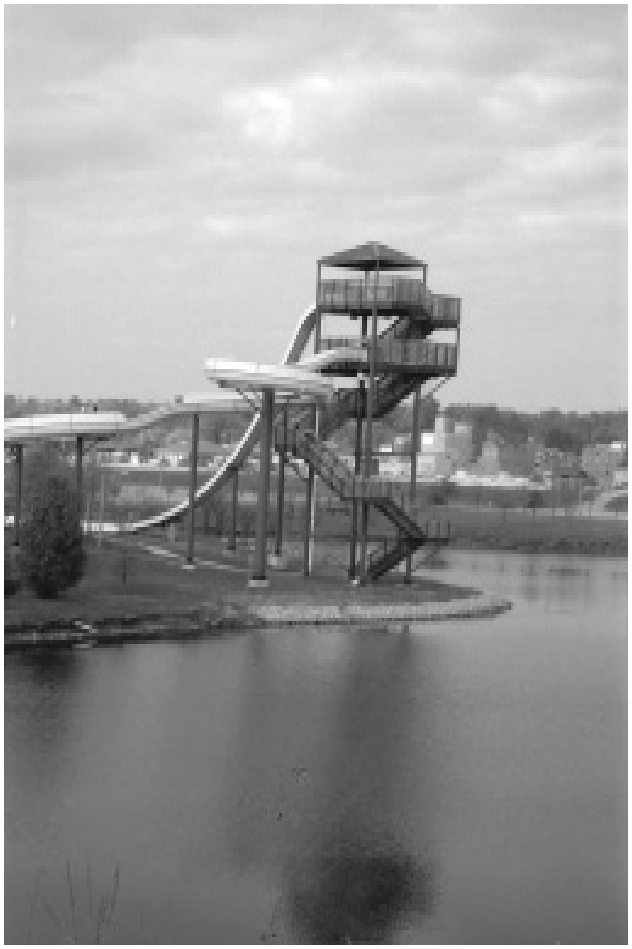
RDG Planning & Design, 2013

2014 UPDATE

Table 5.4: Park and Recreation Facilities Related to Population

Criterion	General Level of Service Guideline	Need 2013	Existing Facilities	Comments
Baseball Fields	1 per 3,000 residents	8-9	**10** *5 at Ottumwa Park; 3 fields that are not at any park and are maintained by parent associations; 2 backstops at Wildwood.*	Ottumwa is adequately served but local demand may require that this standard be exceeded
Softball Fields	1 per 3,000 residents	8-9	**10** *7 at Ottumwa Park; one at Wildwood School; a backstop at Evans Middle School; and one at the National Field and one at the Midwest Fields.*	Ottumwa is adequately served but local demand may require that this standard be exceeded.
Football Fields	1 per 20,000 residents	1	**2 fields** *One at Evans Middle School and one at Ottumwa High School.*	Adequate service
Running Track	1 per 20,000 residents	1	**2 Tracks** *One at Evans Middle School; One at Ottumwa HS Sports Complex.*	Adequate service
Playgrounds	1 per 2,000 residents	12-13	**13** P*lay ground areas located at all the parks except Ballingall, Central and Hamilton.*	Adequate service
Soccer Fields	1 per 10,000 residents	2-3	**2** *Located at the former Walsh School and six more schools have nets.*	Ottumwa is adequately served but local demand may require that this standard be exceeded.
Volleyball	1 per 5,000 residents	5	**2 sand courts** *1 at The Beach Ottumwa; 1 at Ottumwa Park.*	Add 3 sand volleyball courts.
Basketball Courts	1 per 5,000 residents	5	**7** One each at Jefferson, Memorial, The Beach, Union and Wildwood Parks and two at Ottumwa Park	Adequate service
Tennis Courts	1 court per 2,000 residents	12-13	**11** 1 at Memorial Park; 6 at Ottumwa Park; 4 at Troeger Park	Add 2 tennis courts
Swimming Pools	1 25-meter pool per 10,000 residents	2	**3** 1 indoor 25-yd pool at The Beach; 1 outdoor, zero depth wave pool at The Beach; 1 indoor at the YMCA	Ottumwa is adequately served by pools.
Golf Courses	1 9-hole standard per 25,000 population	1 9-hole	**2 18-hole** 1 18-hole - Ottumwa Municipal Golf Course; 1 18-hole - Ottumwa Country Club	More than adequate service

PARK DEVELOPMENT PLAN



Based on the analysis in this plan, the following issues emerge for the Ottumwa Park System:

- Maintenance, rehabilitation, or enhancement of existing park facilities
- Continued development of a comprehensive trail and greenway system that links the park and open space system and is integrated into the structure of the city
- Growth and financing of parks to serve the existing population and projected growth areas

This section describes strategies designed to enhance the park system's status as a leading community feature. These strategies:

- Envision a linked park system, molding Ottumwa's open space system into a green network that unites the community and makes each major park the territory of everyone.
- Allow the park system to grow with the city.
- Propose new centers for recreation, which are integrated into a greenway system.
- Provide recreational facilities needed to meet community priorities.

The components of this program are described on the following pages. They include:

- GREEN NETWORK
  - Greenways
  - Ottumwa Trail Network
- MAJOR OPEN SPACE CENTERS
- RIVERFRONT
- RECREATION COMPLEX
- EXISTING PARK IMPROVEMENTS
- CULTURAL RESOURCES
- NEIGHBORHOOD PARK FINANCE MECHANISM

GREEN NETWORK

Ottumwa's park system should be a network of parks, connected by continuous green corridors defined by trails, greenways, boulevards, and civic streets.

A linked greenway system merges parks and open spaces into all parts of the life and development of the city, expanding the use of the park system beyond individual service areas. The components of Ottumwa's green network will include its existing and future parks, a circular trail system that includes major linear open space links, boulevards and civic streets. Major green space linkages will include:

- Pedestrian and landscape enhancements along North Court Street, from Downtown Ottumwa to Elmdale Boulevard.
- A trail system that will include designated bike trails and multi-use trails.
- Streetscape and sidewalk enhancements in the Church Street Business District, extending to the Chester Avenue Promenade.
- The Chester Avenue Promenade, which will connect the Church Street Business District with residential development to the west and the Kettle Creek Greenway.
- Preservation of wooded areas and use of them in the Ottumwa Trail system, linking key destinations within the city.
- Designated parkways in the northern growth area.
- Creek trail corridors along Sugar, Cedar, and Kettle Creeks and Harrow's Branch.
- Creation of a riverfront corridor and Riverwalk that will include open space and a trail system along the southern boundary of the Des Moines River. The trails will also provide links between existing parks and recreation opportunities and development to both the northern and southern edges of the city.

Greenways

The creation of four greenways will link residential and recreational areas across Ottumwa. These greenways include:

- The Cedar Creek Greenway, linking together new development in the northwest with the Ottumwa Municipal Golf Course and future residential development. Corresponding parks and bike trails will connect the growth center with existing development and the heart of the city.
- The Sugar Creek Greenway and Trail, providing an excellent recreation opportunity for students attending Indian Hills Community College and linking the college and residential development in the northeast with the rest of the city. Other trails can connect the Sugar Creek corridor into the Ottumwa Trail system.
- Harrow's Branch, following the creek and forming an important link in a circular trail system. Wooded areas reaching out to the east from the creek can provide connecting trails, connecting northern neighborhoods to the citywide system.
- The Kettle Creek Greenway, including areas that expand the creek corridor. The greenway follows the creek from the lagoon area south to Mary Street then turns east. The trail connects new neighborhoods and community parks in the southwest with the riverfront system.

Expand Ottumwa Trail Network

Ottumwa's trail network should be expanded to knit together various features of the community and park system, including:

- The River Corridor, including pedestrian friendly river crossings on the Market Street Bridge, a reconstructed Black Hawk Street Bridge, and a reused Rock Island Railroad Bridge. The Black Hawk Bridge provides access to Turkey Island, envisioned as a natural recreation area.
- Major greenway corridors identified in the previous section.
- Blazed trails on easements or acquired rights-of-way through the wooded bluffs of the city's north side.
- Neighborhood streets that connect greenways and natural spaces through residential areas.
- Major parks and community open spaces.

The trail network should be viewed as a dynamic system, expandable into the surrounding region. When the system extends into unincorporated areas, the City should work with the County and County Conservation Board to promote coordination and enhancements of their respective trail systems.

Proposed additions to the trail network are shown in Map 4.1 and include:

- *South Ottumwa Loop,* weaving south through the Kettle Creek Corridor, Wildwood Park, east to the proposed location of the new soccer and sports complexes, then back north to the River and west along the southern Riverfront.
- *Harrow's Branch Trail,* which links growth areas in the northwest part of the city with the riverfront and Turkey Island.
- *Sugar Creek Trail,* serving areas whose growth will be encouraged by the completion of the Highway 63 Bypass.
- *Airport Trail,* which extends from the intersection of Rochester Street and Bryan Road up to the Airport Innovation District.

These trail routes would incorporate greenways, trails, parks, and neighborhood streets with sidewalks and bicycle accommodations (like sharrows). These major resources, combined with such features as the promenade street, the Ottumwa Trail, and the riverfront system, can provide Ottumwa with a network that links neighborhoods together and connects the natural and urban environment in a unique way.

The greenway trails, including the Harrow's Branch route, can be unpaved nature trails, which are easier to implement. The nature trails would require volunteer trail blazers, an easement/permission from the property owner, and way-finding signs.

MAJOR OPEN SPACE CENTERS

Ottumwa should develop major open space centers that are accessible to the community through the trail and greenway network and provide passive recreation opportunities. Natural amenities throughout the city will provide opportunities for open spaces both within the existing city and along the northern edge of development.

Candidates for major open space centers include:

- The wooded areas located along the northern hills and the open spaces following Sugar and Kettle Creek and the Des Moines River.
- Open space along Cedar Creek in the northern growth center.
- Turkey Island and Hamilton Park provide excellent opportunities as natural resource areas, but currently have limited access.
- Open space following the south side of the Des Moines River can create a river corridor of trails and recreational opportunities. The area provides space for expansion of The Beach, along with less intensive open space. Trails following the river can link to existing trails in Ottumwa Park and to the northern sections of the city across the rebuilt Black Hawk Street Bridge.

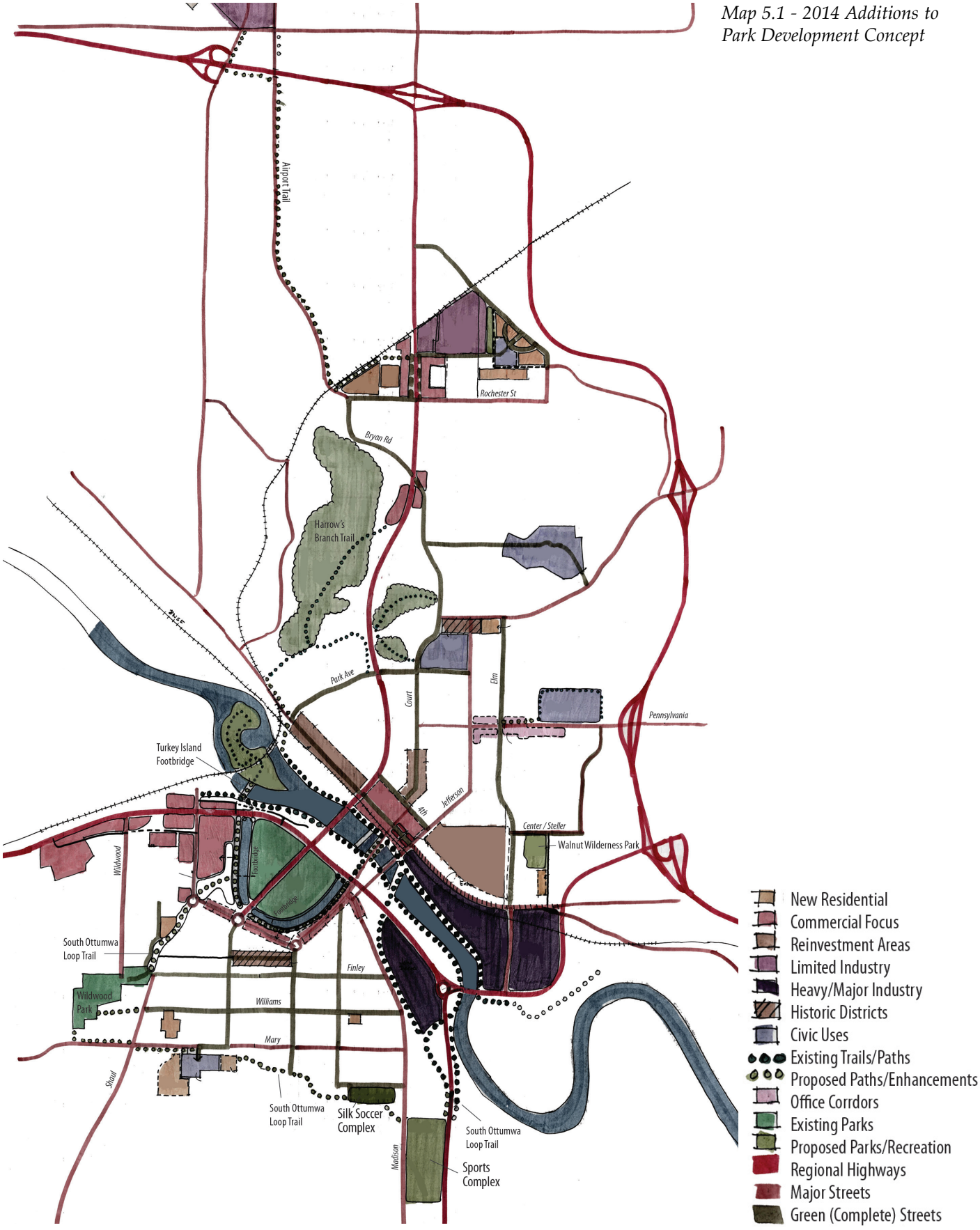
The trail system will play a crucial role in linking these amenities with existing parks and open spaces

RIVERFRONT

Ottumwa should utilize the historic value and scenic views along the Des Moines River to create a unique and attractive destination.

The Ottumwa Riverwalk on the north side of the river can link important historical sites and capitalize on the scenic beauty of the river. The Riverwalk can open the downtown Riverfront to pedestrian use and create significant opportunities for private development. It can link important historical and community features as the Water Works, the old Rock Island Bridge, the Jefferson Street Bridge, and the Depot. Concepts for the Riverfront are presented in greater detail in the Downtown section of the plan. Ottumwa should finance a riverfront master plan for this area.

Map 5.1 - 2014 Additions to Park Development Concept



PARK ADDITIONS

Sports Complex

Planning for a new sports complex is underway, but the question of location is still unanswered. There are a number of factors to consider when siting such a high impact use, including the effect of lights, traffic and parking on the surrounding area.

There has been some interest in locating the complex in Ottumwa Park. This site is not recommended, for reasons including:

- The site is not big enough to accommodate all the desired facilities
- Ottumwa Park is too important as a park resource, and the loss of this informal park space would be a significant detriment to the community
- The Complex would be a high intensity use and would disrupt the surrounding neighborhoods with lighting, traffic and noise.

This plan strongly recommends that the complex be located on South Madison, as shown in Map 5.2. Advantages include:

- Minimizes negative impact on existing neighborhoods due to lighting, traffic and noise.
- Good highway access is an important asset, particularly when hosting out-of-town teams or large tournaments.
- Trail access – the South Madison location would be a 5 minute bike ride from downtown
- A nearby 30-acre site on Silk Street could be used for a soccer complex. The site is already relatively flat, and would tie in well to the south Madison sports complex site
- Opportunity for later expansion

Athletics and recreation design consultants with experience in sports complex and parks projects should be retained to:

- Evaluate public and private needs within the city and surrounding area
- Determine market feasibility of types, sizes, quality, and quantity of sports fields and other amenities in the complex
- Quantify the potential cost recovery of the facility

Walnut Wilderness Park

The wooded area at Walnut and Center/Stellar could provide a location for an east side Wilderness park.

Map 5.2 - Sports Complex Locations

Importance of Preserving Ottumwa Park as Flexible Recreation Space

Ottumwa Park is an irreplaceable asset in the Ottumwa park system, offering the public more than 300 acres of flexible park space with picnic shelters, fishing, camping, playing fields and playgrounds. Its central location in Ottumwa makes it highly accessible to a diverse range of community members. As one of the city's most significant park resources, it should remain open for general public use, and not be restricted as a special use complex that only allows certain types of uses at certain times and days. The loss of this passive recreation space would be a significant detriment to the community, and replacing the current services offered Ottumwa Park would be extremely difficult, particularly in a location as accessible and central as Ottumwa Park. Using this space as a sports complex not only reduces the vitality of the Ottumwa parks system, but would also provide a sub-optimal location for the sports complex, for the reasons given at left. Ottumwa Park should be kept as flexible recreation space, and improved as described on the following page.

EXISTING PARK IMPROVEMENTS

Ottumwa should implement a regularly budgeted, incremental program of park site improvements and upgrades at its existing parks. Parksite enhancement and rehabilitation should be funded on a regular, predictable basis.

The entire parkland and trail system assets should be evaluated through a detailed parks, trails, and greenways master plan. The master plan should:

- Suggest specific improvements for existing parks
- Ensure that existing property is appropriately used and/or preserved
- Identify strategies for providing equitable services to all areas the community
- Consider if efficiencies can be realized by possibly selling existing assets and/or acquiring new assets
- Consider how Ottumwa can better utilize existing parkland to improve the overall level of park service
- Improve multi-modal access to parks by identifying strategic extensions of trails, sidewalks, and on-street bike features that create routes between parks and residential areas and other civic and school facilities

Specific priorities for two of Ottumwa's key park assets, Ottumwa Park and Turkey Island, are listed below.

Turkey Island

Turkey Island should be preserved as a wilderness area with low-impact opportunities for public enjoyment. Improvements would include:

- Access: A footbridge to the island on the south side. The footbridge should be at least 14-feet in width to allow maximum use and emergency access. A pedestrian connection on the north side is possible, but not necessary.
  - The footbridge, while costly, has the potential to be an iconic symbol for the city, providing access to one of the city's most unique assets.
- Trail: An unpaved, loop nature trail for pedestrians, starting and ending at the footbridge. This trial could be created at a low cost by using volunteer trail blazers.
- Interpretation: Interpretive elements along the bridge or nature trail (such as signs/plaques) that highlight the historic significance, cultural meaning, and environmental features of the island.

Ottumwa Park

Ottumwa Park should be enhanced as a community park resource.

The city should create a redevelopment plan to fix roads and trails, and to maintain/add:

- Informal ball fields - These are fields that are available for informal use by the general public, such as a group of kids playing a pick-up baseball game.
- Ways to access the water, such as boat rentals - The water is a tremendous asset that is under-used throughout Ottumwa. The Park is an ideal location to connect residents to the River for both active and passive recreation.
- A promenade along the outer edge, surrounding a civic green - This would provide an accessible route for walking and biking for all ages.
- Pedestrian bridges that connect to adjacent commercial and residential areas - As one of the city's most significant park assets, Ottumwa Park should be accessible by multiple modes of transportation, including walking and biking.

The city should pursue partnerships with private entities to offer additional programming and recreation opportunities. For example, private vendors could offer service seasonally or year-round for food service, bike rentals, or boat rentals.

Private development and public corridors along the edges of the park (see "The Loop" in the Development Concepts chapter) should be oriented to the park.

CULTURAL RESOURCES

Ottumwa historic districts should be a significant destination in the city and linked to the remainder of the city through the greenway system.

Ottumwa's cultural resources are highlighted by about a dozen sites listed on the National Register of Historic Places and several National Register Districts, including:

- Fifth Street Bluff Historic District. This area provided a scenic view and a prominent location above the river valley for wealthy Ottumwa residents of the late 1800s. Construction in this area occurred in three stages, ending in the 1920s. The Italianate and Tudor Revival homes are linked to the city by Court Street.
- Court Hill Historic District. This district follows Court Street, from Sixth Street to Woodland Avenue, and includes 84 structures. The stately homes that dominate the district were constructed between the 1860s and 1920s and were connected by streetcar to the downtown by the 1890s. Enhancing the Court Street corridor and providing trail links along Woodland Avenue and Ottumwa Street will support this distinctive part of the city.
- Vogel Place Historic District, located between the Cemetery and the Country Club. This district and its early 20th century homes also had access to the Ottumwa Electric Railroad line via Court Street.
- North Fellow District, located at the 1200 block of North Fellow Street and 1204-1212 North Elm Street. This district reflects a typical post-World War 2 neighborhood style and has been well preserved.
- Historic Railroad District, located along the railroad tracks at River Drive and Main Street. This district includes the historic railroad station and Ballingall Park.
- Cemetery District, including the cemetery's original 10-acre plot from 1857 and four key structures.

Court Street is the common thread linking these districts to each other and to downtown Ottumwa. Corridor enhancements should include graphics and other features to call attention to their significance, making them a major part of the experience of Ottumwa.

The City should also work toward other National Register designations for educational, financial, and marketing reasons. Potential historic districts include Downtown Ottumwa, Dahlonega, and the Chester Avenue corridor.

NEIGHBORHOOD PARK FINANCE MECHANISM

Ottumwa should establish a mechanism for park acquisition and trail construction, to ensure reservation of well-located and appropriately sized spaces.

Park acquisition may take place through required dedication of appropriate parcels by developers. Construction of planned trails can also be required as part of subdivision development. To require dedication of land or construction of trails by developers, Ottumwa should establish a policy for all new developments that would be implemented through the City's land development ordinances.

The obligation for land dedication is typically a function of:

- Acres in the development
- Development density established by the development's zoning
- Number of people per housing unit, differentiating between single and multi-family residences
- The City's desirable level of service standard for acres of neighborhood parkland per 1,000 residents

Due to the piecemeal nature of development, the required amount of land dedication for any single development may be smaller than the ideal neighborhood park size. One strategy to assemble larger pieces of land is to request that developers locate dedicated land at the edges and corners of the development, so that adjacent developments can combine several small parcels of dedicated land to form one larger parcel.

Ottumwa Parks & Recreation staff should actively pursue funding for trail construction by establishing an ongoing budget for trail construction & improvement and using those funds as a match for grant funding from state, federal and non-profit sources. The Ottumwa Regional Legacy Foundation is an important potential source for park funding.

A note on payments "in lieu"

Some Iowa cities also allow payment of cash in lieu of dedication of land by developers. While the law is clear that a city cannot mandate a payment in lieu of dedication, cities such as Ankeny, Johnson and Iowa City have provisions in their dedication ordinance that allow payment of cash in lieu of dedication, only at the request of the developer. Other cities, such as West Des Moines and Clive, prohibit such dedication. The payment in lieu of dedication approach to park financing requires local processes to track expenditures to the direct benefit of those areas that pay the fee. Ottumwa park officials should consult with the Ottumwa city attorney to determine their approach on this issue.

