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CHAPTER 1 - INTRODUCTION

Why Plan?

Successful communities don't just happen; they must be continually shaped and guided. A community must actively manage its growth and development responding to changing circumstances if it is to meet the needs of its residents and retain the quality of life that initially attracted those residents to the community.

This plan provides a framework for decisions affecting the growth of Warren County. The Vision and Goals of the plan describe a desired future for the County. The policies and strategies describe the actions that the County will take to achieve the desired future by 2025. The master plan as a whole will guide public and private growth decisions so the County will realize the following benefits:

- < Effective preservation of prime agricultural land and valuable natural resources;
- < Predictability for public and private growth decisions;
- < Better coordination between local governments;
- < Cost savings from efficient use and smart expansion of existing infrastructure;
- < Cost savings from reduced demand for new infrastructure;
- < Limited sprawl development through smart growth strategies;
- < Retention of the rural character of the County; and
- < Increased support for community prosperity.

This plan is intended for use by elected and appointed County officials, residents, property owners and other individuals making investments and growth decisions in the County. In addition to describing the long-range goals of the County, this plan outlines the intent of the County's development standards and establishes an implementation program with specific actions that the County will enact to achieve its goals.

What is in the Master Plan?

This Master Plan focuses on land use and development issues facing Warren County and its communities. The Plan:

- < defines a vision for the County's future;
- < summarizes existing conditions, trends and issues that include governmental services, commercial and industrial development and multi-community land use planning that provide a context for the planning process;
- < establishes goals, policies and strategies to achieve its vision;
- < plans for coordinated growth strategies at the fringes of communities; and
- < outlines the process of monitoring, updating and amending the Master Plan to ensure that it continues to serve the County residents and businesses.



How was the Master Plan Prepared?

This Master Plan was prepared with the participation, coordination and creative input from many individuals, representing a broad cross-section of interests in the County. These individuals participated in open house meetings, interviews, and public workshops. The plan also builds on past planning efforts, including:

- Local community planning initiatives and the Wallace House Foundation.¹
- 1999 Needs, Issues and Opportunities Report;
- Growth coordination meeting with the County and Joint Planning Committee to identify potential urban service areas and extraterritorial issues relating to the future growth of the cities and the County's ability to provide infrastructure improvements; and
- Development of Warren County Urban Service Area Growth Policies.

In addition to the numerous interviews, Planning Commission and Board of Supervisors meetings, residents were provided an opportunity at the Warren County Fair in August 1999 to complete a survey and provide comments and input about what they felt were important issues facing the County. In the spring of the year 2000, workshops were conducted with the Joint Planning Board comprised of representatives from Warren County, Carlisle, Cumming, Des Moines, Indianola, Norwalk, West Des Moines and a representative from the ten smaller cities and towns. These workshops were used to forge consensus for the Urban Service Area strategy included in this Plan.

After receiving initial public participation and collecting information, preliminary goals and policies were developed to provide a basis for discussion and refinement of the Master Plan's focus and direction. The Joint Planning Board, County Planning Commission and Board of Supervisors reviewed and provided comments on the preliminary goals and policies in a public meeting and refined the Plan.

How Should the Plan be Used?

The Master Plan is a guide to the smart future growth and development of the planning area. By ensuring that individual actions are consistent with the guidance provided by the growth policies of the Master Plan, the County can effectively achieve its goals. For example, the Board of Supervisors will consult the Master Plan's goals, policies and maps to evaluate rezoning applications. Zoning, subdivision, building and construction codes and standards, which regulate development, will be adjusted to help achieve the Plan's goals. The Master Plan also provides specific policies regarding the provision of water, wastewater, flood control and transportation systems for the Urban Services Area and the Rural Area. These policies should guide the preparation and update of capital improvement programs and the annual budget. The Master Plan should be a dynamic document,

¹ Wallace House Foundation: Warren County Vision Project Final Report, and preceding reports on summit meeting September 16, 1998 and public meeting, November 12, 1998.



subject to periodic amendment when conditions within the County change significantly. Periodic updates of the Master Plan will be needed to ensure that it continues to meet the needs of County residents and businesses.

Community Vision

Successful long-range planning can occur only if a community has a vision of what it aspires to be. The following vision statement reflects residents' overall desires for Warren County's future. Developed from citizen comments in a survey and in a series of community interviews and workshops in the 1999 and 2000, this brief statement summarizes the County's vision of an ideal future -- a future that focuses on cooperative efforts to retain valued assets and enhance the quality of life for all residents.

Warren County's 2025 Vision

Throughout the Master Plan, the vision is translated into more specific goals, policies and programs.

Warren County is an oasis in the metropolitan region where pristine rural areas and valuable agricultural land and businesses successfully coexist in a country atmosphere. The County's vibrant communities are nestled in the relaxed countryside, only a few minutes from Des Moines' downtown. Residents can choose to live in rural, suburban or urban areas and benefit from a balanced economy that offers diversified retail, commercial, office and industrial development clustered in communities and along established transportation routes. The cities and towns located within the County boundaries support the County's goal to preserve these unique qualities.

The vision is the common thread that weaves the chapters into one consistent document.

This vision reflects a broad spectrum of community values and aspirations. Residents of the County value the mix of rural, agricultural and small town lifestyles. Residents are not opposed to development, but favor responsible management of growth that preserves the rural character. They also treasure the abundant open space and available public services. Concerns about annexation and related impacts of growth, in the northern part of the County, have increased as residents have witnessed development of agricultural areas, loss the rural character of the area and new growth that is spurring increased demands for public facilities and services. The vision reflects a shared belief - that through smart growth and development management, the community can address these concerns and maintain healthy, growth patterns.

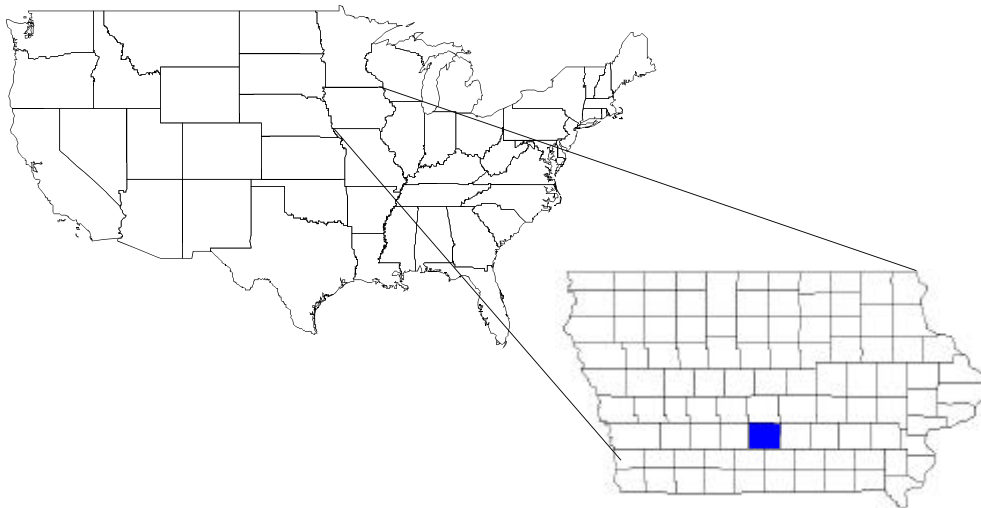
CHAPTER 2 - CONTEXT FOR PLANNING

Overview

This chapter addresses aspects of the physical environment, growth trends and community values that most directly impact the Master Plan.

Warren County is located in south-central Iowa. The North, Middle and South Rivers flow through the County to the northeast where they drain into the Des Moines River. The County is bounded by Polk County (to the north), Dallas County (to the northwest), Jasper County (to the northeast), Marion County (to the east), Lucas County (to the southeast), Clark County (to the southwest) and Madison County (to the west). **Exhibit 1** shows the general location of Warren County.

Exhibit 1: Warren County, Iowa



Warren County encompasses over 571 square miles of land area and includes the southern part of the three-county Des Moines Metropolitan Area. East-west access within the County is provided by State Highway 92. Iowa 5 currently is being realigned and widened in the north. U.S. Highway 69/65 bisects the County with its north-south alignment. Interstate 35 runs along the western edge of the County.

Natural Environment

The natural environment provides both opportunities and constraints for development. Primary environmental factors affecting growth in Warren County are its high corn suitability rated (CSR) soils primarily in the northern part of the County, shallow depth to bedrock in flood-prone areas (creating a groundwater contamination problem where septic tanks are used), the rivers and major

drainageways, steep slopes adjacent to the rivers, scattered woodlands and wetland areas. To date, Warren County has effectively managed growth in these areas.

Decisions affecting growth and development have long-term impacts on the condition of these resources for future generations. One of the County's challenges is to provide for the needs of residents and businesses without sacrificing the County's natural assets and quality of life.

Topography

Topographic elevations shown in **Exhibit 2** range from 755 to 1,080 feet (230 to 330 meters) above mean sea level. The Kansan glacier had a major influence on the terrain. Stream erosion from the glacier resulted in a relatively hilly terrain, with the roughest terrain being located in the southern portion of the County. Floodplain areas are broad and flat.

Geology

Geological formations in Warren County include bedrock of the Pennsylvanian System. The bedrock consists primarily of shale, with interbedded limestones, sandstones and coal seams. The bedrock strata, formed more than 300 million years ago, is of the Des Moines series, including the Cherokee and Marmaton groups. The extreme southeast corner of the County also includes bedrock of the Missouri series. The bedrock strata generally is horizontal and several hundred feet thick. Coal seams, interbedded in limestone, are frequently shallow and conducive to strip mining. Past mining activity has left some portions of County land surface scarred with acid spoil material which does not readily support vegetation. Banner Mine State Wildlife Management Area is a good example of this condition.

The County is relatively hilly and drains in a northeasterly direction.

Overlying the bedrock formation are layers of loess and glacial and river deposits of the Pleistocene era. Loess soils were formed from wind-blown particles and deposited throughout most of Iowa. Glacial till soils in the County were deposited by the advance and retreat of the Kansan Glacier, about 0.6 to 1.2 million years ago. In contrast, glacial till soils in Polk County are the result of the Cary substage of the Wisconsin glacier, which occurred about 12,000 to 14,000 years ago. The alluvial soils were deposited by rivers and streams in the floodplains.

Hydrology

Drainage/Floodplains. The majority of the County drains in a northeasterly direction. **Exhibit 3** shows the location of the County's principal drainageways. Flood hazard areas along these drainageways, the boundaries of which correlate with the 100-year floodplain limits, were mapped by the Federal Emergency Management Agency (FEMA) in the 1970s and updated in



1998.² The 100-year floodplain is the area that has a one percent chance of flooding in any given year. Floodplain areas may be developed under FEMA rules, but they are subject to special limitations regarding structure elevation, fill and foundation design and construction. In addition to the risks from floods, development in floodplain areas is constrained by the poor suitability for use of on-site wastewater disposal systems. On the other hand, these areas provide a quality habitat and highly fertile agricultural land.

Location of Rivers, Streams, and Lakes Within the County. As Exhibit 3 also shows, the County is located within the Des Moines River Basin and includes three principal tributaries: the North, Middle and South Rivers. The Otter, Squaw and White Breast Creeks are the principal tributaries to these rivers. The Otter and Squaw Creeks primarily drain the south part of the County. Lake Ahquabi, located south of Indianola, is the site of the County's largest recreational lake. Lake Red Rock Wildlife Area is located in the northeast corner of the County. Maintaining river and creek banks is critical to prevent erosion and siltation of streams.

