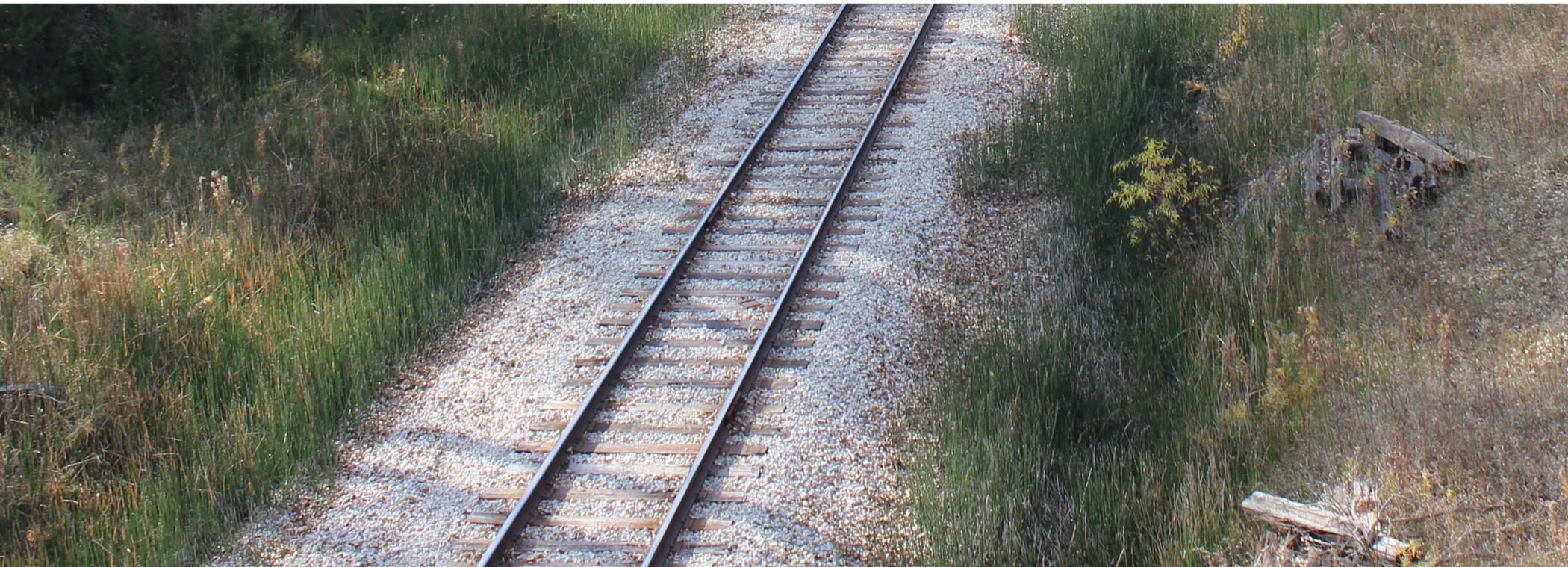
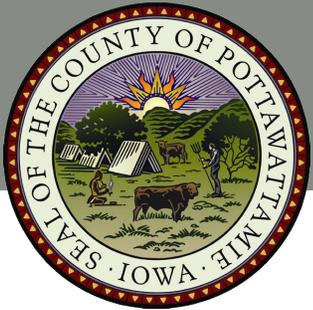




COMPREHENSIVE PLAN 20 POTTAWATTAMIE COUNTY 30



**POTTAWATTAMIE COUNTY, IOWA
COMPREHENSIVE PLAN 2030**

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CHAPTER 1: INTRODUCTION/BACKGROUND

PURPOSE OF THE COMPREHENSIVE PLAN

This Comprehensive Plan-Update was prepared under the direction of the Pottawattamie County Planning Commission as a guide for future development of the County.

This Pottawattamie County Comprehensive Plan-Update is designed to provide policy guidance, which will enable the citizens and elected officials of the County to make informed judgments and decisions about the future of the County. Many issues regarding the future of the County are addressed in this Plan.

A Comprehensive Plan is intended to identify goals, policies and procedures leading to the attainment of quality of life in Pottawattamie County and provide a general guide for future decisions and development concepts. The Comprehensive Plan is also intended to build a strong economic base for the County.

PLANNING PROCESS

Step 1: Background

Planning begins with the collection of data to provide a comprehensive picture of the areas being studied. Analysis of the data provides a basis for the development of forecasts into what the future will be within the County planning areas.

Step 2: Consensus/Recommendations

Planning is the development of the general plan, which establishes specific and practical guidelines for improving existing conditions and guiding future growth. The Comprehensive Plan is presented in narrative, maps and charts, describing what residents want their County to become.

The Comprehensive Plan provides a public process designed to identify, assess and develop goals and policies in the areas of land use, housing, public facilities, transportation and plan maintenance and

implementation. The Plan contains proposals and recommendations that need to be implemented in order to be of value to the residents of the County.

Step 3: Implementation

Implementation is the third phase of the comprehensive planning process. A broad range of development policies and programs are needed to implement the Plan. The Plan identifies the goals, programs and methods of implementing proposals and recommendations and providing a framework for protecting the overall health, safety and general welfare of the Pottawattamie County citizenry, as well as the natural environment. Pottawattamie County needs to plan, design, finance and implement public improvements, and the need to establish and enforce standards for the use of land, with emphasis on the preservation of agriculture land and the Loess Hills Region.

Implementation methods include incentive measures to stimulate private actions consistent with the Comprehensive Plan and the use of federal and state aid programs for community and economic development activities.

Each implementation method has its role in helping to achieve the purpose of the Comprehensive Plan. No one method can accomplish all the goals and policies stated in the Plan. Results are best achieved when using several or all for each element of the Comprehensive Plan.

ELEMENTS OF THE PLAN:

- 1. Introduction/Background**
- 2. Population, Economics and Housing**
- 3. Land Use Profile and Plan**
- 4. Loess Hills Region**
- 5. Public Facilities and Infrastructure**
- 6. Plan Implementation and Maintenance**



Each of these elements are interrelated and dependent upon the others. This relationship provides a framework which will translate these elements into workable programs to assist in achieving the physical, social and economic goals and policies of County.

The system embodied in this framework is a process that relies upon continuous feedback as goals change and objectives become more clearly defined. Planning is an ongoing process that requires monitoring and revision throughout the planning period.

AUTHORITY TO PLAN

The Comprehensive Plan for Pottawattamie County is prepared under the Authority Chapter 335, as amended, of The Iowa Code.

COMPREHENSIVE PLANNING PRINCIPLES

The following principles articulate ten planning principles that have been considered in this comprehensive plan update. They should be considered in the public investment decision-making process.

1. **Collaboration:** The Pottawattamie County comprehensive planning process actively sought input from a wide variety of stakeholders from within and outside of its jurisdiction. Stakeholders were encouraged to

participate and comment on the review process.

2. **Efficiency, Transparency and Consistency:** The County shared its vision for the plan update in the early stages while asking for input on the existing elements of the plan. Throughout the transparent process, there was continuous review, input and mediation. The outcome is a comprehensive plan that collectively promotes managed future development of the County in a manner that equitably benefits all residents and local businesses.
3. **Clean, Renewable and Energy Efficient:** Through the comprehensive plan update, the County focuses on energy efficiency by establishing a land use plan that efficiently connects development to existing utilities.
4. **Occupational Diversity:** Pottawattamie County supports and encourages diversity of employment and business opportunities. The comprehensive plan allocates land near existing infrastructure and transportation that is suitable in size and location for a variety of different types of businesses and services. When appropriate, business locations are connected to residential areas.
5. **Revitalization:** Planning and zoning within this plan facilitates the revitalization of established areas of the County, generally near communities, by promoting development that conserves land and protects historic resources. Reuse of existing sites, structures and infrastructure is preferred over new construction in undeveloped areas.
6. **Housing Diversity:** This plan provides for diverse housing as it makes sense for the safety and infrastructure of the unincorporated areas. The communities are able to offer an expanded range of housing options. Together, the need of both existing and future residents of Pottawattamie County can be met. The County encourages the rehabilitation of existing housing, when appropriate. Currently, the County is provided with minimal regional public transportation, but is considered when available.
7. **Community Character:** Community character is created through the varied communities, their assets, and County parks. Communities range in size, annual festivals, historic areas, arts and culture, recreation, and more.
8. **Natural Resources and Agricultural Protection:** The Land Use and Loess Hills chapters of this plan contain background information and goals supporting the protection, preservation and enhancement of both

natural resources and agricultural lands.

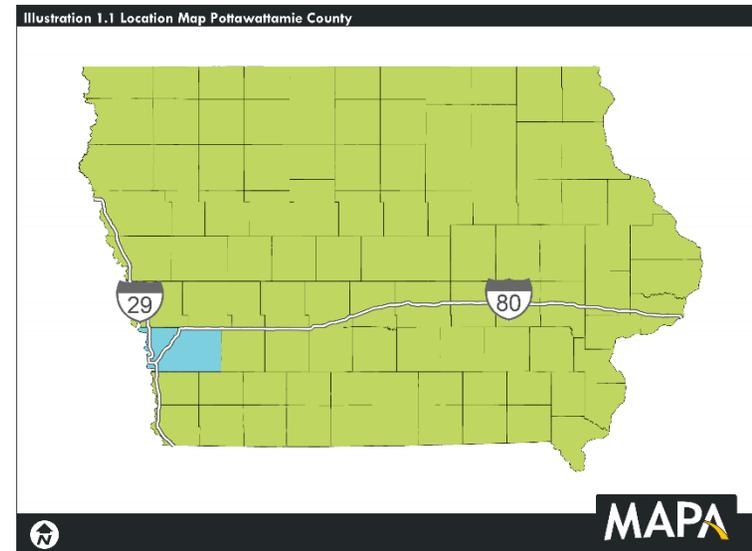
9. **Sustainable Design:** The plan advocates sustainable design by including a specific goal to consider green building materials and technologies, promoting recycling, and sustainability evaluations addressing materials, energy use, operating costs and lifecycle replacement costs for new facilities.
10. **Transportation Diversity:** The Land Use and Public Facilities chapters of this plan work together to develop a diverse transportation system. The plan addresses roadway improvements to relieve congestion, considers an expanded future transit systems, and notes existing trails while encouraging additional trail throughout the County.

LOCATION

Pottawattamie County is located in west-central Iowa, adjacent the Missouri River. Council Bluffs, Iowa is the County Seat of Pottawattamie County, which is located in the southwest corner of the County and also located within the Omaha, Nebraska Metropolitan Area. Primary road networks in Pottawattamie County include U.S. Interstate's 29, 80 and 680, U.S. Highway's 6 and 59 and State Highways 92 and 83.

The County has a total land area of approximately 616,448 acres, or 963 square miles. The major waterway is the Missouri River, which flows from the north to the south and serves as the western boundary of the County and of the State. The Missouri river and its tributaries have sculptured the terrain of Pottawattamie County, creating steep Loess Hills or bluffs along the eastern edge of the river valley, gently rolling upland hills in the central and eastern portions, and the seven to one-half mile wide strip of land adjacent the east side of the Missouri River, which is very level, river bottom lands.

There are fifteen communities in Pottawattamie County: Avoca, Carson, Carter Lake, Council Bluffs, Crescent, Hancock, Macedonia, McClelland, Minden, Neola, Oakland, Shelby, Treynor, Underwood, and Walnut.



CLIMATE

The climate of Pottawattamie County is continental and characterized by widely ranging seasonal temperatures and rapidly changing weather patterns. The temperature ranges from an average daily minimum of 8.3°F in January and maximum of 86.5°F in July. The average annual precipitation is 31.92 inches. The majority of rainfall occurs between the months of April and September. Snowfall annually averages 27.6 inches.

GOALS AND POLICIES

A Comprehensive Plan plays a major role in the future growth and sustainability of a county. Important components of this plan are specific planning goals and policies. Goals and policies provide local planners direction in the administration and overall implementation of the Plan. In essence, Goals and Policies are the most fundamental elements of the Plan; the premises upon which all other elements of the Plan must relate.

Goals are broad statements, identifying the present state or condition of the planning area and what the area could or should evolve into during the planning period. Goals are established for the primary components of the Comprehensive Plan, including population, land use, housing, public facilities, transportation and plan maintenance and implementation. Goals are long-term in nature.

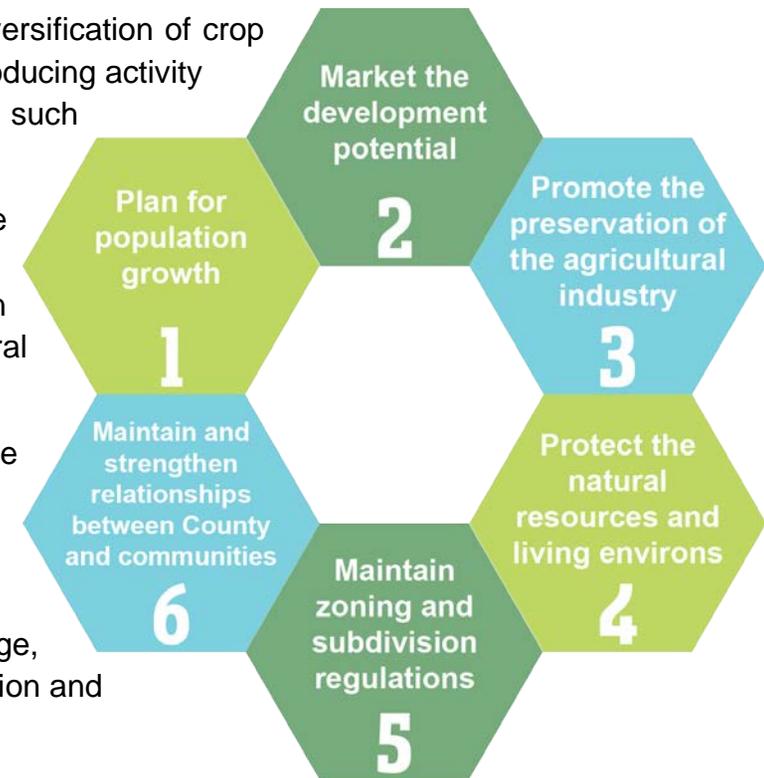
Policies help to further define the meaning of goals. In essence, Policies are recommendations for means by which goals can be accomplished. Policies, often referred to as objectives, are sub-parts of a Goal and are accomplished in a much shorter time space.

The Goals and Policies presented throughout this Comprehensive Plan are the result of both qualitative and quantitative research conducted in association with the Comprehensive Plan. The qualitative research has included input received from the Pottawattamie County Planning Commission, Board of Supervisors, and the general public.

GOALS THAT DRIVE THE PLAN

These general goals "highlight" important elements of the Pottawattamie County comprehensive planning process, as determined via the identification of "key" issues.

- **Plan** for population growth in which the population in the County is expected to grow by 19,858 people, or 18 percent, by the year 2030.
- **Market** the development potential of Pottawattamie County actively to support an increasing population, by broadening the economic base and expanding employment opportunities.
- **Promote** the preservation of the agricultural industry, including the diversification of crop developments. Historically, agriculture has been the primary income producing activity for rural Pottawattamie County, and is anticipated to remain as such throughout the 15-year planning period and beyond.
- **Protect** the natural resources and living environs of Pottawattamie County by controlling and potentially prohibiting, in specific regions, continued development of non-farm single-family dwellings, especially in areas ideally suited for agricultural production or unique natural environments, such as the Loess Hills Region.
- **Maintain** zoning and subdivision regulations and the appropriate administration procedures, to insure the proper implementation of the Pottawattamie County land use plan.
- **Maintain and strengthen** relationships between the County and each community to produce planning practices supportive of proper land usage, economic and housing growth, public facilities and services, transportation and recreation.



CHAPTER 2: COUNTY PROFILE

Population, economic and housing trends in Pottawattamie County serve as valuable indicators of future development needs, patterns for the County as well as each community, and provide a basis for the realistic projection of the future population. The quantity, location and density of demographic and housing features play an important role in shaping the details of various development plans to meet the needs of the County.

