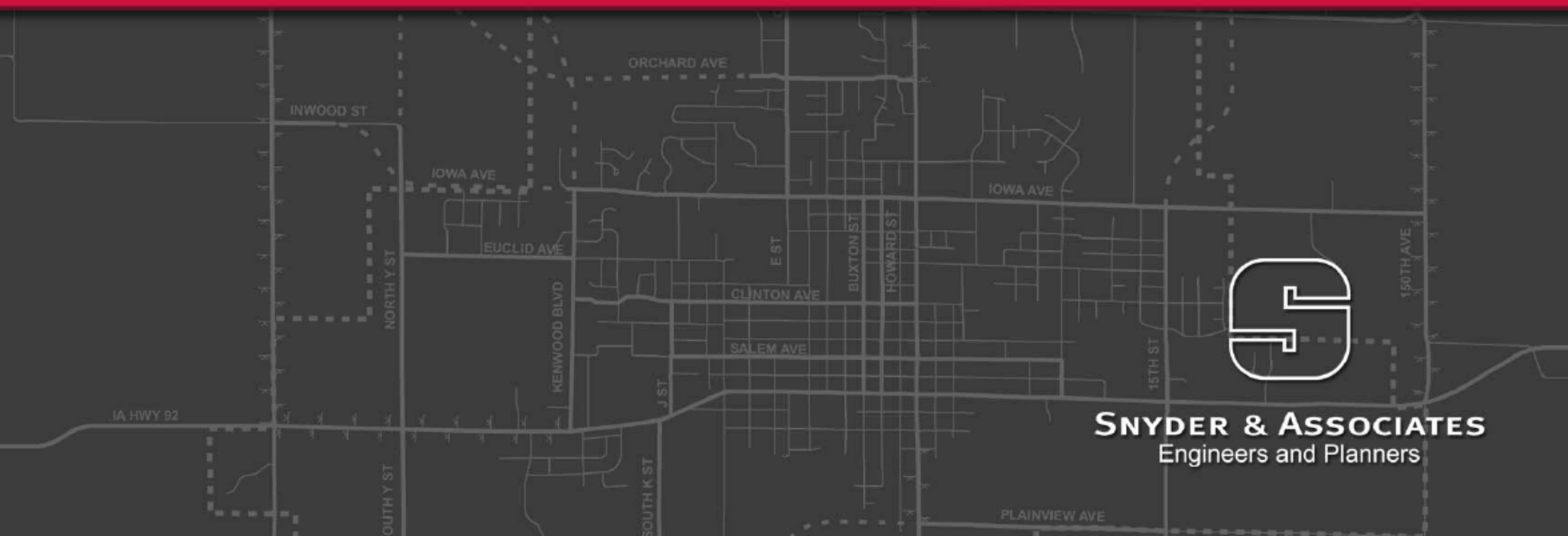
Indianola

CONNECTING TO WHAT MATTERS

October 2011

INDIANOLA COMPREHENSIVE PLAN



SNYDER & ASSOCIATES
Engineers and Planners

A Comprehensive Development Plan
For Indianola, Iowa

Prepared with the Citizens of Indianola
By: Snyder & Associates, Inc.
October, 2011

ACKNOWLEDGEMENTS

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INTRODUCTION

A Comprehensive Plan is a long-range policy guide to decisions about the physical development of a community. A plan generally does not provide a detailed design for development of specific sites; instead it set out broad policy directions for growth, development and redevelopment. This plan analyzes and incorporates a wide variety of components, including the natural environment, population, land use, transportation, parks and trails, infrastructure, services and facilities, and growth management. As a result This Comprehensive Plan provides a vision of Indianola's future, helping to guide the growth of the community

This Comprehensive Plan also provides a framework for land use regulations, recognizing that the people of a community live cooperatively and therefore have certain responsibilities to one another. These regulations determine how land is developed within a city and in its extra-territorial jurisdiction. Under Iowa law, land use regulations such as zoning ordinances must be established and enforced in accordance with an approved Comprehensive Plan.

Comprehensive planning does not end with adoption of the plan so an important aspect of any plan is its implementation. This Comprehensive Plan presents an integrated action program that will help city officials and staff to implement the goals of the community.

AMENDMENTS TO THE PLAN

The time frame of this Comprehensive Plan is an approximately twenty-year period. However, the Plan does not represent a picture of how Indianola will look at any specific year, since plan implementation will occur incrementally throughout the planning period. Furthermore, amendments to this Comprehensive Plan are likely to occur periodically during this time frame, as external forces and conditions change. An important task for the Planning & Zoning Commission and staff is to continually assess growth and development trends, identify priority issues and, when necessary, propose amendments or supplement to this Comprehensive Plan. Such amendments should be carefully prepared and evaluated, with ample opportunity for public input, as was the case with this Comprehensive Plan.

THE PLANNING PROCESS

The goals, objectives and policies set forth in this Comprehensive Plan were developed through a public input process conducted during beginning in the fall of 2010 and completed in the summer of 2011. Snyder & Associates was the facilitator of all components of this process.

STEERING COMMITTEE

Input was obtained from the Steering Committee though a series of Key Person interviews. During these interviews, issues were identified and needs established. The direction and comments received were used to establish the goals and objectives for the Comprehensive Plan. The general discussion issues at these interviews has been compiled and summarized as follows:

- General
  - Tough to get folks to have a vision for the Comp Plan
  - Proximity to Des Moines is both a blessing and a curse
  - Commuters both in-bound and out-bound, daytime drop of only 2,000 people
  - Needs go beyond just physical improvements
  - Bring in new faces to the small groups to help run things
  - Need more of a sense of community
  - More events like Bike Nights on Square, Tuesday Bluegrass,
  - Street naming conventions – difficult to find addresses
  - Need to attract employers, more self sufficiency, especially office/technical
  - Coordinate Comp Plan with Onward Indianola strategic planning

- Growth & Annexation:
  - Sommercrest Hills development is wonderful
  - Sees growth to the north and northwest as larger homes and lots
  - Sees growth to the south as more affordable housing
  - Opportunity to do more along Hwy 92 to the west
  - Concern about adding more area to the city without taking care of what we've got
  - Need to have good reasons to annex, such as improved services or specific development plans, don't bite off too much at one time
  - Council may worry too much about low property tax, important for Council to understand that paving roads brings development and increases tax base
  - Understand when strip annexation is related to tax revenue, but it should make sense for future uses behind the new buildings
  - Annexations need to allow for planning rather than just being a land grab
  - Need infill development in addition to peripheral growth
  - Southeast growth is way off
  - Went from 70-80 building permits per year down to 10-15 per year