Wetlands. Wetland areas are protected by the federal government because they provide wildlife and vegetation habitats and act as a natural filter to cleanse water. Exhibit 3 shows wetland areas in the County. The United States Department of Agriculture (USDA) provides funding through the State to assist with wetland preservation pursuant to the Wetland Reserve Program (WRP). The program focuses on protection, restoration and enhancement of wetlands and associated uplands. Agricultural producers can use the WRP to enhance wildlife and water quality. The WRP has the flexibility to allow the election of a permanent, ten-year or thirty-year easement. Payments are granted to the farmer as a percentage of the appraised value of the length of the easement, based on the appraised value of the land. Farmers dedicating a permanent easement receive payment for 100 percent of the appraised value.

Wetlands provide refuge to wildlife and vegetation and filter the water.

Water Quality. Significant aquifers supply the well fields from which the County derives most of its water supply. In many places alluvial aquifers lie at or near the land surface. A sequence of consolidated sedimentary rocks, known as bedrock, are located beneath the surficial aquifer and extend several thousand feet below the land surface. Underlying all

The County gets most of its drinking water from wells

² FEMA is in the process of preparing digital maps of these floodplain boundaries.



Exhibit 2: Topography



Exhibit 3: Hydrology

or part of the County are the Mississippian, the Devonian and the Cambrian-Ordovician aquifers. In addition, there are sandstone and limestone aquifers of subregional and local extent.

The Department of Economics, Iowa State University (DE/ISU) estimated annual water usage in Warren County in 1993 was 1.315 million gallons. The DE/ISU report³ states that water usage for livestock production was declining. This decline in livestock production was expected to continue, resulting in less water consumption. Water used for irrigation of farm land accounted for about 9 million gallons of water per year. Industrial usage received its water supply from a private water system. The DE/ISU projects that as the population grows and per capita consumption rate increases, there will be an increased demand for potable water. Industrial and commercial water usage also is projected to increase.

The quality of water provided through the Warren County Rural Water System and water supplied by Des Moines, currently complies with the Clean Water Act water quality standards. County watersheds are part of the Federal EPA Clean Lakes Program and the Iowa Publicly-Owned Lakes Program. Lake Ahquabi is a primary watershed supply. According to the University of Iowa Hygienic Laboratory (UHL), some of the rural county residents who rely on individual private wells do not have water quality comparable to Warren County's public water supply system. A UHL report published in 1994, regarding private wells, states that about 65.5 percent of the well-water samples tested contained coliform and fecal coliform bacteria. An average of 25.2 percent of tested wells also showed the presence of nitrates that exceeded the recommended maximum. Residents reported that well contamination is an isolated problem. The coliform bacteria and nitrates most likely come from non-point sources⁴ which are difficult to identify. Pollutants coming from point sources⁵ are more easily identified and treatable.

The County has soil and bedrock conditions that can add to the problem of water pollution. When private septic tanks or private wastewater systems are employed by rural residents, wastewater from septic tanks or private on-site systems can leach into groundwater through porous soils, fissures or sinkholes in the karst topography. This is particularly true in areas with shallow soils over limestone bedrock.

³ Private Well Water Quality 1990-1994.

⁴ Produced from any number of outlets which cannot be readily identified such as atmospheric deposits of pollutants in water, and runoff from golf courses, lawns, stormwater agricultural and construction activities.

⁵ Pollutants produced can be traced to a specific source such as a municipal sewage treatment plant or industry.



Prevention of potential pollution is the first line of defense. The County must ensure watershed management practices reducing surface water runoff, erosion and sedimentation and compliance with the Clean Water Act standards.⁶

Soils

Soils are a vital resource in Warren County, supporting a variety of agricultural endeavors. The County has placed a high priority on preservation of soils, particularly those with a high corn suitability rating (“CSR”). **Exhibit 4** shows the CSRs for Warren County. The Natural Resources Conservation Service (NRCS) published the Soil Survey of Warren County, which mapped individual soil types throughout the County, to provide general guidance about the suitability of soils for agricultural or development purposes. This document is used by the County to minimize the loss of valuable agricultural land due to subdivision and development activity.⁷

Eight major soil associations are found in Warren County. While the characteristics of individual soils within each of these associations vary significantly, a range of characteristics can be anticipated from the major soil associations. In addition to these characteristics, many of the soils create significant development constraints. For example, high shrink-swell potential soils form unstable foundations for roadways or buildings, resulting in cracked foundations and high roadway maintenance costs. Many soils are inadequate for development of on-site wastewater systems due to poor permeability/absorption or poor filtration capabilities.

⁶ DE/ISU 1996, ISU Water Plan, Chapter 4 – Quality of Available Water;
<http://www.profiles.iastate.edu/resources/waterplan/plan/chapter4/> and County Water Facts DE/ISU,
<http://www.profiles.iastate.edu/resources/waterplan/county/warren.html>.

⁷ NRCS is in the process of digitizing soil surveys and preparing data which can be used to overlay CSR information on County base maps.



Exhibit 4: Corn Suitability



Warren County’s soils are primarily of loessial and glacial origin. Soil types, in combination with other factors such as topography, drainage, vegetation and erosion, identify the characteristics of each soil and indicate the type of land development best supported by the soil types. Unfortunately the soils that are best suited for agriculture also tend to be well suited for urban development and are located in the northern half of the County.

Unfortunately, soils best suited for agriculture also are well-suited for urban development.

Soils located along moderately steep slopes (8-15 percent) have moderate limitations and may be developed for urban uses taking into consideration the erosion and stability hazards of such soils. Slopes that exceed 15 percent pose greater limitations for development. Slopes that exceed 25 percent are unsuitable for most development. While slopes of less than 5 percent tend to be subject to wetness due to slow drainage, septic tank drain fields should be constructed where slopes are less than 3 percent to aid the slow and gradual flow of effluent and to allow appropriate absorption and degradation of wastes.

The following soil associations have been identified in the County, and are listed beginning with the association that is most predominant in each area:

County Quarter	Soil Association
Northwest	Macksburg-Sharpsburg-Winterset; Sharpsburg-Lamoni; Ladoga-Gara-Armstrong; Zook-Nash-Nodaway (North and Middle Rivers, Clanton Creek)
Northeast	Tama; Downs-Fayette; Sharpsburg-Lamoni; Ladoga-Gara-Armstrong; Macksburg-Sharpsburg-Winterset; Zook-Nash-Nodaway (South, Middle and Des Moines Rivers)
Southeast	Grundy-Arispe-Winterset; Gara-Gosport-Pershing; Macksburg-Sharpsburg-Winterset; Sharpsburg-Lamoni; Ladoga-Gara-Armstrong; Zook-Nash-Nodaway (South River and Otter Creeks)
Southwest	Sharpsburg-Lamoni; Ladoga-Gara-Armstrong; Macksburg-Sharpsburg-Winterset; Grundy-Arispe-Winterset; Gara-Gosport-Pershing; Zook-Nash-Nodaway (South River, Otter and Squaw Creeks)

Prime Agricultural Land

USDA designations of prime agricultural soils by the use of classifications such as the Corn Suitability Rating (CSR) system and “prime farmland” are two methods of determining the value and quality of farmland.

Corn Suitability Rated Land. The CSR system is the most commonly used index for ranking row crop soil productivity in Iowa. Among the factors considered are the average weather conditions, County soil surveys and soil classifications, and frequency of soil use for intensive row crop production. Corn yield, in bushels per acre averaged over a 5-year period, is used to indicate the fertility and productive capability of the area rated. The average sets a benchmark.

Warren County enjoys a valuable combination of temperatures, precipitation and soils required to support highly productive agricultural operations. The County has placed a high priority on the preservation of soils with a CSR of 60 or greater. However, as shown in the Growth Assessment of *Needs, Issues and Opportunities Report*, development pressures are greatest where the most productive lands are located. Additional efforts may be required to protect the prime agricultural lands and high CSR lands, while providing for some non-agricultural economic return for property owners. Clustering, transfers of development rights, conservation easements and other techniques have proven to be effective techniques to address this issue. However, development should be located where it is already occurring and where it is adjacent to public facilities and services that can be extended efficiently.

Prime Farmland. The USDA “prime farmland” designation is another determinant of whether farmland is of a quality that should not be prematurely developed by non-agricultural uses. Prime farmland is land that is best suited for the production of fiber, food, livestock and timber because it requires minimal inputs of energy and economic resources to maximize the highest possible production per acre. Prime soils have good permeability with few rocks and slopes that do not exceed a 6 percent grade. Once developed for non-agricultural uses, these soils lose their prime agricultural classification.

Productive soils should be preserved to maintain the agricultural economy.

Farm Value and Production. A recent study, using data for the period 1992 through 1997, shows that changes are occurring in Warren County’s farming and farm business community.⁸ The average value of farmland increased. The average farm size increased somewhat to 247 acres and the number of full-time

The trend is fewer but larger farms and increased yield.

⁸ Source: 1997 Census of Agriculture County Profile, USDA, Iowa Agricultural Statistics Services.



farms declined 8 percent to 542 farms. The total market value of farm products increased about 5 percent to \$49,106 per farm while production costs declined by 9 percent. Lower commodity prices and higher energy costs have reduced profits since the 1997 census. The *Needs, Issues and Opportunities Report* provides more detailed information.

Despite federal farm aid, more incentives will be needed to prevent the loss of prime agricultural land and farms. Rising real estate prices create an incentive for farmers to sell parts or all of their farms for non-farm development. Non-farm development then limits the ability to continue normal farm operations as residents complain about noise, odors, lights and dust. This condition often accelerates the conversion of prime farm land. The average value of farm land in 1997 was \$1,522/acre, compared to 1990 when the average value was \$966/acre, an increase of approximately 54 percent. State farm land values for the same period increased from \$1,214/acre to \$1,837/acre (51.3 percent). Cash rents per acre in Warren County also increased in 1998, to \$125/acre, which is higher than the State average of \$119/acre. Total farm real estate debt in the State, which includes land and improvements, rose from \$9.99 million in 1992 to \$11.64 million in 1997.⁹

A significant impact on agricultural uses is farm land value – increasing 54% from 1990 to 1997.

Agricultural Financial Assistance. In federal fiscal year 1997/1998, the State received \$1.5 billion in federal agricultural assistance from the USDA Farm Service Agency. Of that total, the County received \$6.78 million for Production Flexibility Contract Payments, Market Loss Assistance Payments and Conservation Reserve Program Payments (CRP). One-third of the total farms received benefits from CRP. In 1997/1998, 26,000 acres or 8.67 percent of total farm acreage in Warren County was in CRP. The County’s share of federal agricultural assistance available amounted to less than 1 percent of the amount given to the State. The USDA also provides financial assistance to farmers for conservation plans for their land, which is intended to improve soil fertility, soil quality and generally maintain a more productive land base. The program is designed to bring soil erosion into acceptable limits through the use of no-till, minimum-till, contouring, terracing and other conservation measures.¹⁰

Natural Resources

Approximately 9 percent of the County land area consists of scattered woodlands and timbered areas. Hardwood timber, slow to grow but valued for use in product manufacture and construction, needs to be protected from clear-cutting and premature harvesting activities related to land development activities, such as subdivision development. Such activities reduce a valuable resource, contribute to erosion and endanger wildlife habitats for all animals.

⁹ USDA, Iowa Agricultural Statistics, “Iowa Cash Rent Per Acre, 1998.”