QUALITY PUBLIC SERVICES

Ottumwa's capital facilities represent major community investments. Residents' satisfaction with their community is closely tied to their experiences and perceptions of these basic resources. This part of the Ottumwa Plan evaluates operation of public facilities and infrastructure, assesses their physical condition, and suggests policies and actions which can help Ottumwa

maintain quality services into the future.

■ GOALS

In continuing to provide good municipal services to its taxpayers and users, Ottumwa should:

• ASSURE THAT UTILITIES SYSTEMS CAN MEET CAPACITY AND ENVIRONMENTAL QUALITY DEMANDS.

• MAINTAIN THE QUALITY OF OTTUMWA'S PUBLIC SERVICES IN THE MOST ECONOMICAL WAY POSSIBLE.

• SEEK THE GREATEST POSSIBLE EFFICIENCIES IN THE DEVELOPMENT AND OPERATION OF FACILITIES.

• REHABILITATE AGING INFRASTRUCTURE TO MAINTAIN THE QUALITY SERVICE LEVELS EXPECTED BY RESIDENTS.

■ PUBLIC FACILITIES

This section examines the current conditions of Ottumwa's public facilities, and infrastructure systems. The tables beginning on page 94 provides a full inventory of public facilities in Ottumwa. Public facilities include buildings and structures that are used in meeting municipal responsibilities for public services.

• City Hall

City Hall, constructed in 1912, is located in downtown Ottumwa. The building was originally constructed for the post office and was converted to City Hall in 1965. The three-story building is the main office for such City departments as Finance, City Clerk, Purchasing, Human Resources, City Administrator, Mayor, Community Services, Parks, and Engineering. Responsibilities of the Community Services Department include Planning and Zoning, Health and

Inspections, the Airport Industrial Park, Grant Administration, and Community and Economic Development. The Municipal Credit Union is located in the basement of City Hall. In conjunction with the Wapello County Sheriff's Department, the Police Department recently moved to the new Law Enforcement Center.

City Hall is in fair condition, but specific problems exist and require attention. The building is not fully accessible to disabled people because its elevator is too small to accommodate wheelchairs. A standard size elevator may require a new location in the building. The Fourth Street stairs, the windows and the heating and cooling system also require replacement or upgrading. The previous move of the Police Department and Ottumwa Transit Authority from the building opens new space, which should be systematically reprogrammed. Finally, a scarcity of parking around City Hall remains a concern; however, additional spaces have become available with the move of the Police Department.

• Ottumwa Public Library

The Ottumwa Public Library was constructed in 1901 by the Carnegie Foundation. The library is in good condition but has limited space and needs updating. The third floor is not accessible to the disabled, the collection should be updated, and the interior requires renovation. A major building envelope problem is the accumulation of moisture around the foundation of the building. Other facility issues during the planning period will include identifying areas for future expansion and upgrading the automation system.

• Police Department

The Ottumwa Police Department and the Wapello County Sheriff's Department have constructed a joint

Law Enforcement Center attached to a 99-bed jail. The departments share a dispatch center and intake area but otherwise occupy separate sections of the building. The new facility, located at 330 West Second Street, is a two- story facility that should provide adequate space through the planning period.

• Fire Station

The Ottumwa Fire Department maintains two fire stations. The Central Station is located at 201 N. Wapello Street and serves the downtown and northern section of the city. The two-story masonry building was constructed in 1964 and needs significant improvements. The Southeast Iowa Response Group is also housed at the Central Station, reducing the Fire Department's available space. Significant building issues include upgrading heating, cooling, and electrical systems, providing accessible bathrooms, and interior remodeling. The building currently does not accommodate women fire fighters, although adjustments to the second floor dormitory are possible. The Central Station is conveniently located for most of its service area; however, response time to the Airport is 8.5 to 9 minutes. As a result, additional development in this area and along the northern edges of the city may require a north substation.

A second fire station is located at 250 N. Ransom and serves the southern section of the city. The station was constructed in the 1950's and has experienced cosmetic improvements during the 1990's. Additional improvements will be necessary, including heating, cooling, and plumbing system upgrades. The Department will also need to retain additional secretarial staff and establish a routine program of upgrading and replacing equipment and vehicles.

• Public Works Shop and Yard Facility

The Public Works facility, located at 1010 Gateway Drive, includes two principal buildings -- a two-story building built in 1975 which contains four bays, offices and the Parks Department shop; and a smaller building built in the early 1980's for the traffic and sewer departments. Adjacent to these buildings are a salt storage building and an open yard. A second yard for dirt and other materials storage is located across the railroad tracks and is leased from the railroad. Lack of covered storage space is the key issue for the facility. The buildings are in good shape but lack an emergency generator. A program of regular upgrade and replacement of equipment needs to continue through the planning period.

• Ottumwa Industrial Airport

The Ottumwa Industrial Airport is located north of the city, along Highway 63. The airport was originally constructed during World War II as a naval training base and was acquired by the City in the late 1940's. The airport and industrial park cover over 1,200 acres and contain over 53 buildings, 23 of which are owned by the City. Many of the buildings are in poor condition and will require significant repair during the early part of the planning period. The runways are in good condition but line-of-sight problems will require demolition of the terminal and Building #22. United Express and the FAA currently use the terminal facility; its reconstruction is a major priority.

The City has entered into a program with the Iowa Department of Transportation to market the airport. A program to upgrade or demolish buildings in the worst condition should accompany this effort. The city also should improve the overall image of the facility, including improve directional signage to, and within, the Airport.

• Cemeteries

The City operates three cemeteries, most recently assuming operation of the Ottumwa Jewish Cemetery in 2000. The historic Ottumwa Cemetery, the City's principal cemetery, is located along North Court Street, covers 66 acres, and creates a unique arboretum. The Ottumwa Cemetery grounds also include a Superintendent's home, the main offices, and the maintenance shop. The City also owns two other homes located on, or adjacent to, the cemetery property. The office, completed in 1904, is built of Bedford limestone; the structure is in good condition but no longer provides adequate space. A City-owned house at 343 E. Park Avenue would provide adequate office

space.

The cemetery maintenance building is in good condition and should meet the city's needs through the planning period. Calvary Cemetery, located along Pennsylvania Avenue, and the Jewish Cemetery on East Main Street are both in good condition. The Ottumwa Jewish Cemetery only has 20 remaining plots and will require landscaping and site work during the early part of the planning period.

•Parks Shop and Maintenance Facilities

The Ottumwa Parks Department shop and yard are a small part of the Public Works Department shop and yard at 1010 Gateway Drive. The facility provides a limited amount of space for the Parks Department, but all maintenance work is handled by Public Works. The City should evaluate additional space needs during the planning period. Moving the Parks shop would also provide the additional space needed by the Public Works Department at the Gateway Drive location.

•The Ottumwa Coliseum

The Ottumwa Coliseum was originally constructed in 1934 as a cavalry building. The two-story masonry structure has a large meeting room on the first floor and a ballroom on the second floor. The 9,600 square foot building also includes a mezzanine area which is currently closed off. A facility study identifying future needs has been completed on the building. The 1996 Downtown Development Guide proposed expanding it as a community civic center. Further studies suggest that the building is poorly adapted to contemporary demands for quality performing arts, exhibition, conference, banquet, and other events space.

• The Beach-Ottumwa

The Beach-Ottumwa is a water park facility that was opened in 1992. It is located at 101 Church Street, just south of the Ottumwa Dam and includes both an indoor and outdoor pool. The indoor facility provides an 8-lane pool with a small catch pool and slide. The facility also includes locker rooms, restrooms, concessions area and office space. The outdoor facility is located next to the Ottumwa lagoons and includes a zero depth pool, wave pool and two large slides. A boat dock on the Lagoon is used for paddle boats and kayaks. Volleyball and basketball courts are also located on the grounds.

The facility is in good condition but protection from future flooding must be addressed. Improved flood protection could avoid revenue losses during times of high water. The City should also consider expanding the facility to include additional wet and dry activities. Additional recreational opportunities at the facility will broaden the market base of the Beach and can move it closer to economic self-sufficiency.

•Ottumwa Municipal Golf Course

The 18-hole golf course is operated by the City of Ottumwa. The facility features irrigated greens and tees, a clubhouse and various course-related buildings. The clubhouse is a wood structure that was built during the 1960's and is used for a pro shop, snack bar and restrooms. The clubhouse is in good condition. Possible expansion to include a banquet room would encourage year-round use.

PUBLIC FACILITIES PRIORITIES

Based on the inventory, Ottumwa's highest public facility priorities are:

• *Ottumwa City Hall.* Complete a comprehensive needs evaluation for the Ottumwa City Hall, including reprogramming of available space, and begin implementation of the recommendations.

• *Central Fire Station.* Upgrade the Central Fire Station and monitor the need for a northern substation.

• *Removal of Building #22 and the terminal at the Ottumwa Industrial Airport.* Replace the terminal with a new facility.

• *Demolish or upgrade key buildings at the Ottumwa Industrial Airport.*

• *Ottumwa Cemetery.* Relocation of the cemetery office to 343 E. Park Avenue.

• *Bridge View Center.* Replace the obsolete Coliseum with a new, state-of-the-art events facility accommodating performing arts, exhibitions, conferences, banquets, and other community events. Incorporate features or interpretation of the Coliseum in the design of the new facility.

• *Reinforcement of the Ottumwa lagoons, specifically in*

the Beach area.

■ INFRASTRUCTURE

This section presents an inventory and evaluation of the City's existing infrastructure systems. It includes water distribution and storage, wastewater collection and treatment, electrical system and solid waste disposal. The tables beginning on page 108 provide a complete assessment of the recommendations for infrastructure systems. Key findings and projects in progress are summarized below.

WATER SYSTEM

• Water Supply

The Ottumwa Dam, located along the Des Moines River, is the city's primary source of water. When the water quality of the Des Moines River drops, water from the city park lagoons or Black Lake Quarry is used to boost quality levels. The current water supply will meet the city's needs through the planning period. The City should complete a study of the Jordan Aquifer, as a supplemental source during periods of elevated nitrate levels in the Des Moines River.

• Water Treatment

The Ottumwa Water Treatment Plant is located on the north side of the Ottumwa Dam. The facility is producing approximately 6 million gallons a day, well below design capacity. For this reason, the treatment plant should be able to meet the needs of residential growth through the planning period. Because about half of City water is used by industry, large industrial growth could require expansion of the facility.

• Water Storage

Once water is treated, it is stored at one of five reservoirs, three of which are above ground and two below. The reservoirs are in all in good condition and, with 16.7 million gallons of storage capacity, should meet the city's needs through the planning period. A pump station is located at each of the tanks, with one at Webster Street. The pump stations are in good condition, but two of them are not linked to the water treatment plant. The city should consider linking these pump stations to the plant to permit monitoring at one location.

• Water Distribution

The City of Ottumwa maintains approximately 160 miles of water mains, most of which are six inches in diameter. The city also has 1,400 to 1,500 fire hydrants that are all regularly maintained. Fire flows have been an issue in the area of the Quincy Mall, but connecting new development into the main line should stabilize the problem. Line breaks have become an increasing problem. The City Public Works Department and the Water Works should collaborate to replace lines in conjunction with street projects and to complete a systematic plan for upgrading the most deteriorated lines.

• Ottumwa Dam

The Ottumwa Dam provides the main water source for the City of Ottumwa. Spanning 750 feet, the original dam and power plant were constructed in the 1920's. The dam itself was rebuilt and lengthened during the 1960's and again had extensive work done during the late 1990's. Renovations should be completed and the two oldest generators should be rebuilt.

WASTEWATER SYSTEM

Most of Ottumwa's sewer system is made up of combined sanitary and stormwater sewers. This creates two significant problems:

• Excess flows going to the treatment plant and basement flooding during peak rain events; and

• Discharge of combined wastewater and stormwater to the Des Moines River because of combined sewer

overflows (CSO's).

The City is in the process of developing a long-term plan to address these issues and to meet the requirements of the Environmental Protection Agency and the Iowa Department of Natural Resources. The City has proposed a 20 to 30 plan, based on funding, that begins the process of separating and repairing sewers at various locations throughout the community.

The City's lift stations are in good condition and are routinely upgraded and maintained. It is Ottumwa's intent to eliminate some of its 21 lift stations once the proposed plan is approved by regulatory agencies and implemented by the City.

Construction of a sanitary interceptor sewer in the Sugar Creek Corridor will also help relieve some sewer capacity problems from the downtown area. This line will serve new development and divert some flows from the downstream system that has several CSO's associated with it. The Sugar Creek line will also permit the retirement of six sanitary lift stations. While not a substitute for reductions in inflow and infiltration, the interceptor can reduce flows to older parts of the system.

Extensive work was completed on the wastewater treatment plant during the late 1990's to convert the plant to an activated sludge operation. The plant runs well below capacity and continually meets its permitted pollutant discharge levels, even during storm events. Excess flows from storm events can be stored and treated and discharged as storm flows recede. Most excess water is directly discharged to the river through the registered CSO's.

STORM WATER DRAINAGE

Table 6-4 reviews the storm drainage system for the City of Ottumwa. Issues identified in the storm drainage inventory include:

- Flooding on the southern side of the city because of the inability of the combined sanitary and storm water sewer system to handle peak rainfalls.

- Flooding of the Lagoons, a condition worsened by the Richmond Trunk flowing into the Lagoons during heavy rainfalls.

- Street flooding along Hand Avenue, Ferry Street, Vine Street, Orchard Street, Hayne Street and the Swartz Drive area.

New development in the north and south parts of the city occurs outside the 100- year flood plain and should not present problems as long as ordinances and regulations dealing with stormwater management and floodplain development are enforced. The City should complete a master plan for the upgrade and expansion of the stormwater system, and separation of storm and sanitary sewers. Preliminary estimates of the cost of a separation range from $25 to $30 million. The City should also ensure that right-of way is dedicated for future drainage structures on the north and south sides of Ottumwa.

SOLID WASTE MANAGEMENT

The City of Ottumwa has a five-year contract with a private hauler for the collection of solid waste. During 1999, the Solid Waste Planning Area made up of Davis and Wapello Counties failed to achieve its goals for solid waste reduction. Ottumwa and its solid waste contractor, as part of this planning area, should continue to identify programs to advertise the benefits of waste reduction and recycling.

• Ottumwa Landfill

The Ottumwa Landfill is located west of the Ottumwa Industrial Airport. The landfill is owned by the Ottumwa / Wapello County Solid Waste Commission and has been operated by the City since 1988. The 290-acre facility had a 200 year design capacity, but recent changes in regulations regarding proximity to airport runways has reduced this to 50 years. The city is working with the IDNR on horizontal expansion of the landfill to the south.

• Ottumwa Recycling Center

The Ottumwa Recycling Center is owned and operated by the Ottumwa / Wapello County Solid Waste Commission and opened in 1992. The facility collects a wide array of materials including latex paint, batteries, antifreeze, oil, transmission fluid, and sharp materials. The facility is in good condition but is underutilized. Surveys done during 1999 and 2000 found that approximately 60% of Ottumwa's households were using the curbside pick up of recyclable materials. To meet waste reduction goals, this should increase to approximately 80%. Other program needs include extending recycling services to residents of multi-family housing and increasing the

participation of area businesses.

INFRASTRUCTURE PRIORITIES

Based upon the inventories provided, Ottumwa's highest infrastructure priorities are:

• Replacement of the most deteriorated water mains in conjunction with street improvements.

• Diversion of stormwater flows away from the sanitary sewer system and the waste water treatment facility by reduction of inflow and infiltration.

• Completing a master plan for separating sanitary and stormwater flows and improving the efficiency of the City's stormwater management systems. With completion of the plan, establishing an incremental, phased program of separations, establishing priorities according to accepted standards.

• Considering development of an interceptor sewer in the Sugar Creek Corridor.

• Expanding participation in recycling programs.

• Defining an expansion plan for the Ottumwa/

Public Facilities Inventory

City Hall

105 East Third Street

Description

The three-story masonry Ottumwa City Hall was originally constructed in 1912 for the US Post Office and was converted to the City Hall in 1965. The basement provides space for the Municipal Credit Union. The Finance Department, City Clerk, Purchasing Agent, Human Resources, City Administrator, and Mayor are all located on the first floor. The second floor houses the Community Services Department with its various functions; Council Chambers; and Public Information Coordinator. The Parks Department and Engineering are located on the third floor. Restrooms are also located on each of the floors.

On-street parking is located on the north, east and south sides of the building, and a lot is available approximately two blocks to the west. The west entrance and offices are handicapped accessible, but the elevator cannot accommodate wheelchairs.

Evaluation

The City is currently preparing a Request for Proposals to study repairs and facility needs. Specific areas of concern include the north entrance stairs, the roof, and flashing and gutters. The building must have a fully accessible elevator, probably requiring a new location in the structure. The restrooms on the 2nd and 3rd floors should be updated. Windows were replaced in 1975 and parts are no longer available. The boiler has been updated but heating and cooling are hard to control.

The Police Department's move out of City Hall frees a large amount of space, both on the first floor and in the basement. It will also open up the dock area on the east side of the building. The Transit Authority's move also frees space on the third floor.

Recommendations

- Complete a full study of the facility's needs. This should include a study of space needs for each of the departments.

- Based on the needs assessment establish a program of facility improvements. Place highest priorities on building envelope maintenance and elevator replacement.

- Reprogram space vacated by Police Department and Transit Authority.

- Continue routine maintenance.

Public Library

102 West Fourth Street

Description

The Ottumwa Public library is a 25,000 square foot Carnegie structure built in 1901. The three-story building in Downtown is Ottumwa's only library. The facility is handicapped accessible except for the third floor, which is about 700 square feet in stack use. The circulation desk, stacks, reference desk, periodicals, reading room, display space and small office are all located on the first floor. The basement consists of a children's section, meeting room, restrooms, staff space, office space, mechanical room and storage space.

The Ottumwa Library's collection consists of 65,000 pieces of material with an annual circulation of approximately 100,000 pieces. The facility has an automated circulation system and card catalog, 4 computer stations and 6 staff computers.

Evaluation

The building is in good condition with some general updating needed. The roof, windows and air conditioning system were all replaced during the late 1990's. The exterior of the building needs cleaning and minor tuckpointing. The foundation has moisture problems.

The interior of the building is in good condition but requires updating with new carpeting, improved lighting, and wiring for technology needs. The shelving is old and needs refurbishing. For improved accessibility to the disabled, automatic doors for the bathrooms and improved access to the third floor are required.

The facility is used to capacity and 85% of the collection is at least 25 years old. Other space needs include additional office space, meeting rooms and computer work stations.

Recommendations

- Address excess moisture around the foundation of the building, possibly with tiling.

- Evaluate interior needs with scheduled replacement or refurbishment of the oldest features.

- Identify areas for future expansion, including expansion of the existing facility to the west or development of a branch facility.

- Initiate improvements for full handicapped accessibility.

- Upgrade automation systems platforms during the early part of the planning period.

- Develop and initiate a program for updating the collection.

- Continue routine maintenance.

Ottumwa Police Department

330 W. Second St.

Description

During the fall of 2000 the Ottumwa Police Department moved from the City Hall to a new joint use facility at 330 W. Second Street. The new law enforcement center includes the Wapello Sheriff's Department and is attached to the 99-bed Wapello County Jail.

The new facility is a two-story masonry and concrete panel facility. It includes a joint dispatch center, with the remainder of the building divided between the two agencies. The City occupies the east side of the facility. The first floor of the Police Department includes public restrooms, 4 interview rooms, waiting area, records office, conference room, men's and women's locker rooms, workout room, department property storage room, armory,open office / work area, break area, property evidence area, a shared intake area and offices for the training officer, DARE office, data communications, and the watch commander.

The second floor consists of a large training / public meeting room, open office section, clerical staff area, Chief's office, restrooms, conference room, office space for lieutenants, 2 limited access restrooms for employees, 3 spaces for investigators, 2 interview rooms, large office area and utility rooms.

Parking will be located on-site, but garage space for patrol cars is not provided.

Staff includes 36 sworn officers, 3 clerical staff, 2 community service officers, 1 parking officer and 6 dispatchers. The Ottumwa Police Department also has 10 marked and 6 unmarked vehicles.

Evaluation

The new facility will meet the city's needs through the planning period. The biggest concern for the department will be the recruitment and retention of officers.

The Police Department is also working on grants for computers that would be placed in each of the cruisers.

Recommendations

- Identify ways to recruit and retain police officers.
- Establish a program of routine maintenance and upgrades for the new facility.

Ottumwa Fire Department

Central Station 201 N. Wapello St. northwest corner of Fourth and Wapello St.

Description

The Ottumwa Central Fire Station is a two- story masonry building that was constructed in 1964. The Southeast Iowa Response Group (S.I.R.G.), which handles hazardous materials for a 9 county area is also located at the Central Fire Station.

The first floor of the facility includes office space, kitchen / assembly area, 4 truck bays and 1 garage bay. The dorm, lockers, showers and restrooms are located on the 2nd floor and the weight room, office, boiler room, storage and recreation / assembly room complete the basement of the building. There are four public parking spaces in the front of the building and additional staff parking in the rear.

Equipment at the Main Station includes: 1983 and 1997 pumpers, a 1977 snorkel unit, a 1993 hazmat response unit, a 1990 emergency pick-up, 3 trailers for hazmat responses, a 1993 staff vehicle and two 1995 staff vehicles.

The one-story masonry south station was constructed in the 1950's. The facility includes two truck bays, a living room, kitchen, restroom / shower, and dorm area. There is a small gravel parking area in the rear of the building but parking is limited. Equipment located at the facility includes a 1978 pumper, a 1990 pumper, and a 1997 rescue boat.

The Ottumwa Fire Department consists of three ten-man crews, a chief, fire inspector, and training officer. The department covers the entire City of Ottumwa with a rural volunteer fire department covering all areas outside city limits. EMS is handled by a private service based out of the hospital. The fire department responds to all traffic accidents and the EMS service responds to all fire calls.

Evaluation

The Central Fire Station is in fair condition and has easy access to most of the northern section of the city. Access to northern growth areas, including the Airport, could become an issue during the planning period. Response time to the airport is currently 8.5 to 9 minutes. Further development of the area will require an additional substation to the north.

Recent improvements to the Central Station include new roofing, entryway, doors, and two new air conditioning units. A third air conditioning unit will need to be replaced along with the air handling compressor.

A new breaker panel was completed in the late 1990's at the Central Station, but extensive electrical work still needs to be completed on the building. This would include replacing of wiring , the main electrical panel and the generator change over panel. The bathrooms will also need to be upgraded and made handicap accessible. Other problem areas include an outdated phone system, cracking hose tower and lack of storage space. Currently the hazmat trailers are stored outside the building. There is also a lack of training room and space for female firefighters.

Some cosmetic and structural work was completed on the South Fire Station during the 1990's. These improvements included work on large cracks in the walls and a new roof. Nevertheless, additional improvements are necessary. These include replacement of the inefficient heating and air conditioning systems and plumbing system. The City will also need to address handicapped accessibility issues at the facility.