- Land Use:
  - Commercial strips along highway to the north seems to work but don't seem sustainable if continuous
  - Like commercial nodes rather than linear strip development
  - Need more buffering, don't want to live in the house behind a big box store
  - Land use along west Hwy 92 is jumbled, the area from the Catholic Church to Fareway needs redevelopment and/or roadway enhancements
  - Industrial uses are not good neighbors to residential uses, especially to single family homes.
  - Town Square – promote retail use around the square; some concern about retail uses shifting out to fringes
  - Parks are generally doing well
  - More green space is needed near the square
  - More green space is needed in the existing residential area to the west, if opportunity arises
  - Potential exists for a park near the west end of Orchard Avenue
  - May need more apartments for young people
  - Lots of multiple-family choices available for seniors
  - Increasing the minimum lot size from 2-acres to 15-aceres in the agricultural zoning district helps consolidate rural development

- Transportation:
  - Too much congestion on 65/69 at center of town
  - Like idea of loop around town for connectivity
  - Want the loop to be developed as a pedestrian friendly parkway
  - Do not want the loop to be developed as a by-pass which could detract from the square
  - The plan for bike trails is good, but more trails need to be paved
  - Paving of Hoover to the west is vital to capitalize on future growth (#1 priority)
  - Like idea of Hoover to the east – helps to market the industrial area
  - Traffic is lighter on R-63 to SW 9th , preferable than taking Hwy 65/69
  - Paving of Iowa was a lovely improvement but like idea of extending it farther west to R-63
  - Do not close C Street – need a north/south street in the area and have concerns about the narrowness, 2-way, parking, Irving school; but understand why Simpson would like it closed
  - Access management is needed on all arterial streets
  - Like to see that the parkway provides alternative access to the school, Pickard Park and balloon festival from the north and west
  - Concerned about adjoining property owners being required to pay too large a share of the cost of paving streets

- Simpson:
  - Love having Simpson here, major asset to the community
  - Can be some tension between city and college due to tax exemption compared to law enforcement requirements
  - Need to foster cooperation with Simpson; broader-based groups rather than just individual relationships
  - Would like to see bookstore/coffee shops on square.
  - Cannot cater business around the square to students, they don't travel to square
- Services & Infrastructure:
  - As city grows, need to look at need for satellite fire/EMS to the north with heavy traffic on Hwy 65/69
  - One library should suffice for the foreseeable future
  - It would be nice to keep the police and fire departments in one building, even if it means moving city hall to a nearby location.
  - If City Hall moves, it should be to a location near the town square not on north US 65/69
  - The City should promote the fiber network for economic development purposes.

- Indianola Schools:
  - Growth has gotten stagnant (dropped from 60-75 new students per year)
  - Middle school will be expanded
  - North elementary 10-15 years out, school has been shown in north at new development

PUBLIC INFORMATIONAL MEETINGS

- ***Open House***

  A Public Input Meeting was held on January 18, 2011 at The Buxton Room in the Indianola Activity Center. The meeting was held in an Open House format and ran from 6:00 pm until 8:00 pm. Citizens attending the open house had the opportunity to view maps, ask questions, provide verbal comments, and fill out written comments, and enjoy refreshments. Fourteen maps, in draft version, were on display for public input. The Planning & Zoning Commission, Community Development Department staff, and five consultants from Snyder & Associates stationed around the room to answer questions and receive input.

  The Open House was reasonably well attended, with over 30 citizens stopping by the view the maps, obtain information about what is being planned and provide input. Most of the verbal comments received by staff and Snyder & Associates were positive. Numerous citizens were strongly in favor of the parkway concept and major streets plan, including placing a high priority on the Hoover Street paving connection to US

Hwy 65/69. Many positive comments were received about the Future Land Use Plan. Citizens were in favor of having a variety of land uses along north US Hwy 65/69 rather than just extending the strip commercial. Favorable comments were received about the mix of light and heavy industrial area on the northeast, though one citizen wondered about how many years it would take to fully develop. Positive comments were received regarding the opportunity for residential development to the northwest. The written comments receive were interesting and very favorable about the open house format used for the meeting. Some of the written comments did not pertain directly to the Comprehensive Plan, such as wanting the city to have an E-85 gas station. A written report on the visioning process from the Onward Indianola meetings was obtained after the Open House.

- ***Public Input Meeting.***

  A Public Input Meeting was held on June 28, 2011 at 6:00 pm in Council Chambers at City Hall. A PowerPoint presentation was given by Snyder & Associates describing the various elements of the plan and including presentation of the updated maps. After the presentation was complete, the floor was opened for questions and comments from members of the Planning & Zoning Commission, Community Development Department staff and the public. Discussion covered topics such as Iowa DOT's current plans for the widening of U.S. Highway 92and optional means a City could use to direct growth to priority areas.

- ***Council Study Meeting.***

  A study session was held by City Council on August 8, 2011. A PowerPoint presentation was given by Snyder & Associates describing the major components of the plan, followed by a question-and-answer period. Following the meeting, draft copies of the Comprehensive Plan were provided to the Parks & Recreation Commission and other key individuals for review. Comments from elected officials, citizens and staff were received and considered until September 16, 2011. Final revisions to the document were made prior to final adoption of the plan.

CITY INPUT

- ***Planning & Zoning review.***

  As each Chapter of the Comprehensive Plan was written, a draft copy of the text and accompanying maps, graphs and exhibits was forwarded to each member of the Planning & Zoning Commission for their review. Members emailed their comments to the Community Development Department. Comments from all members were compiled and were addressed in the subsequent drafts of the Comprehensive Plan report.

- **Parks & Recreation Commission Review**.

  The Parks and Recreation Commission members were each provided with a draft copy of the Comprehensive Plan for review. Written comments were provided to the Community Development Department and were addressed in the final version of the plan.

- ***Staff meetings, interviews and coordination.***

  Throughout the planning process, Snyder & Associates met with the Community Development Department to discuss various components of the plan. The firm also met with the Water Pollution Control department and Indianola Municipal Utilities. Telephone interviews were conducted with police, fire, library and parks departments. Draft versions of various sections of the comprehensive plan were provided for review of appropriate department heads. Comments were addressed in the second draft of the Comprehensive Plan report.

- ***Mayor and City Council review.***

  In addition to attendance at the public input meetings, the Mayor and City Council discussed the draft Comprehensive Plan at their Study Committee meeting held on August 8, 2011. Input received was incorporated in the final version of the Comprehensive Plan report.

Chapter 2

Community Profile

Indianola is located in central Iowa, approximately 17 miles south of the city Des Moines, the state capitol. With direct access to employment centers in Des Moines as well as the Des Moines International Airport, the City of Indianola is part of the growing Greater Des Moines metropolitan area. As county seat of Warren County, Indianola also has its own unique identity and a strong sense of community and place.

The study area for this plan comprises the area within the existing corporate limits of the City of Indianola as well as the entire area falling with two miles of the corporate limits. The City of Indianola is approximately 9.2 square miles in size. This surrounding study area, typically referred to as the "2-mile area" in this plan, covers an area approximately 55 square miles in size.

Indianola's 2-mile area does not include the incorporated area of any other city. However, the 2-mile area for the City of Ackworth overlaps the section of Indianola's 2-mile area that is located east of 150th Avenue. A small area that has been identified as an expansion area for Indianola falls within the urbanized area of Ackworth; different procedures may need to be followed for annexations within the overlapping 2-mile areas. There is also a small overlap with the 2-mile area for the City of Spring Hill. However, this overlap is located west of 110th Avenue, between Indiana Street and Grimes Street, and has not been identified as an expansion area for the City of Indianola.