¹⁰ The Iowa Link (11-10-98) News Release, USDA.

Wildlife and Vegetation

Threatened and endangered species that have been identified by the Iowa Department of Natural Resources are listed in **Exhibit 5** (the list is not exhaustive; additional species may be eligible).

Exhibit 5: 1996 Threatened and Endangered Wildlife and Vegetation¹¹

Common Name	Latin Name	Iowa Status	Federal Status
Mead's Milkweed	<i>Asclepias meadii</i>	Endangered	Threatened
Prairie Bush Clover	<i>Lespedeza leptostachya</i>	Threatened	Threatened
Slender Ladies' Tresses	<i>Spiranthes lucida</i>	Endangered	None
Great Plains Skink	<i>Eumeces obsoletus</i>	Endangered	None
Bobcat	<i>Felis rufus</i>	Endangered	None
Smooth Green Snake	<i>Opheodrys vernalis</i>	Threatened	None
Bald Eagle	<i>Haliaeetus leucopcephalus</i>	Endangered	Threatened
Henslow's Sparrow	<i>Ammodramus henslowii</i>	Endangered	None
Northern Harrier	<i>Circus cyaneus</i>	Endangered	None
Northern Grasshopper Mouse	<i>Onychomys leucogaster</i>	Threatened	None

The County has other wildlife that is not endangered or threatened, including a significant number of white-tailed deer. It is interesting to note that *Outdoor Life* magazine recently recognized Warren County as an excellent area for hunting deer with the largest antler size. While deer can have a negative impact on crops, deer hunting can be advantageous to the County's economy.¹²

¹¹ Source: Warren County Conservation Board, 1999 and Iowa Department of Natural Resources.

¹² *Outdoor Life* Magazine, January, 1999.



Demographic Characteristics and Growth Trends

Overview

The Growth Assessment explores historical and recent trends in population, income, poverty, employment and growth issues, and is based on the U.S. Census Bureau's 1990 and 2000 Census data as available, and the 1995 and 1997 population estimates.

**During the 1990's,
growth in the County
averaged 1.2% per
year.**

Population/Historic Growth

Even though the County's population grew by less than one-half percent between 1950 and 1960, during the 50s, 60s and 70s, Warren County grew at an average annual rate of 2.3 percent. This annual growth rate slowed to 0.3 percent during the 1980s. Between 1990 and 2000, the annual growth rate increased to 1.2 percent, reaching a total of 40,671 residents. The County's recent growth (at a faster rate than the State in the 1990s) is stimulated by in-migration to the Des Moines MSA, most of which has occurred in the urbanized areas in the northern part of the County and in other areas north of Highway 92. Growth rates have been much slower in the southern half of the County.

Exhibit 6 illustrates that in 1980, more than one-half of the County population lived within urban areas. By 1990, the residency in urban areas increased to two-thirds of the total population. Preliminary 2000 census figures show that the urban area population increased to nearly 27,000, and the rural area population increased to nearly 14,000.

Exhibit 6: Urban/Rural Population 1980 to 1990

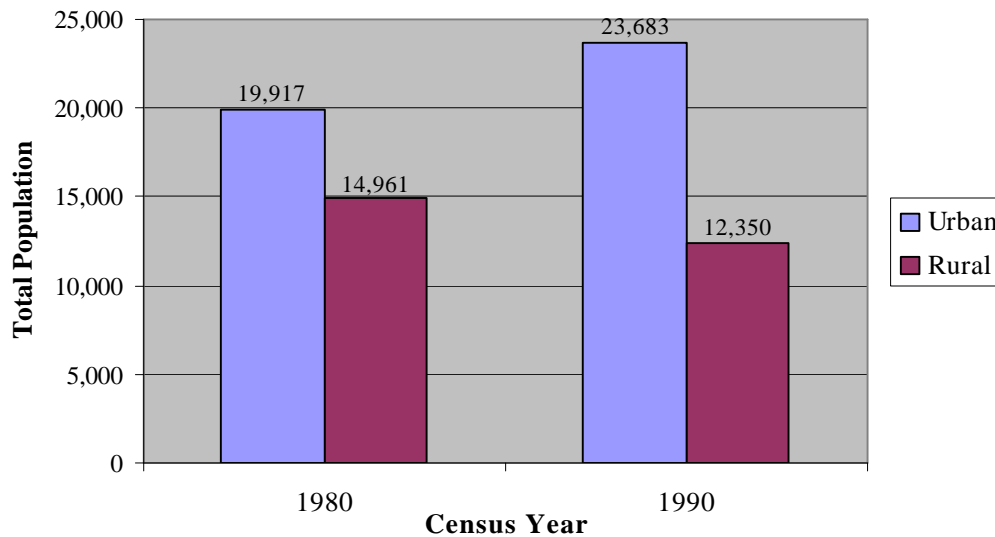
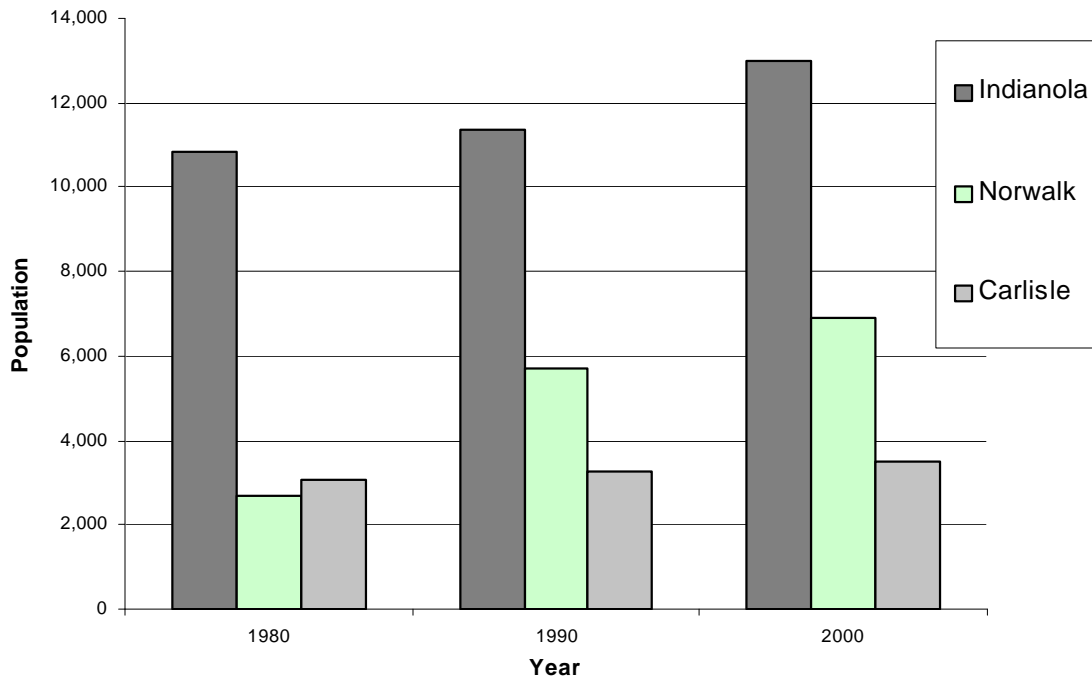


Exhibit 7 shows that the growth of Norwalk, Indianola and Carlisle have been a dominant factor in the County's population changes, representing approximately 57 percent of the County's total population in the year 2000 and 66 percent of the County's population growth in the 1990s.

Exhibit 7: Population by Location



Household Demographics

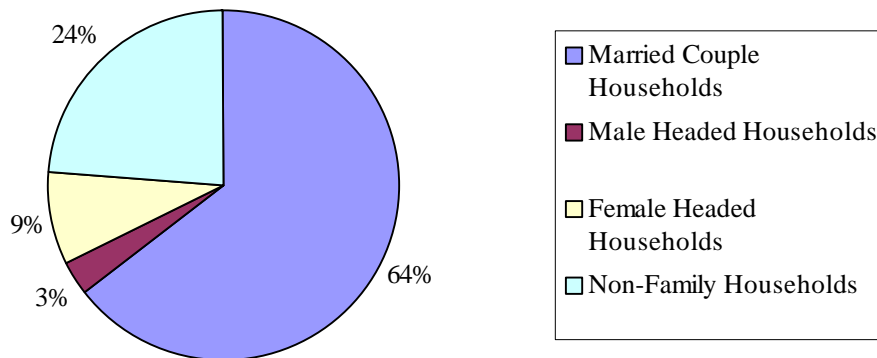
The number of households in Warren County increased by 16 percent (from 12,659 to 14,708) between 1990 and 2000. The mix of household types and household size also have been changing. This shift reflects a decreasing percentage of traditional families, which have been defined as a married couple with or without children. According to Census Bureau estimates, the number of traditional families in the County declined by 11 percent between 1980 and 1990. The number of non-family households (no spouse, no children) increased by 24 percent for that same period. In 2000, 23.8% of total households were Non-Family households, up from 21.3% in 1990.

Households by type provide a snapshot of the community's family demographic. In the 1990s, all family household types increased, although at varying rates. For instance, married families with children increased by 1.3 percent from 4,351 to 4,408. **Exhibit 8** illustrates the distribution of households by type. Within each household by type are subcategories of

information related to children. One notable fact is the number of female headed households with children, which in 2000 constituted 16% of all families with children.

In 2000, the number of persons per household was 2.65, down from 2.75 in 1990 and 3.33 in 1970. The number of persons per household is expected to continue decreasing due to an increasing number of single parent and elderly households, and fewer households with children and/or spouses.

Exhibit 8: Households by Type

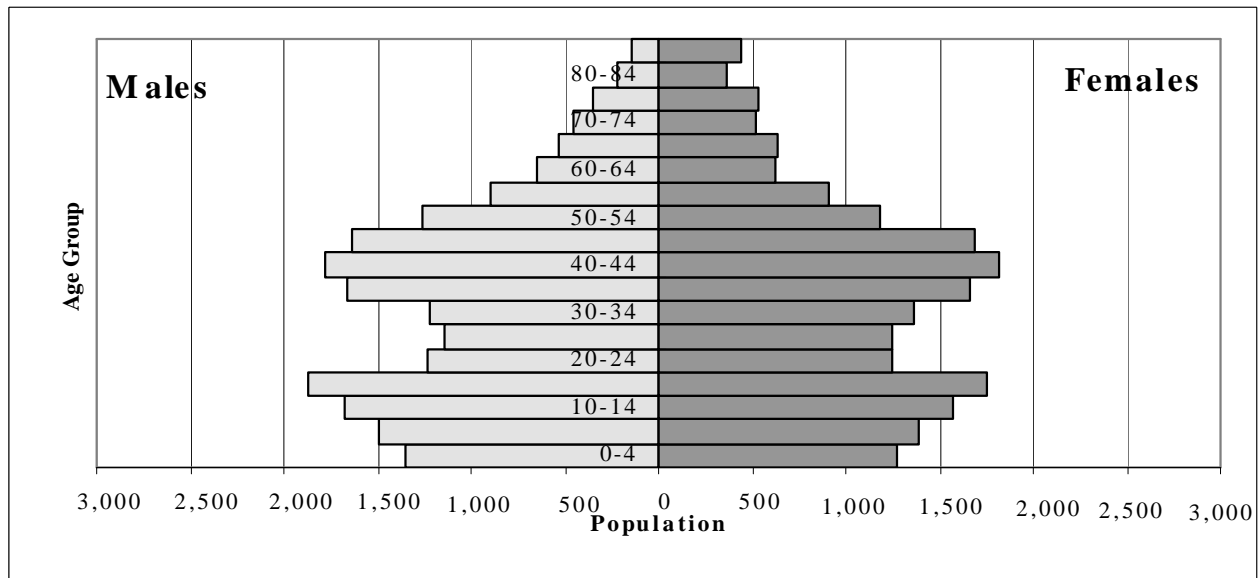


Age Distribution

The age of the County's population provides a good basis for evaluating current and future service needs. **Exhibit 9** illustrates the age of the County's residents at the end of 1996, the last year for which data is available. The bulges in the population graph show the "baby boom" and "echo boom" generations. Less than one-third of the County population was under the age of 20, over one-third is aged 20 to 44; one third is age 45 or older. The distribution of the County's population also follows typical geographic patterns: urbanized areas typically having a greater percentage of young families (Norwalk has an under-20 population cohort group of over one-third of its population; only 21 percent of its population is age 45 or older) than do rural areas (however Carlisle and Indianola more closely reflect countywide age distributions). Planning for appropriate public facilities and services should consider these distributions. The graph also shows a significant gap with the 20 to 34 age

groups, reflecting the loss of young adults due to increased mobility and opportunities outside of the County.