The population trends and projections for the years 1990 through 2030 were studied and forecasted for Pottawattamie County, utilizing a process of both statistical trend analysis and popular consent. Pottawattamie County, overall, is projected to increase in population during the next 15 years. This population growth will require Pottawattamie County to continue to implement development controls and promote development in appropriate areas of the County, while protecting areas ideally suited for agricultural production, or significant as natural environment areas.

GOAL AND POLICIES

Goal 2.1 *To maintain and increase the population base of Pottawattamie County at a rate acceptable to the vision of the citizenry.*

Policy 2.1.1 Plan for diversified population throughout Pottawattamie County during the 15 year planning period.

Policy 2.1.2 Actively market the development potential of Pottawattamie County, to increase the population, by broadening the economic base and expanding employment opportunities.

POPULATION

The analysis and projection of population are at the center of all planning decisions. This process assists in understanding important changes, which have and will occur throughout the planning period. Estimating population size is critical to a planning process. Projecting the population of a county is extremely complex because projections are based on various assumptions about the future. Projections must be carefully analyzed and continually reevaluated due to the County's dynamic economic and social structure of the County.

Table 2.1 identifies population trends (1990-2010) while Table 2.2 shows projections (2030) for the rural communities in Pottawattamie County. Between 1990 and 2010, the population of Pottawattamie County increased 11.3 percent overall and by 7 percent in the rural areas (outside of the incorporated communities). In 2010, the population of the County reached 93,158 persons. Population projections suggest that the County population will continue to grow at a modest rate of 18 percent by 2030 to an estimated 113,016 people, 5 percent in the unincorporated area. All communities are expected to grow by 2030 although most of that growth is expected in the western portion of the County.

Table 2.1: Population Trends - Rural Communities

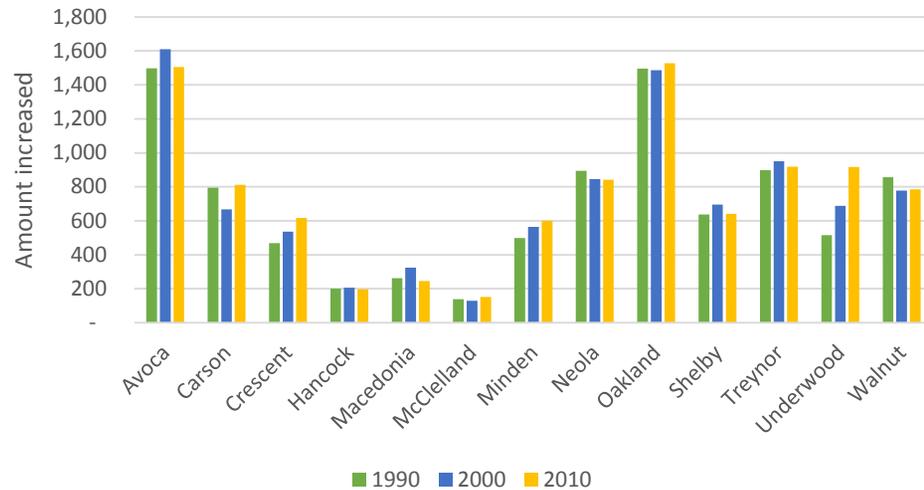
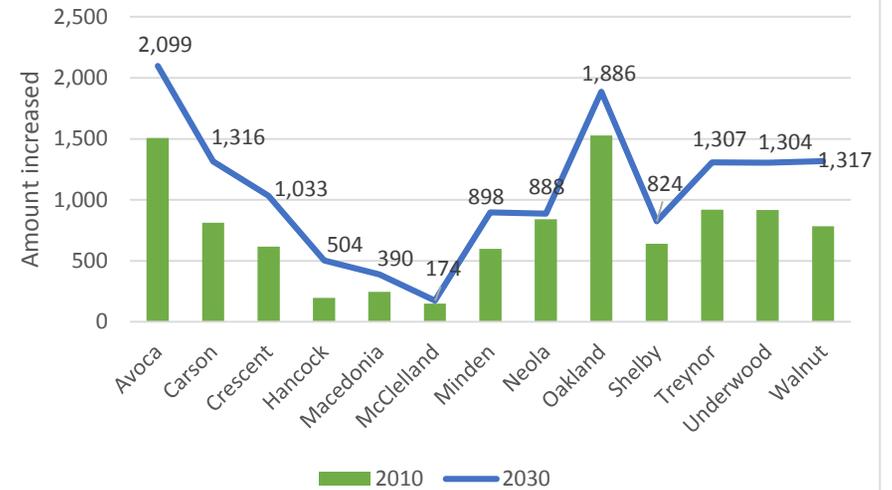
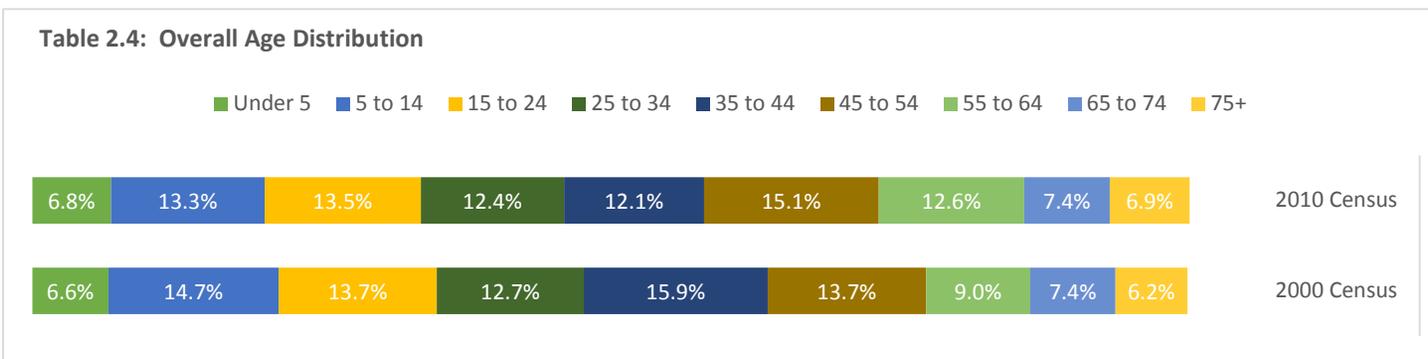
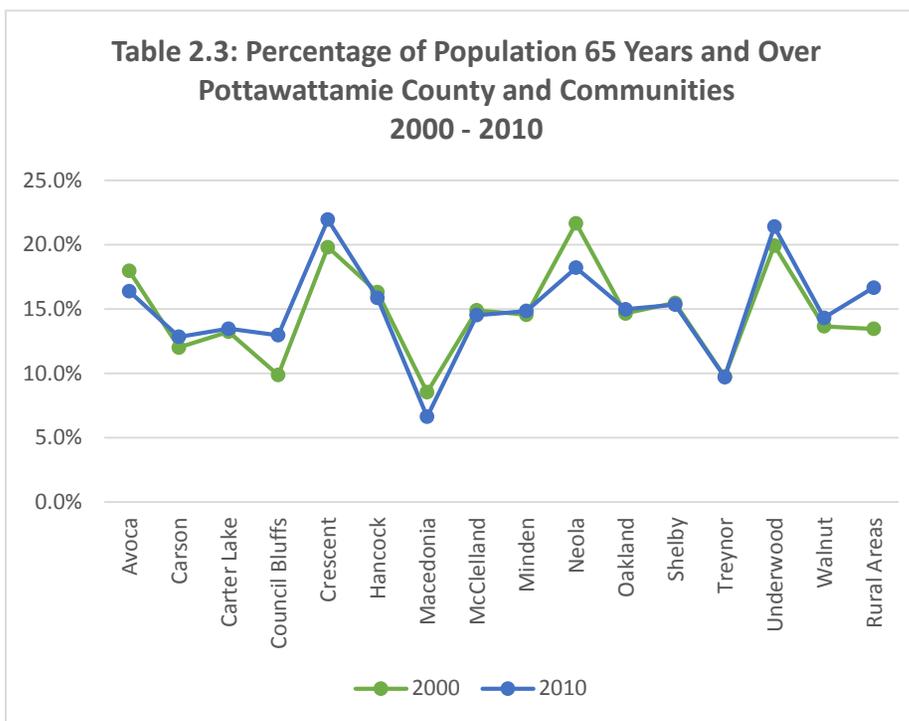


Table 2.2: Population Projection - Rural Communities



The population of Pottawattamie County is aging, median age is 38.5, which is higher than the MSA and state of Iowa. An aging population will require cities and the County to consider diverse zoning options to accommodate this demographic.



HOUSING

Pottawattamie County housing stock is generally older with the majority of homes being built prior to 1960. In 2010, there were a total of 39,386 housing units, up from 35,761 units (9 percent) in 2000. The vast majority, 77 percent, of housing type throughout the County is single family. Nineteen percent of housing type is 2 or more units and approximately 92 percent of these are located in the City of Council Bluffs. In 2010, only 6 percent of the housing stock throughout the County is vacant/unoccupied. Value of homes in the County remain generally affordable with more than half of all units valued between \$50,000 – \$149,999. Pottawattamie median value is \$126,300, slightly above that of the State median value of \$124,300.

Table 2.5: Age of Housing

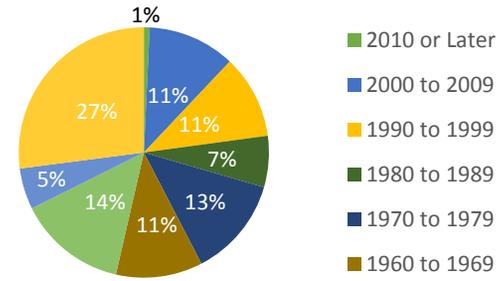


Table 2.6: Housing Tenure

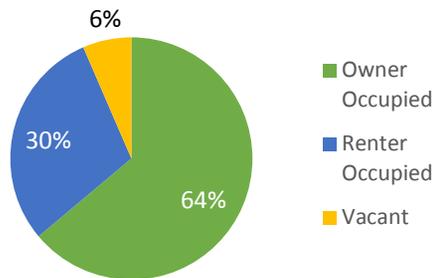


Table 2.7: Housing Type

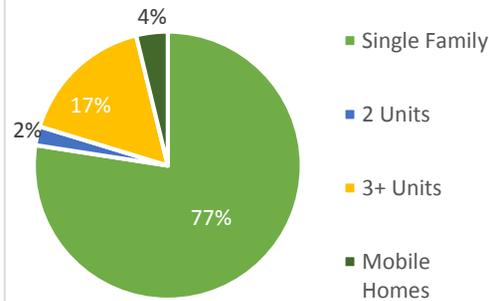
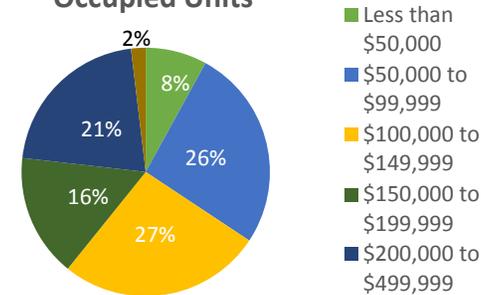


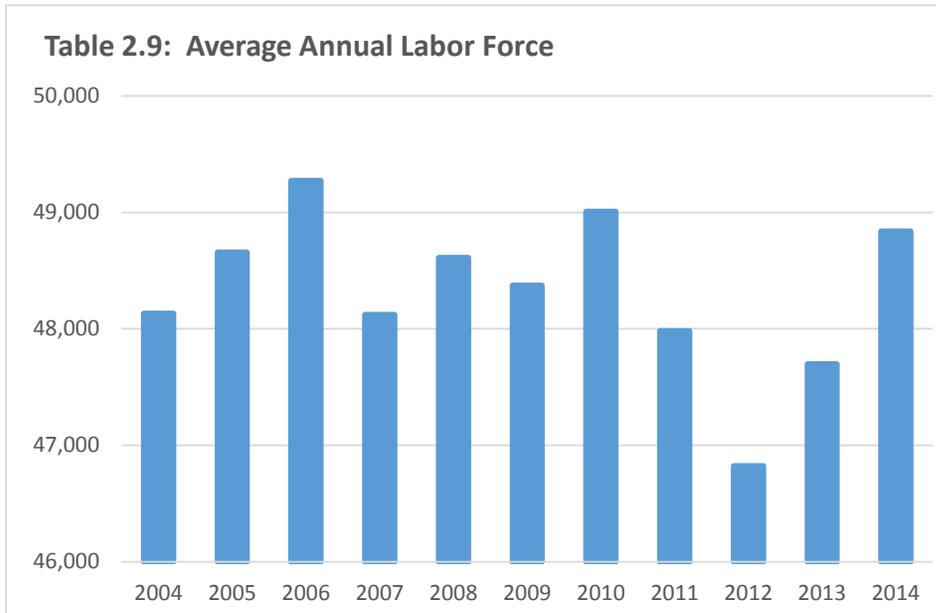
Table 2.8: Value of Owner-Occupied Units



ECONOMICS

The County supports and encourages economic development opportunities within the County and its communities. Managed growth within economic development is key to overall growth. The County works regularly with Western Iowa Development Association (WIDA), the Council Bluffs Chamber of Commerce, the Greater Omaha Chamber of Commerce, and others to grow both job opportunities and a desirable labor force. Being part of the larger metropolitan area allows Pottawattamie County to benefit from opportunities and facilities within the region.

According to the US Census, in 2013, 55 percent of the employed residents of the County, worked in the County, while 4 percent working outside of the County but within the State of Iowa. 41 percent of the employed residents worked outside the State of Iowa.



In 2010, 49,007 people in Pottawattamie County, 16 years and older, were in the labor force. During the past 10 years (2004-2014) the average annual labor force has stayed relatively constant, fluctuating between 48,000 and 49,000 people.

In 2013, the mean travel time to work for residents was 21 minutes, slightly longer than the mean travel time to work for the State of Iowa, which is 19 minutes.

The County lags behind the State of Iowa in bachelor's and graduate/professional degrees. It is important for the County to encourage local economic development groups and community colleges in training and educating the workforce to meet the needs of local employers.

Table 2.10: Travel Time to Work

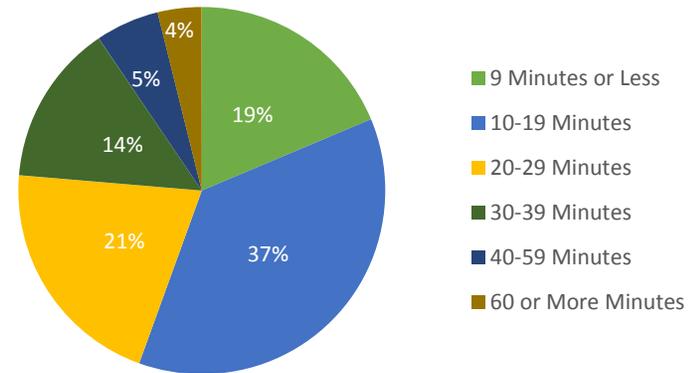
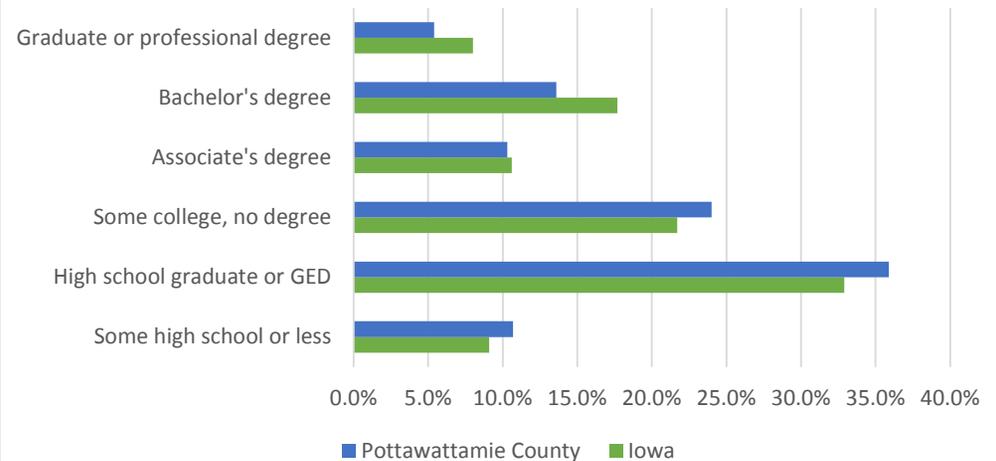


Table 2.11: Educational Attainment Population 25 and Over



CHAPTER 3: LAND USE

The amount and types of land uses influence current and future conditions in rural areas. The variety of land uses, present in Pottawattamie County, is the result of many influences, both human and natural. Existing land uses in Pottawattamie County are the result of factors influenced by individuals, roads, highways, economic activities, public and private agencies, commercial and industrial enterprises and the physical landscape. An examination of land use requires an understanding of the physical setting in which the use activities have developed and are continuing to develop. In order to understand the land use situation in the County, it is necessary to understand the existing land use patterns and the potential limiting factors which could influence future development. This chapter of the Pottawattamie County Comprehensive Plan details existing and future land use conditions, as well as the development of land throughout the County.