Other issues which must be addressed include the need for secretarial staff within the department and routine vehicle and equipment replacement.

Ottumwa Fire Department (...continued)

Recommendations

- Perform routine maintenance and upkeep as needed.
- Conduct a building reuse plan to determine priorities needs and plan of action to meet the needs of future firefighters.
- Complete necessary improvements to mechanical systems, including HVAC and electrical systems at both sites.
- Monitor need for a north satellite station.
- Plan for conversion of second floor dormitory space to accommodate women fire fighters.
- Improve efficiency of heating and air conditioning systems at both stations.
- Implement a routine schedule of replacement for vehicles and equipment.

Public Works Shop/Yard

1010 Gateway Drive

Description

The Public Works shops consists of two separate buildings. The largest of the two buildings, a metal structure built in 1975, houses the Parks Department, sewer maintenance, street maintenance, and mechanics. It is a two-story facility with a small break room and storage area on the second level. The main level consists of a 4- bay area for mechanics, a Parks Department area, and offices for a secretary, Public Works Director, and each of three division heads (sewer maintenance, street maintenance and mechanics). The restrooms are not handicapped accessible. The building also includes a small (8x20ft.) storage area in the mechanics area and a supply area. Five mechanics work out of the building, performing repair services for all City vehicles.

A second building, located at 1010 Gateway, is used by traffic and electrical maintenance. This smaller metal building was built in the early 1980's and is handicapped accessible. The building does include an upper level for sign making equipment. The main floor consists of a booth for painting vehicles, electrical storage area, a lunch room, two offices, and two bays for parking vehicles.

A metal building, built in 1997, is used for salt storage.

The Public Works yard covers a 70x300 foot area at 1010 Gateway Drive. The area is used for storage of large equipment. Some equipment is housed under 2 lean-tos, but most of the equipment has no covering. A small area located across the railroad tracks from the yard is used for dirt and other materials. This area is leased from the railroad.

Evaluation

Both buildings are in good condition. Storage is limited especially for housing vehicles and larger equipment.

The facilities also lack an emergency generator which could be essential during a major storm and power outage.

A cycle of routine replacement and upgrade of equipment has been established, but the asphalt paving machine may need to be replaced ahead of schedule.

More space is needed in the yard area but onsite expansion area is limited. Additional covered storage is also needed for equipment.

Recommendations

- Continue routine maintenance and upkeep of the facilities.
- Acquire an emergency generator for at least the main Public Works Maintenance Building.
- Construct additional enclosed storage area for large equipment that is currently stored outside.
- Continue program of regular upgrade and replacement of equipment.
- Provide for handicapped accessible restrooms.
- Improve accommodations and amenities for employees.
- Countinue routine maintenance
- Construct additional covered storage

Ottumwa Industrial Airport

North US Highway 63

Description

The Ottumwa Industrial Airport was constructed during the early 1940's as a naval training base and was acquired by the City in the late 1940's. The airport and industrial park cover 400 acres with an additional 800 acres of agricultural land. There site includes 53 buildings and 2 asphalt runways. Runway 13/31 is 5,885 feet long and 150 feet wide and runway 4/22 is 5,174 feet long and 200 feet wide. The runways are lighted and have several navigational and landing aids including VASI, ODAL, MALs, V.O.R. (a directional beacon), DME and LOVC.

Of the 53 structures located at the Airport 23 are owned by the City and most are original to the facility. The terminal is a three-story brick-faced, block building that houses United Express, a vacant restaurant area, FAA storage area, and office space. The main level is handicapped accessible but the second and third floors are not. A second steel building provides office and maintenance space for the Ottumwa Flying Service, Inc. The service provides fueling, repair and maintenance, instruction, rental, storage and charter services. The city owns one 40,000 square foot, brick hangar and six metal T-hangars. There is also an airport staff maintenance building, a fuel farm, warehousing and numerous other buildings which are rented out to local businesses and industries.

Evaluation

The Ottumwa Industrial Airport runways are in good condition. Many of the buildings are in poor to fair condition. Building #22 is scheduled for demolition and the terminal will be replaced in 2001 because of line-of-sight problems. A new fuel farm is also scheduled for construction and installation.

The T-hangars are full and will require expansion with further development of the facility.

The City has established a five year capital improvement program for replacement of the terminal and for other improvement projects. A marketing campaign with the Iowa Department of Transportation, the Commercial Air Service Marketing Program, is being used to help stimulate increased usage of air travel available at the airport. Only two to three of the vacant buildings at the facility are judged to be usable. Increased use of the facility will require numerous improvements to the Industrial Park, including replacement and extensive repairs to many of the buildings.

Other needs for the airport include street work, signage, landscaping and entrance features. The internal signage is inadequate and the scattered numbering system for the buildings often leaves the visitor confused.

Recommendations

- Update the facility master plan and include a demolition schedule for deteriorated buildings.
- Continue existing efforts for routine maintenance and repair of existing structures.
- Complete identified projects including the demolition of building #22, construction of a new terminal building along with a new taxi-way.
- Construct hangars based on increased growth and demands.
- Improve the overall appearance of the facility to attract developers who would assist in renovating existing structures.
- Beyond removal of the terminal and building #22, address line-of-sight problems.

Ottumwa Community Cemeteries

Description

The City of Ottumwa currently owns and operates three cemeteries: Ottumwa Cemetery, Calvary Cemetery, and Ottumwa Jewish Cemetery.

Recommendations

- Complete the Ottumwa Cemetery Plan update in 2001.

Calvary Cemetery

SW corner of Pennsylvania and Traul Ave.

Description

The 140-year old Calvary Cemetery includes approximately 21 acres, providing capacity for the next 100 years. The cemetery site has extensive tree cover. A wood-frame, 400 square foot building used for storage is also located on the grounds.

Evaluation

Calvary Cemetery is well-landscaped and in good condition. Some straightening is required for the oldest stones and water lines need replacement. In addition, drive paving should be extended and repairs made to the gates.

Recommendations

- Continue routine maintenance.
- Implement incremental improvements at Calvary Cemetery, including drive paving, stone straightening, and water line installation.

Ottumwa Cemetery

NE corner of Park Avenue and Court Streets

The historic Ottumwa Cemetery covers 66 acres north of Downtown Ottumwa. The cemetery opened in 1856, with numerous improvements made throughout its early history. These include Edgerly Gateway in 1904 and the office / chapel in 1905. The 1,000 square foot facility is not handicapped accessible and is used to capacity. Landscape improvements throughout the years have made the Cemetery a unique arboretum that has become a major community open space. Ottumwa Cemetery is listed on the National Register of Historic Places.

Description

The main maintenance building for both the Ottumwa and Calvary Cemetery is located along Court Street. The two-story , 3,600 square foot building has a walk-in basement and garage with concrete floors and wood framing. The building was constructed in 1961 and has a new roof, furnace and exterior work.

Three homes are also located on the cemetery grounds. The stucco one-story home is currently rented as a residential unit and has approximately 2,000 square feet. A second home at 317 East Park Avenue is a brick structure that is also rented. The superintendent's home is located a 1218 North Court Street. The 1906 home has approximately 2,200 square feet with a two-level basement.

The Ottumwa cemetery department also handles all burials at Mount Olive Cemetery, but the facility is maintained by Indian Hills Community College.

Evaluation

The Ottumwa Cemetery is in excellent condition. Recent improvements have included expanding the hard surface road by 2.5 miles, establishing two new sections, expanding the water lines, refurbishing the entrance and tuck- pointing of all the buildings. Remaining needs include: straightening stones, replacing water lines, expanding hard-surfaced roads, and platting new plots.

The main office is in good condition but has very limited space. Because of space constraints the office will need to be moved during the planning period.

The main maintenance building, located at Ottumwa Cemetery, is in good condition. Repairs, including a new roof, furnace and painting, have been completed in the last five years. Space is a problem at the facility and an expansion will need to be completed during the planning period.

The three homes located adjacent to Ottumwa Cemetery are all in good condition with some minor work needed. The home at 343 E. Park Avenue would be an excellent location for the Cemetery office. Necessary improvements to 343 E Park include:

- Replacement of windows, roof, sidewalks and driveway.
- Exterior masonry work.
- Handicapped accessibility improvements.
- Connection to City sewer system.

The superintendent's home will require repairs that include a new roof and tuck pointing during the planning period.

Ottumwa Cemetery continued

Recommendations

- Adapt a City-owned home at 343 E. Park for cemetery offices.
- Establish a plan for regular replacement and upgrade of cemetery equipment.
- Expand chapel with move of the office. Assure that all work is consistent with the historic character of the cemetery.
- Expand maintenance facility.
- Make required improvements to the Superintendent's house.

Ottumwa Jewish Cemetery

529 East Main

Description

During 2000, the Ottumwa Jewish Cemetery is to be turned over to the care of the city from B'nai Jacob Synagogue with a $54,000 perpetual care endowment. The one acre cemetery has approximately 20 remaining plots.

Evaluation

The Ottumwa Jewish Cemetery is in good condition but will need landscaping work and water extended into the cemetery.

Recommendations

- Complete landscaping upgrades and water extensions to the Ottumwa Jewish Cemetery.

Parks Department Maintenance Shop and Yard

1010 Gateway Drive

Description

The Parks Departments maintenance area is currently part of the Public Works garage. Approximately one-eighth of the area is used by the Parks Department for storage of equipment and general maintenance operation. Currently the Public Works Departments handles all equipment repairs.

The park yard is adjacent to the maintenance shop and is also shared with the Public Works Department. The yard provides a limited amount of defined space for the Parks Department.

Evaluation

The garage is in good condition but provides limited space. A separate parks garage would allow the Parks Department to set priorities for repair projects and provide additional indoor storage space. Any new space should include a green-house area for the city.

The fenced area of the yard provides secure storage but space will be a major issue as the Department grows.

Recommendations

- Continue routine maintenance.

- Evaluate options for expanding on-site or nearby storage of Parks Department equipment and materials.

Ottumwa Coliseum

102 Church Street

Description

The Ottumwa Coliseum was built in 1934 as a cavalry building. The two story masonry structure has approximately 9,600 square feet. The first floor is one large room and provides a small office space. The upper floor contains a stage, ballroom floor and seating. A dance studio also uses this area. The Coliseum also includes a mezzanine area that is not used.

Evaluation

The historic building needs extensive repair and upgrading. Immediate needs include a new roof, boiler, air conditioning, and structural repairs due to settling. The building is not handicapped accessible.

The existing Coliseum does not meet the requirements of a contemporary event center, capable of accommodating performing arts, exhibitions, conferences, and other events. While reuse and expansion has been studied, a new facility appears to be the most appropriate way to satisfy this community need.

Recommendations

- Reuse the strategic Coliseum site for a new event center.

- Incorporate features of the historic Coliseum (including historic interpretation) in the design and program of a new event center.

The Beach-Ottumwa

101 Church Street, South of the Ottumwa Dam

Description

The Beach-Ottumwa was completed in 1992 and covers 13 acres. The facility includes both indoor and outdoor amenities. The indoor facility includes an 8-lane pool, a small catch pool with a slide, two locker rooms, two bathrooms, concessions, and office space.

Paddle boats and kayaks can be used on the lagoon which lies adjacent to the facility. The outdoor section of the facility also includes a zero depth pool, wave pool, two large slides, and volleyball and basketball courts.

Evaluation

The facility is in excellent condition. Issues to address during the planning period include:

- Reinforcement of the lagoon against high water. This prevents revenue loss created by flooding. Protecting the facility from future flooding would also extend the life of equipment.
- Improved flooring systems.
- Replacement of the slide steps. Chemicals from the water easily corrode the metal portion of the steps, requiring routine grinding and painting.
- Lighting system upgrades. The use of scaffolding to change the lights is dangerous and should be replaced with retractable lights.
- Manual vacuum for pool cleaning. Contamination of the pool means it is closed for 24 hours while the non-manual vacuum cleans the pool.
- Outdoor improvements including replacement of the dock and general upgrading of equipment from lounge chairs to paddle boats.

Recommendations

- Reinforce the lagoons.

- Evaluate ways to increase usage of the facility to improve economic performance.

  Possibilities for the indoor facility include:
  - expanding the staging area to handle larger swim meets.
  - providing a meeting room or fitness space.

  Possibilities for the outdoor facility include:
  - expanding dry activity areas, including play areas for small children.
  - providing additional amenities at Sycamore Park.

- Establish a program of routine replacement and upgrading of equipment and finishes where necessary.

- Replace boat dock with commercial grade dock.

- Continue routine maintenance.

Ottumwa Municipal Golf Course

13120 Angle Rd. North
Highway 63

Description

The City of Ottumwa operates a 156-acre, 18-hole golf course on the norther edge of the city. The facility includes:
- Irrigated greens and tees
- Clubhouse
- Various course related buildings used for storage and maintenance.

The clubhouse consists of a wood-frame structure that was constructed in the yearly 1960's. It contains a pro shop, snack bar, and restrooms. In the early 1990's the pro shop was expanded. Also located on the golf course grounds are three cart sheds and one maintenance building.

Evaluation

The clubhouse, maintenance building and cart sheds are all in good condition. The clubhouse has a small area for seating, but lacks room for larger events.

Irrigation offairways will be a high priority during the planning period. The course also has a limited number of cart paths that should be expanded during the planning period.

Recommendations

- Establish a plan for the extension of the cart path system.

- Evaluate the need for additional room in the clubhouse. An expansion that would include a banquet space would provide additional year-round revenue to the course.

- Continue routine maintenance.

Water System Inventory

Water Supply

Description

The Des Moines River is the primary water source for the City of Ottumwa. The City Park Lagoons and Black Lake Quarry provide secondary sources. The dam provides the most important water source for the city of Ottumwa. The reservoir created by the dam stores approximately 500 million gallons of water.

Evaluation

The City's water supply is perhaps its most important public asset. The current water system is adequately sized for the near term future. A five-year plan to evaluate the feasibility of the Jordan aquifer as a viable fourth source is in progress. This would provide an additional option especially when nitrate levels in the Des Moines River rise.

Recommendations

• Continue development of the City's water system as a key to economic development.

• Market Ottumwa as a preferred location for industrial expansion by ensuring adequate water volumes and storage capacity.

• If found feasible, develop plan to utilize the Jordan Aquifer as a supplemental water source.

Water Treatment

230 Water Works Drive

Description

The City of Ottumwa has one water treatment plant located on the north side of the Des Moines River just west of Downtown. The plant is a concrete block building that was constructed in the early 1960's. The plant is designed to provide a maximum of 9 million gallons per day and averages around 6 million gallons per day, 50% of which is used by industries in the community.

The plant consists of two large basins that are approximately 20-feet in depth. Each basin is divided into two cells holding a combined 4 million gallons. A clear well is also located at the plant, holding 850,000 gallons.

Evaluation

The brick exterior walls of the plant have been separating from the concrete block. This is being replaced and should significantly increase the life span of the building.

Expansion of the facility will depend on industrial growth. The plant capacity can handle substantial residential growth but the opening of a any industry that requires a significant amount of water will require expansion of the plant.

Some work has been done on the basins due to freezing and thawing. This should be monitored closely and addressed as needed.

Recommendations

- Continue routine maintenance of the existing facilities.
- Develop facility improvement plan based on an industrial growth scenario.

Water System Inventory

Water Storage Reservoirs

Description

Water goes from the treatment facilities to one of five storage reservoirs. There are 3 above ground and 2 below ground tanks. The above ground tanks include:

• Fox-Sauk, a 1.5 million gallon tank built in 1999 along Fox Sauk Road.

• Elm Street / Bulldog, a 400,000 gallon tank constructed in 1929

• Greenwood, a 4 million gallon tank along Greenwood Drive constructed in the 1950's.

Below ground tanks include:

• Court Street, a 7 million gallon tank constructed in the late 1940's underneath Hillcrest Park.

• Airport, a 300,000 gallon, concrete tank that was constructed in the 1940's.

Each one of the reservoirs has a pump station. The Fox-Sauk was completed in 1999. The Maple Street station, adjacent to the Court Street tower, has a backup diesel pump. There is also one pump station located on Webster Street.

Evaluation

The tanks are all in good condition. The Fox-Sauk was completed in 1999 with room for an additional 1.5 million gallon tank. Court Street was inspected in 1999 / 2000 and is in good condition. The Bulldog has a new roof and additional work will completed during 2000. Greenwood does need some work but with proper maintenance should meet the city's needs during the planning period. The Airport pump station underwent $150,000 in improvements completed during 1999, but further development at the airport could mean increased storage needs in this area.

The pump stations are in good condition due to a regular schedule of maintenance and repair. Only the Greenwood and Webster Street Pump Stations remain unmonitored by the Plant's SCADA system. Improvements to the Maple Street Pump Station were completed in 2000, with Greenwood Station next in line.

Recommendations

• Monitor the condition of the reservoirs and continue the regular maintenance program.

• Connect the Greenwood and Webster Street Pump Stations to the Plant's SCADA system.

• Continue routine maintenance of the system.

Water Distribution

Description

The City of Ottumwa has 160 miles of water mains, of which 80 to 90 percent are 6" in diameter. The main transmission line at the plant is 36" in diameter. The lines are constructed of either ductile iron or PVC and range in age starting in the late 1800's. Three lines cross the river, one of them following Highway 63.

The city owns and maintains approximately 1,400 to 1,500 hydrants that are regularly inspected.

Evaluation

Ottumwa's water mains have been experiencing an increased number of breaks over the last ten years. Most of the breaks occur in the 6" lines that were constructed during the 1940's and 1950's. The city has established a five year plan to replace the most serious deficiencies.

There are some weaknesses in flow but overall this has not been an issue. Fire flows in the Quincy Mall area have been a concern but tying the new Wal-Mart into one of the main lines will help.

Hydrants are in good shape and meet the city's needs.

The Water Department hopes to establish an in-house water meter program. This would upgrade water meter reading through automation.

Recommendations

• Coordinate replacement of water mains with the street department and the sewer department.

• Identify those lines that are priorities for replacement and establish a systematic program for replacement and upgrade of the lines in coordination with other city departments.

• Expand the system as needed based on Ottumwa's future land use plan.

Water System Inventory

Ottumwa Dam

Description

The Ottumwa Dam is an 8-gate concrete dam that spans 750 feet. The power plant, located on the north side, was constructed in the 1920's. There are three generators, two are original and one was rebuilt during the late 1980's. The Dam itself was rebuilt and extended in 1962. Energy produced by the Dam is sold to Alliant Utilities, which helps offsets water rates for residents.

Evaluation

During the late 1990's, improvements were completed, consisting mostly of concrete work. Continued efforts are needed during the planning period to ensure that the dam continues to meet the city's needs.

The two oldest generators will require extensive work within the next ten years.

Recommendations

- Continue the renovation of the Dam and establish a plan for rebuilding the 2 oldest generators.
- Continue routine maintenance.

Sanitary Sewer System

Description

The Ottumwa system was initially constructed in the late 1800's. The major components range in size from 8 to 24 inches. The newest lines are constructed of PVC and the oldest lines are brick and clay. There are six primary trunks that handle storm and sanitary sewer. Some of the newest areas have been divided but approximately 90% of storm water flows through the treatment plant.

A majority of the city is serviced by sanitary sewer but a few locations along Park Avenue use septic systems. The city system also extends to the airport.

Evaluation

The oldest sections experience substantial inflow and infiltration problems. Separation of storm water and sanitary sewer lines are an important priority during the planning period. During heavy rains, the system cannot handle the loads, causing flooding especially in the southern sections of the city and capacity issues at the treatment plant. Any program to separate the sewer lines will take 20-30 years.

The City is currently working on a program to clean and televise the sewer lines. This program should be completed by 2004.

Recommendations

• Complete study on south basin for separation of storm water and sewer lines.

• Establish a phased, systematic program for sewer separation. This program should focus on those areas experiencing basement flooding and should be coordinated with any street improvement projects.

• Consider impact on the existing and future sewer system of a Sugar Creek Interceptor. Coordinate sewer construction efforts with Wapello County.

Municipal Lift Stations

Description

The City of Ottumwa operates and maintains 21 lift stations. Eight of these stations are storm sewer stations and nine are CSO's.

One privately-owned pump station is located on the west side of the city, used by retail stores in the Quincy corridor. A low pressure system is located off Pike Road in the Birchwood area. It is owned and maintained by the home owners.

Evaluation

The pump stations are in good to fair condition. The City is currently in the process of trying to eliminate and rebuild many of the stations.

Recommendations

- Eliminate stations as storm and sewer lines are separated.
- Continue routine maintenance and upgrade the lift stations as needed.

Waste Water Treatment Plant

2222 S. Emma St.

Description

The waste water treatment plant is an activated sludge system. During the late 1990's, a $16.5 million upgrade was completed that converted the plant from a trickle filter to an activated sludge operation. Improvements during this time also included:

- Head works building with solids handling
- Primary and final clarification system
- Anaerobic sludge digester and handling equipment
- A new activated sludge basin
- Blower
- Sludge conditioning tanks
- Administrative and lab building

The plant is designed for 10.5 million gallons per day and averages approximately 4.5 million gallons per day.

Evaluation

The facility is in excellent condition with suitable capacity. During heavy rains, the plant has difficulty handling extraneous flows. Elimination of some of the lift stations and sewer separations will reduce inflow and infiltration, eliminating this significant environmental problem.

Changes in federal treatment regulations could require additional treatments and expansion of the plant.

Recommendations

- Identify and eliminate lift stations that add to the extraneous flows into the plant.
- Continue routine maintenance.

Stormwater Management Inventory

Drainage Topography

Description

The Des Moines River is Ottumwa's main drainageway. Kettle Creek, Harrow's Branch, Jefferson Street drainageway, Southside Jefferson drainageway and the Richmond trunk collect stormwater drainage. This surface drainage system empties into the Des Moines River. Much of Ottumwa storm water drains into the combined sewer system and is treated at the wastewater treatment facility before it is deposited into the Des Moines River.

Evaluation

The threat of flooding is greatest on the south side of the Des Moines River. Flooding in this area is generally caused by the inability of the combined sanitary and storm water sewers to handle peak rainfalls.

In South Ottumwa, the Richmond trunk sewer line drains much of the area. Flows during the heaviest rainfalls cause flooding at the lagoons.

Storm drainage from parts of South Ottumwa flow into the lagoons, producing an overage that must be pumped to the river. During heavy rains, the pumps are sometimes unable to evacuate this water.

Street flooding on the south side occurs along Hand Avenue, Ferry and Vine Streets. On the northern side of the river street flooding occurs along Orchard, Hayne and in the Swartz Drive area.

The 100-year flood boundary (as defined by the Federal Emergency Management Agency) comes into contact with the city mostly on the southern side of the river. Except for development along west Highway 34, most development occurs outside of the flood boundary.

Those areas within the 100-year floodway should be reserved as open and recreation space.

The developed areas of Ottumwa rely heavily on the combined sanitary and stormwater sewer system to collect surface drainage form streets. The Richmond Trunk discharges into the lagoons, but most storm water flows into the treatment plant. The system will need to be divided or an alternative developed to relieve the pressure on the sanitary sewer system.