Exhibit 9: Population by Age Group Distribution at the End of 1996¹³



Between 1990 and 2000, the County's population was estimated to have increased by 12.9 percent. The dependent population (persons under 18 and over 65) generally relies on the work force population (individuals ages 18 to 64) to support them. The U. S. Bureau of the Census has projected that the number of persons in Warren County over 65 years of age could double by 2020. By 2020, persons 65 and older may represent almost 18 percent of the total population. A high ratio of the dependent population increases demands for recreational, educational and travel services.¹⁴

One of the most important trends of the 21st Century will be the aging of the baby boomer population.

As the baby boom generation continues to age, their recreational, educational, transportation and health needs will continue to increase the demands for related facilities and services. Aging residents tend to live in the same place longer, creating a sense of stability. These residents will

¹³ US Bureau of Census: Year 2000 Census data indicates 19,768 (48.6%) males and 20,903 (51.4%) females

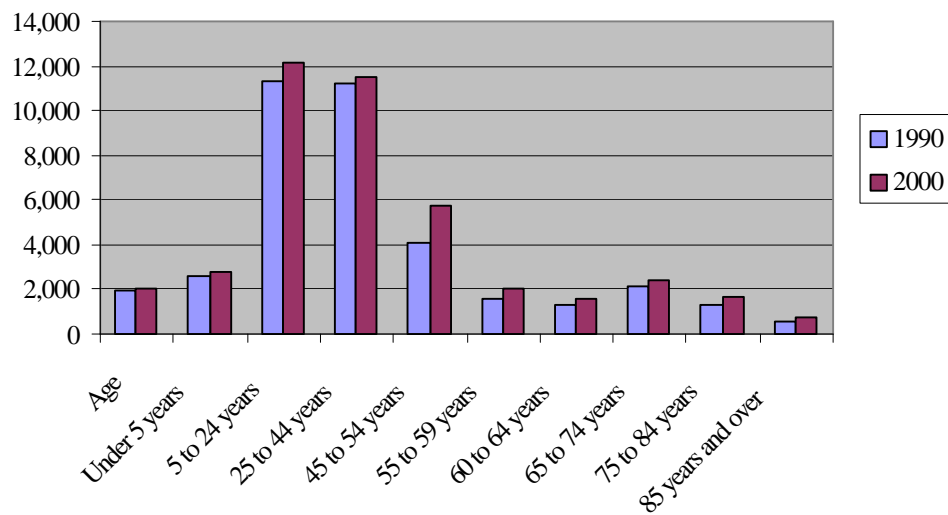
¹⁴ Iowa's Counties: Selected Population Trends, Vital Statistics, and Socio-Economic Data, 1998 edition, pages 33 and 36.



have higher expectations regarding community life, the availability of shopping and the level of public services and facilities. **Exhibit 10** shows the net change in the number of persons in each age group between 1990 and 2000.

The median ages of the fourteen incorporated cities in the County, the State and the U. S. have been increasing over the last twenty years. In 1990, the median age for the County was 32.8 and 34.0 for the State. The Census projects the median age will increase to 36.5 in 2000, 39.4 in 2010, and to 41.3 in 2020.¹⁵

Exhibit 10: Net Change in Warren County Population - 1990 to 2000

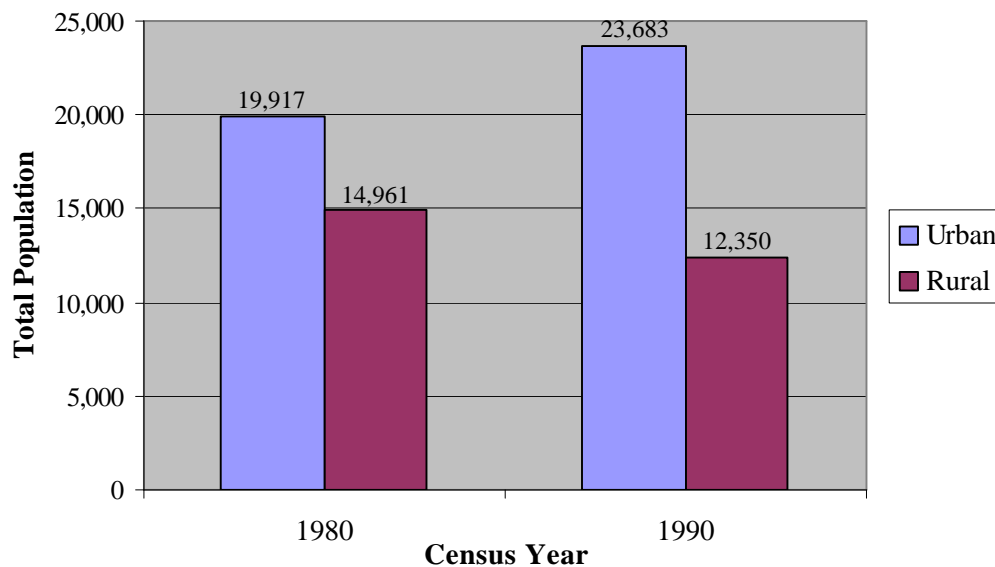


¹⁵ Iowa's Counties: Selected Population Trends, Vital Statistics, and Socio-Economic Data, Page 37.

Another continuing trend is the relocation of population into urbanized and urbanizing areas. As shown in **Exhibit 11**, the urban population increased by nearly 19 percent between 1980 and 1990. During the same period, the rural population decreased by more than 17 percent. Preliminary numbers for 2000 show that both rural and Urban populations increased in the 1990s, with urban areas capturing more than two-thirds of the County's growth.

Urban areas have had significant growth (19%); rural areas have had significant loss (17%).

Exhibit 11: Urban/Rural Population Shift 1980 to 1990



Race and Ethnicity

In 2000, 98.9 percent of the County's population classified itself as non-Hispanic whites. Hispanics of any origin comprised 1.1 percent of the population, while other Census groups (Asians/Pacific Islanders, Blacks, and American Indians, Eskimos or Aleuts) combined comprised less than one percent of Warren County's population.

**Income and Poverty**

Personal Income. Income is measured two ways by the Census Bureau: Per Capita Personal Income (PCPI) and Total Personal Income (TPI) and both have been increasing. **Exhibit 12** shows the dollar amounts and average annual growth rates of PCPI and TPI. In 1996, the PCPI for Warren County was \$21,019. This PCPI ranked 44th in the State, was 94 percent of the State average (\$22,330) and was 86 percent of the national average (\$24,436). In 1986, the PCPI for the County ranked 57th in the State. The total personal income (TPI) for the County in 1996 was \$828,019,000. ¹⁶

Exhibit 12: Personal Income and Total Personal Income - 1986-1996

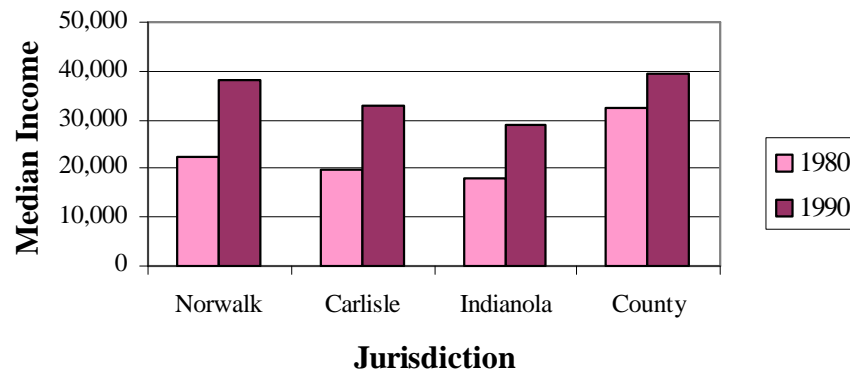
Jurisdiction	PCPI ¹		Avg Annual Growth	TPI ^{2,3}		Avg Annual Growth
	1986	1996		1986	1996	
Warren County	\$12,939	\$21,019	6.2%	\$451,561	\$828,019	8.3%
Des Moines MSA	\$15,973	\$24,436	5.3%	\$5,965,899	\$11,339,429	6.6%
Iowa ⁴	\$13,748	\$22,330	6.2%	\$38,383,920	\$63,596,832	6.6%
US ⁴	\$15,185	\$24,436	6.1%	n/a	n/a	5.8%

Exhibit Notes:

- 1 - PCPI - Per Capita Personal Income.
- 2 - TPI - Total Personal Income.
- 3 - In thousands of dollars.
- 4 - Iowa and US were reported for 1987-1997.

Exhibit 13 shows the distribution of income for the three larger cities, as well as the County median income. Median household income in the County increased from \$32,452 in 1980 to \$39,356 in 1990, an increase of 21.3 percent. Though median incomes for the three largest cities were significantly less than the County in 1980, the gap narrowed by 1990.

¹⁶ Recent data from Iowa State University indicates that year 1999 PCPI in Warren County was \$24,363 and TPI during the same time period was \$989,488. .

Exhibit 13: Median Household Income Distribution

Housing and Residential Development

A review of the plat maps of Warren County reveals that numerous lot splits and small subdivisions have occurred throughout the County over the past few years.¹⁷ Most of the subdivisions have been done north of Highway 92.

The median age for housing units is approximately 30 years, meaning that one-half of the houses were built before 1970 and one-half were built after 1970. In 1990, almost 74 percent of the houses were owner-occupied. The mean 1990 housing sale price (\$63,500) increased steadily to \$93,200 in 1997. Adjusted for inflation in 1997 dollars means there was an actual increase of 16.5 percent. The *Targeted Industry Analysis*¹⁸ indicates that there is a need for additional housing priced below \$100,000, as well as more rental units and affordable housing.

**The average housing
sale price in 1997
was \$93,200.**

Employment

In 1996, total earnings of employed persons in the County were \$230,823,000. The average annual earnings growth during the years 1986 through 1996 was 6 percent, including a dramatic 9.5 percent increase in FY1995-1996. **Exhibit 14** compares the

¹⁷ Farm and Home Publishers, Ltd., Farm and Home Plat and Directory, Warren County, Iowa, 1999; and R.C. Booth Enterprises, Plat Maps of Warren County, Iowa, 1998.