GOALS AND POLICIES

Goal 3.1 *Provide opportunities for development in an orderly, efficient and environmentally sound manner.*

Policy 3.1.1 Avoid developments that could result in the contamination of soils and ground water resources.

Policy 3.1.2 Limit future developments to locations which are relatively free of environmental constraints relating to soils, slope, flood plain, drainage, erosion, ground water, endangered species or other natural resources.

Goal 3.2 *Establish and maintain land use development patterns and densities in rural Pottawattamie County that conform to uniform planning standards.*

Policy 3.2.1 Develop and follow a general land use plan for the County, which is based upon present conditions and the sound forecast of future needs.

Policy 3.2.2 Strive to improve substandard conditions in rural Pottawattamie County by providing a planned program for clean-up and reuse of deteriorated areas.

Policy 3.2.3 Limit development from areas with sensitive soils conditions. Regions along the River corridors, contain the highest concentration of sensitive soils conditions. Perhaps the most important area to protect and preserve is the Loess Hills region, in the western portion of the County.

Policy 3.2.4 Ensure that adequate open and recreational space is maintained in the County. Emphasize recreational opportunities associated with the River corridors, as well as existing Pottawattamie County parks, nature areas and wildlife habitat areas.

Policy 3.2.5 Maintaining updated zoning and other policies/regulations that will provide incentives for preservation of agricultural lands for traditional agricultural uses.

Goal 3.3

Encourage compatible adjacent land uses throughout the County by means of regulations suited to the unique characteristics and location of each use.

Policy 3.3.1 Establish an annual review and modification process of zoning districts and regulations to encourage both development and redevelopment activities.

Policy 3.3.2 Facilitate the orderly development of residential uses that are environmentally sound, with regard to topography and soils capacity.

Policy 3.3.3 Support the planned development of non-farm residential structures within 2-miles of the Council Bluffs and within ½-mile of the other communities in the County. Agricultural-Urban Transitional Areas are planned in the rural area between the two-mile planning jurisdiction line of Council Bluffs and the eastern township line of Norwalk, Hardin and Keg Creek Townships, from the southern county line, north to the Norwalk and Hazel Dell Townships north line, where concentrations of rural subdivisions currently exist.

Policy 3.3.4 Encourage industrial and commercial development within and/or adjacent to the communities of Pottawattamie County or in areas allowing for compatible land uses and adequate access to transportation and utility systems.

Goal 3.4 ***Work cooperatively with federal, state, and adjoining county governments to develop compatible environmental control measures.***

Policy 3.4.1 Develop and enforce state and local regulations protecting the environment from contamination or pollutants.

Policy 3.4.2 Implement protective measures to limit excavation within sensitive soil areas, such as the Loess Hills region, to prevent soil erosion and over development of these areas.

Policy 3.4.3 Review and identify measures which limit or reduce flood hazards, control water run-off and enhance the quality of surface and ground water.

Goal 3.5 ***Provide opportunities and incentives for development that will encourage economic stability and strengthen the overall tax base in the County.***

Policy 3.5.1 Encourage the development and redevelopment of local businesses at strategic locations along highway corridors within the 2-mile limit of Council Bluffs and within ½-mile of each of the other communities, as established through community adopted land use policies.

Policy 3.5.2 Identify land uses to promote and compliment development at Interstate 29, 80 and 680 interchanges that provide services to highway traffic and regional rural areas within the County.

Policy 3.5.3 Establish procedures for site plan review of commercial and industrial developments.

THE NATURAL ENVIRONMENT

There are three topographic regions included in Pottawattamie County. The bottom lands along the Missouri River, steep bluffs adjacent the Missouri River valley, and the gently rolling to hilly uplands in the central and eastern parts of the County. Soils are used primarily for dry cropland, pasture and rangeland, very little of the total county area is irrigated.

SOILS

The Natural Resources Conservation Service has identified eight soils associations in the Soil Survey of Pottawattamie County. These include:

1. **Albaton-Haynie-Sarpy,**
2. **Luton-Cooper-Salix,**
3. **McPaul-Nodaway-Napier,**
4. **Ida-Hamburg,**
5. **Monona-Ida,**
6. **Monona-Marshall,**
7. **Zook-Nodaway-Marshall, and**
8. **Marshall-Exira Soil Associations.**

Albaton-Haynie-Sarpy Association

The Albaton-Haynie-Sarpy Association is on bottom lands along the Missouri River, in the extreme western portion of the County. This Association is characterized as *"Nearly level and very gently sloping, poorly drained, well drained, and excessively drained, clayey, silty, and sandy soils formed in alluvium on bottom land."* The Association comprises about 5 percent of the total County area. Cultivated croplands are the predominate land use type in this association.

Limitations of the Albaton-Haynie-Sarpy Association soils are severe for all soils where flooding, wetness and shrink-swell potential severely limit these soils for footings and foundations of structures, septic tank absorption fields and sewage lagoons. The clayey soils also severely limit septic tank absorption fields from functioning properly.

Luton-Cooper-Salix Association

The Luton-Cooper-Salix Association is located on bottom lands along the Missouri River in the western portions of the County, just above the Albaton-Haynie Sarpy Association. The Luton-Cooper-Salix Association is described as *"Nearly level, very poorly drained, somewhat poorly drained, and moderately well drained, clayey and silty soils"*

formed in alluvium on bottom land.” This Association occupies approximately 3 percent of the total County area. The Association is used for cultivated crops or for urban development, within or near Council Bluffs and Crescent.

All soils within this Association have severe limitations for the construction of foundations, septic tank absorption fields and sewage lagoons. Flooding, wetness and shrink-swell potential are all limiting factors.

McPaul-Nodaway-Napier Association

The McPaul-Nodaway-Napier Association is along bottom lands of portions of the Missouri River and the Pigeon, Indian, Mosquito, Pony and Keg Creeks in the western half of the County. These soils comprise just 6 percent of Pottawattamie County. The main concerns in management are flooding, excessive wetness and reducing the risk of erosion. The soils are characterized as *“Nearly level to moderately sloping, moderately well drained and well drained, silty soils formed in alluvium in upland drainage ways, on bottom land and on foot slopes.”* The Association is used for cultivated crops or for urban development. All or portions of the communities of Council Bluffs, Crescent, Underwood and Neola are included within this Association.

McPaul and Nodaway soils have severe limitations for the construction of foundations due to flooding, while Napier soils have only slight limitations. Severe limitations for sewer lagoons and septic tank absorption fields in both McPaul and Nodaway soils are identified due to flooding. Napier soils exhibit only severe limitations due to slope for sewage lagoons and only slight to moderate for septic tank absorption fields.

Ida-Hamburg Association

The Ida-Hamburg Association is generally located in the western portion of the County, along the ridgetops and steep side slopes of the Loess Hills. Soils of this Association are described as *“Moderately sloping to very steep, well drained and somewhat excessively drained, silty soils formed in loess on uplands.”* Approximately 3 percent of Pottawattamie County land area is comprised of this Association. Most areas of this Association are pastured, some areas support native vegetation and some smaller areas are used for cultivated crops.

Slight to moderate limitations exist for the construction of foundations for buildings in the Ida Soils, while Hamburg soils are listed as severe due to steep slopes. Septic tank absorptions fields and sewage lagoons are severely limited in this Association due to steep slopes.

Monona-Ida Association

This Association ranges from nearly level lands to strongly sloping soils on ridgetops and from moderately sloping to very steep soils on side slopes. Soils of this Association are characterized as *“Nearly level to very steep, well drained, silty soils formed in loess on uplands.”* Most of the western half of Pottawattamie County (west of Keg Creek) is included within this Association. Approximately 25 percent of the County area, is comprised of this Association. Lands are utilized for cultivated crops, pasture, or hay.

Slopes and moderate shrink-swell potential impact this Association soils with moderate to severe limitations for building foundations, septic tank filter fields and for sewage lagoons.

Monona-Marshall Soils Associations

Monona-Marshall Soils are located in the central portion of Pottawattamie County, generally between the Keg Creek and West Nishnabotna River valleys. Soils in this Association are described as *“Gently sloping to moderately steep, well drained, silty soils formed in loess on uplands.”* The total area included in this Association occupied 18 percent of the total County area. Soils of this Association are primarily cultivated crops, with small amounts utilized for hay and pasture.

Moderate to severe limitations exist due to shrink-swell potential and slopes for the construction of foundations. Moderate to severe limitations impact the ability of sewage lagoons and septic tank absorption fields to function properly due to steep slopes and seepage of these soils.

Zook-Nodaway-Marshall Association

Soils of the Zook-Nodaway-Marshall series are located within the stream terraces of creeks and rivers throughout the eastern third of the County. These regions and their soils are generally described as *“nearly level to moderately sloping, poorly drained, moderately well drained, and well drained, silty soils formed in alluvium on bottom land and in loess on stream benches.”* Soils in these regions comprise 5 percent of the total county area. Lands of this Association are comprised of cultivated crops. The major management concerns are flooding and wetness in areas of the Zook and Nodaway soils.

Zook and Nodaway soils are rated severe for limitations to foundations, septic tank absorption fields and sewage lagoons, due to flooding and wetness. Marshall soil have only slight limitations for septic tank filter fields, but have moderate to severe limitations for sewage lagoons because of seepage and sloping conditions. Shrink-swell potentials of Marshall soils have moderate limitations to structural foundations of buildings. Specific conditions of individual sites should be examined to determine if construction of lagoons and septic systems can overcome these limitations.

Marshall-Exira Association

This Association is located throughout the majority of lands in the eastern third of the County. The Association is described as *“Nearly level to moderately steep, well drained, silty soils formed in loess on uplands.”* Approximately 35 percent of Pottawattamie County contains this soils Association. The soils of this Association are mainly utilized as cultivated crops.

Limitations of Marshall soils are moderate for the construction of foundations, moderate to severe limitations for sewage lagoons due to slope and only slight limitations for septic tank absorption fields.

Exira soils have moderate to severe conditions due to shrink-swell and slopes for foundations, slight to severe limitations for septic tank absorption fields and sewage lagoons depending on the slope of a particular parcel of land.

WATERSHEDS



The topography and terrain of Pottawattamie County is varied. It has three general topographic regions. Bottom lands are associated with the Missouri River in an area of land ranging from seven to a half-mile wide along the western boundary of the County. Very steep bluffs along the eastern edge of the Missouri River valley are formed in Loess Hills. Lastly, gently rolling to hilly uplands in the central and eastern portions of the County provide the largest concentration of croplands.

Drainage in the County is generally from the northeast to the southwest. The primary streams and rivers are from west to east are, the Honey, Pigeon, Mosquito, Keg, Silver Creeks, the West Nishnabotna River, the Graybill, Jordan, Farm Indian, and Walnut Creeks, as well as the East Nishnabotna River.

GROUNDWATER

A ground-water resources investigation was conducted by the USGS in 1992. This report describes the availability, quality, and use of water from the alluvial, glacial-drift, and Dakota aquifers in a nine county area in southwest Iowa including Pottawattamie County. The flood plain of the Missouri River valley was not included.

The eastern part of the County is in the Nishnabotna alluvial aquifer. Yields to wells have been reported as large as 2,000 gallons per minute; however most yields are less than 100 gallons per minute. Nitrate concentrations greater than the drinking water regulation and agricultural herbicides have been detected in samples from municipal water supplies.

Four types of glacial-drift aquifers are present; loess, inter-till sand and gravel, basal sand and gravel, and buried-channel aquifers. The glacial drift aquifers are most commonly used by rural water users, or users that do not have access to alluvial aquifers. These aquifers are discontinuous and unpredictable in location. Hydraulic and water quality data generally are unavailable for these aquifers.

Wells completed in loess commonly yield less than 10 gallons per minute, although there are reports of yields as large as

20 gallons per minute. Yields of 10 to 120 gallons per minute appear to be possible for inter-till and basal sand and gravel aquifers. Yields of more than 150 gallons per minute are possible from some buried-channel aquifers.

It is recommended that all communities within the County participate in a wellhead protection program.

RURAL EXISTING LAND USE ANALYSIS

Pottawattamie County contains approximately 616,448 acres of land area. Existing land uses in Pottawattamie County are identified in Illustration 3.1. These current land uses types, such as agricultural, residential, commercial, industrial, parks and recreation and public/quasi-public are delineated.

Illustration 3.1: Land Use Chart

	Riverfront & Ag Production	Ag Production	Loess Hills	Ag – Urban Transitional	Urban Transitional	Industrial	Commercial
Dwellings per quarter-quarter section	1	2	2	3	3	-	-
Commercial permitted	No - except at interchanges	No	No	Yes	Yes	N/A	Yes
Industrial permitted	N/A	No	*Limited	No	Yes	Yes	N/A
Residential subdivisions permitted	No	No	Yes, clustered recommended	Yes	Yes	No	No
Minimum lot size with well and septic	40 acres	2 acres	2 acres if not clustered	2 acres	2 acres	1 acre	1 acre
Minimum lot size with water and/or sewer	N/A	N/A	2 acres if not clustered	1 acre	1 acre	N/A	N/A
Minimum lot size when within ½ mile of a city	N/A	N/A	2 acres if not clustered	N/A	1 acre	N/A	N/A
Requires subdivision roads to County standards	N/A	N/A	Yes	Yes	Yes	N/A	N/A
Minor sub (4 lots or <) direct-shared access hard surfaced roads	N/A	N/A	Yes	Yes	Yes	Yes	Yes
Major sub (5 lots +) frontage roads	N/A	N/A	Yes	Yes	Yes	Yes	Yes

*Limited opportunities available by conditional use permitting

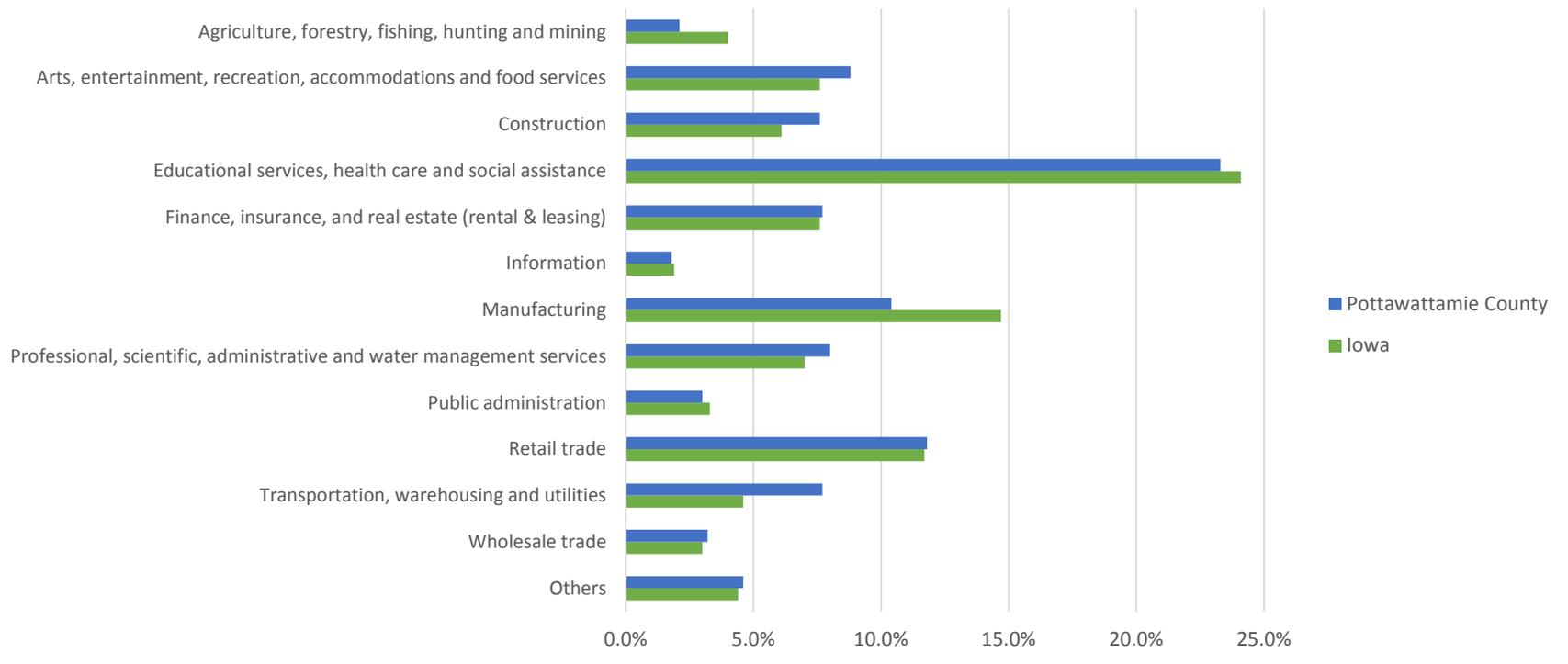
Rural Land Use

Rural residential land use is located throughout the County. There were an estimated 6,958 households in 2010 throughout Pottawattamie County in the rural area (balance of county), including the rural subdivision areas. This is an increase of 958 households from 2003. High concentrations of agricultural production lands in the eastern third of the County have limited the amount and concentration of rural dwellings. Likewise, portions of Pottawattamie County area similarly less developed in “pockets” throughout the County.