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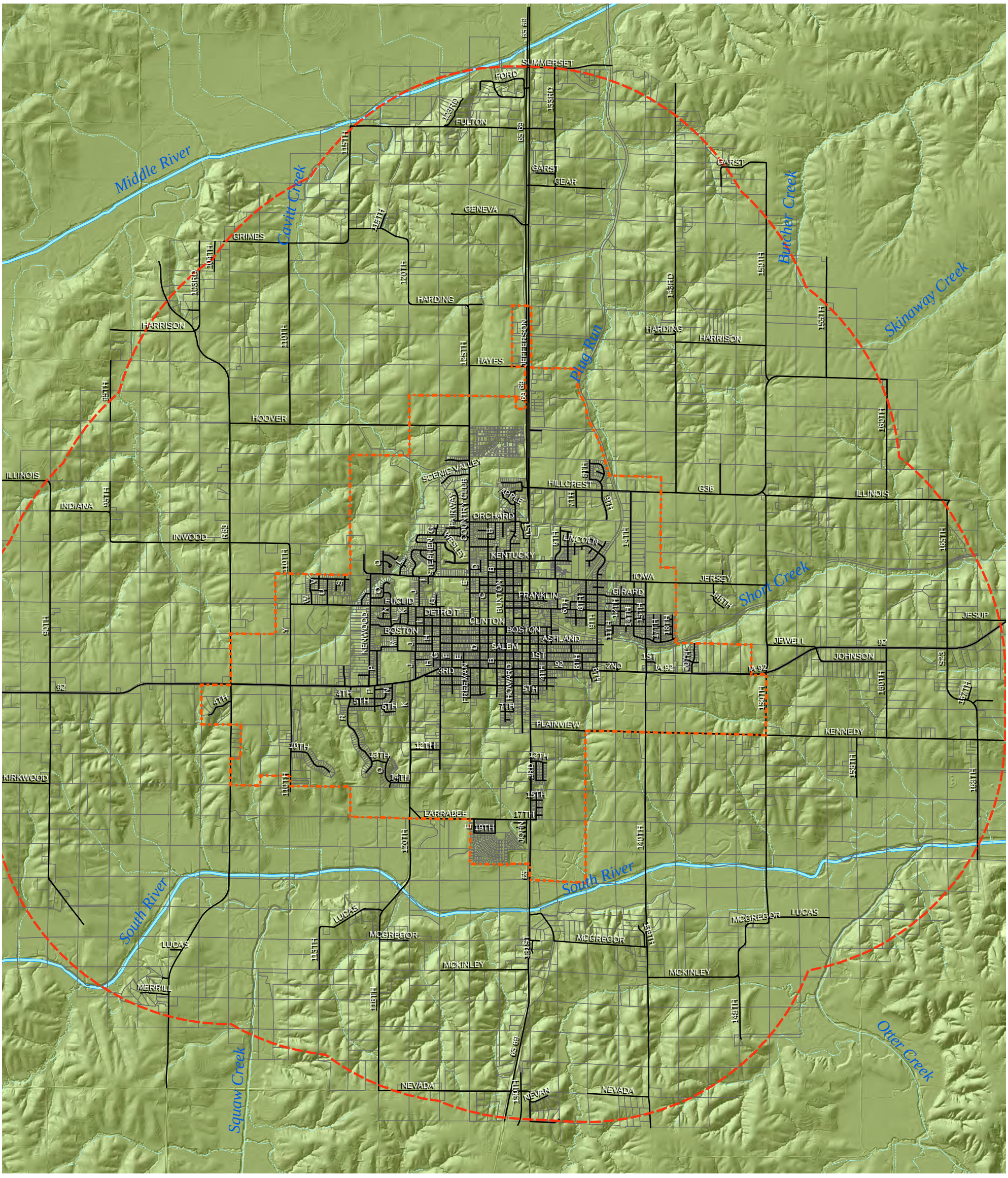
Topography

EXHIBIT 2-1



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0 2,500 5,000 10,000 Feet

Legend

- Two-Mile Boundary
- Existing Corporate Limits

NATURAL ENVIRONMENT

Indianola is a community set between two rivers; the Middle River to the north and the South River to the south. IA Hwy 92 generally follows the ridgeline dividing the drainage basin of these two rivers. The area surrounding the city is dominated by rolling terrain. These rivers, along with their tributaries and associated woodlands and rolling hills, provide an exceptional natural environment for the community. The terrain and drainage basins are illustrated on the Topography map.

The Middle River skirts the two-mile area surrounding the city's current corporate limits; flowing northeasterly as it makes its way toward the Des Moines River. Three major tributaries of the Middle River extend to the south into Indianola's planning area. The east tributary, Plug Run, is generally located east of US Hwy 65/69 and extends south into the northern part of the city, terminating in the vicinity of E. Hillcrest Avenue. Cavitt Creek, the center tributary, is situated west of US Hwy 65/69. This creek also enters the city, running past the Country Club and then continuing south beyond W. Euclid Avenue. An unnamed tributary is located west of County Hwy R-63. While the flood plain of the Middle River follows all three tributaries into Indianola's 2-mile area, only the flood plain of Cavitt Creek is located within the city boundary.

The South River is located just south of the city boundary and flows to the east though this area, generally paralleling IA Hwy 92. Several unnamed tributaries extend north from the section of the South River into the city. Once south of Ackworth, the river bends to the northeast as it flows toward the Des Moines River. After the river crosses IA Hwy 92, one large tributary, Short Creek, extends west into Indianola where it terminates west of 15th Street. The flood plain of the South River follows these tributaries into and around the city.

ENVIRONMENTAL CONSTRAINTS

The Environmental Constraints map illustrates the following physical restrictions:

- ***Flood Hazard Areas.*** Flood hazard areas associated with the Middle River and the South River are designated on the map as floodway, 100-year floodplain and 500 –year floodplain. The flood hazard areas are generally not suitable for development purposes. Some limited development in these areas may be acceptable if appropriately located and properly mitigated. For example, in flood fringe areas, recreational facilities or wood waste recycling may be permitted. Development should not increase the extent of the flood plain or cause damage or erosion to improvements along the creeks.
- ***Wetlands.*** Wetlands as recognized by the National Wetlands Survey are denoted on the map, however all wetlands have not been identified. Where wetlands are present or suspected to be present, proper permitted is required. If identified jurisdictional wetlands are permitted to be disturbed by development, mitigation may be required.