¹⁸ Warren County Economic Development Corporation, 1999.



earnings of employed persons, the larger industries as a percent of earnings, and the average annual growth rate of earnings for Warren County, Des Moines MSA and Iowa. The growth in total non-farm earnings in Warren County has exceeded the growth of the State's, but lags behind Des Moines' earnings growth rate.

Exhibit 14: Earnings by Industry 1986-1996

Jurisdiction	Non-Farm Earnings of Persons Employed in Industries in thousands \$		Avg. Ann. Growth %
	1986	1996	
Warren County	320,630	609,878	6.0
Des Moines	4,715,709	9,305,259	7.0
Iowa	22,206,459	38,917,535	5.5

At the end of 1996, a total of 23,300 Warren County residents were in the labor force with an unemployment rate of 2.1 percent. The County unemployment rate declined even further to 1.5 in April 2000. In comparison, the unemployment rates for the State and the U.S. were 3.1 and 5.0, respectively. The labor force in any area consists of all persons aged 16 and over who either are currently employed or actively seeking work. The size of labor force and its skill level are often important factors in economic development efforts.

In 1996, the three largest employment sectors in the County were services (accounting for 25.8 percent of earnings); state and local government (17.8 percent); and retail trade (13.1 percent). Wholesale trade was the slowest growing employment sector, accounting for 7.8 percent of earnings. The fastest growing sector was construction (13.1 percent of earnings), increasing at an average annual rate of 8.7 percent. This pattern of employment earnings generally followed the trend in the State for approximately the same time period.

Construction was the fastest growing labor sector in the 1990s - a sure sign of growth.

The County's lower wages mean residents may seek better jobs outside the County.

Between 1989 and 1998, the Des Moines MSA lost higher paying jobs in the manufacturing sector and gained lower paying jobs in the service sector. A shift from higher paying seasonal jobs to lower paying but more stable jobs increases economic stability and long-term job growth, but also means reduced average personal income. In terms of labor cost, the County's wage rates rank below average wages paid in Des Moines. While lower labor costs can

attract business and industry (so that products can be produced at lower rates), lower wage rates may cause employees to seek higher paying jobs outside the County. Currently, the County suffers from a shortage of skilled and unskilled labor.

Growth Projections

Population/Housing. Based on projections produced by *Woods & Poole Economics, Inc.*, Warren County's population is projected to increase to 49,930¹⁹ by the year 2020, an increase of 9,259 people compared to the 2000 population. Based on an average of 2.5 people per household and considering a constant 5 percent vacancy rate, there will be a need for approximately 3,703 additional housing units in the County by 2020.

The cities located within the northern portion of Warren County anticipate population growth and a demand for mostly single family residential dwellings and some multi family residential dwellings. Given the growth potential of this area, these expectations are realistic. However, there is limited need for significant residential growth in unincorporated areas of the County beyond identified community growth areas.

A recent study indicates a population increase of 49,930 by 2020, creating a need for 3,703 more housing units.

Non-Residential Development and Employment. The need for non-residential development in the County is more difficult to project than residential development. Many of the County residents commute to employment outside the County. County-wide projection of its proportional share of future employment is based on the MPO's projections as shown in the Regional Employment Growth table below.

¹⁹ 2002 Iowa State Profile, Woods & Poole Economics, Inc., 2002.

**Regional Employment Growth²⁰**

	MPO	Warren County	Warren County's Proportional Share of Total as a %
Population 1990	337,507	36,033	10.68
Population 2020	505,414	45,610	9.02
Population Change	167,907	9,577	5.70
New Employment Total	119,724	6,824	5.70
New Manufacturing Employment	1,885	108	5.70
New Retail Employment	17,691	1,008	5.70
New Other Employment	100,148	5,708	5.70

Because the County is hoping to capture a larger percentage of regional employment, County-wide planning should provide for more acreage than is shown above. Except for the cities in the northern portion of the County, there is marginal demand for additional commercial or industrial land in unincorporated areas.

Commercial Retail Land Development. The County's local and highway commercial development is generally located within the northwest quadrant and along highways abutting or near the Warren and Polk County line, and along Highway 92 north, U.S. 69 Highway and Highway 92. A few very small commercial centers are shown near Martensdale, New Virginia and Lacona.

The Bureau of the Census indicated that retail sales have declined steadily in the County since 1980. The *Targeted Industry Analysis* also indicated that the County lost retail sales to Polk County. Census figures show that total retail sales, adjusted for inflation in 1997 dollars, dropped from more than \$162 million in 1980 to \$151 million in 1997. Retail sales in Polk County increased from more than \$4.8 billion in 1980 to more than \$6.2 billion in 1997.²¹

Since 1980, Warren County had a 7% loss in retail sales, while Polk County had a 65% increase.

²⁰ MPO data not updated to reflect 2000 U.S. Census

²¹ The Census prepared an adjusted estimate of dollars of retail sales gained or lost during this time period. The figures are derived by taking the average retail sales per person in the state divided by the state population and multiplying that figure by the population estimate for the county. The state average suggests



For the same period, Polk County sales increased more than 65 percent. Retail and service business development is most likely to occur within the areas abutting Iowa 5, at I-35 interchanges and within the USA boundaries.

Office Development. Currently, office development has not been considered a major factor in the County. However, the demand may change as annexed areas develop in the future.

Industrial Land Development. Currently, industrial land uses are located along U.S. Highways 69 and 92 and abutting the interchanges along I-35. Occasional small industrial development is found in other areas. Very little industrial development is shown in the outlying County areas. Paving and infrastructure are essential for industrial development.

Based on standard multipliers for each type of employment growth, the County would need, at a minimum, the acreage shown in the table below to accommodate its proportional share of regional growth:

**Acreage Required to Accommodate
Proportional Share of Growth**

Type	Needed Acreage
Manufacturing/Industrial	17
Retail	116
Other	262

then whether the county has gained or lost sales from or to another county or counties.

CHAPTER 3 - FUTURE LAND USE AND GROWTH MANAGEMENT GOALS & POLICIES

Overview

Growth pressures from the Des Moines Metropolitan Area bring challenges to Warren County. The Growth issues and priorities identified in this Chapter form the basis for the County's future land use and growth coordination goals and policies, and justify the strategies recommended in this Plan.

Issues

The following growth issues, which were identified by the participants in the planning process, are discussed in detail in the Needs, Issues and Opportunities Report. These issues are the challenges addressed by the countywide, Urban Service Area and rural policies and strategies of this Plan.

Environmental Issues

- Protecting development from flood damage.
- Preserving prime agricultural lands.
- Protecting groundwater and water quality.
- Ensuring that non-agricultural development adequately addresses constraints from steep slopes and deep bedrock.
- Protecting woodland areas.

Growth Issues

- Managing residential growth in agricultural areas.
- Promoting economic development and diversification.
- Managing impacts of residential growth.
- Fostering efficient growth patterns.
- Facilitating intergovernmental coordination between the County and internal cities and adjacent jurisdictions.
- Establishing a common growth management strategy that includes a shared vision for the location, type, intensity and timing of growth.
- Reaching agreement on the types of services and facilities that should be provided for urban and suburban development.
- Supporting agricultural and resource-based tourism.
- Supporting agricultural industry.
- Reducing retail leakage.
- Promoting efficient land use.
- Supporting healthy communities.
- Identifying appropriate areas for urban growth.
- Capitalizing on Iowa Highway 5 and Union Pacific RR.
- Encouraging residential growth where services are available.

Community Facilities Issues

- Planning for the provision of adequate public facilities and services (e.g., streets, utilities, stormwater facilities, fire stations, etc.) to serve planned growth.
- Protecting and capitalizing on the Iowa 5 corridor.
- Providing/maintaining an efficient County road system.
- Minimizing conflicts between agricultural and non-agricultural traffic.
- Coordinating roadway and land use decisions.
- Establishing appropriate levels of service.
- Establishing equitable funding for public improvements and services.
- Facilitating development of points of presence for telecommunications.

Regulatory Issues

- Ensuring that Warren County's land development regulations are consistent with County goals.
- Developing consistent and appropriate regulations addressing the unique needs of urban, suburban and rural development.

Priorities

When interpreting this plan, decision-makers will need to balance competing objectives – they will need to decide which goals are more important. If, for instance, an application for development of high CSR land that is contiguous with a city is evaluated, the Board may determine that achieving efficient service is more important than preservation of agricultural land. However, when the same development is proposed on prime agricultural land in an area that can not be served efficiently, the Board would reject the proposal. The following priorities should be used when a decision involves competing objectives.

Agricultural Land Preservation - means that high quality agricultural land will be protected from premature development. Some prime agricultural land will be developed in urban service areas, but elsewhere in the County, development will be located and designed to minimize interference with agricultural operations. Residents viewed this as a high priority issue.

Land Use Compatibility - means that land uses can exist in close proximity without interfering with one another. It does not mean identical land uses or intensities. It means that potential negative impacts of one use on adjacent properties have been mitigated.

Fiscal Integrity - means that the decision will not result in an unnecessary public sector fiscal burden. While some decisions may generate short-term losses, they should result in long-term benefits that enhance the quality of life in the County.

Efficient Service Provision - means that the decision will capitalize on existing public investment in infrastructure and minimize increases in long-term capital, maintenance and operations costs.



Community Health and Stability - will be promoted through the regulation of development within Urban Service Areas.

Retention of Viable Agribusiness - will be fostered through the protection of agricultural operations from incompatible non-farm development and support for activities and businesses that strengthen the County's agricultural economic base.

Economic Development - will be supported through the reservation of key commercial and industrial sites along the County's highway corridors. Capital improvements will favor the development of these sites.

Development Quality - will be a high priority for the Board in order to enhance the attractiveness of the County for economic growth and to sustain its fiscal integrity. Quality will be measured in terms of design and durability.

Open Space Preservation - is essential to maintain the rural character of the County and to provide adequate recreational opportunities for existing and future residents.

Future Land Use and Countywide Growth Management Goals & Policies

Goal 1.1: To provide a balanced mix of land uses that is arranged to avoid conflicts and to maximize the efficient delivery of public services and facilities.

Policy 1.1.1: Use the land use categories in **Exhibit 15** for future land use planning. (The future land use categories of the County and cities were considered in the compilation of this list. The future land use classifications of the County and cities are shown in an exhibit in the Appendix to this Master Plan.) The “Permitted Land Uses” column lists examples and should not be considered all-inclusive. Intensities establish the maximum gross density for each residential land use category. Residential densities are expressed in dwelling units per net acre of a project, excluding streets and other public dedication areas. The “location” describes the areas where each land use category may be appropriate.

Exhibit 15: Future Land Use Categories

Proposed Category	Permitted Land Uses	Density	Location
Agricultural / Conservation	A-1 Primary Agriculture: Agriculture and conservation; very large lot estate and farm homes; farmsteads; orchards; wineries; Christmas tree farms; horse farms.	4 residential dwelling unit lots per 40 acres	Throughout all of unincorporated Warren County
	A-2 Agricultural/Estates	Up to 1 dwelling unit per 2 acres through the planned development process	Low productivity soils, access to adequate roads, outside USAs
	A-3 Agriculture/ Conservation Subdivision	Up to 6 dwelling units per 40 acres on maximum 1 acre lots in a cluster	In USAs ²² where utilities will not be available within 3 years
Low Density Residential	Single-family detached residential dwellings; low density planned residential	up to 4 dwelling units per acre	In USAs/cities - annexation required
Medium Density Residential	Single family detached and attached residential and two-family residential dwellings; low density apartments.	up to 10 dwelling units per acre	In USAs/cities - annexation required
High Density Residential	Multiple family residential (4 or more dwelling units); manufactured home parks; planned mixed use districts.	up to 20 dwelling units per acre	In USAs/cities - annexation required

²² Urban Service Area (USA) boundaries are mapped in Exhibit 17 and applicable policies are established in Chapter 4 of this Master Plan.