Agriculture has historically been the primary focus of the Pottawattamie County economy and its communities. Production includes crop and livestock production and is the most dominate land use in the County (open space or agriculture).

Table 3.1: Employment Distribution by Industry

(Civilian Employed Population 16 Years and Over)



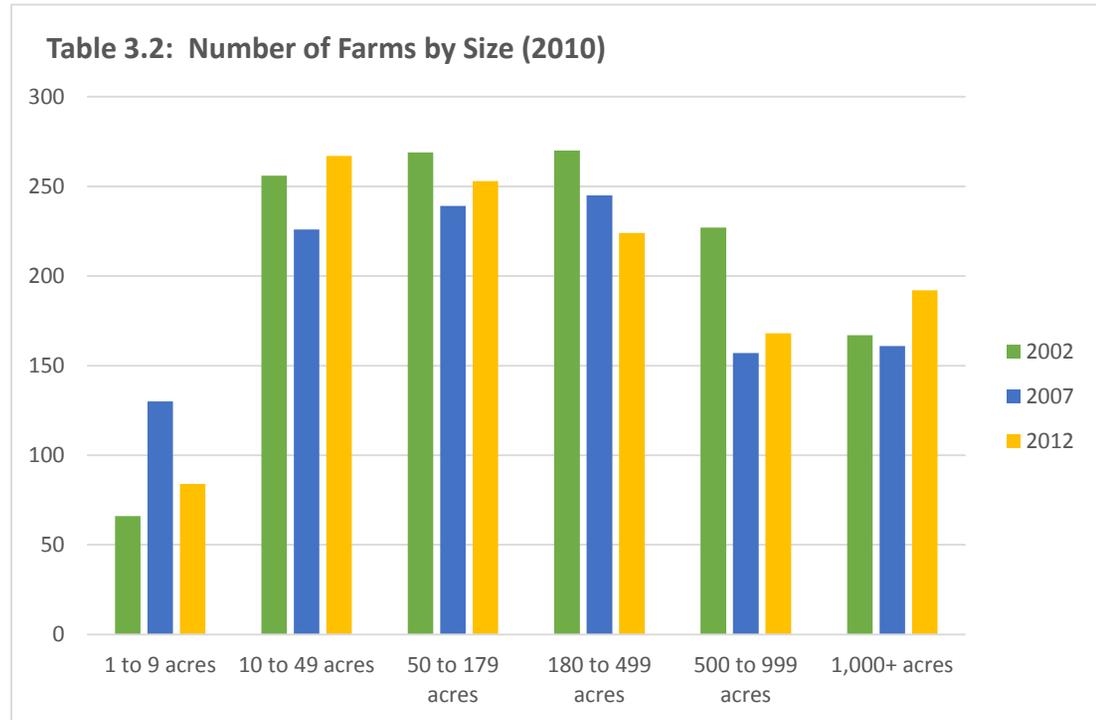
Although a primary focus of land use, Census data shows that the agriculture and related industry represent only 2.1 percent of County employment, lower than the State rate of 4 percent. Nearly a quarter of employment is in the educational services, health care and social assistance industries.

Commercial and industrial land uses, throughout Pottawattamie County, are generally located within the 2-mile limit of the communities. This allows for efficient use of connections to existing utilities and infrastructure.

Public/quasi-public land uses such as churches, cemeteries and public utility lines are located throughout the County. Recreation/wildlife areas, State Recreational Areas, Nature Areas, State Parks, County Parks and Wildlife Habitat areas sponsored by the Pottawattamie County Conservation Board, as well as numerous wildlife management areas, are located throughout the County.

Future development in Pottawattamie

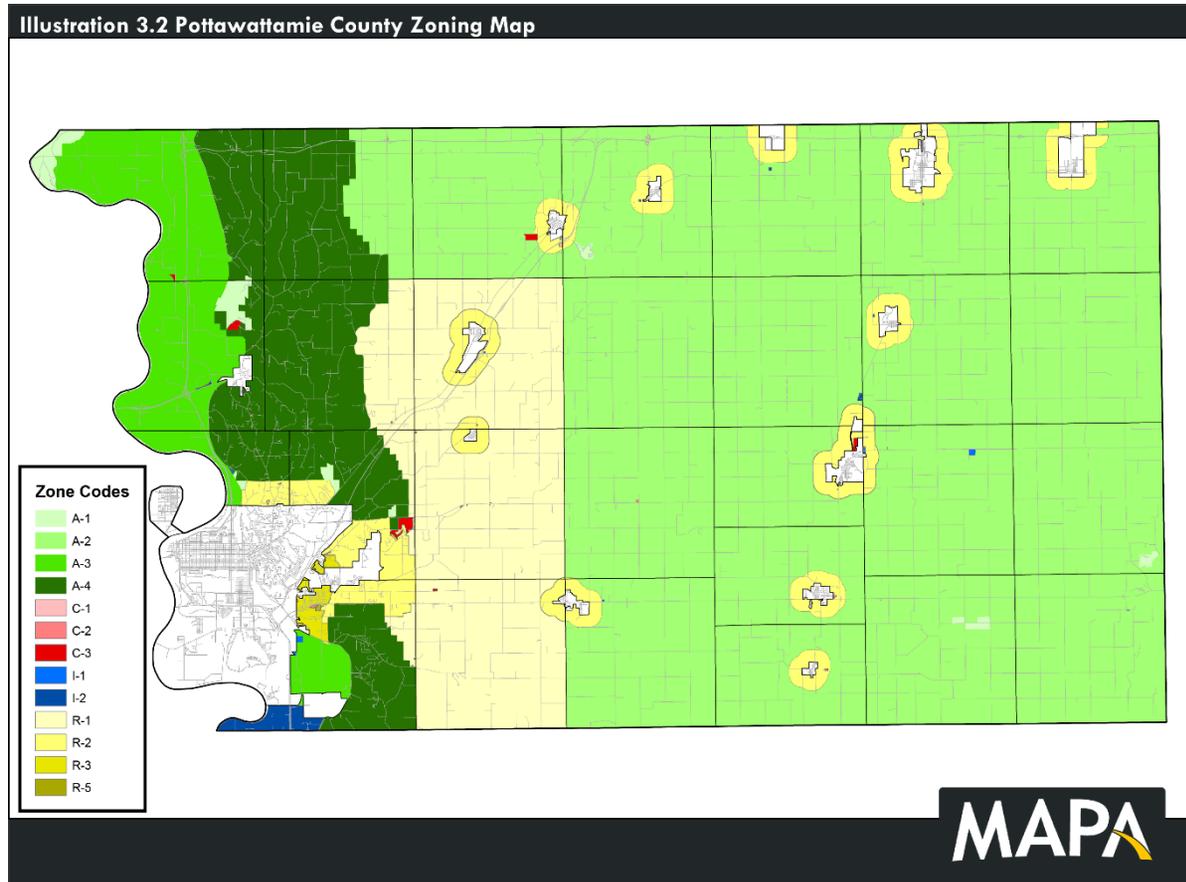
County is expected to be concentrated in close proximity to each of the communities and in selected areas, within approximately a eight mile radius of Council Bluffs. Coordination between local and County officials is imperative to insure adjacent land uses are compatible, especially within the 1/2-mile limit of the communities. The future land use in this update reflects that coordination with the communities and includes residential, commercial, and industrial uses as identified by each community.



Rural Zoning

The boundaries of zoning and overlay districts are shown on the Official Zoning District Map (see right) and are part of the Pottawattamie County Zoning Ordinance (separate document) which can be obtained from the Pottawattamie County Planning Office.

Zoning refers to a classification within land uses which the regulations specified within the Zoning Ordinance are uniform and which are assigned to a particular area of the County and noted on the Zoning Map.

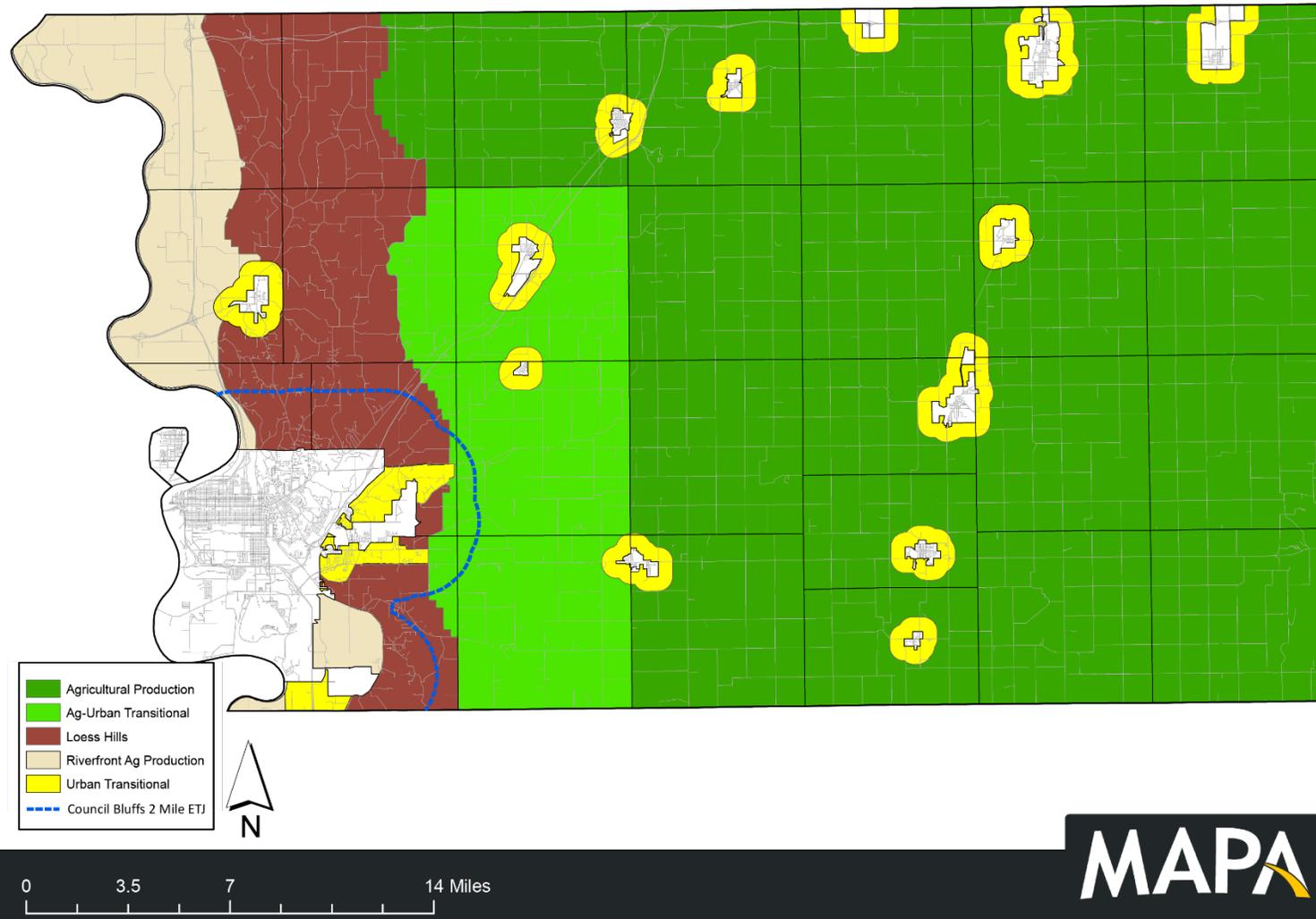


RURAL FUTURE LAND USE

The population of rural Pottawattamie County is expected to increase by 847 persons by 2030. Likewise, all incorporated communities within the County are expected to increase in population during that time. Growth in communities will vary with larger growth generally happening in and around Council Bluffs and adjacent communities. The Pottawattamie County Planning Commission should encourage future development to occur in close proximity to existing communities to preserve agricultural lands. Such planning practices will also allow for the efficient use of existing infrastructure features, including streets, electrical, water and sewer systems.

A generalized future land use map for Pottawattamie County is presented in Illustration 3.2. Agricultural production, which currently accounts for an estimated 64 percent of the County land use, will continue to be located in the rural areas of Pottawattamie County. The western third of the County is impacted by rolling hills and steep topography. Although less populated and large areas lack rural roads, non-farm related dwellings could be attracted to this area of the County. Provisions to limit the density of development in this area are strongly recommended.

Illustration 3.3: Pottawattamie County Future Land Use



RIVER FRONT AND LOW LYING AGRICULTURAL PRODUCTION AREAS

The first and most restrictive region included in the Future Land Use Plan analysis, is the River Front and Low Lying Agricultural Production Areas. This area extends from the Missouri River east to the western boarder of the Loess Hills region. The River Front region is most notable for its association with the low-lying bottomlands of the Missouri River floodplain. This region contains very fertile soils for the production of row crops and is generally void of non-farm dwellings. The nature of the mostly flat lands has attracted the Interstate 29 and 680 corridors with their associated commercial uses at the interstate interchanges. Generally, given the fact that large portions of this region are included in the floodplain of the Missouri River, very few areas are capable of sustaining development.

The following is a list of recommendations for the area:

- Prohibit commercial and industrial uses, except at Interstate interchanges.
- Allow dwellings only when in conformance with floodplain restrictions.
- Preservation of wetlands, open space areas and agricultural production areas is needed.
- Limit non-farm dwellings to one per quarter/quarter (40 acres).

The most predominate use of this region of Pottawattamie County is agricultural production. Row crops are perhaps most highly concentrated as in any area of the County.

AGRICULTURAL PRODUCTION AREAS

Future Agricultural Production Areas will remain in the central and eastern portions of the County. These production areas are notable for having fewer numbers of single-family dwellings, large expanses of croplands and the presence of moderately large livestock confinement facilities. Traditionally, the highest rated land use issue in Pottawattamie County was the protection of agricultural lands for agricultural production. The second highest issue identified was the protection of existing farm operations from construction of non-farm single-family dwellings, commercial and industrial facilities.



The following is a list of considerations to protect these areas from the encroachment of urban uses:

- Prohibit commercial and industrial uses.
- Limit non-farm dwellings to two (2) per quarter/quarter (40 acres).
- Maintain a minimum lot size to 2 acres for individual dwellings (on well and septic system).