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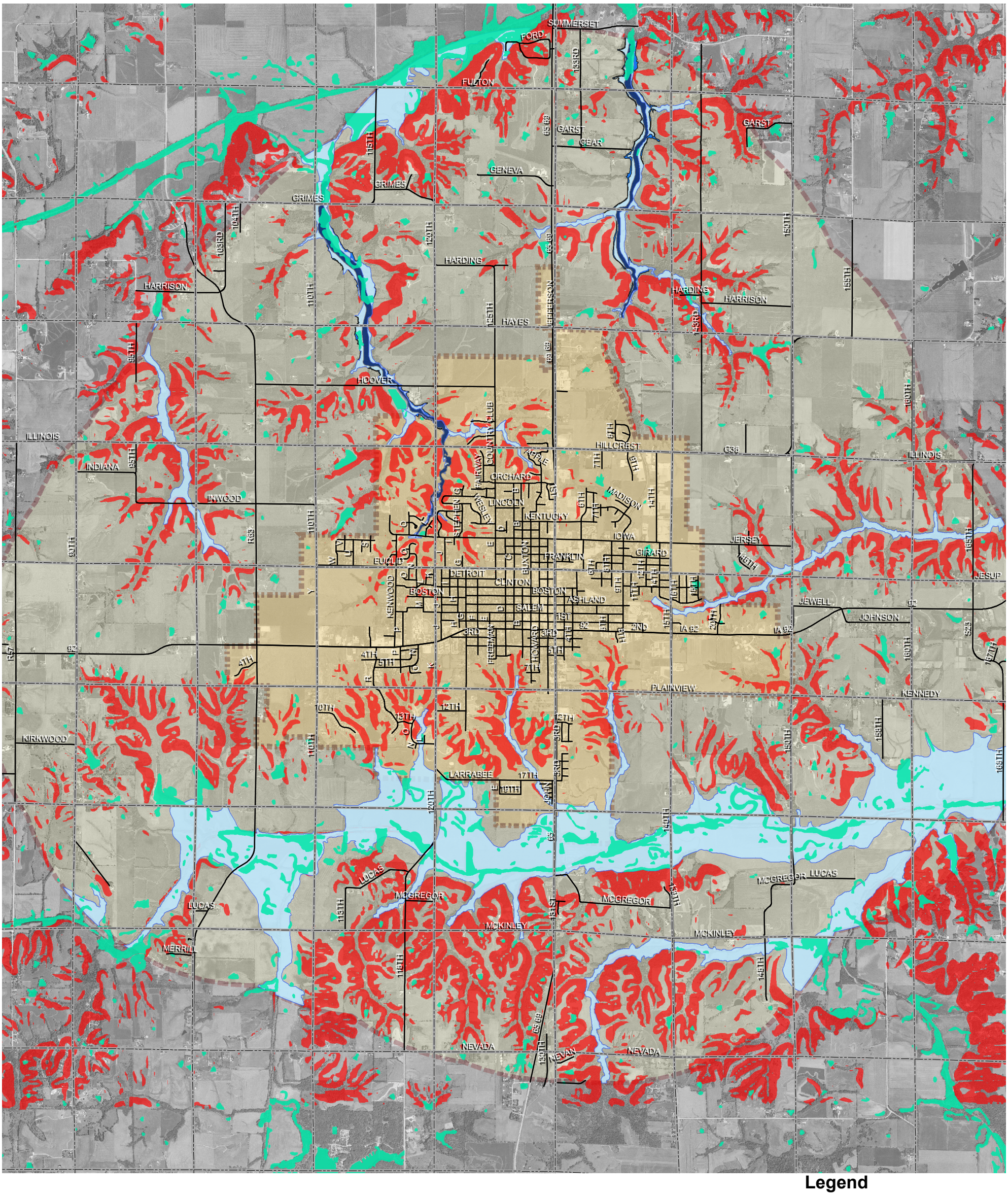
Environmental Constraints

EXHIBIT 2-2



Legend

- Section Lines
- indianola_roads
- National Wetlands Survey
- 100-Year Floodplain
- 500-Year Floodplain
- Floodway
- Greater than 10% Slope
- Existing Corporate Limits
- Two-Mile Boundary

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0 2,500 5,000 10,000 Feet

- ***Severe Slopes.*** The rolling terrain comprises area of extreme slopes that make development difficult. The areas of primary concern are steep, having greater than ten percent slope. These areas are generally located adjacent to drainage ways. Since areas having severe slopes typically require more extensive grading in order to develop the site, erosion is a concern.

- ***Multiple Drainage Basins.*** The City of Indianola is essentially perched on the high ground between the two rivers. Given the number of tributaries and drainage way running through the city and surrounding area, the planning area includes multiple drainage basins which can complicate growth of a community.

- ***Soil Suitability.*** Though not specifically shown on the Environmental Constraints Map, Soils Maps are available from the Natural Resources Conservation Service. However, much of the area in and around Indianola is composed of clay-type soils. These soils often have limited permeability and therefore higher runoff rates; their slow percolation rates may not be suitable for use as leach fields for septic systems. In addition, clay shale may be found which may cause construction limitations. In areas where the potential for unsuitable soils exists, exploration and analysis by a geotechnical engineer is recommended.

ENVIRONMENTAL CHALLENGES

The environmental constraints defined above create challenges that may limit the development and growth of the city. These challenges include:

- ***Cost-efficient Infrastructure Construction.***
    - **Street Connectivity.** The number and location of drainage ways makes street construction problematic since crossing these drainage ways is costly due to the need for culverts and/or bridges in addition to the greater potential for disruption to the environment resulting from tree clearing and extensive grading operations. To be cost-effective, the number of creek crossings should be limited. It is therefore important to establish a good system of collector and arterial streets that provide connectivity between neighborhoods and then to adhere to that plan.
    - **Sanitary Sewer Extension.** As the city continues to grow outwardly, the new developments will be downstream of the existing community and infrastructure. Given the high number of drainage basins surrounding the city, extension of sanitary trunk sewers becomes challenging. Future developments located northeast of the city will be connected to a different trunk sewer than will future developments to the northwest, southwest or southeast. Pump stations will be required in order to convey flows from one drainage basin to another as these flows are transported to

the wastewater treatment facility. As a result, it will be more cost effective for Indianola to direct growth to areas that can be reasonably served by the city's sanitary trunk sewer system when possible.

- ***Land Use Determination.*** Appropriate land use may be determined based upon the impact of various environmental issues. Areas having severe slopes are costly to develop, particularly for large commercial or industrial users; however since those areas typically offer a wooded setting, they are often ideal for residential development. Slopes that are too steep may be unstable for construction of buildings; setbacks from the embankments may need to be increased.

ENVIRONMENTAL OPPORTUNITIES

- ***Sense of Place.*** The valley of the Middle River creates a sense of physical separation from the urbanized area surrounding Des Moines. Future land use should respect the character of the Middle River valley as development occurs to the north along US Hwy 65/69.
- ***Sustainability.*** The City has the opportunity to help the city conserve these natural features and expand the use of these features. The Comprehensive plan and land use goals should preserve open space and critical environmental areas.
- ***Land Use.*** These natural drainage ways form a major resource for the city as well as providing structure for future growth patterns. The wooded drainage ways establish a natural buffer between incompatible land uses. Residential land uses should congregate in areas having woodlands and rolling terrain; industrial land uses in flatter areas that foster "big box" development.
- **Regional Detention.** To the extent possible, regional storm water detention facilities should be developed at strategic locations, to assure effective storm water management and to create water features that may be incorporated in the city's park and green belt system.
- ***Greenbelt System.*** Indianola's extensive network of peripheral streams form a major community asset that can define the city's future open space network. Greenbelt areas are proposed and should be used to connect new open space and trail systems back to the current city. These green belts should also be used for connectivity of neighborhoods to each other as well as parks and open space. Drainage ways in their natural condition should be enhanced as part of the parks and trails network. To the extent possible, private development adjacent to drainage ways should maintain public access to the green belt.