Proposed Category	Permitted Land Uses	Density	Location
Local Commercial/Services	Office and commercial district, semi-professional and professional offices and public services/limited retail and commercial to serve the immediate area.	maximum 5-acre site	Outside USAs, in unincorporated areas with adequate road capacity. In USAs
			In USAs near intersections of paved arterial roads or integrated into residential neighborhoods.
General Commercial	Larger commercial retail area; town centers; agricultural/commercial	no minimum or maximum	In both USA and Rural Areas near paved arterial intersections.
Highway Commercial	Regional commercial trade services, retail and offices serving the traveling public, large employment centers; regional research and development (no manufacturing or assembly); and indoor warehousing.	minimum 3 acre site, no maximum	Near highway interchanges and intersections of paved arterial roads.
Industrial/Business Park	Low intensity industrial, business park and warehouse development with highway access.	minimum 20 acre site, no maximum	Adjacent to arterial roads with adequate capacity in USAs and Rural Areas.
General Industrial	Higher intensity industrial and warehouse development with adequate highway/rail access.	minimum 20 acre site, no maximum	Adjacent to paved arterial roads with adequate capacity in USAs and in Rural Areas.
Public/Semi-Public	Golf courses and cemeteries.	no minimum or maximum	USAs and Rural Areas



Proposed Category	Permitted Land Uses	Density	Location
Parks & Recreation / Open Space	Parks, recreation and open space including floodplains, flood hazard areas, rivers, and streams; conservation areas, wildlife preserves, wooded areas, slopes greater than 25%.	no minimum or maximum	USAs and Rural Areas



Exhibit 16: Future Land Use Plan Map



Exhibit 17: Urban Service Area Map



- Policy 1.1.2: Use the Future Land Use Map in **Exhibit 16** to coordinate and guide land use and development decisions. Zoning decisions should be consistent with the adopted Future Land Use Map and the other policies of this plan. While the map may indicate a particular land use type, the County should consider the adequacy of infrastructure before approving zoning.
- Policy 1.1.3: Maintain the Future Land Use Map and to include adopted Plan amendments as they occur.
- Policy 1.1.4: Establish a process and criteria for amendment of the future land use map in the land development regulations.
- Policy 1.1.5: Require consistency with the Urban Service Area (USA) policies established in Chapter 4 of this Master Plan and any implementing intergovernmental agreements for all USAs mapped in **Exhibit 17**.
- Policy 1.1.6: For cities without adopted plans, provide the opportunity to comment on development proposals located within their USAs.
- Goal 1.2: To provide a variety of housing opportunities in the County in appropriate locations.**
- Policy 1.2.1: Ensure that the Future Land Use Map provides adequate development potential for a variety of housing types required to meet the housing needs of present and future residents. When evaluating need, the County should consider the availability of housing within incorporated communities and USAs.
- Policy 1.2.2: Direct affordable housing projects to cities or planned districts in the USAs that have centralized water and/or wastewater systems, paved access, and access to employment opportunities.
- Goal 1.3: To provide adequate opportunities for commercial and industrial development.**
- Policy 1.3.1: Coordinate with communities, the business community and economic development interests to ensure that an adequate supply of local, county and highway commercial land is available for development.
- Policy 1.3.2: Coordinate with communities, the business community and economic development interests to ensure that an adequate supply of developable industrial land is maintained in the County.

- Policy 1.3.3: Limit other commercial development within the Rural Areas to businesses providing for local retail, service and agricultural needs, including businesses related to agricultural tourism. The County may enter into improvement agreements to enable operators on unpaved roads to provide for paving.
- Policy 1.3.4: Allow existing commercial and industrial uses to be maintained, expanded, and/or redeveloped. Promote new commercial and industrial development under the following conditions:
- a. adequate roads;
 - b. adequate water and wastewater facilities are provided to serve the proposed industrial use, including provision of water for fire suppression; and
 - c. proposed development will be compatible with existing residential development.
- Policy 1.3.5: Encourage commercial development serving regional commercial needs in existing cities having areas zoned and serviced by adequate public facilities and services for such development.
- Policy 1.3.6: Encourage highway commercial development at all interchanges along I-35.
- Goal 1.4: To coordinate development decisions with the efficient provision of public facilities and services.**
- Policy 1.4.1: Ensure that street configurations provide adequate connectivity to provide for effective long-term access to and through all properties planned for development.
- Policy 1.4.2: Secure adequate right-of-way for planned road expansion and extensions that is consistent with the Functional Street Classification system illustrated in **Exhibit 18**.
- Policy 1.4.3: Maintain a safe and efficient transportation system and program that meets the needs of residents and businesses. Coordinate County capital improvements timing location and design with the plans of the cities.
- Policy 1.4.4: Coordinate with school districts to ensure that proposed developments can be adequately served and that all service providers are aware of each other's improvement plans.



Exhibit 18: Functional Street Classification

Goal 1.5: To protect and preserve sensitive natural resources, including floodplains, woodland areas, wetlands and other sensitive natural areas.

- Policy 1.5.1: Protect environmentally valuable land, including woodlands, wetlands, stream banks and wildlife and vegetative habitat areas, from inappropriate development. Encourage the use of stream buffers and clustering of development to preserve larger expanses of open space.
- Policy 1.5.2: Preserve scenic and historic areas through zoning and flexible design standards.
- Policy 1.5.3: Locate future development (other than bridges and low intensity recreational facilities) outside flood hazard areas. Where development is allowed in the floodplain, require it to be elevated, floodproofed and located outside the floodway.
- Policy 1.5.4: Ensure that local flood management programs meet or exceed regulatory requirements of the Federal Emergency Management Agency, and applicable state regulations.
- Policy 1.5.5: Establish a system of green belts along all rivers, as well as their major tributaries. Encourage development of a trail system, where appropriate along these waterways, especially where the waterway links with the Great Western and the Indianola Trails. Some trail segments may be appropriate adjacent to the waterways, but separate trails that parallel the waterways should be considered based on their aesthetic value, safety and cost-effectiveness.
- Policy 1.5.6: Coordinate with private property owners and other agencies to preserve environmentally sensitive areas in green belts (open spaces) to connect larger wildlife refuges.

CHAPTER 4 - URBAN SERVICE AREA GOALS & POLICIES

Overview

Warren County supports its communities as centers of social and economic vitality. The County, through this plan, is entering a partnership to ensure that development around communities reinforces their long-term vitality. The establishment of the following policies and their implementation throughout each community's Urban Service Area will address land use, transportation, utility and other public service issues in a manner that reinforces each community's growth plans. This will enable the community's to grow in an orderly manner, coordinating annexation with the timely extension of public facilities and services.

Urban Service Areas (USAs) include land around cities that is planned for urban development as well as centralized water and wastewater services during the next 20 years. These areas, which are illustrated in **Exhibit 17** (previously referenced), should be protected from development that would constrain the growth of the cities. Inappropriate development includes low-density residential lots served by on-site wastewater systems and other development that is inconsistent with adopted future land use plans. With isolated exceptions, all land within a USA is expected to become urban or suburban in character over the course of the next 20 years. New development shall be consistent with the County's Master Plan and with the applicable city's adopted land use plan. Urban Service Areas are intended to provide a more effective growth management tool than the statutory 2-mile extra-territorial jurisdiction of cities and are intended to replace these areas for subdivision and land use review.

These policies were established by a joint planning committee and should be refined through a similar process. As circumstances, priorities and fiscal conditions change, so may the policies or boundaries of the USA. Thus, any amendment to USA policies or boundaries should be consistent with process for amending the comprehensive plan. The State vests final decision-making authority over unincorporated areas with the County Board of Supervisors. Because of the importance of decisions within the USA to the affected cities, USA amendments should involve input from city representatives. This plan element outlines an appropriate process for USA amendments as well as for the regulation of development that occurs within USAs. The implementation of the USA policies established in this element will be accomplished through the County's development regulations and intergovernmental agreements with the individual cities.

Key Issues

The following key issues affect long-term urban growth and development in portions of Warren County. Consequently, the resolution of these issues is the focus of the USA policies.

Balanced, Smart Growth - Rural and city residents within the boundaries of the County are concerned about the large lot, scattered residential development that is spread out in the County, particularly in the northern portion. Such unplanned growth can create

barriers to planned expansion of infrastructure and city boundaries. Infrastructure is expensive and barriers will add unnecessary costs to expansion and extension of services. Expansion of infrastructure is critical to the physical and economic health of the County as well as its cities. Unplanned growth also consumes high corn suitability rating (CSR) agricultural land and natural areas that need to be preserved. Sprawl development increases the area of conflict between agricultural uses and residential development. It is critical that the County's Master Plan provide better guidance for the timing and intensity of land use and development decisions.

Utility Capacity and Urban Service Area Definition - The incorporated cities, whose boundaries lie within or adjacent to the County (Carlisle, Cumming, Des Moines, Indianola, Norwalk, and West Des Moines), expect to grow beyond their current boundaries. Properties in the USAs have reasonable expectations for the extension of centralized water and sewer service over the next 20 years. Water is an essential commodity. Rural water suppliers have developed their systems to provide rural levels of service, with limited capacity for fire protection. There is general consensus that rural water availability in USAs promotes non-urban development and creates fiscal and political obstacles to the rational growth of communities.

Extension of sanitary sewer throughout much of the North River basin is feasible through a variety of alternatives. While septic systems can be used to treat wastewater, these systems are inadequate for suburban and urban intensity development and costly to replace when they fail. If the soil is unsuitable or becomes saturated and does not percolate properly, wastewater can contaminate surface and groundwater. Centralized water and sewer service will be required for most development in the USAs, but will not be required in the other unincorporated areas.

Urban Service Area Development - USAs define the areas in which urban development is projected to occur within the next 20 years. Development should be required to provide infrastructure necessary to support the expanding urban population. Some interim development should be allowed, but in no case should it be approved if it will create a barrier to future infrastructure expansion and city growth. Since USAs provide undeveloped land for planned growth for city development, no unincorporated land should be involuntarily annexed pursuant to State law unless it is included in a city's development plan and that public safety and other city services will be provided immediately, that adequate centralized water and wastewater service will be reasonably available to the property within three years, and that plans for appropriate road maintenance and fire protection services and facilities as necessary are in place at the time annexation occurs. Reasonable availability of adequate centralized water and wastewater service does not mean that infrastructure will be extended to existing development that has no need for the facilities or that infrastructure will be extended to each vacant parcel, but it does mean that the city has plans to extend facilities within a reasonable distance of any development proposed to occur within three years of annexation.



Peripheral Development - There has been a proliferation of new parcels created through the plat of survey process. There has historically been no requirement for these incremental small subdivisions of land to be reviewed by the County Zoning Office before recording. The process has created more intensive development than is allowed by zoning without the benefit of adequate review or consideration of the cumulative impacts. These developments form an obstacle to rational urban growth. Concern about the extensive use of the plat of survey process has been one of the prime motivations for defensive annexation by cities. Such plats generally use septic tanks and well water or Warren County Rural Water Supply system distribution lines that are smaller than the 6- to 8-inch diameter lines necessary for fire protection. Additional non-farm traffic has created conflicts with farm traffic and increased demands to pave rural roads.