Recommendations

- Continue to enforce ordinances and regulations dealing with stormwater management and floodplain development.

- Establish a long range plan for the separation of storm and sanitary sewer lines. Coordinate this work with street and water projects.

- Promote expanded recreational use of floodplain corridors.

- Dedicate right-of-way for future drainage structures on the southern and northern sides of Ottumwa in anticipation of future growth.

- Continue routine maintenance of the system and maintain and clean intakes and sewers of debris and silt.

- Acquire easements for storm sewer / ditches in anticipation of future growth to the north and south.

Major Surface Streams: **Des Monies River**	The Des Moines River is a wide, shallow river that flows from northwest to southeast. The river, which drains a large region of central Iowa, flows through the center of the city, becoming the major drainageway for both the northern and southern sections of the city.
Kettle Creek	Kettle Creek flows from the southwest to the north, draining into the Ottumwa Lagoons. The stream provides the main source of drainage for some of the newest developments in the southern sections of Ottumwa.
Bear Creek	Bear Creek lies adjacent to Highway 34 on the western edge of the city and flows directly into the Des Moines River. It is the main drainageway for those areas in the southwest that do not drain into Kettle Creek.
Southside Jefferson Drainageway	The Southside Jefferson Drainageway is the main drainageway for the southernmost section of the city. The drainageway lies to the south of Mary Street and flows into the Des Moines River on the northside of Rabbit Run Road.
Harrow Branch	Harrow Branch drains a large section of northwestern Ottumwa. It flows from northeast to southwest and into the Des Moines River.
Jefferson Street Drainageway	The Jefferson Street Drainageway follows Jefferson Street in the northern section of the city. It runs from north to south, through Jefferson Park and emptying into the Des Moines River.
Sugar Creek	Sugar Creek drains a large section of northern and eastern Ottumwa. The creek flows from northwest to southeast in the northern section of the city before turning southwest well outside city limits and draining into the Des Moines River south of Brick Row.
East Side Drainageway	An unnamed drainageway carries storm water along Ottumwa's eastern edge into the Des Moines River. The drainageway follows Walnut Avenue south before curving southeast at Highway 34.
Richmond Trunk Sewer Line	The Richmond Trunk runs south to north between Lake Road and Milner Street draining into the lagoons during heavy rainfalls.

Solid Waste Management Inventory

Solid Waste Collection

Description

Collection of solid waste within the City of Ottumwa is contracted out to a private hauler who collects at 9,200 households. Businesses in the community contract separately. Collection is curbside on Mondays, Wednesdays and Fridays. Refuse, recyclable and bulk items are picked up on these days and yard waste, tires, and appliances collected on Tuesdays. All bulk items, except for appliances which are sold for scrap, are taken to the landfill.

Evaluation

The hauler must renew its contract every five years with the city. The renewal process will begin in 2001.

Goals are established each year for waste reduction; during 1999 these goals were not met and waste collection increased. It is highly likely that this is the result of economic growth. The city should investigate new ways to increase recycling and reduce the amount of waste entering the landfill. This is especially true for the commercial sector which accounts for 70% of the waste sent to the landfill.

Recommendations

- In contract with private hauler, consider automatic extensions and other incentives if goals including waste reduction and customer satisfaction are met.

- Implement additional educational tools on the environmental benefits of recycling and waste reduction.

Ottumwa Landfill

West of the Ottumwa Airport Rural Route 5

Description

The Ottumwa Landfill is operated by the city but owned by the Ottumwa/Wapello County Solid Waste Commission. The city took over operation of the 290-acre facility in 1988. There are 3 full time operators, 1 manager, 2 gate workers, and 2 grounds workers. The facility consists of one scale house and two repair shops. The landfill is open six days a week only to those residents living in Van Buren, Wapello and Davis County residents. A $48 per ton tipping fee is also charged to anyone delivering material to the landfill.

The landfill also temporarily holds yard waste before it is taken by Chamness Technologies, located in Eddyville.

Evaluation

The landfill originally had 200 years of capacity but this was reduced to 50 years due to an inability to expand to the north. New regulations have limited the distance that the landfill can be from the runways of the Ottumwa Industrial Airport. The city is currently working with the IDNR on a horizontal expansion to the south.

The buildings located at the landfill are all in good condition and with proper maintenance will meet the city's needs through the planning period. The vehicles are meeting the city's needs and are routinely replaced. The compactor is scheduled to be replaced in the 2000/2001 budget year.

Recommendations

- Continue regional efforts to ensure the safe and efficient operation of the landfill. Continue solid waste planning with Commission members.
- Continue work with the IDNR to expand the landfill to the south.
- Consider reserving some of the yard waste for composting to be used as a mulch/soil conditioner in parks.

Ottumwa Recycling Center

2415 S. Emma

Description

The Ottumwa Recycling Center was opened in 1992 and is operated by the City and owned by the Ottumwa / Wapello County Solid Waste Commission. The Center employs a recycling coordinator, two utility workers and 2 gate workers. The center also works with Tenco, who collects recyclable materials from 20 to 30 small businesses around the city.

The Center offers curbside pickup but also takes free drop-offs from Davis and Wapello County residents. Residents from any other county pay a fee. The center accepts standard materials in addition to tires, bulk goods, latex paints, batteries, antifreeze, oil, transmission fluid, and sharp materials. The center also collects books for an annual book sale and usable clothing for shipment overseas.

Evaluation

The facility is in good condition and meets the planning area's needs.

The Recycling Center's highest priority is increasing use of the facility. The Center distributes a monthly newsletter and advertises on the local cable access channel. These activities should continue, augmented by new approaches to increase recycling activity. Surveys done during 1999 and 2000 found that approximately 60% of the community is recycling. To meet waste reduction goals approximately 80% of the community will need to participate in the program.

Recommendations

- Extend recycling program to multi-family residential units and continue to increase participation of area businesses.

- Continue routine maintenance on the recycling center with regular replacement and upgrade of equipment.

A VITAL CITY CENTER

Downtowns occupy a particular place of importance within cities and towns. They are a unique to their individual communities - no downtown looks exactly like any other downtown. Because of this relationship, people often measure the health of their city by the health of their traditional downtown district.

Goals for a Vital City Center

Downtown Ottumwa clearly has this sense of importance for the city. Other than the contemporary Quincy Avenue commercial district, Downtown remains Ottumwa's largest single, compact concentration of commercial development - a place where the tradition of long-standing businesses mix with new enterprises in a unique setting. It is also a vital mixed use center, a focus for business, civic life, public infrastructure, transportation, and the arts, situated along the banks of the Des Moines River. Perhaps as important, Ottumwa's City Center quite literally bridges the river, connecting the north and south sides of the city. The City Center is the knot that ties this city of diverse environments together.

Yet, for its opportunities and special status, Downtown Ottumwa faces significant challenges. It is a large downtown, with a substantial amount of building area. The downtown district was developed during an earlier era, when the city's population was larger, passenger trains were the primary means of intercity transportation, rural customer service areas were more populous, and there was no competition for retail primacy. In order to respond to the downtown challenges of the later 20th century, Ottumwa undertook several major development and planning initiatives. These included:

• The urban renewal program of the 1970's, funded by special allocations of urban renewal and Community Development Block Grant funds. This project resulted in the acquisition and demolition of property along Main Street west of Court Street, development of new mixed use office and retail buildings, and the partial development of a pedestrian mall along Main Street. Because of market trends and mounting evidence that suburban-type mall configurations in urban settings rarely worked as expected, the urban renewal project was never fully implemented. A one-block segment of the Main Street mall was subsequently removed and reopened to traffic.

• A 1992 study of existing conditions by Iowa State University's College of Design. This effort helped to focus attention on downtown revitalization, but did not include a specific action and implementation plan.

• The Downtown Development Guide, a major planning effort completed in 1996 and led by Hoisington Koegler Group. This broad ranging downtown planning effort remains the guiding document for city policy in downtown Ottumwa and forms the basis of this section. The comprehensive plan recommends some modifications of the priorities and

directions established by the Downtown Development Guide, but incorporates most of its major recommendations and policy directions.

It is important that Ottumwa continues to commit resources to improving the economic and emotional heart of the city. The problems faced by Ottumwa's City Center are not unusual. Many cities have successfully met and overcome the challneges of adapting older business districts to the changing economic and social environment of contemprorary times. Ottumwa has taken important steps as it moves to join these other successful cities in the downtown revitalization process.

■ GOALS FOR DOWNTOWN OTTUMWA

Downtown Ottumwa incorporates both the traditional downtown on the north bank of the Des Moines River and the Church Street business corridor on the south bank. The Downtown Development Guide established an overall vision statement for the district:

• *Downtown Ottumwa should be the community and regional focus of commerce, culture, government, and social interaction.*

• *Downtown Ottumwa will be a vibrant destination for community residents and visitors. The City will re-acknowledge and draw new meaning from its namesake, the "rippling waters" of the Des Moines River. Its built environment will have a unified and high quality character and a clear and memorable identity. The area will be convenient for both pedestrians and automobiles.*

• *Downtown Ottumwa will invoke a strong expression of community pride. It will become widely known as the place to shop, work, live, meet people, and spend leisure time.*

To position Downtown to fulfill this vision, the city and downtown community should:

•STRENGTHEN DOWNTOWN'S ROLE AS A "FLAGSHIP" DISTRICT FOR THE CITY.

Clearly, Downtown Ottumwa is a psychological focus for the city. It is undoubtedly discussed, worried about, and sometimes fought about more than any other part of the community. Downtown's image is bound up with that of the entire community. Downtown should capitalize on this identification by becoming a source of pride and vitality, a center that people in the city and around the region like to visit for enjoyment, commerce, and cultural enrichment.

•INTEGRATE THE RIVER INTO THE LIFE OF DOWNTOWN.

The Des Moines River is Downtown's most visible feature. The natural environment of the river creates a sweeping foreground for the traditional north bank Downtown district rising on the bluff. Despite the strong image of the river, however, downtown does not always effectively use this special resource. The river clearly divides the north and south parts of the district. On the north side, the railroad, parking lots, and the water works separate Downtown from the river. On the south, the water and park frontage is lined by the backsides of buildings and rear parking lots. While these are not bad patterns, they discourage a link between the street and the environment only 200 feet away.

A walk along the river is more an effort than a joy, and Downtown does not effectively use the development potential of an urban river. Downtown Ottumwa should reconnect with the river and use this unique feature as its primary resource.

•CREATE A MIX OF USES AND ACTIVITIES.

The dramatic changes in retailing that have created the shopping center and discount store have eroded the exclusive role that downtowns once held in American communities. This does not mean that Downtown is declining. It simply means that it will experience a transition which, if successful, can create a new and equally rewarding environment. This can be a place that provides settings for many kinds of activities, including, but not limited to, the traditional focus on general retailing.

Yet, Downtowns sometimes try to revitalize themselves by trying to make themselves into something they are not. The failure around the country of many pedestrian mall experiments on Main Streets suggests that life in a downtown district is a delicate mix of vehicles, pedestrians, places for activity, windows on the street, and other features. The urban renewal experience of Ottumwa is proof of this. Downtown Ottumwa should include a lively mix of uses, designed to make it a focal point and place of pride for all residents of the city and the region. In addition, its special features can make it a center for visitors.

An important aspect of this work is the development of an events center in Downtown Ottumwa. Cultural life – including the operation of two regional symphony orchestras – is an important value to Ottumwa's residents and an key service that the city offers to its region. The plan for the proposed Bridge View Center, on the site of the existing Coliseum and surrounding land, is admirably situated to unify the two portions of the central business district and to take advantage of the river as a signature for the community.

•STRENGTHEN THE DOWNTOWN RETAIL ENVIRONMENT.

In many communities, the role of Downtown has changed from one of primary retailing in pre-auto era days, to one of specialty retailing, small business, and service activities. Downtown Ottumwa has many of these small enterprises and indeed, acts as an incubator for small business. Yet, it still includes significant general retailing. Downtown completed the first stages of streetscape improvement along Market Street in 1999 and has implemented the "First Step"

commercial / office development project proposed by the Development Guide. Further improvements to the downtown streetscape can improve the district's business environment and strengthen its attraction for shoppers and other users.

•INCREASE THE ECONOMIC REWARDS OF BUILDING OWNERSHIP IN DOWNTOWN OTTUMWA.

Any investment must provide a reasonable rate of return to its investor. This rule is equally relevant to Downtown properties. Older buildings are often fully amortized, avoiding debt service costs that tend to increase rents. However, upper levels of buildings in Ottumwa are frequently vacant or bring very limited revenue. As a result, property owners receive a relatively low return on investment. In addition, further investment, involving rehabilitation, adaptive reuse, or bringing structures into compliance with contemporary codes or federal regulations, may seem unattractive to building owners.

When owners can expect a good return on downtown property, investment similarly increases. Therefore, the downtown development strategy must provide reasonable economic rewards to the district's property owners.

•PRESERVE THE PHYSICAL APPEARANCE AND HISTORIC FABRIC OF DOWNTOWN OTTUMWA.

The historic value of Downtown and its role as a symbol of the character of Ottumwa require measures to preserve and rehabilitate Downtown's buildings. The city has many buildings more than a century old, and many other structures that can play a supporting role to the continued revitalization of the historic retail core of the city. This does not mean that every building can or even should be saved. However, new projects should preserve the fabric and scale of the central business district.

•IMPROVE THE QUALITY OF THE PHYSICAL ENVIRONMENT AND THE INTENSITY OF COMMUNITY ACTIVITY IN DOWNTOWN OTTUMWA.

Downtown Ottumwa is made of people and community life, as surely as it is of buildings. It must be alive with people and activity. Some aspects of this life are physical – the district must provide an attractive and pleasant environment for its users, and should provide settings for events and programs. Other aspects are programmatic – providing attractions that attract people to the area.

Downtown Ottumwa has the additional advantage of being located near, but not on, the city's major highways. Both north-south Highway 63 – which will become a business route with completion of the bypass – and east-west Highway 34, touch downtown but do not affect the quality of its primary commercial streets. This permits a slower, more leisurely pace that enhances the "small town" quality of the city center.

Finally, Downtown Ottumwa has distinct districts – the areas north and south of the river have specific personalities and extend Downtown's influence to both the north and south parts of town. The variety found in Downtown Ottumwa creates a foundation for creating a fine downtown environment, a place that is attractive because it is distinctly different from the more mundane commercial world of the shopping strip, the parking lot, and the large, free-standing

commercial building.

•MAKE DOWNTOWN OTTUMWA A LITERAL BRIDGE BETWEEN THE NORTH AND SOUTH PARTS OF TOWN.

Ottumwa's slogan, the "City of Bridges," emphasizes the importance of bridging the river and unifying its two banks. Downtown literally encompasses three of these bridges: the auto-oriented Wapello Street Bridge, which carries major intercity traffic; the historic Jefferson Street Bridge on the eastern edge of the district; and the Market Street Bridge that most directly links the areas retail and main street districts. A fourth crossing, an abandoned railroad bridge, offers yet another opportunity for linkage. These bridges have different personalities, but should be integrated by walkways, lighting, and signage into the fabric of downtown to link people and businesses together. In 2000, the installation of dramatic lighting for the Jefferson Street Bridge is an example of making a structure part of the landscape of Downtown. Local public transportation also has a role to play in bringing about these linkages.

■ ISSUES

This section summarizes important issues in Downtown Ottumwa, generally as identified by the Downtown Development Guide and other observations.

Land Use and Development Patterns

General characteristics of the downtown area include:

• *Distinct areas with individual personalities.* The Downtown Development Guide stated that the variety of settings in Downtown created a challenging sense of fragmentation. However, these diverse environments also add variety if held together by common features and identifying graphics. Some of the individual parts that together make up Downtown Ottumwa include:

- *The traditional Main Street District*, most clearly expressed along Main and Second Street, between Court Street and Jefferson Street. This area is characterized by multi-story, older commercial buildings with front facades located on the property line. It is the most pedestrian-scaled area of the district, reflecting the business environment typical of business districts developed during the late 19th and early 20th centuries. The multi-story Parkview Plaza Hotel, the Harvester Building , and the Courier Building are some of the more dominant structures in this district. The Main Street District incorporates many of downtown's most important historic buildings.

- *The "urban renewal" district,* generally along Main and Second Street, from Court to Marion. This area was the focus for urban renewal activity during the 1970's and includes single-story, large footprint newer buildings. While originally designed for retail uses, some of this floor space has been converted to office use.

- *The Central Park Public District,* including a cluster of historic civic buildings located around Central Park. This area is centered along Third and Fourth Streets, from Market to Washington and includes City Hall (the former Federal Building), Ottumwa Public Library, the Wapello County Courthouse, and St. Mary's Catholic Church, all listed on the National Register of Historic Places. This superb cluster of buildings, worthy collectively of National Register district designation, commands superb views of the Des Moines River Valley and forms a monumental

terminus to North Court Street.

- *The Railroad/Water Works District,* making up the north riverbank from Court to Wapello Streets. This special district includes Ballingall Park, the Burlington (now Amtrak) depot also housing the Wapello County Historical Museum, and the waterworks installation.

- *The Church Street District,* including a linear commercial corridor between Highway 34 and Richmond Avenue. This street, a neighborhood commercial corridor in scale, terminates at the triangle of churches and historic commercial buildings at the Vine and Richmond intersection.

Rather than lacking focus, these distinct areas can be linked together to form an unusual district with diversity and special personality. This can be done through graphic themes, directional information, entrance features that note passage from one part of Downtown to another, interpretive information, and special streetscape elements.

• *Buildings with reinvestment and maintenance needs.* The Downtown Development Guide cites situations of poor maintenance and low or marginal occupancy, contributing to a sense of under-use and disinvestment in parts of the district. In addition, the Guide states that a lack of consistent design standards has resulted in construction of buildings that are inconsistent with the character of the downtown district.

• *Major parks and open spaces related to the river.* Ottumwa and Sycamore Parks define public use and green space on the river's south bank. The north bank remains relatively open but is also underutilized. The riverfront, west of Market Street to about Washington Street, is used for surface parking, while the balance of the riverfront includes waterworks property. The north bank, between the Market and Jefferson Street Bridges, is principally undeveloped.

Transportation and Circulation

Major transportation patterns in Downtown Ottumwa include:

•*Major arterial highways that cross through downtown, but do not particularly affect movement or the environment of the district.* These include the existing Highway 63 (Wapello Street) , with grade level access to the downtown street system at the Fourth Street intersection; and Highway 34, a limited access expressway section with a grade level intersection at Wapello Street and an interchange at the convergence of Market and Jefferson Streets. The completion of the Southeast Iowa expressway around Ottumwa is likely to reduce regional traffic along Wapello Street.

•*North-south through movements linked to the bridges.* Jefferson Street, a local arterial that runs north to Alta Vista and links Downtown to northern neighborhoods and the Indian Hills campus, functions as a major vehicular crossing. The Market Street Bridge carries lower speed, local traffic, and has easier pedestrian access. Both streets converge into Church Street south of the river.

•*A street grid that distributes traffic around downtown.* Fourth Street is a major link from Wapello Street, the primary entry into Ottumwa from the north. Main and Second Street form a one-way, east-west pair. While residents are used to this pattern, preserving multi-lane street channels along rather narrow streets, the pattern complicates the use of downtown by visitors.

•*An incomplete riverfront access system.* A riverfront road runs through the waterworks property east of Kitterman Avenue, but runs into the municipal lot.

•*The BNSF right-of-way.* The BNSF mainline runs east and west between the downtown core and the riverfront. While not difficult to negotiate, the railroad may be perceived as a barrier that divides the riverfront from downtown. On the other hand, it also is a source of movement that is highly associated with the growth and development of Ottumwa. Moreover, the daily, mid-day and mid evening arrival of Amtrak's California Zephyr creates a special event in the downtown district.

•*A hub for public transportation.* The Ottumwa Transit Authority's (OTA) four routes converge in downtown. OTA has defined a transit center at Market and Main Streets that is a layover point for these routes, permitting transfers between northside and southside lines.

Market Issues and Opportunity

The Downtown Development Guide included an extensive market study that resulted in the following conclusions and observations:

•Downtown remains a significant commercial and

retail center for support of government and the professional and financial sectors of the economy. The emergence of the Quincy Avenue corridor as a major consumer commercial district, anchored by Quincy Plaza, has produced both overall retail growth in the Ottumwa economy and a decreasing focus on downtown retailing.

• Retailing trends continue to evolve. While regional mall and big-box retailers dominate the retail environment, a demand continues to grow for retailing that offers a special shopping experience incorporating both specialty businesses and traditional retailers. Both the Main Street and Church Street business communities include independent, small businesses with an emphasis on personal services. However, this independence also decreases the ability of each area to organize and promote cooperatively.

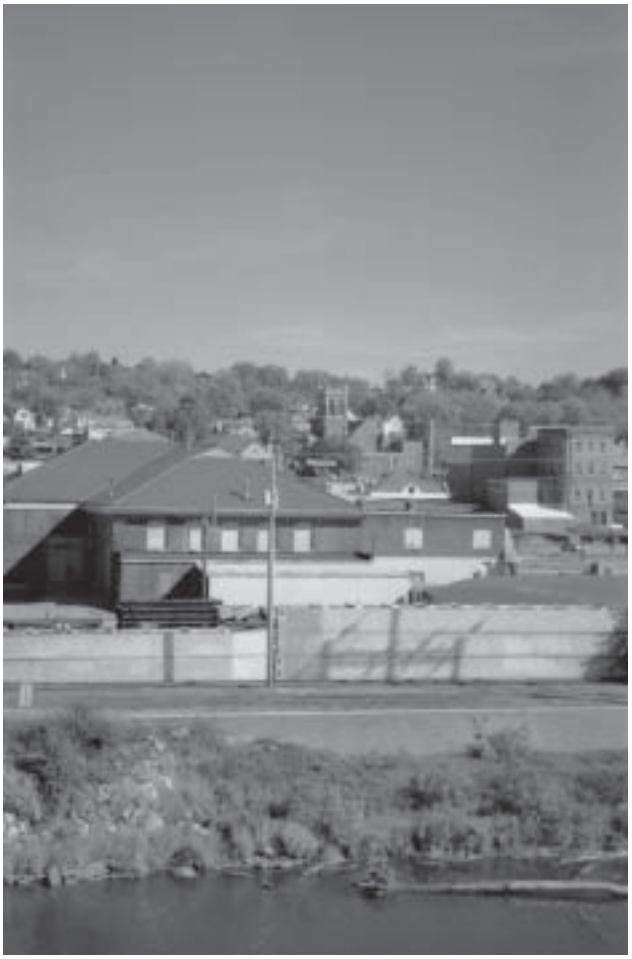
• In contrast to Main Street, Church Street acts as a neighborhood business district with extensive local services. Church Street buildings are more likely to be detached and served by either individual parking or parking behind buildings.

• The Main Street district displays relatively high first-floor vacancy.