POPULATION

HISTORICAL POPULATION

Indianola is the county seat of Warren County, which was formed in 1846 and was named after General Joseph Warren. In 1849, Indianola was founded as the county seat near the geographic center of the county. The city had a population of 836 at the time of its first census in 1860. The community then grew quickly during its first few decades of existence. Early economic development of the community largely depended upon the manufacturing of automotive accessories and plastics.

After 1890, population growth slowed and became somewhat more erratic until around 1950. At that time, automobile use expanded and Des Moines became a center for employment, commerce and entertainment. With its close proximity to the state capitol city, Indianola went through a period of rapid growth from around 1950 until the 1980's.

Table 2-1: Census Data

Year	Population	% Increase for Decade
1860	836	-
1870	1,428	70.8
1880	2,146	50.3
1890	2,254	5.0
1900	3,261	44.7
1910	3,283	0.7
1920	3,628	10.5
1930	3,488	-3.9
1940	4,123	18.2
1950	5,145	24.8
1960	7,062	37.3
1970	8,852	25.3
1980	10,843	22.5
1990	11,340	4.6
1995	12,332	*
2000	12,998	14.6
2005	14,156	*
2010	14,872	14.4
		*Special Census

Source: United States Census Bureau: factfinder2. Census.gov

During the same period of time, an increasing percentage of Indianola and Warren County residents began to commute to work in the urbanized area of Des Moines. As a result, Warren County became included in the Des Moines Metropolitan Statistical Area, which also includes Polk and Dallas Counties.

Reflective of the national recession in the real estate industry during the mid 1980's, Indianola's growth tapered off to 4.6% during that decade. During the two decades that followed, Indianola's population growth increased once again. While current growth is not as rapid as experienced in the 1950s, the approximately 1.4% average annual is healthy. Importantly, growth has remained steady between 1990 and 2010 in spite of the recent downturns in the real estate market both in Iowa and in the nation.

FUTURE POPULATION

This Comprehensive Plan is intended to create a framework for the planned growth of Indianola. This means the future growth areas designated in the Growth Management Plan should reflect development the city can realistically expect within the timeframe of the plan. While population projections are an inexact science, they are important in helping a city establish priorities.

Indianola's 1996 Comprehensive Plan Update included three scenarios for future growth. The high range growth projection was based on an estimated annual growth rate of 1.4%; using the percentage of growth the city experienced between 1990 to 1995 gleaned from a Special Census and then projecting that same growth rate forward to 2020. The low range projection was based on the more conservative growth projections of Woods & Pool Economics, Inc. However, the middle range projection was selected for planning purposes at that time. That projection was based upon the Des Moines Metropolitan Planning Organization's (DM MPO) forecast information, which anticipated a surge in population in Warren County due to the construction of Relocated Iowa Highway 5. As a result, a population of 20,138 was used for the 2020 planning year at that time.

Indianola's 2003 Comprehensive Plan Update did not generate new population projections. However, the interim 2000 census recorded the population of Indianola as 12,988. Since that count fell between the middle-range projection and the low-range projection, the 2003 Comprehensive Plan extrapolated a new population projection, calculating the 2020 between those two prior projections. The resulting population of 18,655 was used for the 2020 planning year for that plan.

In 2007, Central Iowa Regional Transportation Planning Alliance (CIRPTA) released its Long Range Transportation Plan. Working in collaboration with the DM MPO, the future population for Indianola reflects a more modest growth rate based on slower housing starts; the 2030 population was projected to be 17,098 which is less than previous population projections for 2020 populations. These projections are summarized in the following table.

Table 2-2: Population Projections

Year	Census Data	1996 Comp Plan Update						2003 Comp Plan Update		2007 CIRTPA Long Range Plan		2011 Comp Plan Update	
		High Range		Middle Range		Low Range							
		Pop	Avg %	Pop	Avg %	Pop	Avg %	Pop	Avg %	Pop	Avg %	Pop	Annual Avg %
1990	11,340	11,340		11,340		11,340							
2000	12,988	13,397	1.8%	13,079	1.5%	12,957	1.4%	12,998		12,998		12,988	
2010	14,872	17,749	3.2%	16,609	2.7%	15,425	1.9%	15,839	2.2%	14,352	1.0%	14,872	1.5%
2020	-	22,100	2.5%	20,138	2.1%	17,892	1.6%	18,655	1.8%	15,895	1.1%	16,657	1.2%
2030	-									17,098	0.8%	18,655	1.2%

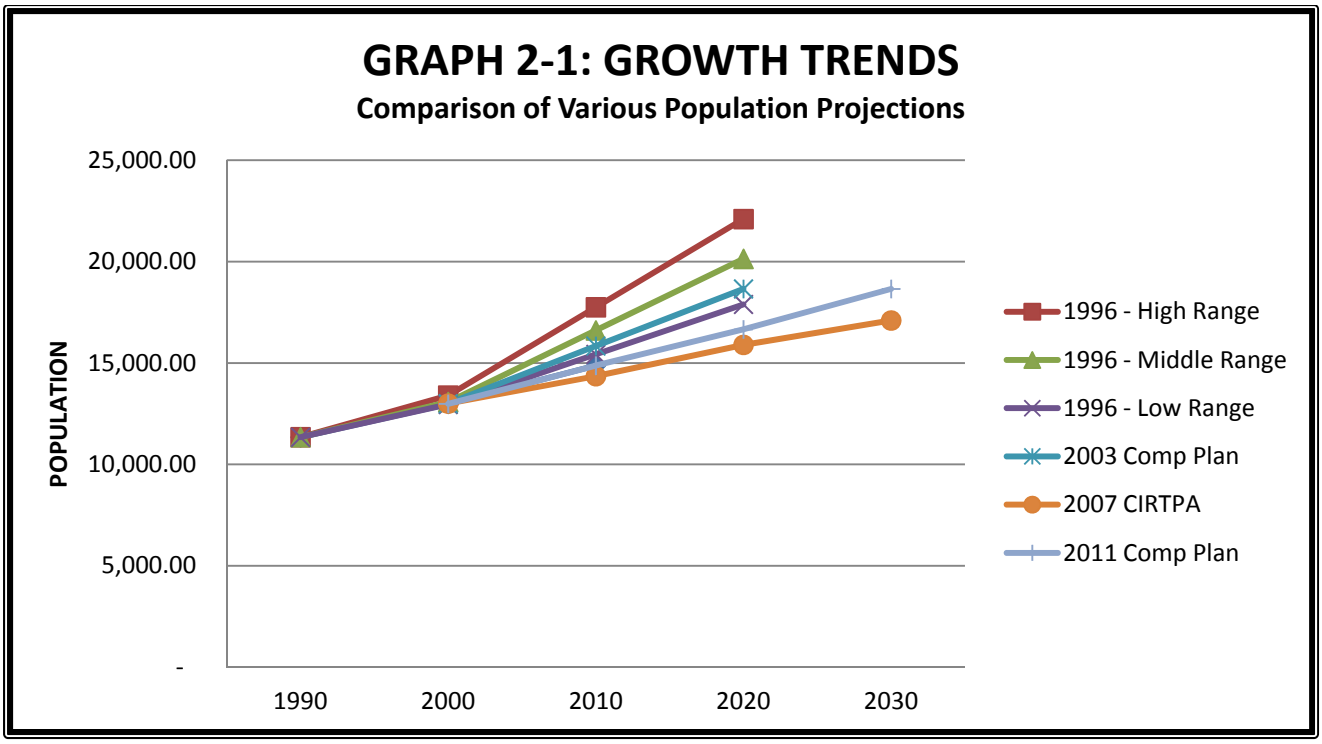
Sources:
1996 Comp Plan: 1996 Comprehensive Plan Update; City of Indianola; Kirkham-Michael and Associates
2003 Comp Plan: Indianola Action Development Plan; January 2003; Stanley Consultants, Inc. & Environmental Design Group, Ltd.
CIRTPA: CIRTPA Horizon Year 2030 Long-Range Transportation Plan, October 2007; http://www.dmampo.org