Rural Planning and Development Regulations - Rural residential development consumes valuable farm land, generates public service liabilities that usually exceed revenues from the development, often interferes with normal farm practices and increases pressure for conversion of additional farm land. Chapter 4 of the County's Master Plan proposes to limit rural development, particularly at the fringes of defined urban service areas to avoid creating barriers to the long-term growth of the County's communities.

Fiscal Planning - Development patterns impact the ability of the County and cities to provide public facilities and services generated by new development. This element establishes coordinated policies to encourage pay-as-you grow programs for new growth and to coordinate development activity and annexation with each jurisdiction's ability and capacity to provide infrastructure and services.

Development Review Process - Development review is the key implementation mechanism for the USA policies. While cities are most capable of ensuring that USA development is consistent with their adopted standards, the Warren County Board of Supervisors is concerned that property owners should have the opportunity to petition their elected representatives for development requests. The policies in this element provide the greater opportunity for cities to review extra-territorial development applications than is provided by state law, but keep final approval for most applications in the hands of the Warren County Board of Supervisors.

Urban Service Area Goals and Policies

Goal 2.1: Ensure that development and improvements in USAs are consistent with long-term growth plans of the applicable cities.

Policy 2.1.1: Require land uses and the intensity of development within the USAs to be consistent with the applicable city's future land use plan.

Policy 2.1.2: Require all urban and suburban development to provide improvements consistent with the improvement standards and

building codes adopted by the applicable city to ensure adequate public facilities and building safety.

- Policy 2.1.3: Establish a process for city staff review of subdivision, plat of survey, plan amendment and rezoning applications within each city's USA.
- Policy 2.1.4: Formally establish a Joint Planning Committee providing equal representation from all cities having jurisdiction in the County and the County.
- Policy 2.1.5: Establish a process for Joint Planning Committee review of applications for exceptions to City improvement standards in any USA.
- Policy 2.1.6: Establish a process for the County and cities to review proposed amendments to the USA policies and boundaries. This process should involve review and action by the Joint Planning Committee.
- Policy 2.1.7: When negotiating inter-governmental agreements with each community, establish appropriate process and standards to ensure that buildings comply with adopted building codes.
- Policy 2.1.8: Ensure that annexation is coordinated with the timely provision of adequate public facilities and services.

Goal 2.2: Ensure that new development has adequate public facilities.

- Policy 2.2.1: Require centralized water service for all new development, except as provided below for interim development.
- Policy 2.2.2: Require centralized water systems to provide adequate supplies to meet minimum standards for fire flows.
- Policy 2.2.3: Require all urban and suburban development to be connected to a centralized wastewater system, except as provided below for interim development.
- Policy 2.2.4: Require all urban and suburban development to provide street and drainage improvements consistent with the adopted improvement standards.



Goal 2.3: Require new development to fund the cost of new improvements and services required by new development.

Policy 2.3.1: Require new development to fund water and wastewater systems required to meet the needs of the proposed development.

Policy 2.3.2: Ensure that interim development has guaranteed the costs of installation and connection to urban infrastructure in an acceptable manner before recording final plats for the development.

Policy 2.3.3: During negotiation of intergovernmental agreements, the County and cities to review and implement suitable finance tools to offset growth-related costs.

Goal 2.4: Provide for interim development in portions of the USA that will not be served by cities in the near future.

Policy 2.4.1: Permit interim development to occur in a manner that will support long-term urbanization of the USA.

Policy 2.4.2: Allow rural development at densities not to exceed 4 dwelling units per 40 acres.

Policy 2.4.3: Allow the creation of cluster development with a density not to exceed 6 dwelling units per 40 acres subject to the following conditions:

- a. Individual development lots shall not exceed 1 acre in net²³ area.
- b. Property owners shall be made aware of the potential for future development of the remaining portion of the parent tract.
- c. Property owners shall be made aware of requirements for connection to a centralized sewer system when available.
- d. Installation of a dry sanitary sewer system may be required if sewer service is to be available within five years as part of an adopted capital improvements program.
- e. Applicants for development shall establish a mechanism, acceptable to the applicable service provider, to fund construction and connection to centralized water and sewer service when the services become available, if sewer service will not be available within 5 years. The following financing methods to fund future construction and connection to

²³ Net lot area excludes land within the public or private right-of-way



municipal systems may be considered to avoid burdening municipal rate payers: facility benefit assessment, construction of dry systems, or escrowed funds for construction costs.

- g. Buildable areas shall not encroach on planned collector or arterial street rights-of-way.

Goal 2.5: Coordinate infrastructure development and provision of services with applicable entities.

Policy 2.5.1: Coordinate street and drainage improvements projects with other service providers to meet the demands from planned development more efficiently. Prior to constructing improvements, ensure that needed utility improvements are coordinated so new pavement will not need to be disturbed for planned utility upgrades.

Policy 2.5.2: Promote coordination and cooperation among all fire prevention, EMS and law enforcement agencies.

Policy 2.5.3: Support the provision of responsive, high-quality fire suppression and emergency medical services (EMS). Require that urban developments have adequate access to emergency services. Coordinate the design, location and construction of stand-pipes and fire hydrants with fire districts as needed to protect new development.

Policy 2.5.4: Establish a process to enable cities to negotiate with the owners of property planned for park and recreation purposes prior to County approval of a rezoning or subdivision application.

CHAPTER 5 - RURAL AREAS

Overview

Rural Areas include all the land in the unincorporated County that is not within the boundaries of the USAs, cities or targeted commercial/industrial areas. These areas should be protected from development that would damage the rural character of Warren County. Inappropriate development includes both residential and non-residential development that is not characteristic of the countryside or a rural community. Rural residential development often interferes with normal farm practices and increases pressure for premature conversion of farms and farm land. From a fiscal standpoint, revenues are increased, but service costs (primarily associated with road construction and maintenance) typically exceed revenue gains, resulting in deficit spending for all but the most expensive rural homes. With isolated exceptions, all land within the Rural Area is expected to remain rural in character for at least the next two decades. New development shall be consistent with the following goals and policies.

Key Issues

Land Use. The rural area is intended for agricultural and other very low intensity uses. Limited residential development may be allowed at densities not to exceed four dwellings per 40 acres. Where adequate water and roadway systems exist, the County may approve cluster developments at greater densities. All rural area development shall be designed to avoid interference with agricultural operations.

Water and Wastewater - There will be only limited development in the Rural Area. Therefore, there will not be a need for centralized wastewater systems. Rural development may use existing rural water supplies or well water. Wastewater may be treated with on-site systems in accordance with the Iowa Department of Natural Resources regulations and standards. Agricultural industry and limited commercial development serving the Rural Area are encouraged to provide on-site systems. The County will not maintain individual or centralized wastewater systems.

Transportation - The Rural Area will continue to use the existing County Road system that includes dirt, gravel and hard-surfaced roads. The County will have a limited paving program and generally will not pave roads or add new roads in the Rural Area unless and until traffic volume increases indicate the need in order to maintain safe roads. System expansions must be done within the fiscal means of the County and should provide the flexibility to evolve as needs and technology change. The location and design of new facilities should be compatibly integrated into the community fabric -- protecting the character of individual neighborhoods and the community as a whole. Transportation system planning is an ongoing process that should be flexible, comprehensive and open to public participation.

Public Facilities and Services - Development within the Rural Area should not expect to have the same level of public facilities and services as the USAs. New public facilities and services are likely to be built and provided in the USAs as those areas develop due to the density of population making the provision efficient and



cost-effective. The County will maintain its existing levels of law enforcement and emergency services.

Conservation and Resources - Floodplains, natural areas such as rivers, streams, wetlands, plant and wildlife habitats, woodlands, and the quality of groundwater and air are valuable to the physical and economic character of the County. The protection of these resources is a County priority.

Rural Areas Goals and Policies

Goal 3.1 To maintain the rural character of the countryside.

Policy 3.1.1: Allow development at densities of up to 4 dwelling units per 40 acres where adequate access and road capacity exists.

Policy 3.1.2: Except within an identified USA, permit agricultural (A-2) subdivisions to develop at densities of up to 1 dwellings per 2 acres through the planned development process where properties have access to a public road with adequate capacity and development is configured to avoid negative impacts on agricultural operations

Goal 3.2: To maintain the County road system in the Rural Areas to minimize long-term costs while providing adequate access.

Policy 3.2.1: Develop a road maintenance plan that minimizes long-term capital and operations costs while providing safe and convenient access for rural residents and farmers. Incorporate the planned maintenance into the capital improvements plan and budget.

Policy 3.2.2: As funds allow, convert dirt roads to gravel per agreement between residents and the County.

Policy 3.2.3: As funds allow, upgrade gravel roads to hard surfacing, when the traffic volume exceeds 400 vehicles per day, in order to maintain a safe and efficient road system by agreement.

Policy 3.2.4: Limit development in areas that would create the need for the upgrade of roads before scheduled in the Capital Improvements Program.

Policy 3.2.5: Allow the use of shared driveways for up to six residential lots provided such driveways meet current county requirements and are surfaced with gravel in order to accommodate emergency vehicles.

Policy 3.2.6: Use vegetation to control weeds and minimize erosion along the County rights-of-way.



Policy 3.2.7: Maintain existing levels of fire protection/EMS and law enforcement services.

Goal 3.3: To protect sensitive natural resources, including floodplains, heavily forested areas, steep slopes, wetlands and other areas.

Policy 3.3.1: Preserve natural features to the greatest extent practical through the design of developments in unincorporated areas.

Policy 3.3.2: Protect environmentally-valuable land, including woodlands, steep slopes, wetlands, stream banks and wildlife habitat areas, from inappropriate development. Where facilities are adequate to support development, encourage clustering of residences to preserve expanses of open space.

Policy 3.3.3: Preserve scenic and historic areas through zoning and flexible design standards.

Policy 3.3.4: Establish a system of accessible green belts along the North, Middle and South Rivers as well as their major tributaries.

Goal 3.4: To secure a system of public and private open spaces throughout the County that serves as a visual and recreational amenity.

Policy 3.4.1: Coordinate with private property owners to retain non-farm lands with high aesthetic or environmental value (*e.g.*, ridgelines, steep slopes, floodplains, woodlands and wetlands) as public or private open space. Private open space areas may be held in conservation easements where appropriate. Public dedication or purchase should be required for key trail linkages and lands that are identified for inclusion in the County park system.

Policy 3.4.2: Coordinate with private property owners and other agencies to preserve environmentally sensitive areas in green belts (open spaces) for use as wildlife refuges and passive recreational areas.

Goal 3.5: To prevent premature development and preserve the most productive farm land in rural areas.

Policy 3.5.1: Recognize that agricultural land is the principal natural resource of the County.



- Policy 3.5.2: Limit rural residential development on agricultural land with a CSR of 60 or higher. Allow limited rural residential development through the planned development process where adequate road and water capacity exist, soils have limited productivity and the development would not interfere with existing agricultural operations.
- Policy 3.5.3: Permit agricultural service related businesses and industries in unincorporated areas if compatible with adjacent uses, located on less productive soils (*e.g.*, CSR is less than 60) and located along road that is adequate to support projected traffic demands. Cluster rural and rural residential lots on less productive (lower CSR) portions of the site.
- Policy 3.5.4: Coordinate with the Iowa Department of Economic Development to help agricultural producers expand existing product markets and to locate new markets for products.
- Policy 3.5.5: Support educational and demonstration projects that increase public awareness of the benefits of agricultural land preservation.
- Policy 3.5.6: Recognize that normal agricultural and environmental nuisances come with rural living and minimize the impact of development in rural areas on existing agricultural operations.
- Policy 3.5.7: Adopt flexible zoning standards to facilitate the development of agricultural tourism and agriculture-related businesses that increase the viability of agricultural operations and are consistent with the road capacities.