• Public and cultural events may provide a substantial consumer market for downtown. The existing Coliseum hosts a variety of events, most of which occur during the fall and winter months. Arts and cultural groups, including the city's two orchestras, use the Coliseum and a variety of other venues. The Coliseum's use is limited by a lack of air conditioning, break-out rooms, banquet and food preparation facilities, and quality performing arts space.

• Office space is located in traditional office buildings, government buildings, and converted retail space. The recently completed First Step project, proposed by the Downtown Development Guide program, helps to address a need for Class A contemporary office space. It also establishes the expectation of more reasonable rents for property owners leasing quality space.

THE DOWNTOWN DEVELOPMENT PLAN



This section presents a strategy designed to help Downtown Ottumwa maintain and expand its role as a regional mixed use center. The program proposed in this plan is designed to provide realistic steps leading to the revitalization of the city center. These recommendations are generally based on the recommendations and concepts contained in the Downtown Development Guide, but include some modifications. The overall concept proposes:

• The creation of a district that is alive with activity, emphasizing the river as a signature, unifying element.

• Initiatives which help to connect the north and south parts of the city by providing improved pedestrian river crossings and establishing Bridge View Center as a major focus for community activity.

• A vision of Downtown Ottumwa as a mixed use district, placing an emphasis on specialty commercial, office and residential development, along with civic and community activities to augment a traditional reliance on major retailing.

• A strengthened downtown management system, to coordinate and implement the downtown improvement program and to provide a unified marketing and promotional effort.

• Enhancements to the district's image and public environment, in order to establish a niche as a center for entertainment, specialty shopping, and apartment living.

• Stabilized existing occupancy, and the redevelopment or rehabilitation of specific buildings and sites, including the upper levels of commercial structures.

The components of this program include:

- **THE RIVERFRONT**
- **BRIDGING THE RIVER**
- **BRIDGE VIEW CENTER**
- **DISTRICT MANAGEMENT**
- **DOWNTOWN HOUSING OPPORTUNITIES**
- **INTEGRATED PUBLIC SPACES AND GREENWAYS**
- **IMPROVED PARKING AND CIRCULATION**
- **STREETSCAPE IMPROVEMENTS**

- **ADAPTIVE REUSE AND PRESERVATION**
- **FINANCING MECHANISMS**

Each of these elements is discussed below.

■ THE RIVERFRONT

Ottumwa's riverfront should develop as central image feature and amenity for downtown.

While downtown Ottumwa has many distinctive qualities, it is the river that provides the greatest opportunity. Other cities have successfully built revitalization programs on the foundations of their urban waterfronts. Examples of this technique are Duluth, Minnesota, which resembles Ottumwa in physical configuration; Dubuque, Iowa; and many other cities.

The Downtown Development Guide identifies the river as downtown's primary image resource and calls attention to the barriers dividing the river from the built-up portions of the traditional downtown district. It proposes greenbelt and recreational trail development along the river and proposes increasing access to the river through the construction of a riverfront parkway. The Downtown Development Guide envisions the riverfront parkway as a four-lane divided boulevard between Kitterman Street and College Street. It would follow the alignment of the existing river drive south of the Waterworks and swing to the north, running adjacent to the railroad right-of-way under the Jefferson Street Bridge to College Street.

Increasing access to and visibility of the riverfront is a critical part of an overall downtown strategy. However, a modified concept could produce a more pedestrian oriented riverfront at lower cost than parkway development. Components of the recommended strategy include:

•*A pedestrian boardwalk or promenade along the river bank, from Kitterman Street to College Street*. The promenade should incorporate attractive lighting, street furnishings, graphics, overlooks, urban squares, and other features to create a special environment. The promenade should have a relationship to waterworks structures and facilities, which form a thematic element of the riverfront.

•*Parking facilities and trailhead nodes at the two endpoints of the boardwalk, Kitterman Street on the west and College Street on the east*. College Street should be extended south to lead to this trailhead area, which could include a shelter, park facilities, and interpretive information.

•*A modification of the existing road system that serves potential riverfront development but stops short of full boulevard development*. The current drive south of the waterworks merges into the municipal parking lot east of the treatment facility. The current road alignment may be modified and shifted northward, depending on the design of the promenade. A defined street alignment should continue east to Market Street; the actual alignment should be determined by the site design of parking and development areas between the waterworks and Market Street. A well landscaped two-lane roadway is satisfactory to meet potential traffic demands, resulting in street continuity at a substantially lower cost than the parkway proposal.

•*Historic interpretation*. The Riverfront Promenade should help tell the story of the Des Moines River and its influence on Ottumwa. Interpretive graphics and information should be integrated into the promenade design to relate the history of this important waterway. The Ottumwa Waterworks is a special subject for thematic interpretation; this information could describe the history and current operations and processes of the waterworks, featuring the creation of a safe municipal water supply as a major theme. The adjacent dam and facilities enhance opportunities for interpretation. Interpretive graphics can use a variety of design approaches. In San Francisco, an historical signage program along the Embarcadero uses vertical pylons to create an outdoor museum telling the rich history of this urban waterfront.

•*Development opportunities.* Development along the promenade presents an important opportunity for the city. Key development sites include the current municipal parking lot between Market Street and the

Waterworks; and the site between the Jefferson and Market Street Bridges. Development on these sites should include mixed uses, including housing, along with associated parking and public space. Buildings should generally be located near to the river and the promenade, with parking and circulation occurring to the rear, along the railroad right-of-way.

• *Market Street Focus.* The Riverfront Promenade should include a major focal point at the foot of the Market Street Bridge. This should include a welcome center and may incorporate a place for outdoor events and performances. The Market Street location is especially important because of the potential central role of the Market Street Bridge as a unifier for the north and south parts of downtown.

■ BRIDGING THE RIVER

In the City of Bridges, the crossings over the Des Moines River should be fully integrated into downtown development. Pedestrian improvements should focus on the Market Street Bridge.

The Downtown Development Guide rightly considers the bridges over the Des Moines River as both important amenities and as key transportation elements necessary to link the commercial districts on the two sides of the river. The Downtown Development Guide places a specific focus on pedestrian improvements on these crossings, proposing:

• With redecking of the Market and Jefferson Street Bridges, wider sidewalks, special lighting, and overlooks to accommodate pedestrian and bicycle transportation.

• Adaptation of the existing catwalk on the Hydro Dam as a walkway with fence enclosure, open to the public.

• Decking of the abandoned railroad bridge east of Jefferson Street as a trail facility.

Of these potential projects, the highest priority should be the Market Street Bridge. The height and design of the historic Jefferson Street span make it less friendly to pedestrians. Waterworks staff is concerned about the liability and hazards of opening the Hydro Dam to public use. The Market Street Bridge has the strongest pedestrian connection to downtown, and provides the most direct link to the Beach and event center site. Moreover, its elevation at the riverfront provides the opportunity for connection to the Riverfront Promenade.

A desirable modified section for the Market Street Bridge would include two moving lanes on the east side of the span and a wide, multi-use promenade, capable of accommodating both pedestrians and bicycles. Special lighting and cantilevered overlooks, proposed in the Downtown Development Guide, may also be included in the design.

The Jefferson and Wapello Street Bridges will be the primary automobile routes. Decking and improvement of the former Rock Island Railroad Bridge as a pedestrian crossing, is also highly desirable and would link the College Street trailhead of the promenade with a trail and greenway system proposed for the south bank of the river.

■ BRIDGE VIEW CENTER

Ottumwa should develop a new civic events center, providing state-of-the-art accommodations for community events, conferences, and the performing arts, at the Coliseum site.

Development of a multipurpose civic center on the riverfront is a major part of the downtown agenda. The facility should include accommodations for conferences and conventions, trade and product shows, special community events, and the performing arts. The Bridge View Center concept envisions a 120,000 square foot facility, incorporating a 750-seat theater, 30,000 square feet of clear-span exhibition space, 7,000 square feet of break-out and conference space, and a full range of support features. The existing Coliseum site is ideal for the facility as a symbolic connection between the north and south sides of the city. Its adjacency to the riverfront and integration into the park system also provide significant assets.

Railroad Corridor.
Effective landscaping can make this important corridor an effective bridge between the river and the Main Street district.

River Walk.
The River Walk along the Des Moines River can bring pedestrians to the riverfront. The Water Works and Hydro Dam are major landmarks along the Walk. The River Walk also opens excellent opportunities for adjacent provate commercial and residential development.

Market Street Bridge.
Wide sidewalks, lighting, and street furniture on the east side of the Market Street Bridge integrates the crossing into the downtown pedestrian system.

The convention center project requires additional steps which should be incorporated into an overall facility master plan:

• Improvement of the traffic system at the Market Street / Jefferson Street bridge approaches, planned as part of the Bridge View Center project. The convergence of these approaches under the Highway 34 interchange can be confusing to visitors. This intersection should be improved, providing clear connections between the two bridges and Church Street, as well good directional graphics.

• Redevelopment of the entire Coliseum triangle, encompassing the area between the two bridges and bounded by the river and Highway 34.

• Development of a high-quality hotel associated with the civic / convention center, logically incorporated into the redevelopment area.

■ DISTRICT MANAGEMENT

Downtown Ottumwa should strengthen its organizational structure to manage and promote the commercial district.

Single-owner shopping centers maintain unified management to promote businesses and the overall facility. Ottumwa's development organizations have recently created Partners in Progress, an umbrella organization composed of the Ottumwa Area Chamber of Commerce, the Ottumwa Area Development Corporation (OADC), Ottumwa Progress, Inc. (OPI, the city's downtown business organization), and Bridge View Center, Inc., with close cooperation from the City and County. The focus of both OPI and Partners in Progress has been on physical development projects, including the First Step development, the streetscape program, and Bridge View Center. The physical development function of these groups will remain extremely important. OPI / Partners may consider pooling the resources of private contributors to make strategic investments in Downtown. Examples of important investments may include rehabilitation of strategic properties, developing financing packages to maintain key retailers in the city center, and acting as a general partner for development projects.

However, as Downtown Ottumwa moves beyond major development projects such as Bridge View Center, marketing and promotional activities will become increasingly important. In this function, OPI may fill some of the roles of a shopping center manager. These roles include the preparation and distribution of promotional materials, development of programs, management of improvement projects, and the recruitment of businesses into Downtown.

Some possible marketing initiatives include:

• A program of activities and events, providing an ongoing series of attractions that bring people into the center.

• Marketing and management programs – developing and gaining wide distribution of advertising materials to add the district to Ottumwa's list of significant visitor attractions.

• Establishing uniform service standards and store hours – establishing a uniform service mission for Downtown Ottumwa, defining the district as an area in which customers can expect personalized, knowledgeable attention.

■ DOWNTOWN HOUSING OPPORTUNITIES

Ottumwa should increase housing opportunities within the Downtown district.

The Downtown Development Guide identified a significant potential demand for downtown housing. Indeed, downtown housing is an effective mechanism for the revitalization of traditional business districts. It is a particularly appropriate strategy in districts that have the potential to experience evening use. Housing can make Downtown Ottumwa a neighborhood, as well as a business and civic district. In addition, adaptive reuse of upper floors of commercial buildings can increase economic returns for building owners and provide needed housing in the community.

Ottumwa's downtown building stock encourages adaptive reuse. The Main Street orientation and the grades up from the river, generally give upper levels good views.

The Downtown Development Guide also identifies significant opportunities for new residential development. Recommended sites include the riverfront along the proposed promenade, and a block bounded by Second Street, Fourth Street, Jefferson Street, and Green Street.

These developments can use a variety of financing mechanisms, including tax increment financing; equity financing, utilizing the low-income housing tax credit; historic tax credits; and the use of CDBG / HOME funds. Pooling of several adjacent properties into unified developments can provide shared elevator service and help overcome difficulties with the Americans with Disabilities Act.

■ INTEGRATED PUBLIC SPACES AND GREENWAYS

Ottumwa's greenway and trail system should be integrated into the fabric of Downtown.

Public spaces should play a major role in the revitalization of downtown Ottumwa. The superb riverfront open spaces provided by Ottumwa Park, the Beach, Sycamore Park, and other major open spaces are a major resource for the city and its downtown district. These and other major spaces should be integrated into the fabric of downtown development. Components of this policy include:

•*Completion of the existing and proposed elements of the riverfront and promenade system on both banks of the river.*

The Market Street Bridge can link the pedestrian systems on the two banks together.

• *The Market Street Focus.* This area represents a major node on the Riverfront Promenade and may include a Welcome Center and residential development. North of the BNSF, the area also includes the Ottumwa Transit Authority's transit center. A fuller development of this area can also provide a home for Ottumwa's Farmers Market, proposed as a major downtown attraction by the Downtown Development Guide.

• *Church Street Green.* A common green space should be developed to link the commercial street frontage of Church Street to the lagoon and trail behind the street's west side storefronts. Despite their relative adjacency, the lagoon and park area and business street have little connection; such an open space link can reconnect the city's major open space to Church Street.

• *Trail links to Church Street.* The trail developed along the east side of the lagoon serves the back facades of Church Street businesses. These businesses may develop a secondary orientation to the trail; restaurants may also provide opportunities for outdoor eating overlooking the lagoon. In addition, clear paths between the trail and the street, directional signage, and bicycle racks can also help to link the street's business environment with the trail.

The trail may also be extended along the west side of the lagoon across Wapello Street and provide direct pedestrian and bicycle access to Quincy Plaza. This can help to expand downtown to include the city's largest single retail concentration.

• *Ballingall Park Enhancement.* Ballingall Park, adjacent to the architecturally significant Ottumwa Depot, should be an enhanced urban square. A similar effort has effectively restored Central Park as a major community landmark.

• *The Railroad Corridor.* The BNSF corridor is a significant feature in downtown, but also is a barrier that divides the riverfront from the core of the traditional downtown district. The development of this as a green corridor can help to minimize the dividing influences of the railroad. This is a technique that has been historically used along the Burlington mainline in the west Chicago suburbs, where the railroad right-of-way was integrated into the design of this nineteenth century planned communities.

■ ENHANCED TRANSPORTATION AND PARKING

Downtown Ottumwa should provide internal transportation that connects its parts effectively and convenient parking that accommodates present and future uses and encourages downtown visitors to become pedestrians as soon as possible.

Traditional downtowns like Ottumwa's developed as pedestrian and transit-oriented districts. Facilities necessary to accommodate an auto-oriented society, including parking lots, expressways, and wider streets, were laid over the smaller-scaled grid of the transit-oriented city center. Even a corridor like Church Street, with its lower development density, has the character of the streetcar strip district that it once was.

Parking is often a special challenge in traditional downtowns. The Downtown Development Guide inventories about 1,500 off-street public parking spaces, supplemented by private off-street parking and on-street spaces. The largest of these lots flank the railroad corridor, and provide reasonable but underutilized service to Main Street businesses between Court and Jefferson Streets. The linear Church Street lot also provides about 200 stalls on the rear of storefronts along that commercial corridor. While the Downtown Development Guide generally observes that the district has an adequate supply of parking, it concludes that some improvements are needed to increase the convenience and efficiency of parking facilities, some of which were subsequently completed.

Other forms of circulation are also important to downtown. While downtown is served by major regional arterials, the paths from those approaches to downtown features can be indirect and confusing to visitors. In addition, although the downtown district forms a hub for Ottumwa's bus system, the district lacks internal transportation services that link parts of this large area together.

Components of a transportation and parking plan for Downtown Ottumwa include:

• Reconfiguring and enhancing existing parking, including redesign of existing riverfront lots to increase efficiency and attractiveness. The large West Market Street lot should be combined with major development and riverfront enhancements to bring it into play as a functional part of the downtown parking supply.

• Encouraging employees to park in remote locations, freeing core parking for customers of downtown services.

• A directional graphics system that clearly and attractively leads downtown users from major approach routes to downtown features, attractions, and parking areas.

• A public parking lot improvement and enhancement program that includes:

- Landscaping that breaks up large paved areas into smaller areas that help users orient themselves and more clearly fix the location of their cars.

- Improved landscaping and connection of the Church Street lot to businesses along the corridor.

- Information graphics and kiosks at major public parking facilities that orient users and inform them about downtown features in the immediate vicinity.

- Streetscape enhancements that improve the quality of the pedestrian experience from parking areas to downtown destinations.

• Considering the development of a downtown circulation system, using small, specially marked buses to loop through the district and provide connections between the north bank of the river, the Coliseum and Beach areas, and the Church Street subdistrict. This may become especially important with the development of a civic center and other projects on the Coliseum site, along with increases in visitor and tourist activity in the district. The circulation system should provide a clear, easy to understand route with frequent service and should incorporate shelters and special graphics.

■ STREETSCAPE IMPROVEMENTS

Church Street Today.
Views of the Church Street streetscape and the Lagoon frontage today.

Church Street Streetscape.
Street landscaping, crossing nodes, graphics, and other features continue the concept of a "promenade street" linking the Church Street and Main Street parts of Ottumwa's City Center.

Lagoon and Rear Building Facades.
Parking lot improvements, rear facade improvements, green areas, and trail connections complement the urban streetscape along the building fronts. These features can connect the business life of the street with the more contemplative setting of the Lagoon and Ottumwa Park.

Ottumwa should continue its current program of incremental streetscape improvements, improving the quality of the district's public environment.

The Downtown Development Guide proposes an ambitious streetscape improvement program, designed to improve the quality of the district's public environment. The Guide proposes two levels of streetscape improvements: an "intensive" program for major streets through the district and a "standard" program for other downtown streets. Major differences between the two levels of improvement include sidewalk paving patterns and materials, the use of banners and graphics, and the extent of street landscaping. The city completed an initial phase of streetscape improvements along Market Street during 1999.

Streetscape improvements can improve the user's experience in downtown, establish a better image, and define unified themes that connect the district's features. Components of the program should include:

• A concentration of landscaping and softscape at nodes at street intersections. Amenities of these nodes should include trees, benches, ornamental lighting, and information kiosks. Their design should include a contrasting paving surface. In addition to concentrating landscaping and ornamental paving in strategic areas, nodes allow handicapped accessibility in compliance with the Americans with Disabilities Act, decrease the length of street crossings for pedestrians, increase pedestrian safety, and protect parked cars.

• Concrete sidewalks with special paving accents along downtown streets.

• Continuing current installation of pedestrian-scale street lighting, including street graphics and accommodation for seasonal lighting displays.

It is usually difficult to allocate the resources necessary to complete a streetscape development program at one time. As a result, it is necessary to focus improvements in strategic areas where investment provides the highest dividends. In Downtown Ottumwa, these strategic areas include:

• *Main Street between Court Street and Jefferson Street,* the traditional district's primary commercial street, much of which has been completed.

• *Second Street between Court Street and Green Street.*

• *Market Street between the government district at Third Street and the Market Street Bridge,* two blocks of which have been completed.

• *Court Street between Central Park and the proposed Riverfront Promenade.* The Development Guide identifies Court Street as a special design corridor because of the clear vista that it provides between the park and the river.

• *Church Street, between the approaches to the Des Moines River bridges and the triangle at the Vine and Richmond Avenue intersections.* Church Street has the character of a neighborhood shopping street. Streetscape developments here should include improved connections between the street, the parking lot along the rear building facades, and the parallel trail along the east bank of the lagoon.

■ IMAGE AND DISTRICT IDENTITY

Downtown Ottumwa should establish a unified "brand" reflected in the marketing and physical themes of the district. The individual subdistricts of Downtown Ottumwa can be expressed within the unity of this Downtown brand.

The Downtown Development Guide defined the river and water theme as the primary image for the district. This brand should be used throughout the district and may be incorporated into both physical improvements, graphics, and marketing materials. Indeed, the Riverfront Promenade provides an opportunity for emphasizing this brand, including interpretation of both the natural river and its later harnessing and adaptation by people.

Within this unified theme, signage, graphics, and in-

terpretation may be used to define the character of the subdistricts that together make up the city center, linking the parts of this large district into a single entity.

■ ADAPTIVE REUSE AND PRESERVATION

Historic preservation and rehabilitation of key buildings should be encouraged to complement other private and public investment.

Downtown Ottumwa's built environment is one of its most salient features. The scale and continuity of buildings in the district and surrounding streets help define the special character of the area and gives it a unique sense of place. As a result, development policies should capitalize on this quality to the district's economic and environmental advantage. This principle should be implemented through three efforts: adaptive reuse, building facade rehabilitation, and a preservation ordinance.

• *Adaptive Reuse.* The city and local lenders should develop an ongoing program to finance and encourage the reuse of underutilized spaces. This program should make use of available sources of funding, including TIF, CDBG / HOME funds, and tax credits, combined with participation by local lenders.

• *Design Standards and Facade Improvements.* The community should continue its facade improvement program, providing readily available and affordable financing for facade and code improvements in buildings. Improvements, including new construction, should follow specific design standards such as those presented in the Downtown Development Guide. These standards should discourage or prevent construction of inappropriate building types, such as "pole barns."

• *National Register Listing and Preservation Ordinance.* The city should work to list appropriate parts of the larger city center on the National Register of Historic Places and to implement a program of historic designation and design review. National Register listing can provide significant tax benefits for certified rehabilitation of buildings that contribute to the quality of the district.

■ FINANCE PROGRAM

The Downtown development program should be conceived as a comprehensive multi-year capital effort, with adequate funding provided for its implementation.

Ottumwa has begun implementation of its downtown program with the completion of the First Step project and Market Street streetscape improvements. These projects are the first components of an extremely important long-term program to secure downtown's role as Ottumwa's signature feature. The next vital projects include:

• The promenade on the north bank of the river.

• The redevelopment of the Market Street west parking lot, with enhanced parking and private development adjacent to the promenade.

• The civic center development at the Coliseum site.

• Pedestrian enhancements on the Market Street Bridge.

The downtown program and its priorities should be established as a ten-year capital improvement program, paired with appropriate funding sources. Funding options identified by the Downtown Development Guide include:

• Tax increment financing.

• A local option sales tax, with proceeds directed to city center improvements.

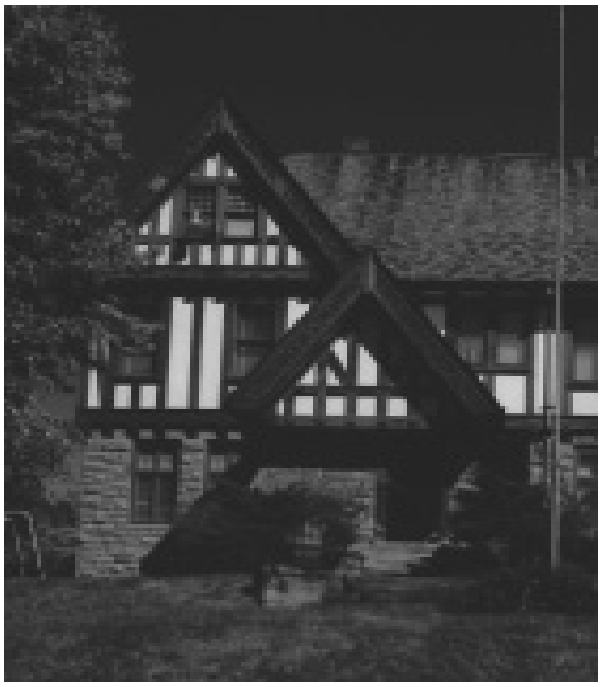
• A lodging tax.