To protect agriculture lands for agricultural use, the development of urbanized uses should be restricted.

LOESS HILLS REGION

The Loess Hills Region runs from the northern to the southern portion of Pottawattamie County and includes the eastern portion of Council Bluffs and all of Crescent, Iowa. Topographic conditions include the steep bluffs along the eastern edge of the Missouri River and its associated canyons and drainage ways, as well as rolling hills to nearly level rangelands along the eastern boundary of the region. This area is internationally renowned for its unique concentration of Loess Soils (over 200 feet thick) and wide variety of flora and fauna species that combine to make this region one of the most important ecological areas in western Iowa.

Pottawattamie County sees the need for the protection and preservation of these areas as an important resource in the County. This geographic region extends beyond Pottawattamie County into a total of seven western Iowa Counties.

The Loess Hills have experienced an influx of non-farm single-family dwelling construction during the last ten years, which has led local residents, the Pottawattamie County Planning Commission, and Board of Supervisors to question the logic of continued development. The protection of the Loess Hills region was identified as one of the most important key issues to Pottawattamie County, as shown in the results of the County-wide Survey, and discussion and consensus with the Planning Steering Committee in preparation of the 2013 plan.

The following is a list of considerations for the future development of the Loess Hills Region to make this region one of the most important ecological areas in the Midwest:

- Promote preservation methods of steep slopes, scenic view corridors and areas that have historic or natural importance.

- Limit non-farm dwellings to two (2) per quarter/quarter (40 acres).
- Provide for development options that meet the needs of the Loess Hills area in terms of erosion control, preservation of natural sloped topography and natural “view corridors”.
- Establish a requirement for grading permits County wide.
- Prohibit extraction pits in the Loess Hills area.
- Promote “clustered subdivisions” that are oriented perpendicular to hard surfaced county roads, state or federal highways.
- Clustered subdivisions should utilize the natural topography to “step” the houses into the hillside to retain natural grades as much as possible.
- Require subdivision roads to be constructed to County Road Standards.
- Minor subdivisions, comprised of no more than 4 separate lots, can have direct-shared access onto hard surfaced roads beyond 2-miles of Council Bluffs and ½-mile of the other communities in the County.
- Major subdivisions of 5 or more separate lots would require frontage roads or designated access roads that have direct access onto hard surfaced roads within 2-miles of Council Bluffs and ½-mile of the other communities of the County.

Please refer to the expanded section on conditions of the Loess Hills for a more thorough analysis of this unique ecological area.

AGRICULTURAL-URBAN TRANSITIONAL AREAS

The Agricultural-Urban Transitional Area is identified as an existing area which contains the highest concentration of rural subdivisions. Geographically, this region is located east and northeast of the two-mile planning jurisdiction of the City of Council Bluffs and extends to the east Township line of Norwalk, Hardin and Keg Creek Townships (300th Street) and the north Township line of Norwalk, or Rosewood Road, south to the County Line. Although agricultural production takes

place within this region, the mixture of non-farm households in close proximity to agricultural uses is already prevalent.

Highways 6, and 92, as well as Interstates 80 and 29 serve the region. These roadways effectively provide quick travel times to Council Bluff and the Omaha, Nebraska metropolitan area.

The following items are key issues to the future development of this region:

- Dwellings with individual wells and septic systems would be required to have minimum lot sizes of two acres.
- Allow minimum lot size to be reduced from two acres to one acre when subdivisions utilize public or common water and/or sewer systems.
- Designate county roads as major collector category roads in conjunction with development of subdivisions.
- Require subdivision roads to be constructed to County Road Standards.
- Minor subdivisions, comprised of no more than 4 separate lots, can have direct-shared access onto hard surfaced roads.
- Major subdivisions of 5 or more separate lots would require frontage roads or designated access roads that have direct access onto hard surfaced roads.
- Require subdivisions to lessen the impact of their development upon adjacent agricultural production areas by planned open space, shelter belts and landscaping.

URBAN TRANSITIONAL AREAS

Areas within ½ miles of Neola, Minden, Shelby, Avoca and Walnut form a band of transitional rural lands along the I-80 interstate and Highway 83 (Tamarack Road) corridors. Likewise a similar band of jurisdictions is formulated along the Highway 59 corridor including the communities of Hancock, Oakland, Carson and Macedonia. These urban transitional areas split the agricultural production area in half and logically provide services to the agricultural production area.

Lands within ½ miles of each of the cities should be the area of concentration for non-farm rural dwellings, and commercial and industrial uses that prefer not to or should not be located within the corporate limits of a city. Given the close proximity of municipal services, such as emergency medical, utilities, and other municipal facilities, the areas within two miles of each city are ideal locations for non-farm land use types.

Priorities for development in this region are as follows:

- Allow non-farm dwellings and subdivisions in highest concentrations of any of the future land use areas.
- Allow subdivisions as a permitted use within 2-miles of Council Bluffs and ½-mile of the other communities, when located on hard surfaced roads.
- Promote subdivisions with public or common water and/or sewer systems with minimum lot sizes of 2 acres, but decrease minimum to one acre when location is within one mile from the corporate limits.
- Require subdivision roads to be constructed to County Road Standards.
- Minor subdivisions, comprised of no more than 4 separate lots, can have direct-shared access onto hard surfaced roads beyond 2-miles of Council Bluffs and ½-mile of the other communities.
- Major subdivisions of 5 or more separate lots would require frontage roads or designated access roads that have direct access onto hard surfaced roads within 2-miles of Council Bluffs and ½-mile of the other communities.
- Promote commercial and industrial uses where proximity to urban services are readily available, as well as access to the highway corridors.

Continued development of rural subdivisions in this region is recommended to be coordinated with the future planning documents of the communities. Future road systems, utilities and open space areas need to be coordinated between the communities and rural Pottawattamie County to provide proper development patterns.

INDUSTRIAL AREAS

Future industrial usage is encouraged to locate in close proximity to major transportation routes within the 2-mile limit of Council Bluffs and ½-mile of each of the other communities or in specific rural areas such as along railroad or highway corridors. The types of industries that should be encouraged in these areas should include “light manufacturing” and “general industrial” types, such as high tech or agriculture related industries. These types of industries are typically clean and efficient in operation and provide varied classifications of employment opportunities.

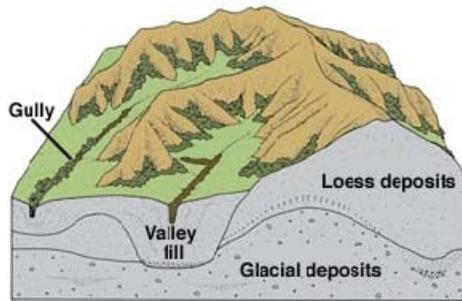
COMMERCIAL AREAS

Future commercial land uses in rural Pottawattamie County will include, highway commercial, commercial recreational, and Loess Hills Commercial Overlay District. Highway commercial land use should be located within 2-miles of Council

Bluffs and ½-mile of each of the communities, and in limited instances be considered at the junctions of major highways or at interchanges along Interstate 29, 80 and 680 in rural Pottawattamie County. Development should be limited to commercial types capable of meeting the needs of local highway motorists. This would include such types as gasoline convenience shops, truck and freight terminals and farm implement sales and service.

To encourage limited opportunities for commercial land use that would enhance the social-economic aspects of local recreation and product opportunities related to tourism, a commercial recreational and Loess Hills Commercial Overlay District will be utilized. The commercial recreational use will include services related to recreational opportunities such as the bike trails, water trails, and county parks. The Loess Hills Commercial Overlay District allows limited opportunities for commercial land use that would enhance the social-economic aspects of the Loess Hills. The District would be in close proximity to the Lincoln Highway Scenic Byway with the intent of this use to encourage limited commercial development associated with locally made or grown products that would include such types as arts, craftsmanship, foods, wine, and produce.

CHAPTER 4: LOESS HILLS REGION



The western third of Pottawattamie County contains natural soils formations that formed during the “Ice Age” from glacial outwash, which deposited crushed and powdered rock along what is now the Missouri River Valley. As the glaciers melted and gradually receded, dry wind-blown silt was deposited along the eastern edge of the Missouri River valley and eventually formed the Loess Hills or “Bluffs.”

This soils formation exists in seven counties along the western border of the State of Iowa. The Loess Hills in Pottawattamie County range from one-half to seven miles in width, along and east of the Missouri River valley, with the steepest slopes present on the western edge of the landform. Rolling to nearly level terrain is typical in the eastern areas of the Loess Hills formation, much of which is utilized for agricultural crop production.



Loess soils in western Iowa and Pottawattamie County are unique in the United States, as they represent the deepest concentration (upwards of 200 feet) of this soils type.

In 1985 the National Park Service said they are the “best example of loess topography not only in the central lowlands, but in the United States.”

Only one other region in the World compares (China’s loess formation exceeds 300 feet in depth), but according to one source this region has been extensively excavated to the point where none of its natural topography exists.

Development has impacted the Loess Hills of Pottawattamie County, primarily characterized by farming operations, single-family homes and the communities of Crescent and Council Bluffs. The Pottawattamie

County Zoning Ordinance limits development of rural dwellings to lands that front on hard surfaced County Roads, State

or Federal Highways. These provisions have been successful in achieving their original intent.

However, negative effects of these provisions have also occurred. Several sections of the scenic highways have experienced the development of large concentrations of individual dwellings to the point where views of the Loess Hills valleys and vistas have been blocked from the “Scenic Byways,” or highways (Old Lincoln Highway). A few multiple lot subdivisions exist within the Loess Hills region; however, the vast majority of these dwellings were developed as separate parcels. In order to protect these valleys and vistas, the following policies have been developed.

LOESS HILLS DEVELOPMENT POLICIES

A variety of policies have been considered that could be utilized to limit continued development in the Loess Hills.

Policies to be considered when developing in the Loess Hills are as follows:

- Promote preservation methods that preserve the Loess Hills region, and at the same time allow appropriate levels of development.
- Limit the concentrations of single-family dwellings along hard surfaced county roads, and State and Federal Highways. Examples currently exist where rows of dwellings along these hard surfaced roads block scenic views to the valleys and canyons beyond.
- Establish provisions within the Zoning and Subdivision Regulations that prevent erosion of sensitive Loess Hills soils. Changing the natural topography for dwelling sites and entire subdivisions can, and has, severely damaged the ecosystems of the hills below the development sites.
- Devise methods that promote the least amount of site leveling and re-grading by “incentive zoning” techniques that allow smaller lot sizes if the dwelling footprint “steps” with the natural topography to limit the need for excessive excavation.
- Clustered subdivisions should utilize the natural topography to “step” the dwellings into the hillside to retain natural grades as much as possible.
- The majority of development in the Loess Hills has been by individual dwellings, as opposed to multiple lot subdivisions. Establish a stringent subdivision review and compliance process that “clusters” dwellings together in

regions of the Hills that are environmentally suited.

- Limit development along the designated roadways of the Loess Hills National Scenic Byway.
- Implement protective measures to limit excavation within sensitive soil areas, such as the Loess Hills region, by developing a Slope Protection Overlay District.
- Implement grading permits with varied standards based on the quantity of soil disturbed and establish a local criteria for development and enforcement of storm water pollution prevention plans (SWPPP) and erosion control plans.
- Promote Loess Hills related tourism, as appropriate.

NON-FARM SINGLE FAMILY DWELLINGS

For many years, the construction of dwellings not associated with farming or ranching, within the Loess Hills, has been a common topic of discussion among the Pottawattamie County Planning Commission, County Board and several organizations dedicated to preserving the Loess Hills. These entities consistently discuss the conflicting issues of preserving the environmental character of the Loess Hills and not infringing upon the rights of property owners to utilize their land as they see fit. Obviously, the construction of a house in the Loess Hills region is an attraction, due to the scenic qualities of the Hills, and for its close proximity to the Council Bluffs and Omaha metropolitan areas.

PROTECTION FOR PRIVATELY OWNED LANDS

Local organizations, such as the Iowa Natural Heritage Foundation, Loess Hills Preservation Society, The Nature Conservancy, Pottawattamie County Conservation Board, and Soil and Water Conservation Districts, assist private landowners to establish Conservation Easements, Mutual Covenants, Reserved Life Estates, Protective Covenants and Deed Restrictions. These programs can allow families to retain ownership of their lands, but prohibit the construction of any further buildings to preserve the natural character of their property within the Loess Hills. As for example, the owners of approximately 200 acres of land adjacent to the Hitchcock Nature Area are gradually preserving the character of their lands by utilizing Conservation Easements.

These owners have utilized language that prohibits any building on the land, but allows current agricultural uses to continue and encourages prairie restoration. This process preserves the character of the Loess Hills, especially privately

owned lands adjacent to publicly owned facilities like the Hitchcock Nature Area.

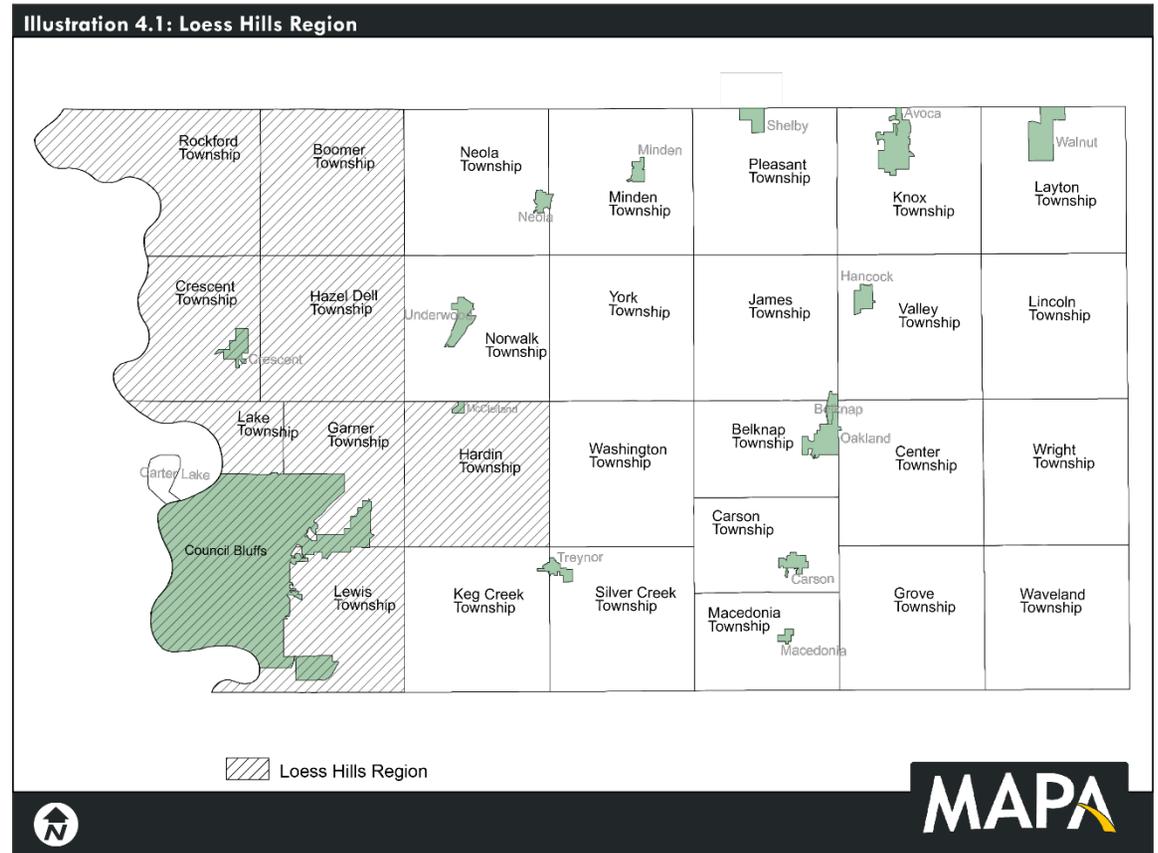
The process of preserving privately owned lands and preventing any further development will be vitally important to the Loess Hills region in Pottawattamie County and Western Iowa. Significant properties that are unique for their natural environment, topography, or scenic qualities should be preserved for future generations and it is a priority of the County.