In February, the U.S. Census Bureau released the total population counts for the 2010 census, although detailed demographics were not available at the time of this writing. Indianola's population in 2010 was recorded as 14,872; establishing Indianola's population lower than either the 2003 Comprehensive Plan forecast or the low-range growth projection forecast of the 1996 Comprehensive Plan. Interestingly, Indianola experienced more growth in 2010 than CIRPTA had projected in their 2007 Long Range Transportation Plan.

This 2011 Comprehensive Plan Update is a long range plan, with a planning horizon of 2030. This plan projects Indianola's population to be 18,655 in 2030, based upon achieving a population of 16,657 by the year 2020.

While this projection does not forecast as aggressive a growth trend as prior Comprehensive Plans, it is also not as conservative as the CIRTPA 2007 Long-Range Transportation Plan. However, DM MPO indicates CIRPTA is also currently updating their population projections based on new populations projections utilizing the recently released 2010 Census counts.

A comparison of these growth trends is illustrated in Graph 2-1.



Sources:
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2003 Comp Plan: Indianola Action Development Plan; January 2003; Stanley Consultants, Inc. & Environmental Design Group, Ltd.
CIRTPA: CIRTPA Horizon Year 2030 Long-Range Transportation Plan, October 2007; http://www.dmampo.org

RECOMMENDATIONS

For planning purposes, the City of Indianola should:

- ***Continue to monitor growth.*** Through their tracking of building permits and other indicators, the Community Development Department has a good understanding of the growth in both the population and valuation of Indianola. Population forecasts are affected by many variables on local, state and national levels, population projections are dynamic. The City should continue to monitor both development and population trends due to the significant impact they have on the City's planning efforts.
- ***Continue to conduct a Special Census when warranted.*** The City caused a Special Census to be performed in 1995 and in 2005. In order to monitor growth for capital improvements planning purposes and benefit from increased Road Use Tax revenue, the City should again consider a Special Census, particularly if anticipated increased revenue exceeds its cost.
- ***Review new CIRTPA population projections***. The DM MPO does not yet have a time frame for when their new population projections will be available. Once accessible, the City should review CIRTPA's forecasted growth trend. If these projections are

significantly different than those included herein, the City should determine if alternative planning strategies should be considered.

- ***Review detailed demographics for 2010 Census***. Once the detailed demographics for Indianola are released, this information should be reviewed to determine if there are any unforeseen impacts to the city's plans for future growth. For example, Simpson College plays an important role in the population dynamics of Indianola. The effects of the college on the city's age composition will likely be apparent when the 2010 census data regarding age composition becomes available. This student population is not static and therefore will not continue to age with the rest of the population. These students typically do not remain in Indianola, therefore the College's student population should be considered when pertinent and applicable in determining the city's true population growth.
    - Accurate count. College towns often have a difficult time getting accurate census counts since college students are often counted by their parent(s) toward the population of their hometown rather than toward the their college community. Once available, the 2010 age composition of Indianola should be reviewed to determine if it reasonably coincides with the student enrollment of Simpson College. If not, the City may wish to consider encouraging students to count Indianola as their home on future censuses.

EXISTING LAND USE

The City of Indianola currently occupies an area of approximately 11.1 square miles. Approximately 61% of this area is urbanized, with land classified as residential, commercial, industrial, tax-exempt (civic, school, parks, utility and similar uses). Indianola's dominant land uses are characterized as follows:

- Town Center/Square. This area functions as the central business district of the City, encompassing both Indianola City Hall and the Warren County Courthouse. Existing land use includes civic uses as well as professional office offices, banks and financial institutions, agencies, retail and restaurant uses.
- U.S. 65/69 and IA. Hwy 92 Commercial Corridors. These two major transportation corridors have significant impact on the land use of properties fronting on these arterial streets. Land uses are primarily commercial uses, including retail strip centers, big box retail such as car dealerships and superstores, convenience stores.
- Simpson College. Located north of the town center/square, the college has a major impact on the area surrounding the campus. The area includes numerous parks, and the campus includes administrative offices, group housing, and sports facilities in addition to classrooms.
- Northeast Industrial Park. This industrial area includes the bulk of Indianola's industrially uses. The area also includes vacant, currently classified as agricultural, available for future industrial use. The area has reasonable access to major transportation corridors.
- Northwest Residential Area. The northwest quadrant of the city is dominated by residential land uses. While residential land uses are certainly found in other areas of the city, the northwestern area has seen a significant share of new single-family residential development in recent years.

The Existing Land Plan identifies current land uses, based upon the land use classifications and the parcel designations by Warren County, and is found on the following page. This map illustrates current land uses in Indianola and the 2-mile area surrounding the city.

Indianola's existing land use within the current corporate limits is evaluated in this section. The City's land use will be documented by its current land use classification. The existing land use will then be evaluated by two alternative comparative methods; as a percentage of total area and by development density.