• A self-supported municipal improvement district.

Chapter 8
HOUSING FOR OTTUMWA'S FUTURE

Ottumwa's ability to preserve its existing stock and develop adequate new housing to meet future needs and support economic expansion is critical to the city's future growth and development.

Neighborhoods are one of Ottumwa's most important economic development amenities, and the city's housing supply represents its single largest cumulative capital investment. Yet, much of Ottumwa's housing stock is relatively old and shows significant signs of deterioration. In addition, a number of older units have been demolished, leaving vacant lots that can be a resource for new development. This chapter considers housing and neighborhood conditions and establishes a program to improve housing and neighborhood quality-of-life.



■ GOALS

Basic goals for neighborhood-based policies are presented in this section. These goals begin with the assumption that Ottumwa's neighborhoods have special, unique qualities that demand individualized actions to:

• PRESERVE OTTUMWA'S EXISTING SOUND HOUSING STOCK.

In a community like Ottumwa, with a long history and a large stock of older housing. About 75% of the city's housing supply was built before 1950. Clearly, housing preservation is a critical priority for the community. Ottumwa's most significant affordable housing resource is already on the ground and is virtually impossible to replace.

• CREATE AN ENVIRONMENT IN OTTUMWA THAT OFFERS BETTER HOUSING OPPORTUNITIES FOR ALL.

While Ottumwa generated significant housing development during the 1990's, experiencing the construction of about 500 units (including manufactured homes), it has not met the potential demand for new affordable housing. Providing new housing to serve a range of people, including young families, professionals moving into the city, low-income households, and seniors, is important to the city's ability to attract business and retain young people. Even with substantial new housing construction, the city struggles to meet the housing needs of its population of retirees, young families and long-time residents seeking to better their own housing situations. Ottumwa must continue to work to meet the needs of all in order to prosper.

- **BUILD AN ENVIRONMENT WHICH ALLOWS PEOPLE FROM ALL PARTS OF THE CITY TO PARTICIPATE IN ITS GROWTH AND DEVELOPMENT.**

As programs are implemented which change or improve the physical form of the city, it is critical to keep in mind the process that must be present to get the job done. Planning and city improvement is as much about people participating in decision making as it is about physical improvements. Neighborhoods that are strong usually have a nucleus of residents who understand the importance of citizen participation in making communities work. This kind of grass-roots involvement is important to the neighborhood preservation process, particularly when issues of individual property maintenance standards, volunteerism, and access to government are important.

- **CREATE COMMUNITY CONNECTIONS THAT WILL UNITE NEIGHBORHOODS OF THE CITY.**

Strengthening cooperation and involvement of residents throughout the city must include the creation of physical connections that develop subdivisions into neighborhoods of the city. Community streets, parks, and public facilities can work to strengthen the city and its identity to residents. New areas, when they develop, must be integrated into the existing fabric of the city, rather than existing as enclaves. This can be a particular challenge as development gravitates to the hills and wooded areas that surround the future Highway 63 route.

- **ASSURE THAT EACH NEIGHBORHOOD IN OTTUMWA REMAINS HEALTHY.**

The success of a community depends upon the ability of its neighborhoods to achieve a wholeness that provides a good living environment. A neighborhood's public facilities and services must be readily available to all sections of the community. In addition, access to retail services and other private amenities are also important in defining the quality of wholeness. Neighborhood policies and strategies must address both public and private sector service issues if the city is to provide complete living environments.

- **ASSURE THAT EACH NEIGHBORHOOD PROVIDES A GOOD RESIDENTIAL ENVIRONMENT FOR ITS RESIDENTS.**

A good residential neighborhood provides high quality schools, churches, day-care facilities, parks, and cultural facilities to support the city's living environment. One of the most fundamental services a city can provide is the protection of housing areas from major intrusions and hazards. Deteriorated streets, traffic problems, poor property maintenance, poor pedestrian circulation, and code violations can diminish the living quality that neighborhoods offer. These conditions interfere with resident's enjoyment of their own property, reduce property values, and make neighborhood rejuvenation more difficult. Thus, neighborhood policies must accentuate the positive aspects of a neighborhood, and seek to reduce negative or deteriorating influences. The City has made a strong beginning through its program of Neighborhood Watch organizations. These groups assist the City by monitoring and reporting building and zoning code violations in their neighborhoods.

HOUSING CHARACTERISTICS IN OTTUMWA

This discussion will examine housing value and physical characteristics of Ottumwa's housing stock.

Table 8.1 compares changes in housing occupancy for Ottumwa from 2000 to 2010. Changes include:

- 2% increase in total housing units
- Change in owner/renter distribution: *Owner-occupied units decreased by 6%, while rental units increased by 11%*
- Increased vacancy rate: *Vacancies increased from 5.9% to 8.9% of the housing stock, with rental market having a much higher vacancy rate than the owner-occupied market.*

Table 8.2 illustrates changes in the composition of Ottumwa's housing stock, according to the number of housing units per structure. The composition of Ottumwa's housing stock remained relatively constant during this decade – one small change was a decrease in the percentage of homes that are single-family detached, from 78% to 76%.

2014 UPDATE

Table 8.1: Change in Key Housing Indicators, Ottumwa

	2000	2010	Change 2000-2010	% Change 2000-2010
Total Housing Units	11,038	11,257	219	2.0%
Total Occupied Units	10,383	10,251	-132	-1.3%
Owner Occupied Units	7,423	6,971	-452	-6.1%
% Owner Occupied	71.5%	68.0%	-3.5%	x
Renter Occupied Units	2,960	3,280	320	10.8%
% Renter Occupied	28.5%	32.0%	3.5%	x
Vacant Units	655	1,006	351	53.6%
Vacancy Rate (%)	5.9%	8.9%	3.0%	x
Homeowner vacancy	*1.8%*	*2.4%*		
Rental vacancy	*6.4%*	*11.7%*		
Persons / Household	2.31	2.36	0.05	2.2%
Source: U.S. Census 2010				

Ottumwa has a relatively low median housing value as compared to the average for the State of Iowa, as shown in Table 8.3. However, median home value increased more than 40%, which is consistent with state and national trends.

Table 8.4 (following page) shows the ratio of median house value (owner-occupied) to household income for Ottumwa, Wapello County, the State, and other peer cities in Iowa. An ideal ratio is around 2.5, which corresponds to the basic logic that an affordable housing price is roughly 2-2.5 times household income. If the ratio is higher than 2.5, this indicates that the housing stock may be too expensive for residents. If the ratio is lower than 2.5, this indicates that the housing stock is under-valued. Ottumwa and Wapello County both appear to have an undervalued housing stock.

2014 UPDATE

Table 8.2 – Change in Composition of Housing Stock

Housing units in structure	2000	2000 % of Total	2010	2010 % of Total	Change 2000-2010
1-unit, detached	8,565	78.0%	8,782	76.3%	217
Mobile home	390	3.6%	470	4.1%	80
1-unit, attached	108	1.0%	228	2.0%	120
2-4 units	930	8.5%	859	7.5%	-71
5 or more units	977	8.9%	1167	10.1%	190
Boat, RV, van, etc.	7	0.1%	0	0.0%	-7
Source: U.S. Census 2010					

2014 UPDATE

Table 8.3 – Housing Values from 2000-2010

Median Home Value	2000	2010	% Increase
Ottumwa	$47,900	$68,600	43.2%
Iowa	$82,500	$119,200	44.5%
U.S.	$119,600	$188,400	57.5%
Source: U.S. Census 2010			

2014 UPDATE

Table 8.4 – Ratio of Median House Value to Household Income for Ottumwa and Selected Peer Cities

	2010 Median Household Income	2010 Median House Value	Value to Income Ratio
Ottumwa	$35,540	$68,000	1.91
Wapello County	$40,093	$74,800	1.87
Burlington	$39,128	$80,500	2.06
Oskaloosa	$37,909	$83,600	2.21
Muscatine	$46,178	$98,000	2.12
Newton	$39,461	$98,600	2.50
Mt Pleasant	$40,265	$97,300	2.42
Pella	$58,486	$160,700	2.75
State of Iowa	$48,872	$119,200	2.44

Source: U.S. Census ACS 5-year estimates, 2010

Table 8.5 provides an affordability analysis by matching the estimated cost of housing in 2010 to the city's income distribution. A positive balance in the right-most column indicates a surplus of housing within the affordability range of each respective income group, while a negative balance indicates a shortage of affordable housing.

The analysis indicates a relative shortage of both very low and higher cost units in Ottumwa in 2010. As a result, higher earners occupied housing that, if available, could be affordable to a more moderate income market.

A shortage of owner-occupied housing priced below $150,000 is traditionally difficult to fill through new construction. The high end of this range is often equal to basic construction costs. Costs can be even higher depending on initial lot costs. Thus, developers often find the profit margins lower and the risks higher in this range. Within the lower ranges of the $100,000 to $150,000 market, new construction often requires some form of subsidy.

The city does have policy options for addressing higher-earning households living in lower-valued houses. These include:

- Direct production of moderately-priced housing to provide new housing stock for under-served populations.
- Encouraging higher-value housing developments that provide realistic "move-up" options to higher-earning households.
- Creating alternative housing settings, such as independent living units, for older adults that can free up some of the supply of sound affordable housing.

2014 UPDATE

Table 8.5: Housing Affordability

Income Range	% of House-holds	# House-holds in Each Range	Affordable Range for Owner Units	# of Owner Units	Affordable Range for Renter Units	# of Renter Units	Total Affordable Units	Balance
$0-25,000	33.69%	3497	$0-50,000	2115	$0-400	706	2821	-676
$25,000-49,999	31.96%	3317	$50,000-99,999	2970	$400-800	2133	5103	1786
$50,000-74,999	15.54%	1613	$100,000-149,999	1031	$800-1250	414	1445	-168
$75-99,999	9.20%	955	$150,000-200,000	387	$1250-1500	0	387	-568
$100,000+	8.37%	869	$200,000+	468	$1500+	27	495	-374

Source: U.S. Census ACS 5-year estimates, 2010; RDG Planning & Design 2013

After a decade of serious housing loss during the 1980s, Ottumwa experienced substantial new housing development during the 1990s and early 2000s. Construction dropped off again in the late 2000s, consistent with the national downturn in housing construction. Table 8.6 shows these trends in detail.

The Ottumwa Housing Authority (OHA) and private owners maintain a significant supply of housing for seniors and families that use one or more federal housing subsidy programs. OHA's main housing resources include 298 units in three public housing high rise buildings for seniors and 60 family public housing units at five locations. Private owners operate an additional 44 subsidized units for seniors and 100 for families at three locations. Table 8.7 summarizes the city's inventory of subsidized units for low- and moderate-income households.

2014 UPDATE

Table 8.6 – Construction Activity in Ottumwa, 2000-2012

Year	Single Family	Multi Family	Total Built	Demo-lished	Net Total
2000	14	0	14	9	5
2001	9	3	12	1	11
2002	22	21	43	5	38
2003	12	39	51	13	38
2004	17	20	37	16	21
2005	12	80	92	6	86
2006	20	65	85	14	71
2007	14	2	16	12	4
2008	9	0	9	13	-4
2009	7	5	12	17	-5
2010	13	0	13	15	-2
2011	4	0	4	9	-5
2012	5	4	9	7	2
Total	158	239	397	137	260
Avg/ year	12.2	18.4	30.5	10.5	20.0

2014 UPDATE

Table 8.7: Subsidized Development In Ottumwa

Development	Address	Owner	Units
Senior Housing			
Southoak Towers	102 West Finley	Housing Authority	102
Westgate Towers	910 West 2nd	Housing Authority	97
Camelot Towers	827 Albia Road	Housing Authority	99
Hillside Apart-ments	118 S. Union	CRV As-sociates	44
Total Senior			342
Family Housing			
Taft	100 Taft Avenue	Housing Authority	26
Hedrick Heights	302 Summit	Housing Authority	6
Fairview Avenue	223-229 Fairview	Housing Authority	4
Elm Court	1102-1120 Elm Court	Housing Authority	14
Jay/Fellows Street	1105-1115 Jay 808-814 Fel-lows	Housing Authority	10
Stellar Woods Village	720 Fellows Avenue	Homz Manage-ment	46
Ottumwa Heights	530 Franklin	Colby De-velopment	54
Tindell St	Tindell St	*Available 2013	4
Total Family			164

1998 Housing Conditions Study

Table 8.8 and Map 8.1 summarize the results of a citywide housing condition survey, completed in 1998 by an Iowa State University/Iowa DED team. This study, which is now almost 15 years old, is provided here as a point of reference for housing decisions, but should be updated to evaluate current conditions.

The survey reviewed about 5,127 houses or about 57% of the citywide total and compiled the results by 29 enumeration subdistricts. Houses were rated in one of four categories:

- *Good:* Recently built houses in sound condition or older structures in good repair. No significant rehabilitation required.
- *Fair:* Sound structures with minor repair or maintenance requirements.
- *Poor:* Substantial rehabilitation needs and signs of deterioration, including cracks, holes, or other breaks in the building envelope, deteriorating exterior materials, or other signs of deterioration.
- *Deteriorated:* Unsound structures for which rehabilitation is unfeasible.

The survey indicated substantial rehabilitation needs in the city. Only about 34% of the housing stock was considered to be in "good" condition, while about 50% were in "fair" condition. An additional 14% are in poor condition, requiring major structural rehabilitation. If interpolated to the entire housing stock, this suggests that 4,626 units require maintenance or minor rehabilitation and 1,222 units need major rehabilitation. Assuming an average rehabilitation costs of $10,000 for minor rehabilitation and $40,000 for major rehabilitation, total citywide residential rehabilitation needs are about $95 million.

For evaluation of neighborhood-based policies, this plan assigned a condition index score to each enumeration area (4=good through 1=deteriorated). A condition index was calculated by computing a weighted average score using the following formula:

*Index = [(# good units*4)+(# fair units*3)+(# poor units*2)+(# deteriorated units*1)]/Total units*

Index scores correspond to the following policy alternatives:

3.5-4.0: *Conservation: Sound neighborhoods without significant rehabilitation needs. Minor repairs or minor rehabilitation may be needed in some areas. Routine enforcement of building and zoning codes.*

3.0-3.5 *Conservation/minor rehabilitation: Sound neighborhoods with some repair needs. Minor rehabilitation needed on a spot basis. Policies should encourage reinvestment in houses through home improvement program. Enforcement of building, zoning, and property maintenance codes. Good targets for neighborhood organization.*

2.5-3.0 *Rehabilitation/major strategy areas: Neighborhoods with a majority of housing stock in need of minor or major rehabilitation. Rehabilitation programs should be targeted to these areas. Supporting building, zoning, and property maintenance standards are important in these areas. Infill development can help to address vacant property issues.*

2.0-2.5 *Major rehabilitation/redevelopment areas: Neighborhoods with substantial housing deterioration. Major rehabilitation, demolition of deteriorated houses, and redevelopment may be appropriate in these areas.*

Rehabilitation needs are concentrated in the southern part of North Ottumwa, in older neighborhoods just above the Second and Main Street corridors. The average index score for the entire city is 3.16.

Table 8.8: Housing Condition Index In Ottumwa, 1998

North Ottumwa		
District	Location	Index Score
N01	NW	3.57
N02	NE	3.41
N03	SW	2.78
N04	SW	2.84
N05	SW	2.67
N06	NW	3.62
N07	NW	3.59
N08	NE	3.39
N09	SW	3.19
N10	NE	3.70
N11	SW	2.53
N12	SW	2.72
N13	SW	2.99
N14	SE	3.13
N15	SE	3.03
N16	SE	2.57

North Ottumwa (cont.)		
District	Location	Index Score
N17	SE	3.17
N18	SE	3.59
N19	SE	2.80
N20	SE	2.40
N21	SE	2.64
South Ottumwa		
District	Location	Index Score
S01	W	3.79
S02	W	3.10
S03	W	3.13
S04	W	3.34
S05	W	3.56
S06	W	3.73
S07	E	3.37
S08	E	3.10

Map 8.1 - Results of 1998 Housing Conditions Study

Housing Strategies

Table 8.9 presents the current estimated income distribution (by percent of households) of Ottumwa, paired with affordable monthly housing costs for each income range. Each cost-category is matched to strategies that can deliver housing affordable to each income range. For example, the most appropriate strategies for increasing housing in the $50-$70,000 price range include rehabilitation of existing housing and affordable single-family development. These strategies are considered in more detail in the Housing Strategies portion of this plan.

HOUSING CHARACTERISTICS SUMMARY

The preceding analysis reveals the following major trends:

- After a decade of serious housing loss during the 1980's, Ottumwa experienced substantial new housing development during the 1990's and early 2000s. Construction dropped off again in the late 2000s, consistent with the national downturn in housing construction. With demolitions, the city added a net total of about 260 units (about a 2% increase) from 2000-2012.
- 32% of housing units were rentals in 2010, an increase from 28% in 2000.
- In 2010, approximately 80% of all housing units were in single-family structures (including mobile homes).
- The city's 2010 vacancy rate is very high at 8.9%, an increase of 3% from 2000. Vacancy is even higher for the rental market, at 13.2%
- Ottumwa's housing values are lower than the state median and are undervalued based on Ottumwa's median income. However, home values from 2000 to 2010 increased by about 43%, consistent with state trends.
- Ottumwa has a relative shortage of housing in both the very low (under $50,000 home value) and higher cost categories ($100,000 and higher home value).

2014 UPDATE

Table 8.9 – Housing Types and Strategies, by Income and Price Range

Income Target	# of households 2010	% of total households 2010	Affordable Monthly Housing Costs (with utilities)	Price Ranges for Ownership Housing	Appropriate Housing Types and Strategies
Under $15,000	1,966	18.9%	$0-375	Less than $30,000	- Public Housing - Section 8 certificates - Section 42 tax credit rentals - Existing housing rehab
$15,000-24,999	1,575	15.2%	$375-625	$30,000 - $50,000	- Section 42 tax credit rentals - Existing housing rehab - Mobile home/manufactured housing - Acquisition with rehab
$25,000-34,999	1,533	14.8%	$625-875	$50,000-$70,000	- Section 42 tax credit rentals - Existing housing rehab - Market rate rentals - Affordable single-family development
$35,000-49,999	1,826	17.6%	$875-1,250	$70,000 - $100,000	- Market rate rentals - Affordable single-family development - Subdivision development with infrastructure assistance
$50,000-74,999	1,633	15.7%	$1,250-1,875	$100,000 - $150,000	- Subdivision development with infrastructure assistance - Market-based single-family
$75,000+	1,847	17.8%	Above $1,875	Over $150,000	- Market-based single-family - Subdivision development through special assessments

HOUSING AND DEVELOPMENT POLICIES

Preservation of existing housing and development of new housing to support new growth are vital elements of Ottumwa's community development strategy. While land use and community investment strategies are important to housing planning, specific efforts are needed to address housing priorities. This section considers initiatives which, if combined with existing programs, can help address these major priorities.

The city's primary housing challenges include:

• Developing an adequate supply of housing, with a concentration on affordable housing, to meet community needs.

• Establishing a cooperative, community-wide system for the development of affordable housing.

• Providing quality rental housing for Ottumwa's present and prospective residents.

• Developing an effective, multi-faceted neighborhood conservation and rehabilitation program.

• Establishing an effective method of financing subdivision development, particularly for mid-level housing development.

• Maintaining the structural integrity of older homes and the quality of Ottumwa's existing housing supply.

• Providing market rate housing for owner-occupied units above $150,000

Programs to address these issues are described in the following pages. They include:

- **OTTUMWA HOUSING PARTNERSHIP**
- **AFFORDABLE HOMEOWNERSHIP**
- **SUBDIVISION FINANCING FOR AFFORDABILITY**
- **RENTAL HOUSING PRIORITIES**
- **TAX CREDITS**
- **HOUSING CONSERVATION**
- **NEIGHBORHOOD ASSOCIATIONS**

Ottumwa should also be sure to take full advantage of existing programs through organizations such as the Area 15 Regional Planning Commission and the Iowa Finance Authority (IFA). A list of these programs is provided at the end of this chapter.

OTTUMWA HOUSING PARTNERSHIP

Ottumwa should consider the creation of a housing partnership, organized to develop affordable housing.

Ottumwa has several locally available programs to assist with affordable housing finance, including the Home Assisted Housing Rehabilitation Deferred Loan Program and the Locally Funded Housing Rehabilitation Repayable Loan Program. However, the city lacks a unified delivery system for the construction of affordable housing.

The community should establish an Ottumwa Housing Partnership composed of four elements:

1. A local development corporation, which should be incorporated as a Community Housing Development Organization (CHDO) or a Community Development Corporation (CDC). This entity directly develops or organizes affordable housing efforts which are not occurring or practical in the private market.

2. A Lending Consortium that shares the risk of lending for untested or higher risk projects.

3. Employer-assisted housing provides methods by which major employers such as John Deere and Excel offer specific assistance to employees, potentially in concert with other development activities of the partnership.

4. An information and counseling service, to assist new homebuyers with such issues as credit counseling and qualification assistance.

These four elements are described in greater detail on the following pages.

It is important to note that this structure supports and complements but in no way substitutes for the private sector. Other parts of this overall strategy are intended to remove obstacles that prevent the private sector from meeting affordable housing needs. The Housing Partnership should only be involved as a development entity for worthy projects which for various reasons cannot be executed by private businesses.

1. The Community Development Corporation (CDC)

These bodies are private, nonprofit corporations that operate as developers or general partners in affordable housing ventures. Community Housing Development Organizations are a type of CDC which meets specific federal requirements for community representation on its board of directors and are authorized to receive direct funding from state-administered programs. The proposed Housing Partnership should include such a corporation that can be a key participant in:

- Affordable single-family development.
- New, affordable rental housing development.
- Rehabilitation projects that involve purchase and resale of houses.
- Organization of housing development partnerships with private developers.

2. The Lending Consortium

Through the consortium, local lenders come together to share the risk of lending to higher risk or unconventional projects. The city can use dedicated housing funds to insure the projects as well. Several communities in Iowa have already generated local funds in support of housing rehabilitation through the establishment of Lender's Consortium. The central missions of the consortium would include:

- Construction and long-term financing of key project types that are identified as high priorities for the community.
- Construction lending to private builders of affordable housing.
- Mortgage financing to low and moderate-income buyers who fall outside of normal underwriting standards for institutions.
- Rehabilitation financing for existing neighborhoods

The consortium and its programs can be funded by a combination of:

- Proportionate funding by lenders (proportional to overall assets).
- Corporate contributions and investments.
- State Community Development Block Grants (CDBG) and other housing funding programs.

3. Employer-Assisted Housing

Employers should consider housing assistance as part of recruitment and benefit packages for current and prospective employees. Avenues for involvement may include:

• Investment in the equity for affordable housing developments financed under the Section 42 low income housing tax credit program. These investments receive substantial tax advantages, making them an attractive and financially rewarding investment option for some individuals and corporations.