POPULATION GROWTH IN THE LOESS HILLS

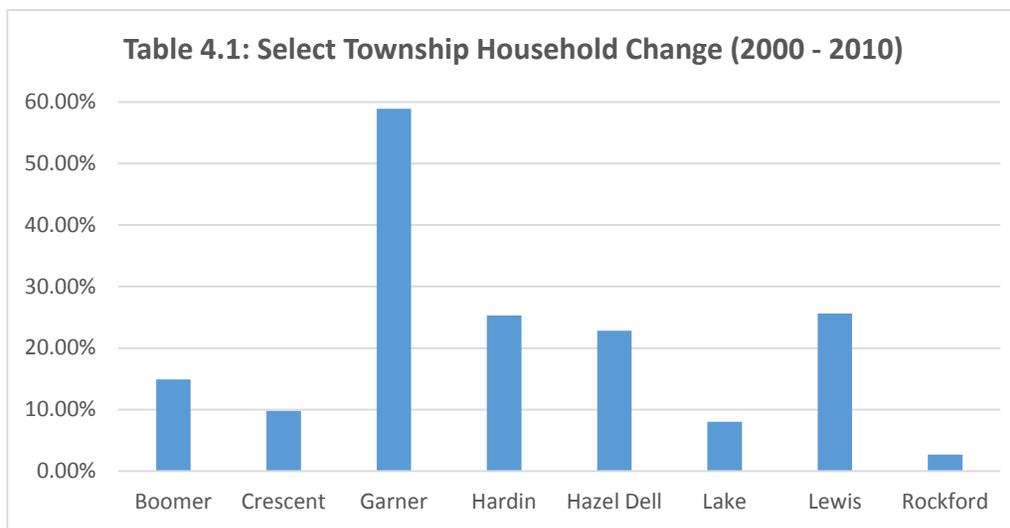
Census information from 2000 and 2010 documents the rise in population and the number of households in the townships that are impacted by the Loess Hills region. Total population in these western Townships increased by 1,727 persons.

Lake, Garner and Lewis Townships each include portions of the City of Council Bluffs, while Crescent Township includes the entire City of Crescent. The remaining Townships, Rockford, Boomer, Hazel Dell and Hardin contain rural residential dwellings.

Overall, the population grew by 7.1 percent within this area, to a total of 26,102 people. Rockford Township was the only townships that experienced minimal population declines; 10 persons or 1.6 percent. All other Townships grew with Garner growing the most adding 2,548 people or by 54.5 percent. The second fastest growing Township was Hardin, which grew by 188 or 21.8 percent.



The number of households increased in every Township, in spite of the fact that Rockford Townships experienced slight population declines between 2000 and 2010. Overall, a total of 1,053 additional households were constructed during the 2000's in the Townships that include portions of the Loess Hills region. Some of the largest increases were located in the Townships including portions of Council Bluffs (Garner and Lewis). Other Townships with large growth include Hardin and Hazel Dell with 25.3 percent and 22.8 percent respectively. These four Townships also contain the largest concentration of rural subdivisions and individual dwellings of any of the Loess Hills townships, or of any township in Pottawattamie County.



A comparison between the 8 Loess Hills region Townships and the remaining 20 Townships is striking. Seventy percent of all new households in Pottawattamie County were located in one of the Loess Hill region Townships. The attraction to construct residential dwellings in the Loess Hills region is obvious.

Scenic surroundings, steep topography, dense concentrations of trees and underbrush, wide open grasslands, drainage ways and canyons all combine to make the Loess Hills a very unique environment in Pottawattamie County, Iowa and the nation.

The close proximity of the hills to the metropolitan communities of Council Bluffs, Iowa and Omaha, Nebraska provide short travel times to a wide variety of employment opportunities and services, further attracting families willing to commute from the Loess Hills.

Continued development of the Loess Hills will impact the natural environment of this important resource in Pottawattamie County and in western Iowa. The key issue is, *“to what extent is new rural development appropriate for Pottawattamie County?”*

CHAPTER 5: PUBLIC FACILITIES AND INFRASTRUCTURE

Public facilities are a vital component to the County to improve the quality of the living environment. Many of these public facilities have been developed out of necessity. Each public facility requires financial commitment, and therefore, necessitates the careful review and planning for future needs.

The major emphasis of this section is to determine the present capacity of the primary public facilities in Pottawattamie County, and to determine the adequacy of these facilities to meet the future estimated demands throughout the planning period, for both the County and participating communities. The majority of public facilities in Pottawattamie County are located in communities.

GOALS AND POLICIES

Goal 5.1 *Provide adequate, efficient and appropriate public utilities and services to both existing and future agricultural and residential areas.*

Policy 5.1.1 Maintain and improve existing public utilities and services on an as needed basis.

Policy 5.1.2 Provide facilities and services in rural Pottawattamie County necessary to prevent degradation of the environment, including modern sewage treatment, refuse collection and disposal and similar environmental control processes as necessary.

Policy 5.1.3 Ensure the rules and regulations governing safe drinking water and sewage treatment are adhered to.

Goal 5.2 *Provide for the equitable distribution of public facilities to meet the cultural, educational, social, recreational, safety and health needs of the County.*

Policy 5.2.1 Provide adequate public health, safety and crime prevention systems throughout the County.

Policy 5.2.2 Promote a social and cultural environment that provides an opportunity for all residents to experience, develop and share their values, abilities, ambitions and heritage.

Policy 5.2.3 Foster a public educational system capable of raising the County's overall educational level.

Policy 5.2.4 Develop and promote programs to educate the residents of Pottawattamie County and visitors on the rich heritage and history of the region.

Policy 5.2.5 Ensure the rules and regulations of the Americans with Disabilities Act are addressed at all public facilities.

Policy 5.2.6 Encourage the availability of all necessary services to youth and older adults in Pottawattamie County.

Goal 5.3 ***Plan, program and implement the most effective, safe and cost efficient infrastructure and public facilities system throughout the rural county areas.***

Policy 5.3.1 Prepare and adopt an annual Capital Improvement Program or Plan, which is consistent with the goals and policies of the Comprehensive Plan.

Policy 5.3.2 Recognize the need for and improve on intergovernmental and regional cooperation to reduce duplication of services.

Policy 5.3.3 Maintain modern design standards and policies for public infrastructure improvements throughout the rural areas of Pottawattamie County.

Goal 5.4 ***Provide a transportation system throughout the County that enhances the safe and efficient movement of people, goods, and services.***

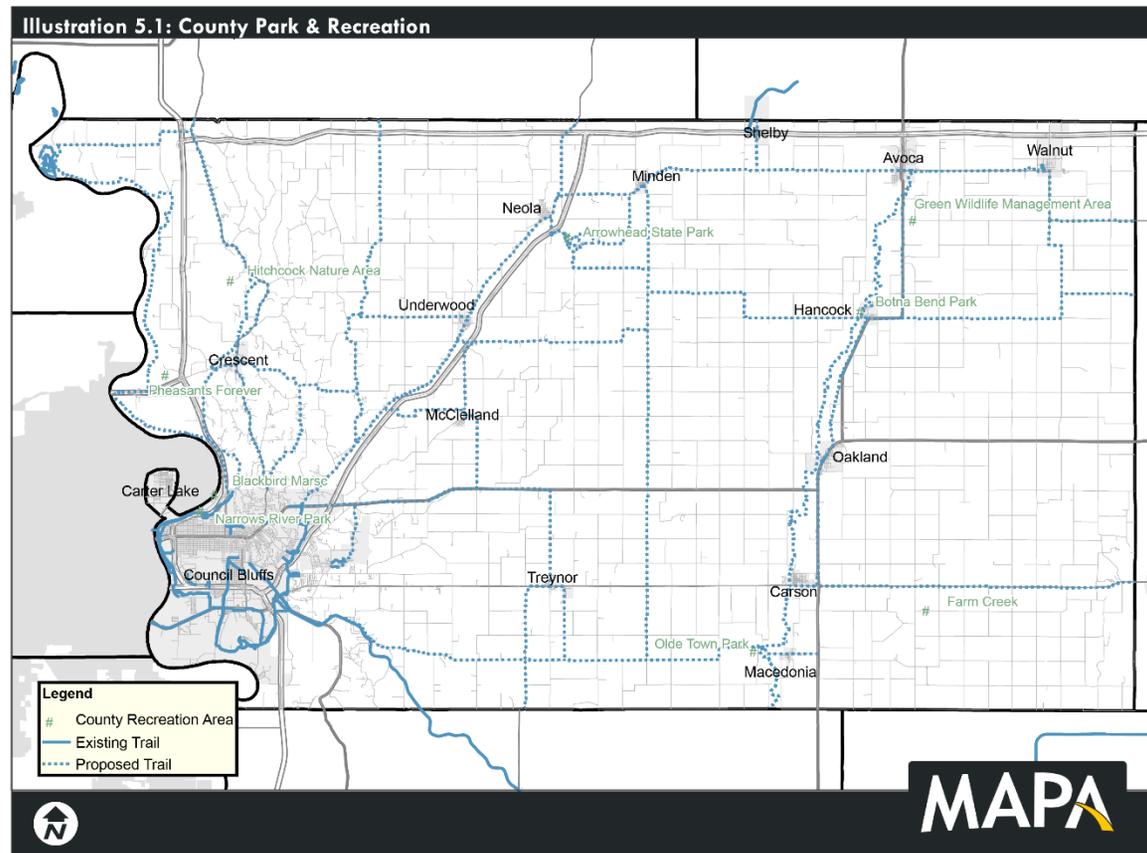
Policy 5.4.1 Coordinate transportation systems with the planning and development of other elements of the County, including other transportation means, public utilities and facilities.

Policy 5.4.2 Continue to develop County road systems in accordance with the standard State of Iowa functional street classifications.

Policy 5.4.3 Develop a comprehensive trails plan to allow for educational and recreational activities throughout the County. The coordination of recreational trails with connections to regional communities and recreational gathering points will enhance recreation and tourism in Pottawattamie County.

PARKS AND RECREATION

An integral part of the quality of life in a community is the park system and recreational opportunities provided to its residents and visitors. Recreational opportunities and the availability of open space play an important role in enhancing a community's "quality of life." The community's role in planning adequately for open space and providing a full range of recreational opportunities directly impacts the community and economic development activities.



Pottawattamie County offers a variety of recreational opportunities for both residents and visitors. The facilities include:

State Parks Within Pottawattamie County:

Lake Manawa State Park is located 2.5 miles south of Interstate 80 at Council Bluffs. The Park covers 1,529 acres, including a 660-acre natural lake. Facilities are available for camping and picnicking, including trailer hook ups, shower and restroom facilities and a shelter with a fireplace and kitchen facilities. Lake activities include swimming, boating and fishing. There are also a number of nature trails for hiking or biking.

Wilson Island Recreation Area is located 4 miles south of Missouri Valley on Interstate 29 and 5.5 miles west on Desoto Avenue. The recreation area contains 577 acres of recreation wildlife area. This is a State Park.

Pottawattamie County Parks:

Green Wildlife Management Area contains 10 acres of wildlife within Pottawattamie County and is located 2 miles south of Avoca.

Hitchcock Nature Area is located 5 miles north of Crescent in the Loess Hills. This nature area includes hiking trails, an archery range, picnic shelters and campsites.

Arrowhead Park contains a 17-acre man-made lake with opportunities for fishing, canoeing and boating. The park also contains camping facilities, picnic shelters, hiking trails and recreational activities, such as sand volleyball and a fitness course. Arrowhead Park is located 1 mile southeast of Neola.

Narrows River Park is located one mile from Interstate 29, in Council Bluffs. Situated along the banks of the Missouri River, recreational opportunities include fishing, hiking, volleyball, horseshoes, camping, hiking and bird watching.

Olde Town Park is located one mile west of Macedonia and is located on the historic Mormon Trail. The park offers fishing, primitive camping and canoe access to the West Nishnabotna River.

Botna Bend Park offers a number of recreational opportunities, including fishing, hiking, wildlife viewing, canoeing, camping and picnicking. The park is located on the West Nishnabotna River in Hancock.

Wildlife Habitat Areas (maintained by Pottawattamie County Conservation Board):

Farm Creek is located one mile south of Highway 92, just east of Carson, and contains 80 acres of land for public hunting and fishing.

Blackbird Marsh is a small wetland located near North 16th Street in Council Bluffs. It contains a multitude of wetland wildlife, such as ducks, geese, frogs and turtles.

Pheasants Forever is a 13.27 acre area which serves as a foot plot for pheasants. It is located on the northwest corner of the Interstate 29 and Interstate 680 West Interchange.

TRAILS

Trails provide people with a means of becoming more active. Today, walking and biking are two of the most popular ways to participate in active living. Providing facilities that support these activities have a number of social, health, economic, and environmental benefits. A County wide trail has been identified with Phase I (Council Bluffs to Weston) currently under construction. Trails can also be found in several of the County parks listed above.

COUNTY ADMINISTRATION

Public Administration facilities are designed to serve citizens of the County and provide a location to conduct the business of the government.

County Courthouse

The **Pottawattamie County Courthouse** is located at 227 South 6th Street in Council Bluffs, Iowa, and was built in 1975. Offices located in the courthouse include:

County Assessor
County Attorney
County Auditor
County Recorder
Board of Supervisors
Buildings & Grounds
Communications 911 Center
Conservation Board
Emergency Management Agency

Community Services
County Engineer/Secondary Roads
GIS
Medical Examiner
Information Services
Juvenile Court Services
Planning Department
County Treasurer
Veteran Affairs

Law Enforcement

The **Pottawattamie County Sheriff's Office** is located at 1400 Big Lake Road in Council Bluffs, Iowa. Arrestees are taken to the County jail, which is also located at this address. The Sheriff has 28E Agreements in place with the rural communities for law enforcement. The **City of Council Bluffs** has its own Law Enforcement located at 227 South 6th Street in Council Bluffs, Iowa. Prisoners are taken to the Pottawattamie County Jail facility.

Fairgrounds

The **Pottawattamie County Fairgrounds** are located along Highway 59, two miles South of Interstate 80 (Exit 40), in Avoca, Iowa. The County Fair is held each year in mid-July. The fairgrounds include a number of facilities, including an arena, grandstands, buildings for displaying good and holding activities, animal barns, 4-H buildings and bathroom facilities.

The **West Pottawattamie County Fairgrounds** is located just east of the City of Council Bluffs, along Highway 6. The fairgrounds include standard fair facilities, such as arena and grandstands, animal holding facilities and carnival ride areas.