Indianola
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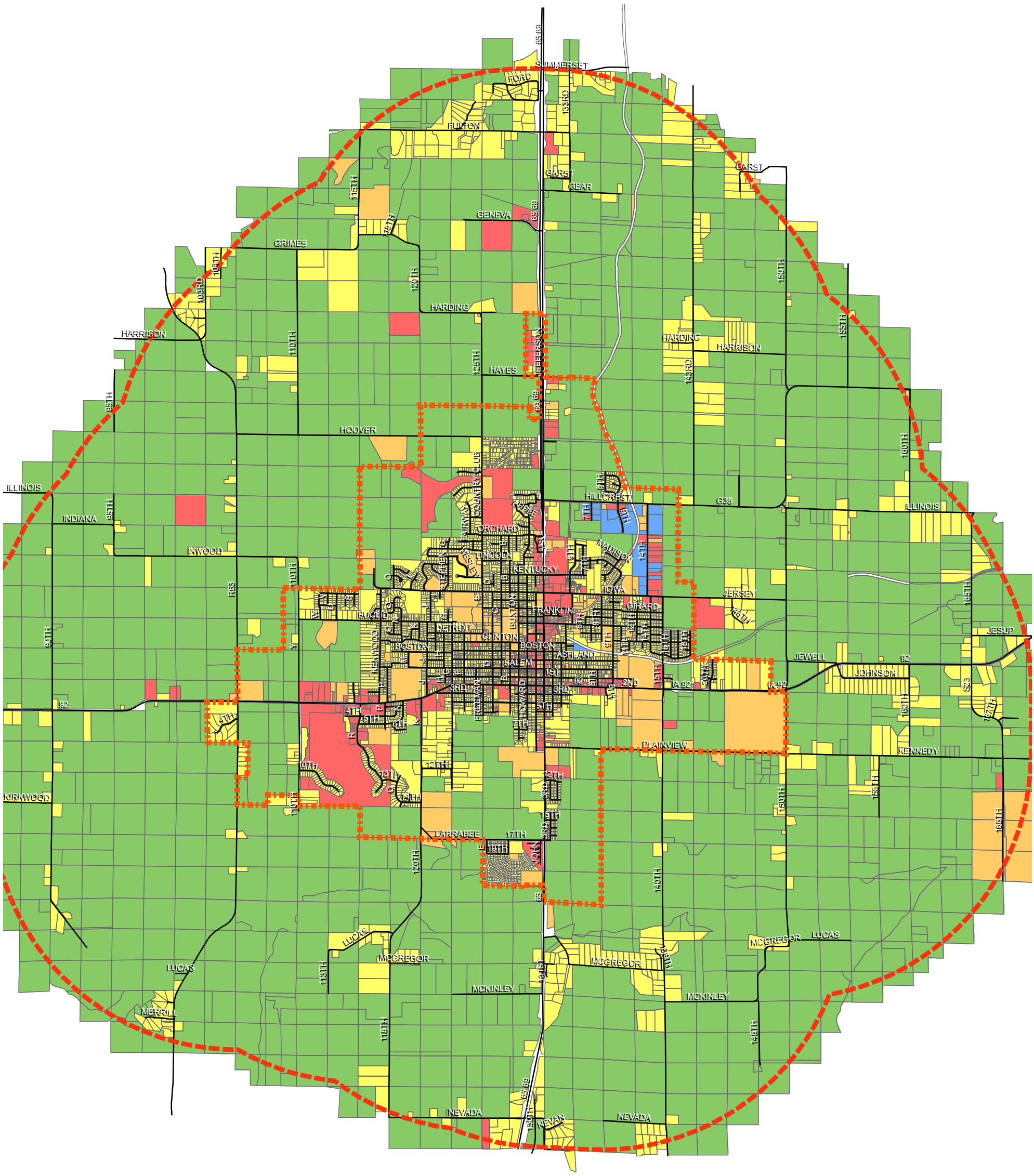
Existing Land Use

EXHIBIT 2-3



Two-Mile Boundary

Existing Corporate Limits

Existing Land Use

- Agricultural
- Commercial
- Exempt
- Industrial
- Residential

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0 2,500 5,000 10,000 Feet

- ***Current Land Usage***
  - ***Current Land Use Distribution.*** Currently, the City of Indianola's existing land use can be broken down as follows:

Table 2-3: Land Use Distribution

Indianola's Land Use Distribution			
Land Use	**Area (Acres)**	**Area (Sq. Miles)**	**% of Total Area**
Agricultural	2,749.29	4.3	38.9%
Residential	2,054.98	3.2	29.1%
Commercial	813.35	1.3	11.5%
Industrial	102.03	0.2	1.4%
Tax-Exempt Parcels	969.10	1.5	13.7%
Right-of-way	384.27	0.6	5.4%
Total	**7,073.0**	**11.1**	**100.0%**

  - ***Comparative Evaluation of Current Land Use as a Percentage of the Urbanized area.***

For purposes of this comparison, only the urbanized area is evaluated. The agricultural/vacant land area is excluded since the amount of land designated agricultural land is often more a function of annexation policy than of urbanized land use. The following table documents existing land use as a percentage of the urbanized area for the similarly-sized communities of Boone, Pella, Oskaloosa and Knoxville, with each city having a college or community college.

Table 2-4: Percent of Urbanized Area

LAND USE AS A PERCENT OF URBANIZED AREA					
Land Use	**Indianola**	**Boone**	**Pella**	**Oskaloosa**	**Knoxville**
Residential	47.5%	34.0%	26.8%	39.3%	35.4%
Commercial	18.8%	4.4%	4.3%	7.2%	8.2%
Industrial	2.4%	1.2%	18.0%	7.0%	6.2%
Civic/ Tax-Exempt	22.4%	28.4%	31.3%	21.0%	24.0%
Right-of-way	8.9%	32.0%	19.6%	25.5%	26.2%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

- ***Comparative Evaluation of Current Land Use by Development Density.***

The 2010 census sets the City of Indianola's current population at 14, 872. The city's current land use based on population is broken down in the following table. For comparison, land use by development density has again been provided for the Boone, Pella, Oskaloosa and Knoxville.

Table 2-5: Land Use Comparison by Land Use Classification

Land Use Comparison by Land Use Classification (Acres per 100 residents)					
Land Use	**Indianola**	**Boone**	**Pella**	**Oskaloosa**	**Knoxville**
Residential	13.8	8.1	9.2	9.4	8.8
Commercial	5.5	1.0	1.1	1.7	2.0
Industrial	0.7	0.3	2.5	1.7	1.5
Civic	6.5	6.7	9.4	5.0	6.0
Right-of-way	2.6	7.6	7.4	6.6	6.5

- ***Conclusions***

Agricultural land, including vacant land and open space, accounts for nearly 39% of the land within the current city limits of Indianola. Most of this land lies around the periphery of the central urbanized area of the community. Much of this agricultural/vacant land is suitable for development, although a significant portion of this development is restricted by a variety of environmental constraints.

Residential land uses represent approximately 29.1% of the city and is the largest urbanized land use within the corporate limits. Single-family dwellings accounts for the majority of all residential land, however Indianola has successfully dispersed multi-family development throughout the community with significant pockets of multi-family homes south of IA Highway 92 and some new multi-family development on the northeast side of the city. Indianola has a higher than average percentage of their land devoted to residential uses when compared to the urbanized areas of other like-sized communities in Iowa.

Commercial uses, including retail and office buildings, make up about 11.5% of the city, constituting a significant amount of the urbanized area. Indianola has a significantly higher percentage of urbanized land area in commercial uses than many similar sized communities in Iowa. However, continued commercial development at these levels may not be sustainable for the long term.