• Downpayment assistance programs, potentially patterned after 401(k) programs. This program would permit employees to withhold a set amount of their salaries for deposit in an interest-bearing account. These employee contributions would be matched by a contribution from the employer. The downpayment matching program would continue for a specified period (up to three years) and /or a specified maximum. Alternatively, the employer could advance downpayment loans, repaid on the same basis.

4. Information and Counseling Service

The Partnership should maintain a housing information and counseling service, potentially through arrangement with another organization or a Community Credit Union, which provides:

• Information to newcomers on available housing in the community.

• Information and educational assistance, helping new buyers navigate through the home purchase process.

• Referrals to other programs and sources of funding.

• Counseling and assistance with debt management, if required.

AFFORDABLE HOMEOWNERSHIP

The Ottumwa housing strategy should remove obstacles and provide new opportunities for low- and moderate-income buyers. These approaches should be designed to help the private sector meet affordable housing needs to the maximum degree possible.

To the maximum degree possible, Ottumwa should create opportunities for the private sector to deliver quality owner-occupied housing at affordable prices. Several major obstacles exist which prevent these units from reaching their target market. These include:

• Risks involved in the often speculative construction of moderate cost housing. Lower price ranges carry both the highest risk and the lowest profit expectations for builders. A construction loan program using the lenders consortium can help to insulate small builders from this risk.

• The front-end cost of public improvements in subdivisions, including the cost of special assessments for infrastructure, which can add monthly costs that disqualify potential buyers. The next section addresses concepts to address the issue of public improvement financing.

• The mismatch between the cost of housing and incomes of potential buyers.

Programs to address these obstacles are outlined on the following pages.

Participatory Deferred Payment Loans

The participatory mortgage concept can be used to extend the capacity of a moderate income buyer to afford a new home. In this scenario, a deferred payment mortgage – sometimes referred to as a "soft second mortgage"– reduces the amount that must be borrowed at normal market rates. For example, an affordable housing unit is designed for sale at $95,000. Assuming a 3% downpayment and a 7.5% interest rate with 30-year amortization, this unit would require a monthly payment of $644 for principal and interest.

In the deferred payment situation, $20,000 of the mortgage cost may be written as a deferred payment second mortgage. The effective initial cost of the unit is reduced to $75,000. The monthly payment for principal and interest then drops to $508. The mortgage deferral could utilize CDBG/HOME funds.

The mortgage would have a participation clause, by which the second mortgage is repaid as a proportionate to its participation in the initial purchase. Assume that on resale, the house sells for $105,000. The initial public funding accounted for 21% ($20,000 of $95,000) of the house's price. On resale, the Housing Fund similarly recaptures 21% of the sales value, or $22,050. These funds are then used for similar purposes. If the value of the house declines, the City's recovery of the mortgage similarly declines.

Downpayment Assistance

Downpayment assistance to low and moderate income buyers can help make housing accessible. Some programs of this nature are already available through the Iowa Finance Authority and the Regional Planning Commission (page 158)

CDC Purchase And Resale

The Community Development Corporation (CDC) could buy and rehabilitate existing houses for resale to new owners. The Lenders Consortium could finance the acquisition and rehabilitation, with a take-out on the interim financing funded as an FHA or conventional mortgage. Houses are marketed through the normal real estate sales process.

Vacant Infill Lots

A significant part of a new construction program should involve areas in Ottumwa's central city. This work will be accomplished most successfully when a significant number of lots can be developed in close enough proximity to make a substantial visual impact in a neighborhood. These vacant lots could be packaged and conveyed to builders for development of affordable housing.

The Development Concept chapter maps out several focus areas for residential infill development, including the Liberty Elementary School area and former Pickwick and Wildwood school sites. Refer to page 34 for text and page 36 for a map showing the sites.

Actions which could promote development of infill sites include:

• Acquisition and assembly of vacant lots by the city or CDC. Design criteria for houses should be established. Public acquisition should only occur if private builders are unable to assemble sites.

• Changes in development regulations to permit construction of new houses on lots which may not meet contemporary development regulations. These regulations may allow smaller lots or lot widths, reduced setbacks, or other allowances on legal lots of record.

• Participation of approved affordable housing in the participatory deferred payment program.

SUBDIVISION FINANCING FOR AFFORDABILITY

Ottumwa should develop a mechanism which encourages subdivision development for middle and moderate cost housing.

Subdivision development and its front-end costs and risks complicate the problem of providing an adequate inventory of available, improved lots. The high risk/ low profit probability discourages development or encourages development in rural areas which do not require full urban improvements. Even devices like special assessments, which provide front-end public financing, create costs which can place housing beyond the means of moderate or middle-income buyers.

Tools to provide financing assistance for public improvements such as sewer extensions, intersections, major streets, and other necessary facilities are important to an effective housing strategy. The cost of providing infrastructure and site improvements typically accounts for $10,000 to $12,000 of a house's cost. Financing tools can help to lower this initial cost to a buyer, or lessen the initial financing burden to a developer.

Potential financing tools include:

• ***Tax Increment Financing.*** Within a TIF district, the tax basis of a site is frozen at pre-development levels. The added taxes created by development are then used to repay publicly-issued revenue bonds that financed public improvements. Thus, the future taxes created by a residential development pay for improvements, allowing a pass-through of the savings directly to homeowners or indirectly to renters.

TIF diverts taxes that would go to all jurisdictions, including the school system, to help finance a specific project. Therefore, the technique should only be used in a focused, targeted way, with an emphasis on developments that serve low and moderate income people.

• ***Infrastructure Banking.*** An "Infrastructure Bank" can finance public improvements in subdivisions for moderately-priced owner-occupied housing.

In an infrastructure bank program, the city – or the city in combination with another financing entity or program – provides front-end financing for public improvements on the lot. The infrastructure financing is written as a deferred second mortgage loan, with no requirement for repayment until sale of the house. The second mortgage is a participatory loan – that is, its value appreciates along with the value of the house. When the house is sold (or refinanced), the infrastructure mortgage is repaid, with a face value that represents this same proportion of the transaction. This money may then be used to replenish the Infrastructure Bank's capitalization.

For illustration purposes, assume that front end costs for public improvements are $10,000 per lot on a house that otherwise costs $70,000. The second mortgage makes up 12.5% of the home value (or $10,000 of a total cost of $80,000). If the house sells for $100,000, the Infrastructure Bank is repaid 12.5% of those sales proceeds, or $12,500.

• ***Special Assessments.*** Special assessments are appropriately used for higher-cost subdivisions, where the buyer is able to pay the added costs.

RENTAL HOUSING PRIORITIES

Development of new, affordable rental housing is an important development priority for the community. When possible, new development should provide a transition to owner-occupancy and avoid a large project orientation.

The conservation of existing rental housing and development of new rental resources are important priorities for Ottumwa. The City maintains a regular rental inspection program which requires the city's rental units to be inspected at least once every three years. The program's focus is on keeping rental property safe and maintained in sound condition. This vital program should be maintained.

Additional priorities for rental housing development include:

• *Affordable rental housing.* Development for low-income households can utilize HOME funds, TIF, and Section 42 tax credits for financing. The proposed CDC may act as a general partner assembling limited partnerships to help promote needed housing for the city's low income population.

• *Rent-to-Own.* This new approach provides an opportunity for households of moderate income establishing themselves in Ottumwa to rent a home while building equity toward eventual purchase. In this program, a CDC builds new rental housing in single-family, duplex, townhouse, or four-plex configurations. These units may be built with the assistance of the Section 42 tax credit. A portion of the family's rent is placed in an escrow that is directed toward downpayment. At the end of a specific period, the residents can then use the accumulated escrow as a downpayment to purchase either a new house or an existing unit. The rent-to-own program gives young families the opportunity to building equity and wealth while getting settled in Ottumwa. This program is appropriate to a community that is positioning itself to attract a new generation of residents.

• Rental rehabilitation. Options for this program are discussed under HOUSING CONSERVATION strategies in the next section.

HOUSING CONSERVATION

Ottumwa should expand existing rehabilitation and code enforcement efforts into a comprehensive, multi-faceted rehabilitation and neighborhood development program.

Comprehensive Rehabilitation Program

A coordinated rehabilitation strategy, operated by the city on a reliable, multi-year basis, could help ensure preservation of exiting housing by taking advantage of existing funding sources. The strategy could include:

- Emergency repair program: An emergency repair program provides grants or forgivable loans to very low income homeowners, usually from CDBG funds.

- Direct rehabilitation grant programs: This program provides forgivable loans and grants to low income homeowners, from CDBG funds.

- Leveraged rehabilitation program: This approach leverages private loan funds (often through the FHA Title 1 Homes Improvement Loan program) by combining private loans with CDBG or other public funds to produce a below-market interest rate for homeowners. The program works best in moderate income neighborhoods with minor rehabilitation needs. Loans in a leveraged program can be originated through individual lenders or through the proposed lenders' consortium.

- Energy efficiency loans: Funding is leveraged through the utility to provide loans that improve the energy efficiency of older homes. These low interest loans or no-interest loans could be used by anyone in the community to replace windows, heating and cooling systems, or other energy related upgrades.

If resources are not available to run this program through the city, Area 15 Regional Planning Commission can provide assistance to communities in administration of these programs.

Target areas for housing rehabilitation are identified on the map on page 36 in the "Development Concept" chapter. They include:

- The area bounded by Jefferson and Elm on the west and east, and Center and Main on the north and south
- Main Street corridor mixed-use area
- Lower Court Street, north of 4th

Rental Rehabilitation

A rehabilitation program for owner-occupied housing should be augmented with a rental rehabilitation program that provides financing for the improvement of sound rental properties.

The rental rehabilitation program should operate through a leveraged rehabilitation program. Mechanically, the foundation of a rental rehabilitation program should be private financing. An individual institution or the Lending Consortium should take a leading role in marketing the availability of rehabilitation loans to small rental property owners. In some cases, unit rehabilitation may be paired with Section 8 certificates, to help provide adequate cash flow to meet debt service.

Minor Repairs and Maintenance

In addition to providing funding options for large rehabilitation projects, Ottumwa can encourage minor repairs and property maintenance through strategies such as:

- Preparation and distribution of a Property Standards Manual. This should be a friendly and clear document that sets out the community's expectations for individual building and property maintenance. It can provide useful information, such as sites to dispose of/recycle unwanted household items. This manual can encourage standards above and beyond the bare minimum for passing inspection.
- Organizing voluntary efforts through church and civic groups to assist seniors and disabled people with property maintenance.
- Establish a "Better Landlords Bureau," a voluntary investor association/peer group that can provide a seal of approval for quality rental properties.
- Establishing a Home Handyman Program that provides minor home repair assistance for elderly and disabled homeowners, using volunteer assistance. This could be administered through a public service agency with funding support from a community foundation or other charitable source.

Target Area Concept

Rehabilitation programs often provide the best return on investment when they focus on a target area or areas that combine documentable needs with a strong existing neighborhood fabric. A comprehensive approach includes:

- Targeting a residential rehabilitation program to a strategic area.
- Identifying potential infill sites and developing residential projects that are consistent with the character of the neighborhood.
- Improvements to streets and infrastructure where necessary.

DEVELOP NEIGHBORHOOD ASSOCIATIONS

The City should encourage and support residents in forming neighborhood associations to promote & sponsor neighborhood improvements and serve as liaison between city and residents.

Implementing the above recommendations for housing revitalization will require partnership between the city and neighborhood residents. Neighborhood associations can help establish this partnership. A neighborhood association is a way for residents to voluntarily come together to promote and enhance their neighborhood.

Neighborhood Associations can take a variety of forms. Some may exist primarily to host an annual social event, such as a street festival, while others may advocate or raise money for improvements to the neighborhood, such as street upgrades, park improvements, or neighborhood clean-ups. Neighborhood Associations might organize a "neighborhood watch" program to reduce crime, or they may make requests to public officials to enact certain policies or allocate funding to important neighborhood projects. Associations may have official elected leadership and voluntary dues payments, or they may be more informal. Some associations have monthly or quarterly meetings, while others communicate primarily through electronic means. In some communities, neighborhood associations work with the city to establish detailed neighborhood plans that provide guidance for neighborhood infrastructure priorities and residential rehabilitation strategies.

EXISTING PROGRAMS

The city of Ottumwa and its residents already have access to a number of housing programs through organizations such as the Area 15 Regional Planning Commission, Iowa Economic Development Authority (IEDA), Iowa Finance Authority (IFA), and Federal Home Loan Bank of Des Moines (FHLB Des Moines).

- *AHEAD Regional Housing Trust Fund* - The Area 15 Regional Planning Commission administers a housing fund that provides support for rental housing repair, owner-occupied rehabilitation, owner-occupied urgent repairs, new construction, downpayment assistance and special projects.
- *Enterprise zones* - Developers can apply for financial incentives for construction and rehabilitation in Ottumwa's existing enterprise zones.
- *Housing Fund, IEDA* – Funding for rehabilitation, new rental housing construction, home buyer assistance, tenant-based rental assistance, and/or administrative costs related to such programs (IEDA). Typically the city or a local nonprofit organization applies for funding for a specific project of their choosing, then distributes to homeowners and/or renters. Income limitations apply.
- FirstHome and FirstHome Plus - Fixed rate mortgages and down-payment assistance for first-time home buyers (IFA)
- Main Street Mortgage Loan Program – Low-interest loans for downtown upper story housing rehabilitation (Main Street Iowa, IFA, FHLB Des Moines)
- Affordable Housing Program – grants for government or nonprofit sponsored projects that create or rehabilitate affordable housing (rental or owner-occupied) for low income individuals (FHLB Des Moines)
- Section 42 (Low-Income Housing Tax Credit) - investment tax credit for projects that reserve a specific percentage of units for low income residents.

Table of Contents

Traffic Counts

Roadway Name	Segment	Volume	Capacity	Absolute LOS	V/L	LOS
2nd Street	NW of Kitterman Ave.	10200	8400	10500	0.97	E
2nd Street	SE of Marion St.	7700	7500	9375	0.82	D
2nd Street	SE of McLean St.	7600	8400	10500	0.72	C
2nd Street	NW of RR tracks	7000	8400	10500	0.67	B
2nd Street	NW of Caldwell St.	6000	8400	10500	0.57	A
2nd Street	North of Jefferson St.	4990	8400	10500	0.48	A
2nd Street	SE of Forrest Ave.	4810	8400	10500	0.46	A
2nd Street	NW of Forrest Ave.	3770	8400	10500	0.36	A
2nd Street	NW of Clay St.	3760	8400	10500	0.36	A
2nd Street	East of Birch St.	720	6500	8125	0.09	A
2nd Street	East of Ash St.	680	8400	10500	0.06	A
2nd Street	East of Iowa Ave.	450	8400	10500	0.04	A
2nd Street	North of Vine St.	410	6500	8125	0.05	A
2nd Street	South of Jefferson St.	100	6500	8125	0.01	A
4th St.	SE of Hwy 63	9600	7500	9375	1.02	F
4th St.	SE of Marion St.	8000	7500	9375	0.85	D
4th St.	NW of Jefferson St.	5500	7500	9375	0.59	A
4th St.	NW of Union St.	3440	7500	9375	0.37	A
4th St.	East of Birch St.	2100	8400	10500	0.20	A
65th	* West of 110th	60	6500	8125	0.01	A
Albia Road	West of Pocahontas St.	10300	8400	10500	0.98	E
Albia Road	West of Skyline Dr.	1230	6500	8125	0.15	A
Angle Road	Highway 63	860	6500	8125	0.11	A
Blandensberg Rd.	North of Pennsylvania Ave.	1290	6500	8125	0.16	A
Blandensberg Rd.	South of Pennsylvania Ave.	840	6500	8125	0.10	A
Brick ROW	West of Herrmann Ave.	620	6500	8125	0.08	A
Brick ROW	*South of Old Agency Rd.	350	6500	8125	0.04	A
Carter Ave.	West of Green St.	2940	6500	8125	0.36	A
Carter Ave.	East of Green St.	1280	6500	8125	0.16	A
Church St.	South of Myrtle St.	10300	8600	10750	0.96	E
Dahlonega Rd.	*West of Riley	650	6500	8125	0.08	A
Dahlonega Rd.	*East of Riley	550	6500	8125	0.07	A
E. Alta Vista Ave.	East of Birchwood Hts. Dr.	2670	6500	8125	0.33	A
E. Rochester St.	East of Hwy 63	4050	6500	8125	0.50	A
E. Rochester St.	West of Hwy 63	2930	6500	8125	0.36	A
E. Rochester St.	East of Cedar Croft	930	6500	8125	0.11	A
Elm St.	North of Jay St.	4690	6500	8125	0.58	A
Elm St.	South of Carter Ave.	570	6500	8125	0.07	A
Ferry St.	North of Chester Ave.	7100	6500	8125	0.87	D
Finley Ave.	West of Ward St.	2740	8400	10500	0.26	A
Finley Ave.	West of Webster St.	1990	8400	10500	0.19	A
Finley Ave.	East of James	1180	8400	10500	0.11	A
Finley Ave.	East of Wildwood Dr.	640	8400	10500	0.06	A
Greenwood Dr.	East of Pocahontas St.	2630	6500	8125	0.32	A
Greenwood Dr.	East of Wildwood Dr.	1790	6500	8125	0.22	A
Greenwood Dr.	West of Hackwoth St.	1600	6500	8125	0.20	A
H25	*South of Dahlonega Rd.	540	8400	10500	0.05	A

Appendix

Traffic Counts

Roadway Name	Segment	Volume	Capacity	Absolute LOS	V/L	LOS
Highway 34	East of Quincy Ave.	15300	26500	33125	0.46	A
Highway 34	West of HWY 63	15300	26500	33125	0.46	A
Highway 34	East of Wapello St./Hwy 63	14300	26500	33125	0.43	A
Highway 34	North of Hwy 63	13500	26500	33125	0.41	A
Highway 34	West of Vine	11700	26500	33125	0.35	A
Highway 34	East of Hwy 63	11600	26500	33125	0.35	A
Highway 34	East of Hwy 34 & Roemer Ave.	9500	26500	33125	0.29	A
Highway 34	*East of Herrmann Ave.	8400	26500	33125	0.25	A
Highway 34	*East of City Limits	7100	26500	33125	0.21	A
Highway 34	South of Roemer Ave.	6200	26500	33125	0.19	A
Highway 34	*West of Quincy Ave.	5600	26500	33125	0.17	A
Highway 63	South of 2nd St.	19700	26500	33125	0.59	A
Highway 63	North of HWY 34	19700	26500	33125	0.59	A
Highway 63	North of 4th St.	15400	26500	33125	0.46	A
Highway 63	South of Rochester	13300	26500	33125	0.40	A
Highway 63	South of Woodland St.	13300	26500	33125	0.40	A
Highway 63	North of N. Court St.	12600	26500	33125	0.38	A
Highway 63	North of Woodland St.	12200	26500	33125	0.37	A
Highway 63	South of N. Court St.	11000	26500	33125	0.33	A
Highway 63	South of HWY 34	10900	26500	33125	0.33	A
Highway 63	North of Rochester	9000	26500	33125	0.27	A
Highway 63	South of Angle Road	8300	26500	33125	0.25	A
Highway 63	*North of Angle Road	7600	26500	33125	0.23	A
Highway 63	*North of Montagne Ln	6700	26500	33125	0.20	A
Highway 63	*South of Madison Ave.	6700	26500	33125	0.20	A
Highway 63	*North of Madison Ave.	5800	26500	33125	0.18	A
Hutchinson St.	North of Steller Ave.	800	6500	8125	0.10	A
Iowa Ave.	North of 2nd Street	6300	8400	10500	0.60	B
Iowa Ave.	South of Roemer Ave.	6000	8400	10500	0.57	A
Jefferson St.	North of Main St.	10700	7500	9375	1.14	F
Jefferson St.	North of Cook Ave.	10600	8400	10500	1.01	F
Jefferson St.	North of 5th St.	7000	7500	9375	0.75	C
Jefferson St.	North of 4th St.	6700	7500	9375	0.71	C
Jefferson St.	North of Park Ave.	3250	6500	8125	0.40	A
Jefferson St.	South of Park Ave.	2720	6500	8125	0.33	A
Kitterman Rd.	North of 2nd Street	670	5800	7250	0.09	A
Lake Road	South of the City Limits	1010	6500	8125	0.12	A
Madison Ave.	North of Vine	8800	8400	10500	0.84	D
Madison Ave.	South of Vine St.	7100	8400	10500	0.68	B
Madison Ave.	North of Mary	5500	8400	10500	0.52	A
Madison Ave.	South of Mary St.	3450	8400	10500	0.33	A
Main St.	East of Elm	8900	8400	10500	0.85	D
Main St.	East of Jefferson St.	7900	8400	10500	0.75	C
Main St.	SE of Marion St.	6800	7500	9375	0.73	C
Main St.	SE of McLean St.	6700	8400	10500	0.64	B
Main St.	NW of Hwy 63	5800	8400	10500	0.55	A
Main St.	East of Van Buren Ave.	5700	8400	10500	0.54	A
Main St.	South of Roemer Ave.	2350	6500	8125	0.29	A