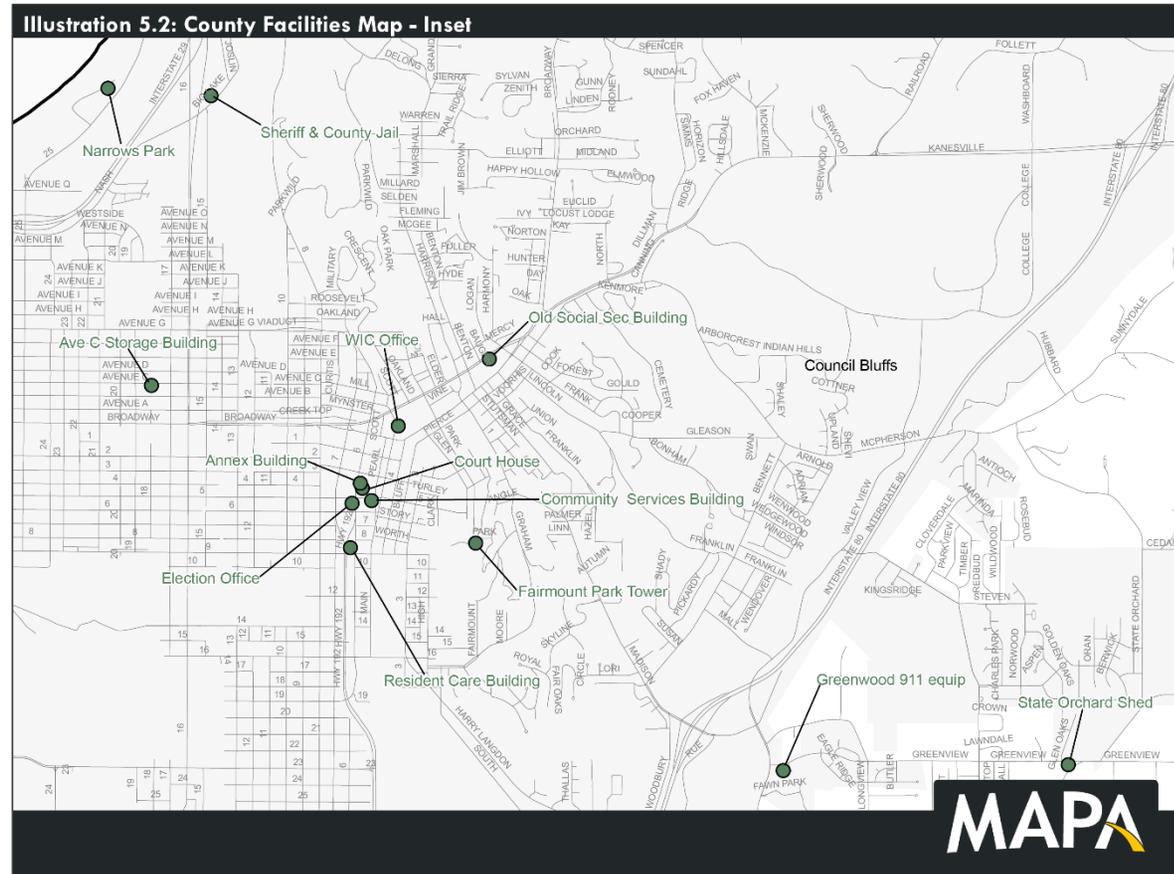
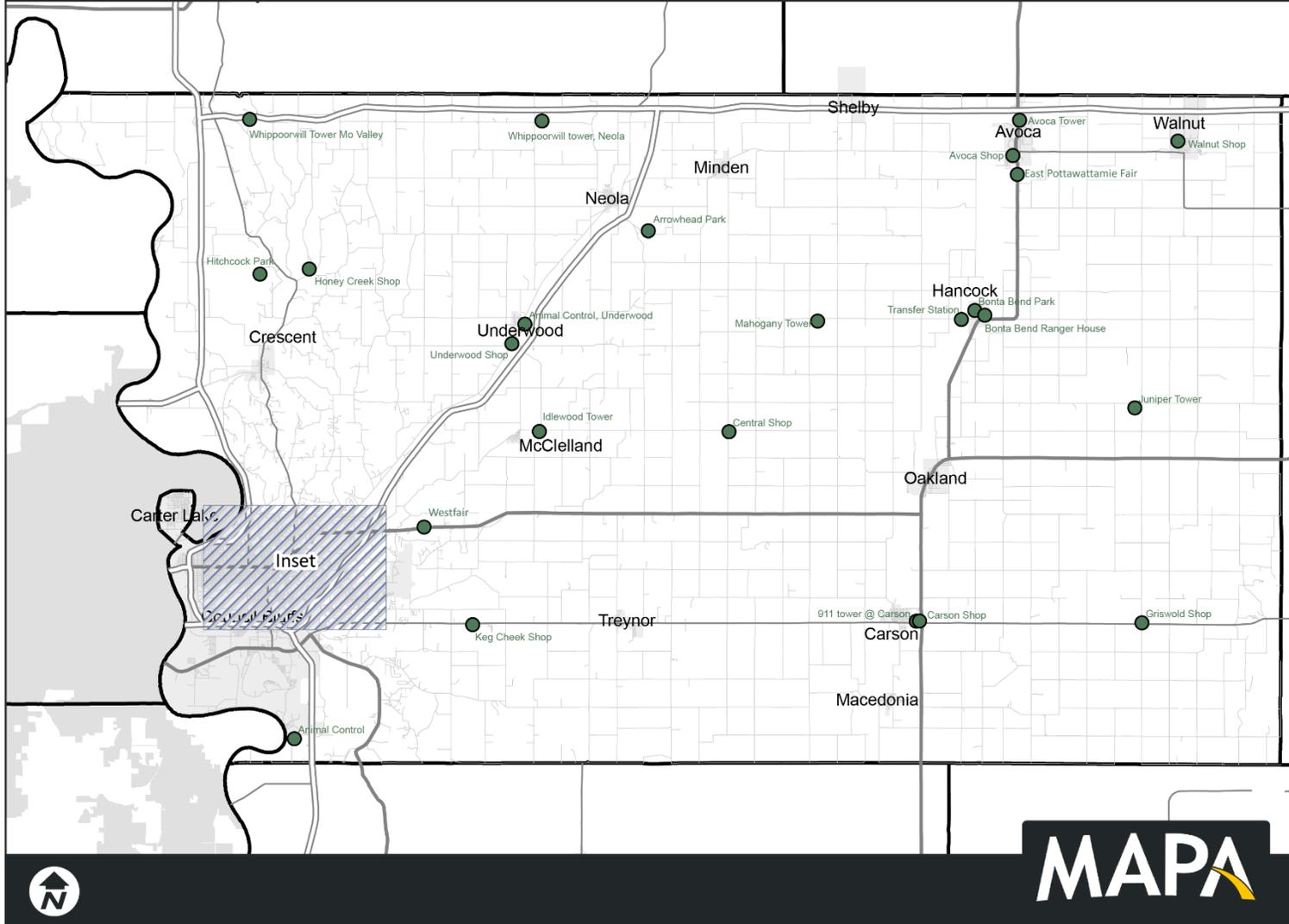


Illustration 5.3: County Facilities



INFRASTRUCTURE

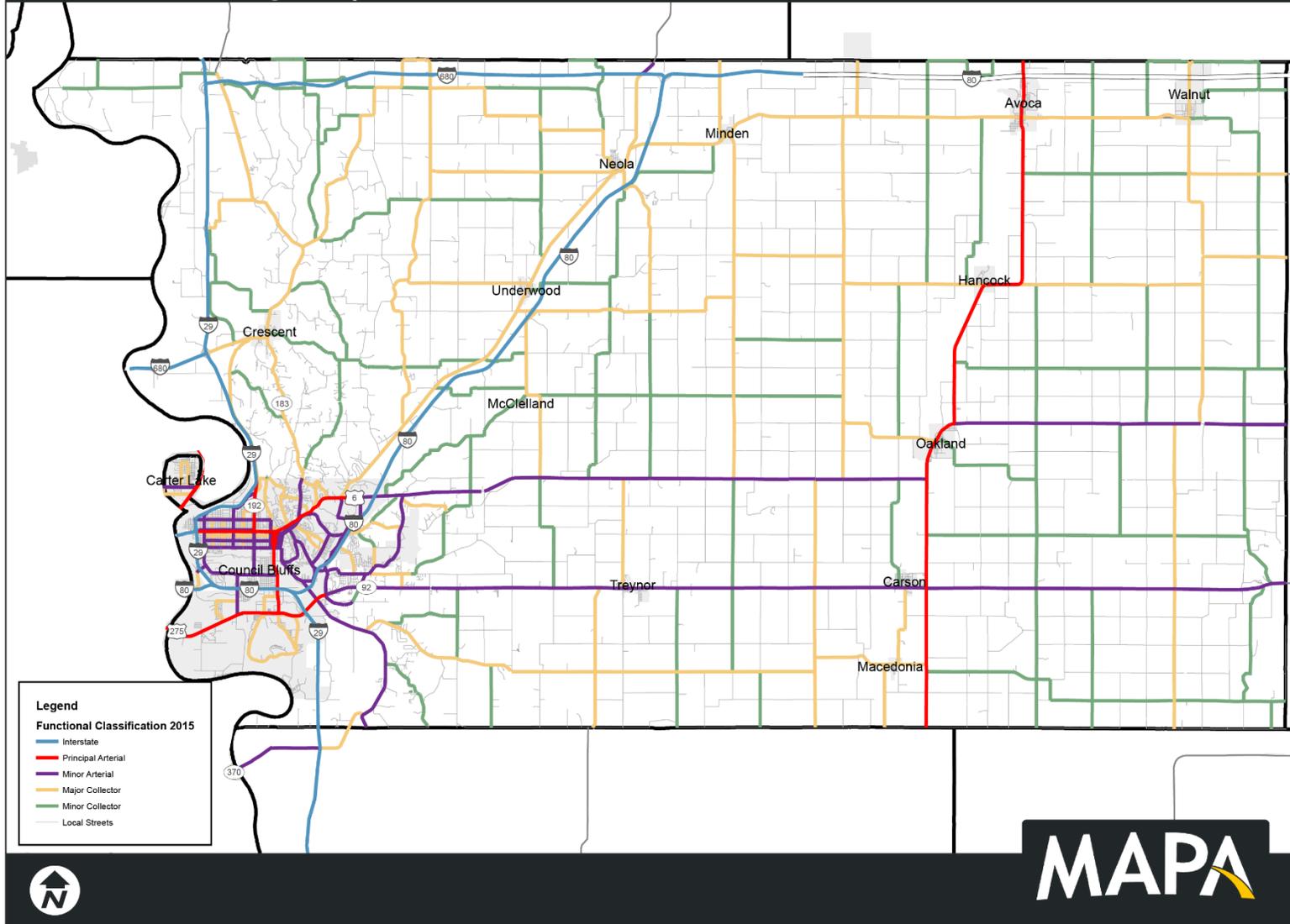
Transportation

The road network in Pottawattamie County is comprised of:

- Interstate routes (80, 29, & 680)
 - Interstate 80 is a major east-west U.S. Interstate and Interstate 29 is a major north-south U.S. Interstate. Interstate 680 links Interstate 80 to Interstate 29, and the Omaha metro area. This Interstate system links Pottawattamie County to many cities and metropolitan areas throughout the Nation.
- State of Iowa highways (6, 59, 83, and 92). The highways provide transportation services throughout the County and into adjacent counties.
- County roads. The county roads provide transportation services throughout the County.



Illustration 5.4: Existing Transportation Network



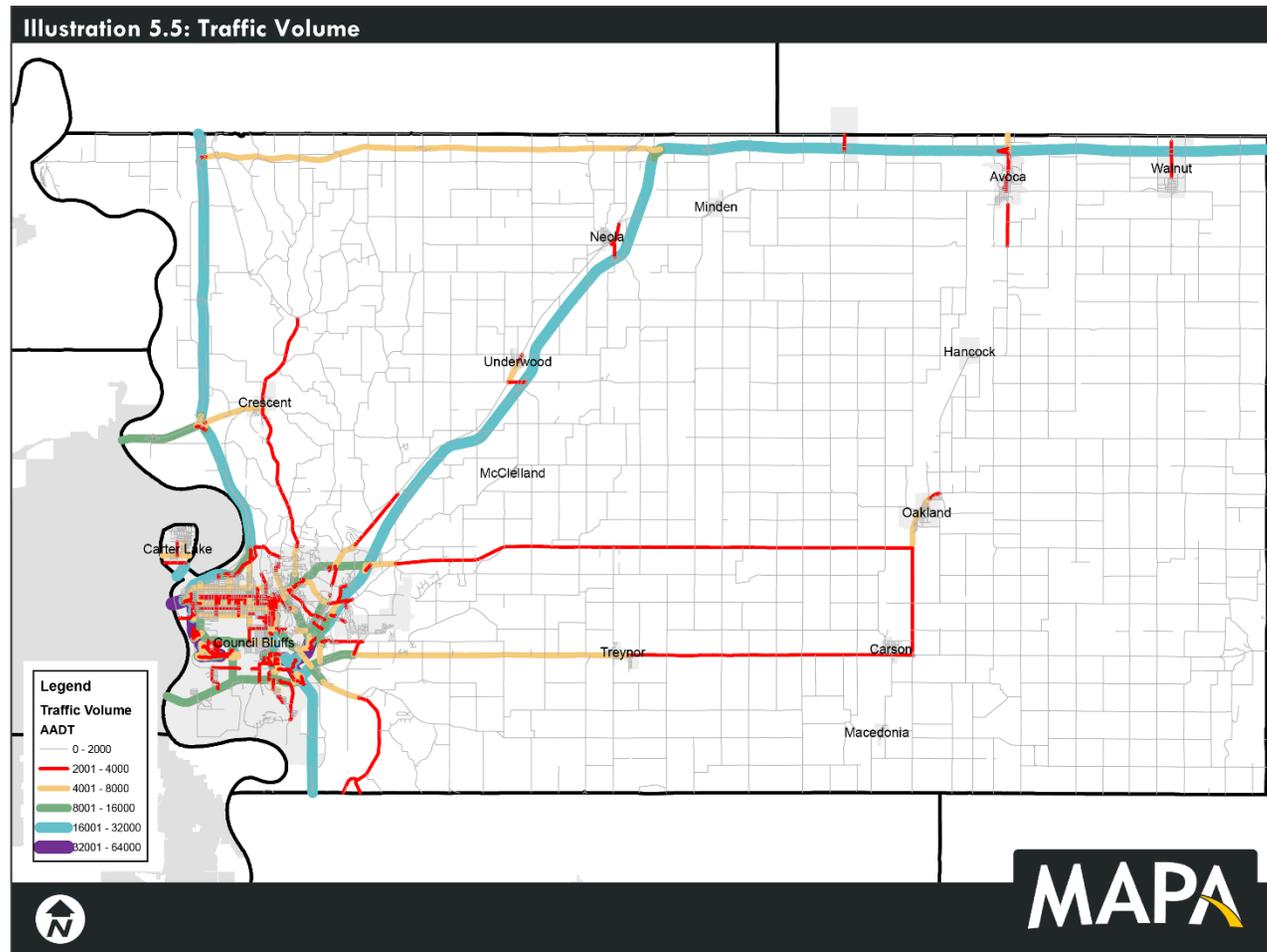
Road Classification

The system identified is comprised of six functional classifications of rural highways as follows:

1. **Interstate:** Consists of the federally designated National System of Interstate and Defense Highways;
2. **Principal Arterial:** Second in importance to Interstate. Shall consist of a group of highways following major traffic routes in Iowa, and ultimately should be developed to multilane divided highway standards;
3. **Minor Arterial:** Consists of the balance of routes which serve major statewide interests for highway transportation in Iowa. Characterized by high speed, relatively long distances, and travel patterns;
4. **Major Collector:** Shall consist of a group of roadways of less importance than through-travel routes. Major collectors serve places of smaller population and smaller recreation areas not served by the higher systems;
5. **Minor Collector:** Consist of a group of roadways which pick up traffic from many local or land service roads and carry it to community centers or to the arterial systems. They are the main school bus routes, mail routes, and farm-to-market routes;
6. **Local:** Shall consist of all remaining rural roads.

Traffic Volume

The Iowa Department of Transportation monitors traffic volume in Pottawattamie County on county roads and state and federal highways. This tabulation process is done to identify the appropriateness of the existing road classification and engineering standards. Pottawattamie County, identifies the average daily traffic counts for state and federal transportation routes within Pottawattamie County.



Transportation Plan

The Pottawattamie County Transportation Plan, underway currently, will provide a more in-depth discussion on a comprehensive, multi-modal approach to transportation planning within the County. Stakeholder and public input will be solicited throughout the process to identify needs, vet recommendations, and demonstrate support for the Final Transportation Plan. The Final Transportation Plan will include a summary of the County's projected transportation needs based off of socioeconomic projections and land use scenarios developed as a part of the Heartland 2050 regional vision. Data related to traffic volumes, safety, employment, demographics, and other factors will be analyzed and to identify future deficiencies. Projects to address these needs will be identified and prioritized based on projections of federal, state, and local funding.

Transit

The County is served by Southwest Iowa Transit Agency (SWITA) in the rural areas and Metro within Council Bluffs. SWITA services are open to the public. On demand service may include medical trips while regular routes may include work routes (for example: Council Bluffs to Oakland for Oakland Foods). Metro operates fixed route service operating only on major arterials and connects Council Bluffs to the Council Bluffs/Omaha metro area.