Goal 3.1 To ensure that rural development has safe and adequate water and wastewater service.

- Policy 3.1.1: Permit rural residential development to use well-water in conformance with the standards of the Iowa Department of Natural Resources.
- Policy 3.1.2: Permit rural residential development to use septic systems for wastewater treatment where soils provide adequate drainage and filtration in conformance with the standards of the Iowa Department of Natural Resources.

CHAPTER 6 - IMPLEMENTATION

Overview

Warren County's Master Plan is intended to be a dynamic document -- one that responds to changing needs and conditions. To assess the Master Plan's effectiveness in responding to changing conditions, the County will need to monitor actions affecting the Master Plan. As a result of these monitoring efforts or private development requests, the County will need to amend the Master Plan periodically. However, Master Plan amendments should not be made lightly. Board of Supervisors and Planning Commission members should consider each proposed amendment carefully to determine whether or not it is consistent with the Master Plan's goals and policies. In addition, the cumulative effect of several minor changes may be a change in policy direction. For this reason, Master Plan amendments must be evaluated in terms of their significance to overall County policy.

This chapter describes the processes to annually review, monitor and amend the Master Plan and the Future Land Use Plan Map. The detailed amendment process will be incorporated into the County's development regulations.

Annual Review & Monitoring

Prior to development of each budget, the Board of Supervisors should:

- < measure the County's success in achieving plan goals through the recommended strategies of the Master Plan Implementation Program discussed at the end of this chapter;
- < propose strategies to be pursued under the coming year's budget;
- < identify unlisted strategies that will achieve Master Plan goals;
- < evaluate growth trends and compare those trends to Master Plan projections; and
- < summarize development actions which affect the Master Plan's provisions.

This annual review should include statements identifying the County's progress in achieving the goals of the Master Plan, the impact of the Plan on service provision, and proposed programs to help achieve the Plan's goals. The annual review should be used as a tool to help set budgetary priorities.

Future Land Use Map Amendments

The Future Land Use Map is intended to serve as a guide for public and private development and land use decisions. The intent of this Master Plan is for the County to adopt a formal amendment process that will be codified in the County's development regulations. Future land use amendments are anticipated as growth occurs and market conditions change. While land use amendments may occur more frequently than policy changes, they should not occur more than twice per year. By limiting opportunities to amend the Future Land Use Plan, the County will reduce the potential for incremental land use changes to result in unintended policy shifts.

Policy Review & Amendment

To ensure that the Master Plan remains an effective guide for decision-makers, the County should conduct periodic major evaluations of the Plan goals and policies. These evaluations should be conducted every three to five years, depending on the rate of change in the community, and should consider the following:

- < Progress in implementing the Plan;
- < Changes in conditions that form the basis of the Plan;
- < Fiscal conditions and the ability to finance public investments recommended by the Plan;
- < Community support for the Plan's goals and policies; and
- < Changes in State or federal laws that affect the County's tools for Plan implementation.

The major review process should encourage input from businesses, neighborhood groups, developers, the County's, cities' and other community interests through the Planning Commission. Master Plan amendments that appear appropriate as a result of this review would be processed according to the adopted Plan amendment process.

Relationship to Budget

The annual budget is one of the most potent tools for plan implementation because it sets priorities for action each year. Capital and operational funding decisions should directly reflect the goals and policies of this Master Plan. The Plan should serve as the basis for the staff's recommended work programs and a focus for the Board's discussion of priorities from year to year. County staff should review the Plan goals and implementation programs and recommend appropriate strategies to achieve the Plan goals in a manner that is consistent with Plan policies.

If specific Master Plan recommendations are not funded, the Board should evaluate whether they should be omitted from the Plan. When there is a conflict between budget priorities and the goals and policies of this Plan, the Board should consider whether those goals or policies remain valid. If they are valid, then the Board should reevaluate budget priorities.

Capital Improvements Programming

The County should maintain and regularly update long-range and five-year capital improvements programs (CIPs).

The long-range CIP is an important planning tool to ensure that the County has planned the most cost effective facilities and to determine whether the County will have the capability to fund needed public facilities. The long-range CIP should reflect the size, approximate location and estimated costs of improvements needed to serve anticipated growth for the next



15 to 20 years. This plan is not an engineering document, but should provide enough specificity to determine which costs are required to remedy existing deficiencies and which costs provide new capacity that will be demanded by new development. The long-range CIP should establish the basis for the County's development fees. The long-range CIP should be updated at least once every five years or when significant changes to the base systems modify the County's long-term capital investment strategies (*e.g.*, changes in service areas, significant changes in the Future Land Use Plan, changes in service demand or delivery patterns).

The CIP should list short-term projects needed to maintain existing levels of service, with each project being assigned a budget and a time frame for completion. The CIP also should delineate the proportion of project costs that is designed to provide new capacity and the proportion that is required to fund existing deficiencies. This delineation will enable the County to quantify the capital costs associated with new development and to monitor the expenditure of development fees. The five-year CIP should be updated annually to reflect the County's budgetary decisions.

Development Regulations

On a day-to-day basis, the development regulations (zoning and subdivision regulations) are the most important tools for Plan implementation. The Future Land Use Plan and the growth related goals are achieved through a myriad of incremental decisions about specific development projects. Because the Master Plan does not carry the force of law, the County must carry out many of the Plan policies through its subdivision and zoning authority. Updates to these development regulations should be consistent with the Master Plan to ensure that incremental actions on development requests support the Plan's goals, policies and recommendations.

Plan Implementation Program

The Master Plan requires on-going action to achieve its goals. **Exhibit 19**, the Plan Implementation Program, provides an initial listing of tasks required to carry out the goals and policies of the plan, which are listed in Chapters 3 through 5. This program should be updated on an annual basis to reflect County accomplishments and to incorporate new program proposals. The Plan Implementation Program is a tool for establishing budgetary priorities. Programs that are not funded in the recommended years should be evaluated for removal from the list or to be shifted back for later implementation. Programs that are completed should be removed from the list. The Plan Implementation Program is intended to be the most dynamic component of the plan. Through annual updates, the County can ensure that the plan continues to serve the community effectively.



Exhibit 19: Plan Implementation Program

Item No.	Implementation Tool	Task	Schedule Years
1	Development Code	<p>Update the Development Code to include the following provisions and standards for:</p> <ul style="list-style-type: none"> • Zoning districts consistent with the Plan's future land use categories; • Plan Amendment process; • Consistency of development proposals with applicable city's future land use plan; • Bulk and density/intensity standards; • Rural cluster/conservation development; • Improvement standards consistent with the Plan; • Adequate public facilities in USAs in conformance with Des Moines Metropolitan Area Improvement Standards (DMMAIS); • 90-day review process to allow affected cities to negotiate with the owner of properties planned for parks and open spaces prior to approval of rezone or subdivision; • Floodplain regulations, in cooperation with FEMA to limit the construction of structures within floodplain or flood hazard areas; • Compatibility standards for development of land uses that may create nuisances such as: concrete, asphalt and similar manufacturing and processing businesses; • Conservation subdivisions, conservation easements and Standards for new development to conserve and preserve natural areas, areas along river banks and stream beds, slopes, woodlands and wetlands as open space through the County Conservation Board and the DNR²⁴. • Buffers between non-farm and farm uses to avoid interference with farm operations. • Standards for shared driveways to maintain rural road character and function. • Rural area design and improvement standards that are compatible with the conservation of rural community character in the Rural Areas. • Locational and design standards to permit agriculture-related service businesses in the Rural Areas so that the farm economy will have resources while protecting the rural character of the area; • Provisions for vested rights of developments in the pipeline at the time the zoning map is amended; and • Access standards for new development. 	2002
2	Official Zoning Map	Update the official Zoning Map so that it is consistent with the Future Land Use Plan.	Ongoing after 2002

²⁴ REAP - Resource Enhancement and Protection - Private/Public Open Space Acquisition Grants - administered by Department of Natural Resources (DNR)



Item No.	Implementation Tool	Task	Schedule Years
3	Master Plan & Planning	Maintain the Future Land Use Map and those of cities within the County through the County's Geographic Information System.	Ongoing
4	Growth Management	Work with applicable state agencies to evaluate and develop programs to purchase the rights to farmland to conserve it and to transfer those development rights to other areas in the USAs or permit increased density.	2002-2004
5	Economic Development	<p>Enhance alliances/working partnerships with state department such as Iowa Rural Development Council (IRDC), Iowa Department of Economic Development (IDED), Iowa Department of Cultural Affairs and the Iowa Tourism Division; local agencies such as Warren County Economic Development Council (WCEDC), the Board of Supervisors, Cities' Chambers of Commerce, Businesses, Simpson College, and school districts in the County; the private sector; not-for-profit and community groups, and farmers to accomplish the following:</p> <ul style="list-style-type: none"> • Support continuing education programs in schools, Simpson College and vocational/technical schools to work to improve labor force skills; • Use cultural tourism/arts techniques and programs and agriculture demonstration projects to attract ag-tourism and other tourists; • Explore agricultural business opportunities that County farmers can use to build new Ag-resource businesses and expand existing ones; • Support agricultural and conservation demonstration projects that can be done with the farmers and County agencies to showcase the importance of maintaining the Ag economy and conserving natural resource areas. • Consider establishing a summer cultural/tourism/agricultural educational program that is coordinated with a County farm or farmers and cities to draw tourists and area residents to appreciate and learn more about the agricultural community. 	Ongoing
6	Inter-governmental Agreements and Cooperation	<p>Develop intergovernmental agreements between the County and cities to effect the policies of Chapter 4, specifically to:</p> <ul style="list-style-type: none"> • Establish a process for city/county review of subdivision and plats of survey in USAs; • Identify appropriate improvement standards; • Address USA boundary amendments and conflict resolution processes; • Address the timing of annexation and the provision of adequate public facilities and services through a city-prepared plan of intent showing the ability and intent to provide public services upon annexation, to make centralized water and wastewater service reasonably available within 3 years of annexation and to have plans for appropriate road and fire fighting infrastructure upon annexation; • Address funding of public improvements; and • Establish a process for evaluating exceptions to improvement standards. 	Ongoing

Item No.	Implementation Tool	Task	Schedule Years
7	Public Facilities & Services	Promote provision of adequate public facilities and services for planned land uses by assisting service providers in the pursuit of grants for: <ul style="list-style-type: none"> • Expansion of water systems to provide enhanced fire protection; • Expansion of centralized sewer systems to serve USAs and existing developments with inadequate on-site systems; • Enhance fire protection/EMS services; and • Purchase of sensitive natural resource areas to create trail connections as public outdoor recreation and open space/green belts to preserve such areas and prevent development. 	2002-2004
8	Transportation	Coordinate with the Iowa Department of Transportation to increase funding for road maintenance.	2002-2005
9	Transportation	Maintain a 5 year capital improvements program to schedule road and bridge upgrades	Ongoing
10	Building Code	Adopt the Uniform Building Code and the Uniform Fire Code and related codes or their equivalents to ensure appropriate, safe development in the unincorporated County. Employ a Building Official to implement the codes.	2004