Traffic Counts

Roadway Name	Segment	Volume	Capacity	Absolute LOS	V/L	LOS
Main St.	South of Vernon Ave.	2130	6500	8125	0.26	A
Market St.	North of Cook Ave.	10800	9400	11750	0.92	E
Market St.	South of 2nd St.	4140	7500	9375	0.44	A
Market St.	South of 4th St.	3700	7500	9375	0.39	A
Mary St.	East of Milner St.	5800	8400	10500	0.55	A
Mary St.	West of HWY 63	5600	8400	10500	0.53	A
Mary St.	West of Webster St.	4630	8400	10500	0.44	A
Mary St.	East of Lake Road	2590	8400	10500	0.25	A
Mary St.	West of Lake Rd.	1600	6500	8125	0.20	A
McPherson Park Blvd.	West of HWY 63	130	6500	8125	0.02	A
Milner St.	South of Mary St.	2590	6500	8125	0.32	A
Milner St.	South of the City Limits	430	6500	8125	0.05	A
N. Court St.	North of Hawthorne Dr.	10800	8400	10500	1.03	F
N. Court St.	North of Pennsylvania Ave.	9900	8400	10500	0.94	E
N. Court St.	South of Vanness Ave	7000	8400	10500	0.67	B
N. Court St.	East of Hwy 63	5400	8400	10500	0.51	A
N. Court St.	North of 4th St.	3430	7500	9375	0.37	A
Park Ave.	West of HWY 63	1660	8400	10500	0.16	A
Pennsylvania Ave.	Jefferson to Elm St.	7600	8400	10500	0.72	C
Pennsylvania Ave.	East of Elm St.	7500	8400	10500	0.71	C
Pennsylvania Ave.	East of Wayne St.	5200	8400	10500	0.50	A
Pennsylvania Ave.	West of Hutchinson Ave.	1980	8400	10500	0.19	A
Pennsylvania Ave.	*East of Hutchinson Ave.	440	6500	8125	0.05	A
Quincy Ave.	South of Hwy 34	12300	20900	26125	0.47	A
Quincy Ave.	North of Ablia Rd	9300	18700	23375	0.40	A
Quincy Ave.	South of Blackhawk Rd.	1770	6500	8125	0.22	A
Quincy Ave.	North of Hwy 34	1270	6500	8125	0.16	A
Richmond Ave.	East of Carlisle St.	9500	9400	11750	0.81	D
Shaul Ave.	South of Finley	1060	8400	10500	0.10	A
Sheridan Ave.	North of Finley	3250	6500	8125	0.40	A
Sheridan Ave.	South of Finley	2720	6500	8125	0.33	A
Sheridan Ave.	South of Garfield	1860	6500	8125	0.23	A
Sheridan Ave.	North of Mary St..	1560	6500	8125	0.19	A
Sheridan Ave.	South of Hammond Ave.	370	6500	8125	0.05	A
Steller Ave.	East of Fahrney Blvd.	820	6500	8125	0.10	A
Vine St.	South of Hwy 63	2880	9400	11750	0.25	A
W. Alta Vista Ave.	West of N. Court St.	310	6500	8125	0.04	A
Wapello St.	South of Hwy 34	10800	20900	26125	0.41	A
Wildwood Dr.	South of Hwy 34	1590	6500	8125	0.20	A
Wildwood Dr.	North of Albia Rd.	1200	6500	8125	0.15	A
Wildwood Dr.	South of Albia Rd.	1090	6500	8125	0.13	A
Wildwood Dr.	South of Greenwood	830	6500	8125	0.10	A
Woodland St.	East of Hwy 63	5400	8400	10500	0.51	A

0 500 1000

In Feet

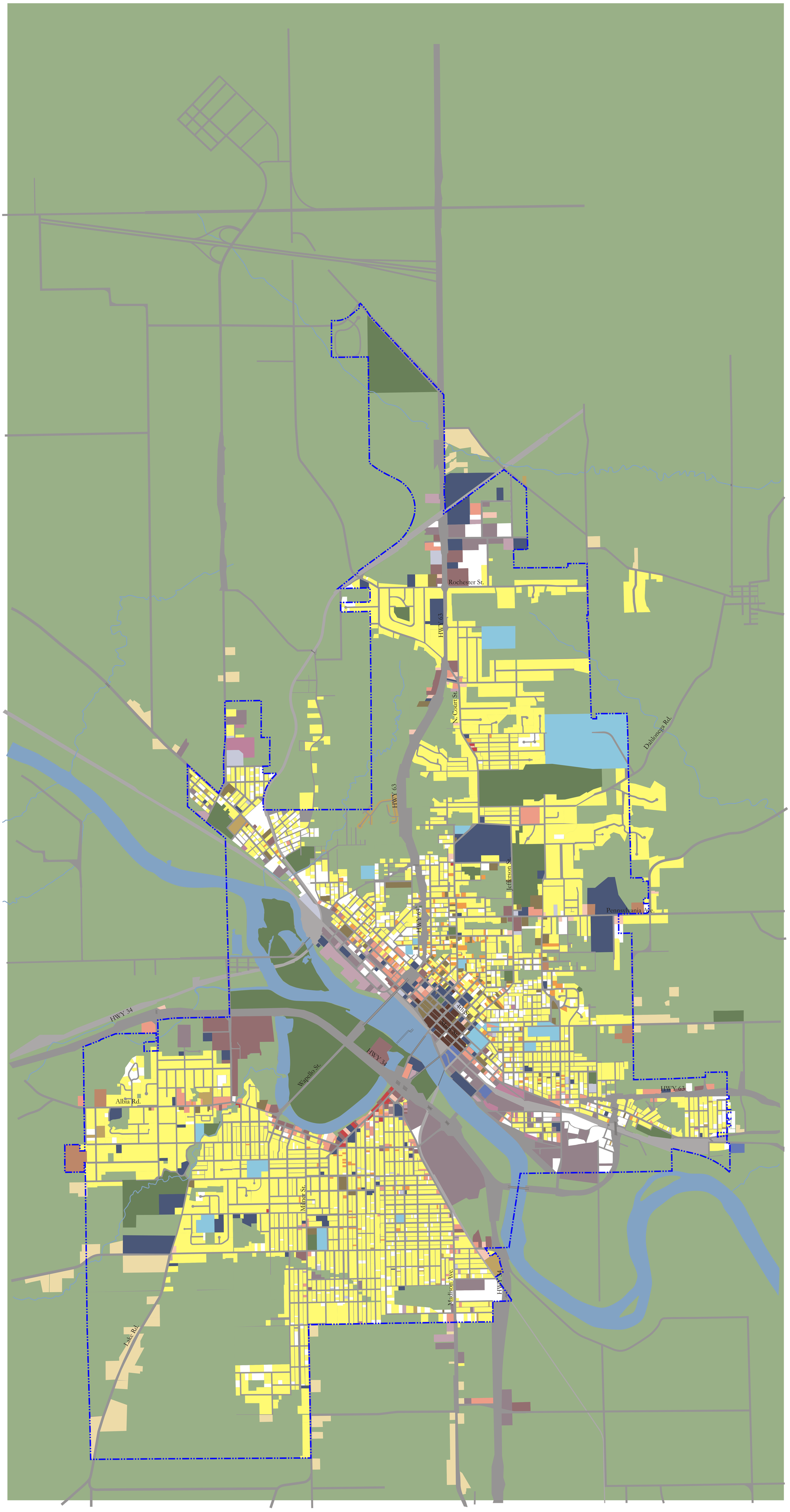
NORTH

Existing Land Use

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

- Vacant
- Vacant Buildings
- Agricultural / Open Space
- Parks / Recreation
- Rural Residential
- Single Family Residential
- 2-4 Plex / Town homes
- Multi Family Residential
- Mobile Homes
- Retirement Home / Assisted Living
- Office / Financial
- General Commercial
- Services
- Contemporary Commercial
- Neighborhood Commercial
- Downtown / Mixed Use
- Light Industrial
- General Industrial
- Salvage
- Schools
- Public Facilities
- Civic Uses



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In Feet

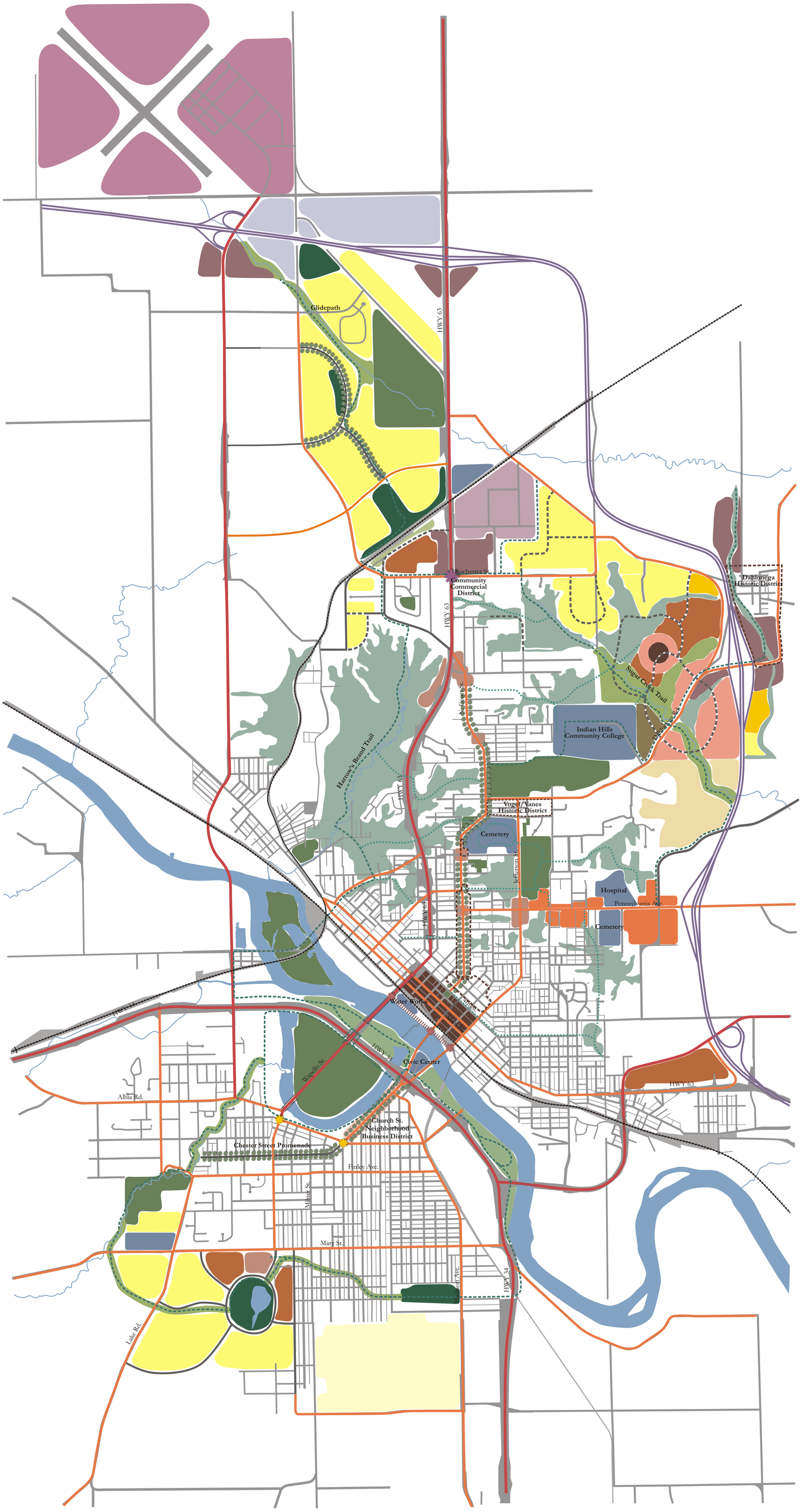
NORTH

Development Concept

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

- Single Family Residential
- Mixed Density Residential
- High Density Residential
- Conservation Development
- Future Development
- Mixed Use
- Downtown Mixed Use
- Commercial
- Neighborhood Center
- Church St. Neighborhood Business District
- Office/ Research Park
- Major Civic Uses
- College Expansion
- Hospital Mixed Use
- Industrial Park
- Airport Industrial
- Office/Warehousing
- Existing Parks and Recreation
- Proposed Parks
- Wooded Areas
- Creek Trail Corridors
- Historic Districts
- Highway
- Arterials
- Colectors
- Other Links
- Trails
- Bike Trails
- Corridor Enhancements



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In Feet

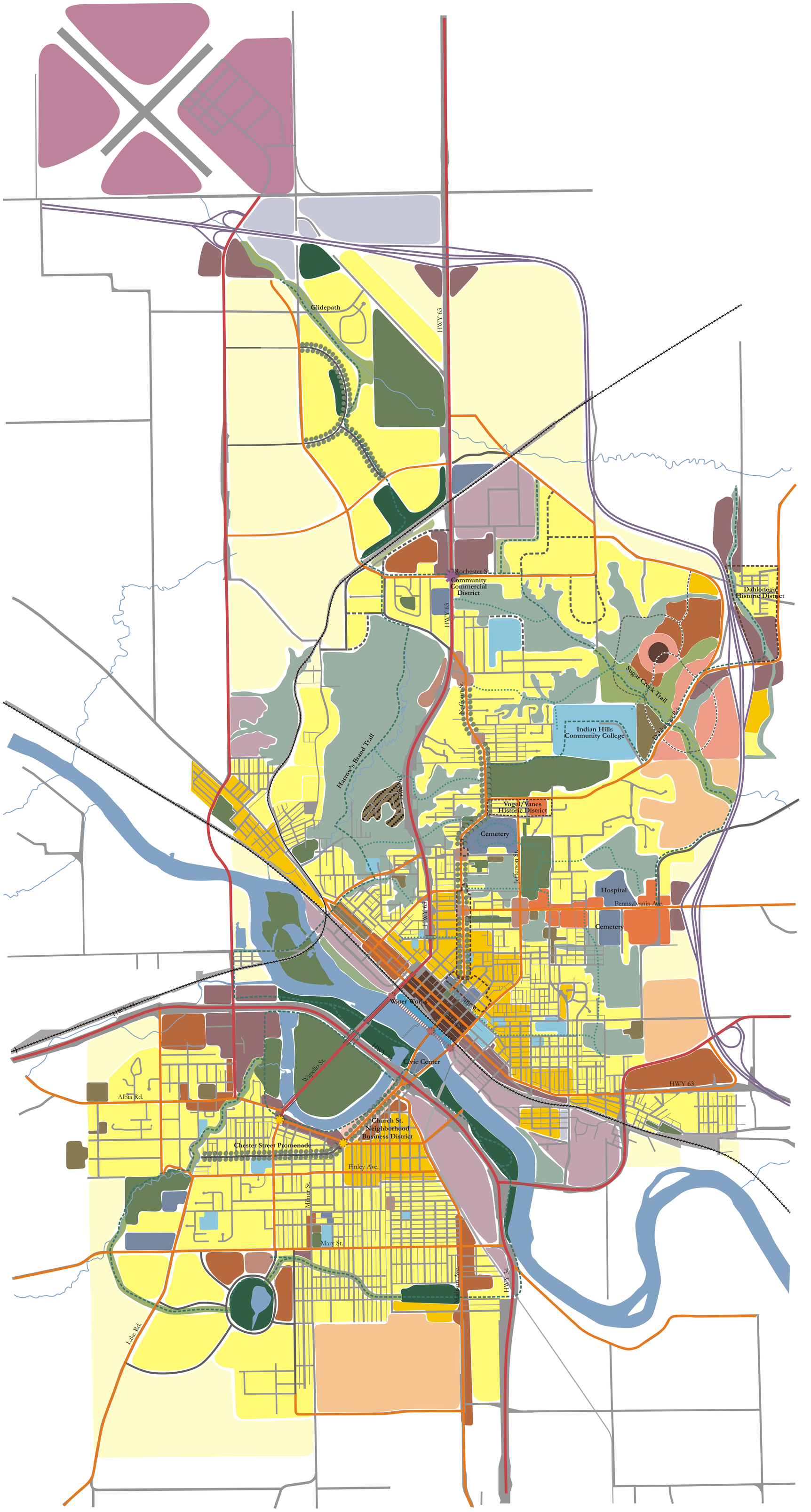
NORTH

Future Land Use

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

- Single Family Residential
- Conservation Development
- Urban Reserve
- Mixed Density Residential
- Mobile Home
- High Density Residential
- Mixed Use
- Downtown Mixed Use
- Commercial
- Neighborhood Center
- Church St. Neighborhood Business District
- Office/ Research Park
- Major Civic Uses
- College Expansion
- River Walk
- Hospital Mixed Use
- Industrial Park
- Airport Industrial
- Light Industrial/Warehousing
- Existing Parks
- Proposed Parks
- Conservation Reserve
- Creek Trail Corridors
- Historic Districts
- Highway
- Arterials
- Collectors
- Other Links
- Trails
- Bike Trails
- Corridor Enhancements



0 500 1000

In Feet

NORTH

Street Classification

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

- Major Arterial
- Minor Arterial
- Collector Street
- D-F Level of Service (LOS)

Rochester St.
HWY 63
N. Court St.
Dahlonega Rd
2nd Av.
McPherson Park Blvd
Woodland
Pennsylvania Ave.
Jefferson St.
Iowa Av.
Hutchinson Av.
Main St.
4th St.
2nd St.
HWY 34
Wildwood Dr.
Quincy Av.
Wapello St.
Albia Rd.
Richmond Av.
Church St.
Greenwood Dr.
Chester Av.
Vine St.
Finley Av.
Shaul Av.
Ferry St.
Milner St.
Sheridan Ave.
Madison Ave.
Mary St.
Blue Grass Rd.
Lake Rd.

0 1000 2000

In Feet

NORTH

Transportation Plan

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

- Highway
- Arterials
- Collectors
- Other Links
- Trails
- Corridor Enhancements

Rochester St.
HWY 63
HWY 34
2nd Av.
McPherson Park Blvd
Woodland
N. Court St.
Main St.
Jefferson St.
Iowa Av.
4th St.
2nd St.
Hutchinson Av.
Dahlonega Rd.
Wapello St.
Albia Rd.
Greenwood Dr.
Chester Av.
Richmond Av.
Church St.
Vine St.
Finley Av.
Milner St.
Madison Av.
Blue Grass Rd.
Lake Rd.
Main St.

0 500 1000

In Feet

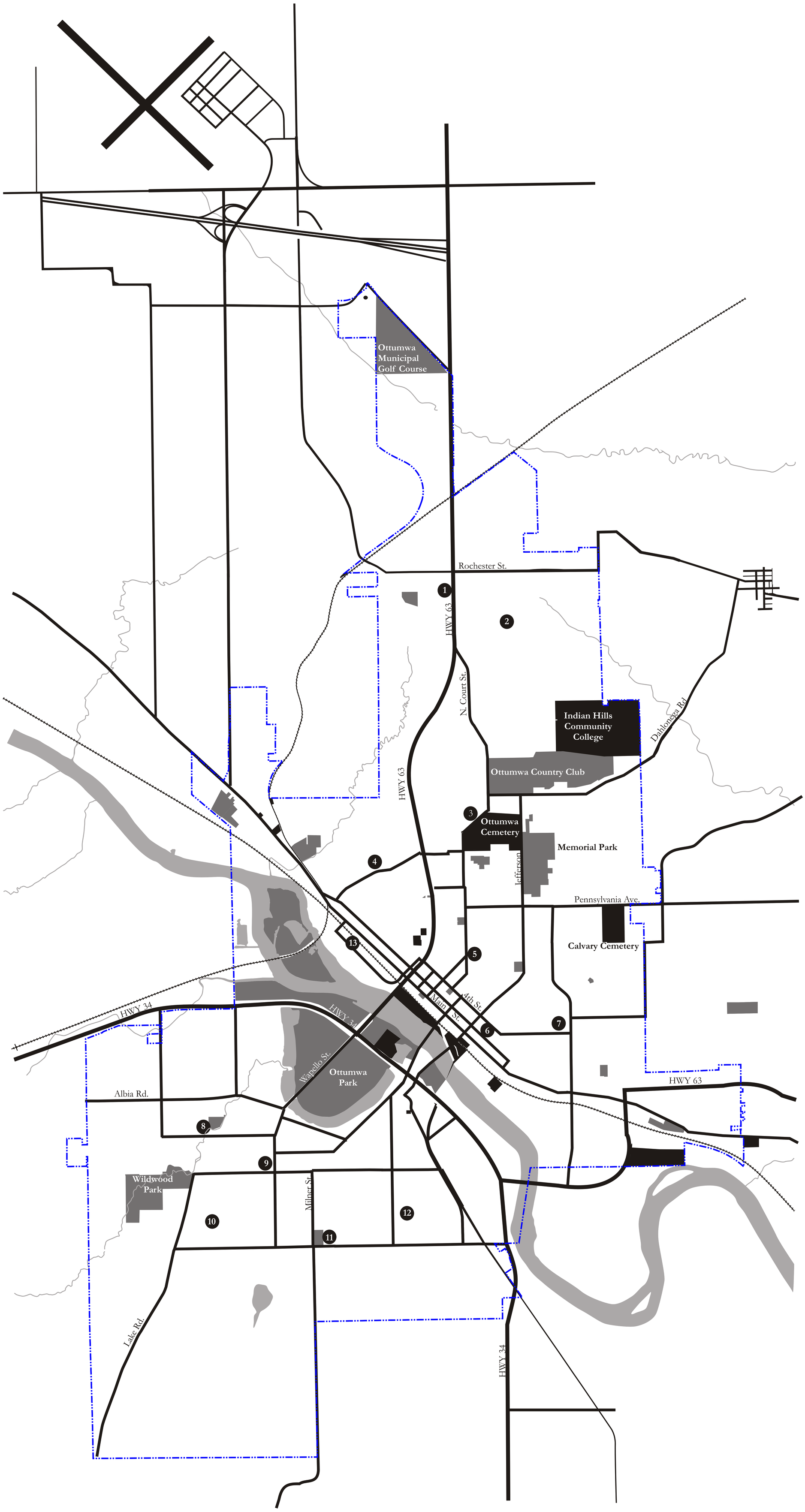
NORTH

Parks & Public Facilities

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

- Parks / Recreation
- Public Facilities
- Schools
  - 1 - Eisenhower ES
  - 2 - Administrative Offices
  - 3 - Horace Mann ES
  - 4 - James ES
  - 5 - Lincoln ES
  - 6 - Ottumwa HS
  - 7 - Wilson ES
  - 8 - Wildwood ES
  - 9 - Evans MS
  - 10 - Pickwick ES
  - 11 - Douma ES
  - 12 - Agassiz ES
  - 13 - Alternative HS



0 1000 2000

In Feet

NORTH

Parks & Trails

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

- Existing Parks
- Proposed Parks
- Wooded Areas
- Creek Trail Corridors
- Downtown Mixed Use
- Historic Districts
- Trails
- Bike Trails
- Corridor Enhancements

Glidepath
Rochester St.
HWY 63
Dahlonega Historic District
Sugar Creek Trail
Dahlonega Rd.
N. Court St.
Indian Hills Community College
Harrow's Brand Trail
HWY 63
Vogel/Vanes Historic District
Cemetery
Jefferson St.
Hospital
Pennsylvania Ave.
Cemetery
HWY 63
Water Works
Main St.
HWY 34
Civic Center
Wapello St.
HWY 63
Albia Rd.
Church St. Neighborhood Business District
Chester Street Promenade
Finley Ave.
Milner St.
Mary St.
Madison Ave.
HWY 34
Lake Rd.

0 500 1000

In Feet

NORTH

Water Mains

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

8-12 inch Water Mains
16-24 inch Water Mains
36+ inch Water Mains

Rochester St.
HWY 63
N. Court St.
Dahlonega Rd.
Jefferson St.
Pennsylvania Ave.
HWY 34
Wapello St.
Albia Rd.
Milnor St.
Lake Rd.
Madison Ave

0 500 1000

In Feet

NORTH

Sewer Mains

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

- 8-12 inch Sewer Lines
- 15- 24 inch Sewer Lines
- 30+ inch Sewer Lines

Rochester St.
HWY 63
N. Court St.
Dahlonega Rd.
HWY 63
Jefferson St.
Pennsylvania Ave.
HWY 34
4th St.
Main St.
Wapello St.
HWY 34
Albia Rd.
Main St.
Madison Ave.
HWY 34
HWY 63
Lake Rd.

0 500 1000

In Feet

NORTH

Housing Condition

Ottumwa, Iowa

RDG Crose Gardner Shukert
Omaha and Des Moines

- Good Condition
- Conservation
- Spot Rehabilitation
- Rehabilitation/ Redevelopment