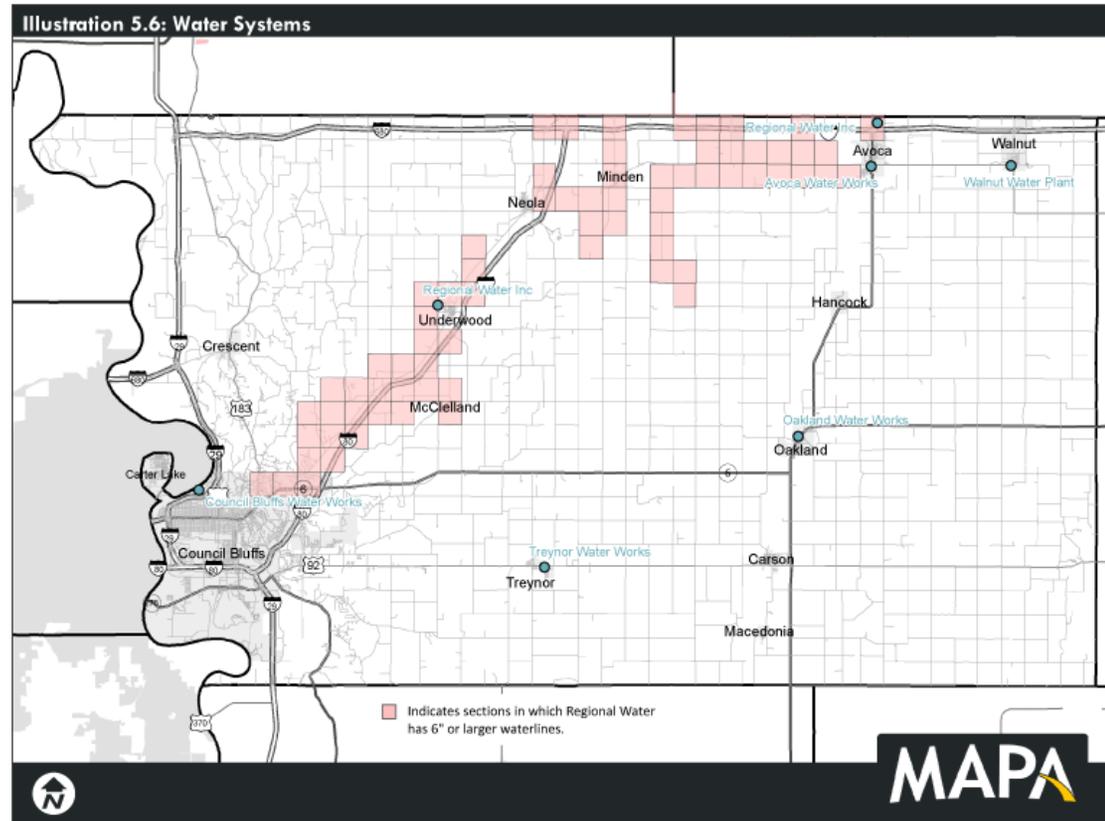
WATER AND WASTEWATER

The availability of safe and reliable water and wastewater is a critical component for future development. Increased regulatory requirements are the driving force behind a trend towards a decrease in the number of households dependent on individual well and septic systems.

Community and regional water supply systems are expanding and adding new users. These community and regional water supply systems offer safe, reliable and efficient water supply to several areas of the County.

This opens up many areas for potential future development that may have had water supply issues that were cost prohibitive for development. Efforts by the County should encourage future development to utilize community or regional public water supply systems.

The County has not been involved traditionally in wastewater except in regards to zoning requirements and inspections. Municipal systems within the County are owned and generally operated by the community in which they are located. The sharing of wastewater systems, when feasible, is encouraged by the County.



HAZARDS

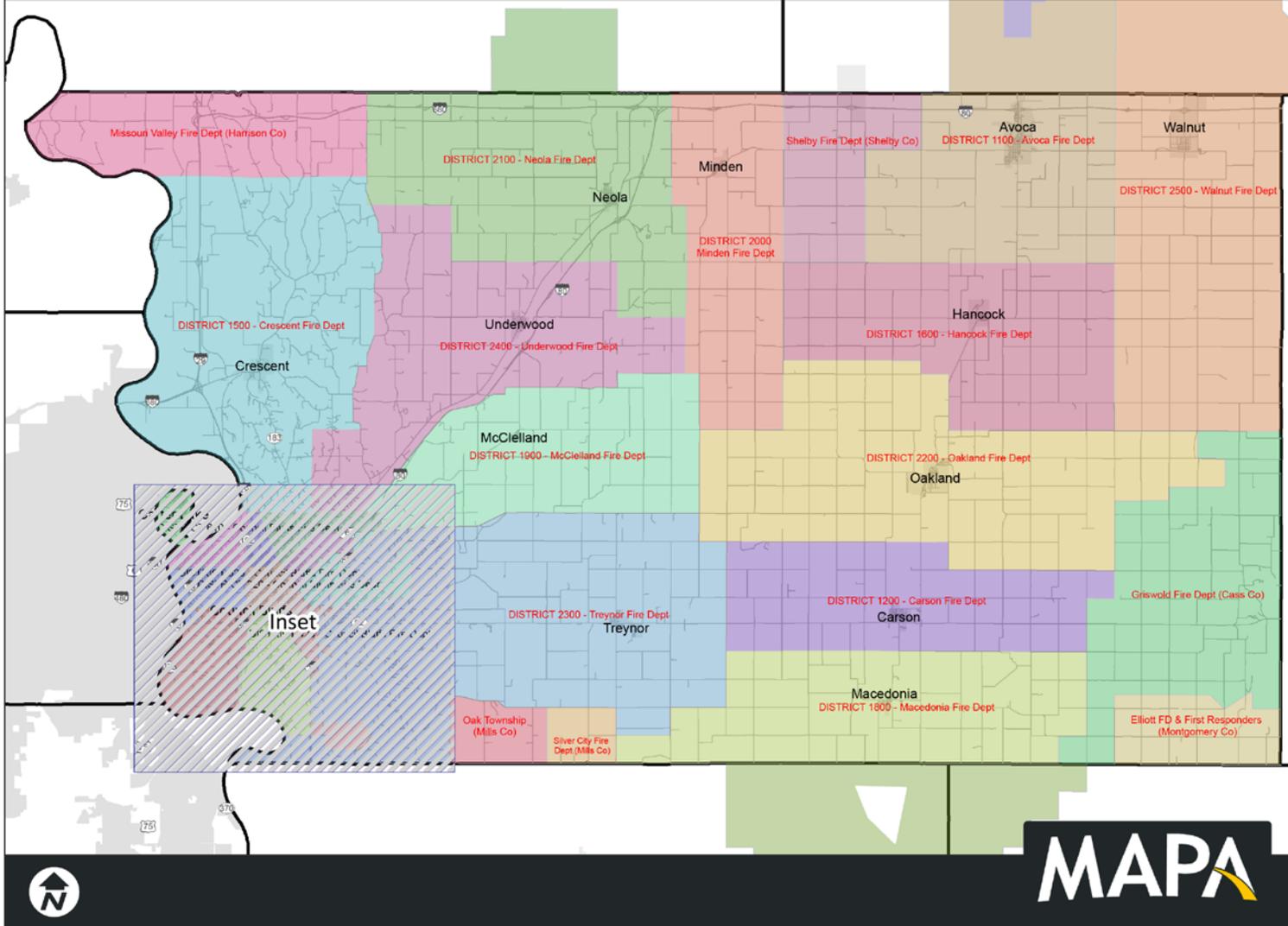
Both man-made and natural disasters have impacted the County in the past and are likely to in the future. Examples of natural and man-made disasters include floods, tornadoes, winter storms, chemical spills, explosions, plane crashes, and more.

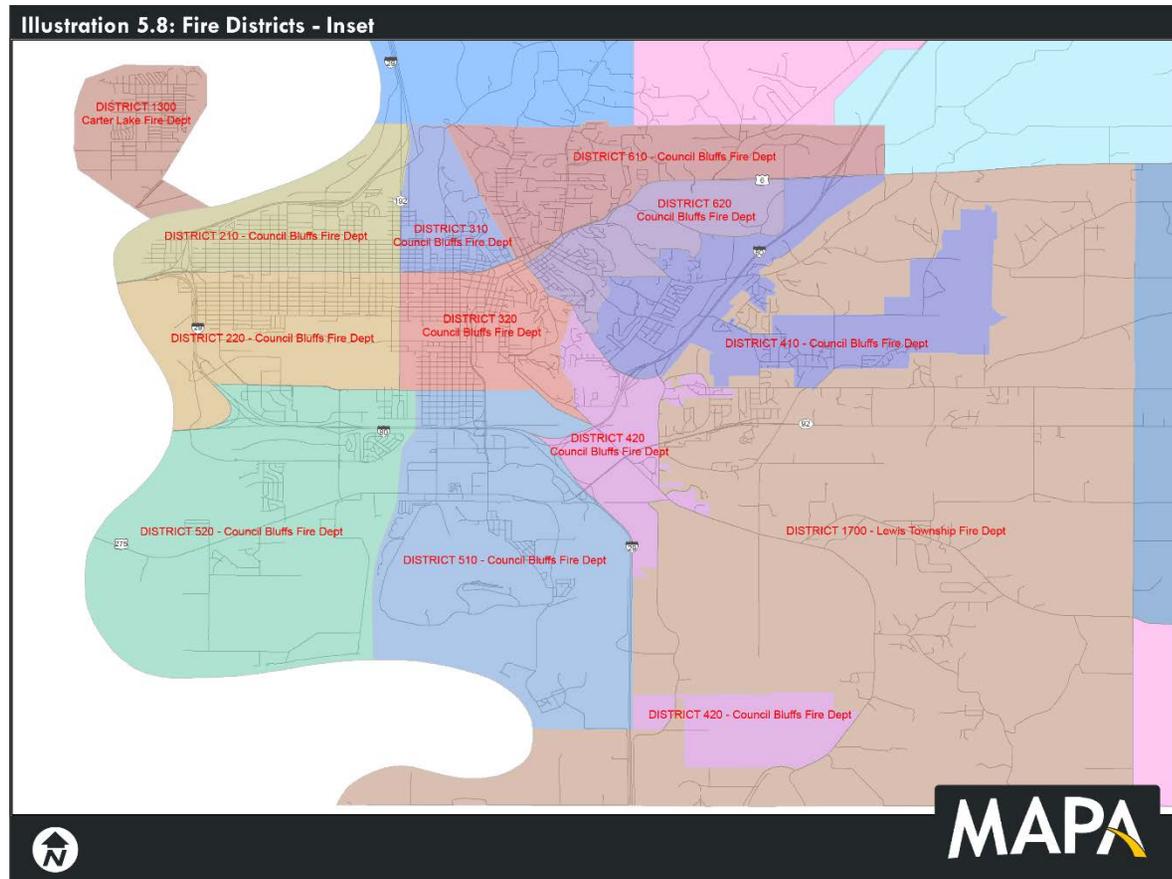
The County has a Multi-Jurisdictional Pre-Disaster Mitigation Plan, required by FEMA to be eligible for funding, that has been developed to protect the health, safety and economic interests of residents and businesses by reducing the impacts of natural and manmade disaster events through planning, awareness and implementation. Pre-disaster mitigation is any action taken to permanently eliminate or reduce the long-term risk to human life and property from natural and manmade hazards.

Fire Protection

Municipal and rural fire protection services are provided by the Council Bluffs Fire Department and the Volunteer Departments within each of the communities of Pottawattamie County. Together, these communities provide fire and emergency medical assistance throughout the geographical areas of the County.

Illustration 5.7: Fire Districts





Civil Defense

Civil defense sirens are one of the most effective means to alerting the public of dangerous weather. Each community within the County has at least one siren which is then connected to the Pottawattamie County Emergency Management Agency.

CHAPTER 6: PLAN IMPLEMENTATION AND MAINTENANCE

Successful delivery of planning activities is a clear understanding of the tools available for the maintenance and implementation of the Comprehensive Plan. This Chapter of the Comprehensive Plan recommends maintenance and implementation procedures most appropriate for Pottawattamie County. Included is a discussion of land use regulations, public and private capital investments and the annual review of the Comprehensive Plan and plan amendments.

GOALS AND POLICIES

Goal 6.1 Maintain and utilize the Comprehensive Plan as the primary tool for making County decisions regarding the physical development of the area.

Policy 6.1.1 Establish a review process for the Comprehensive Plan and associated regulations, including Zoning and Subdivision Regulations.

Policy 6.1.2 Coordinate local groups and organizations to carry out the Goals and Policies of this Comprehensive Plan.

Policy 6.1.3 Coordinate development activities and land use changes with local, County and State officials.

IMPLEMENTATION

Land Use Regulations

The implementation process of the land use plan involves three distinct stages.

1. Design of future land uses, both graphic and narrative. This documentation is included in this Comprehensive Plan update.
2. The local governing bodies (County Board of Supervisors and County Planning Commission) must officially continue procedures to monitor the various land uses within their jurisdiction. This includes the constant study of the County as new development occurs. Advice and recommendations are given to public Boards

by the Planning Commission to assist them in land use decisions.

3. Design and implementation of land use regulations to insure, according to ordinance law, the proper implementation of the land use plan. The primary regulation utilized by most municipalities to accomplish this is the local zoning ordinance.

The right to implement a zoning ordinance is a power given to local municipalities through the State's general police power. Police power is based on the promotion of the health, safety and general welfare of the people and their environs to secure their safety from fire, flood and other damage.

Zoning plays an important role in the Comprehensive Planning process. If properly implemented, a county zoning regulation can be used to achieve several objectives, including:

1. Directing the growth of the County in accordance with a Comprehensive Plan,
2. Encouraging the most appropriate use of land,
3. Preserving and protecting property values, and
4. Providing adequate light and air and preventing overcrowding of land.

The planning and zoning jurisdiction of Pottawattamie County is all unincorporated areas, including the two-mile area surround Council Bluffs and ½ mile around each rural community.

Investments and Improvements

Local investments and improvement can greatly influence both the preservation and growth of an area. Pottawattamie County will have a need for the improvement and development of modern infrastructure, including roads, water, and sewer in rural subdivision and power utility systems. The public capital investment process must be sensitive to the affordability level of the County, while cognitive of the fact that public dollars will need to be secured if population stability and growth are to continue.

Public Capital

A Capital Improvement Program or Plan for the County is the common vehicle to insure public investment. The Plan should detail the specifics of how revenues will be raised as well as the overall allocation of dollars for the public need. The presence of need will always be higher than resources available, so the proper, most wanted and

needed activities should be selected for the Capital Improvement Plan. The fear of allocating public funds for the improvement or development of needed infrastructure and facilities can be tempered if the public is brought into the Capital Improvement planning process.

Scheduled public discussion of needs and resources will provide Pottawattamie County with a firm understanding of needs and the necessity to meet these needs. The most appropriate Capital Improvement Plan or Program is one which contains at least a five-year funding period. This provides the County with some flexibility as to which planned public projects will have implementation priority.

Private Capital

Private capital, or financing, will need to provide the majority of funding for public improvements. This private sector investment is traditionally accomplished via taxes, user fees, or initial development investment.

To insure private investment, Pottawattamie County must produce a process of promoting their future. This starts with the private sector's firm understanding and support for this Comprehensive Plan. Partnerships need to be created between the County and the private sector. These partnerships can range from private sector being appointed to County commissions or advisory groups to the elected Boards.

PLAN MAINTENANCE

The Comprehensive Plan should be reviewed, at a minimum, once a year. The Planning Commission should initiate the Plan review process. Public involvement will be a prerequisite for the effective review of the Comprehensive Plan. Scheduled public meetings will be conducted to insure input from specific neighborhood areas and special interest groups.

The starting point, or foundation for all review processes should be the evaluation of the future land use plan. The review and possible change to the land use plan should be based upon proposed developments. These changes will, in turn, require modifying the other components of the Comprehensive Plan, such as housing, infrastructure and facilities and the environmental assessment.

The process to officially amend the Pottawattamie County Comprehensive Plan should be based upon Planning Commission and County Board of Supervisors public hearings. A Comprehensive Plan must be amended in accordance with Iowa Revised Statute.