Industrial uses only comprise about 1.4% of the city's land use. This land use reflects a lower percentage than other communities of the same size, with the exception of Boone which has a significant amount of industrial use located in the

urban fringe of that city which was not included. This emphasizes the city's ambitions to continue to develop an industrial park on the northeast corner of the city. It will be important for the City to protect those areas designated for future industrial land use when considering potential rezonings.

Tax-exempt parcels represent approximately 13.7% of the land in Indianola. These parcels include uses such as civic buildings, parks, and schools in addition to Simpson College. While this percentage is relatively high, when compared to urbanized areas of other communities that have colleges or junior colleges, it appears reasonable.

LAND CONSUMPTION TRENDS

- ***Land Consumption by Land Use Classification***

One method of evaluating Indianola's land use consumption is to compare the area of different classifications of land use areas over time. A comparison of current land in contrast to the 1996 Comprehensive Plan is summarized in the table below. (The 2003 Comprehensive Plan did not include existing land use areas and is therefore not referenced.)

Table 2-6: Land Consumption by Land Use Classification

INDIANOLA'S LAND CONSUMPION BY LAND USE CLASSIFICATION (in Acres per the 1996 and 2011 Comprehensive Plans)				
Land Use	**1996**	**2011**	**15-Year Change**	**Average Annual Land Consumption**
Residential	1,352	2,055	703	47
Commercial	266	813	547	36
Industrial	205	102	(103)	(7)
Civic /Tax Exempt	225	969	744	50
Right-of-way	-	384	-	-
Total Urbanized Area	**2,048**	**4,323**	**1,891**	**126 Acres**

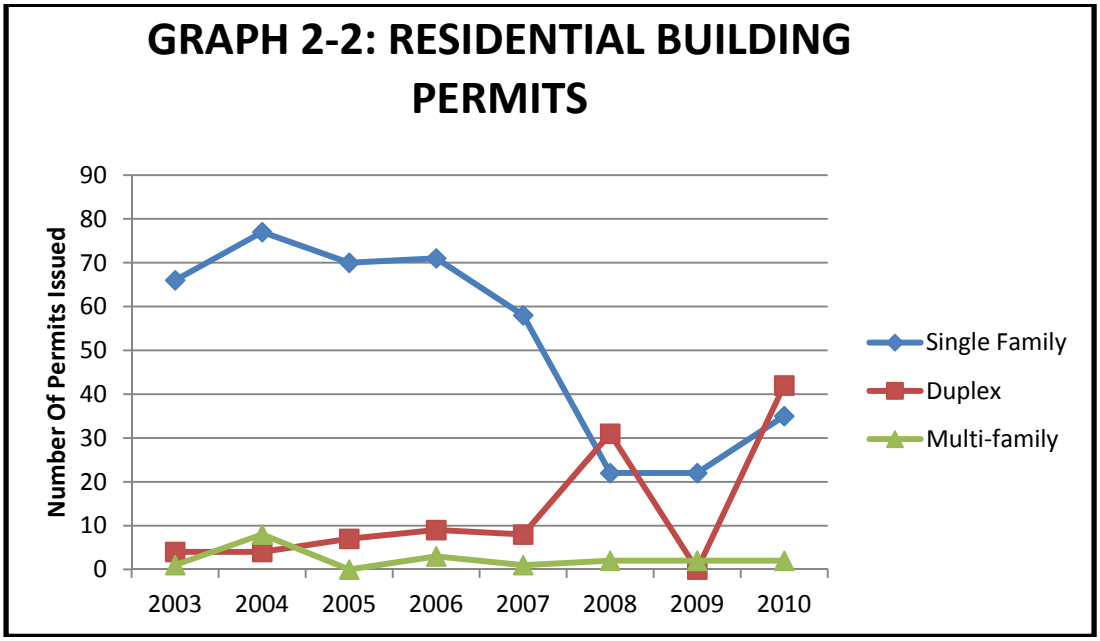
It should be noted that, while it appears the total area currently classified as industrial land use is less than the area so classified in 1996, that reduction may be explained in part by differences in the way certain properties were classified. The classifications in the 2011 Plan are based on Warren County's land use classifications for tax purposes, while the 1996 Comprehensive Plan may have used their own method of classification. While

there are some differences in the way information was gathered and tabulated, it is still possible to draw some general conclusions about changes in the city's land consumption over the last fifteen years.

- ***Number of Building Permits by Land Use Classification***

A second way to evaluate development trends is to look at the number of building permits over time. This provides an alternative way to establish recent development rates, thereby assisting in growth projections. The following graphs illustrate the number of building permits issued by the City of Indianola issued in recent years for both residential and non-residential structures.

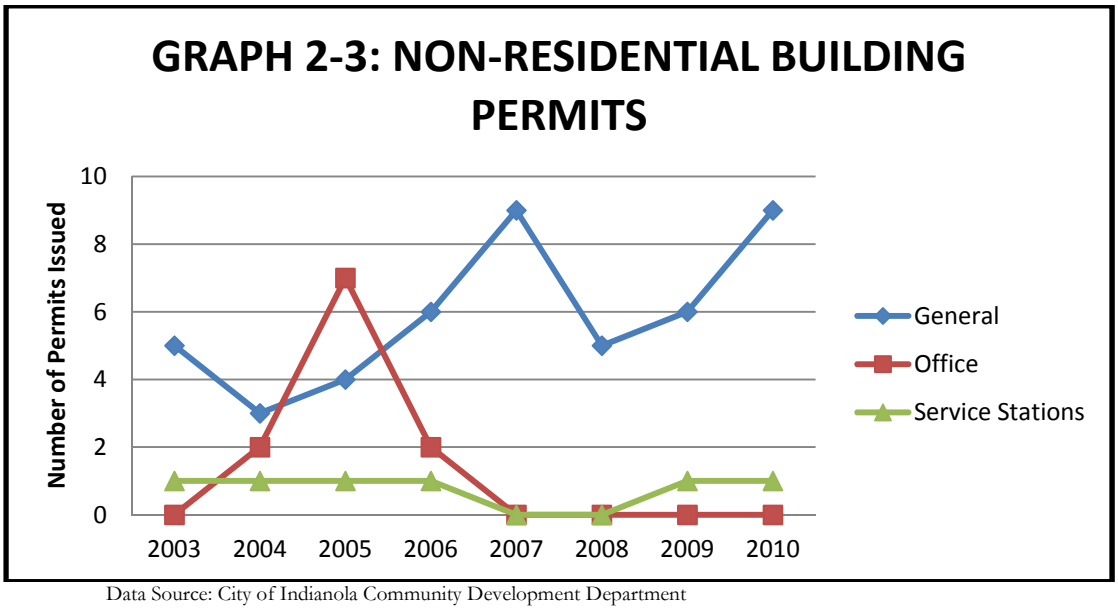
The total number of Building Permits for new construction of residential dwelling is illustrated below. Permits related to additions, renovations or pools were not included in the data table created to generate this graph.



Data Source: City of Indianola Community Development Department

The 8-year average for single-family building permits is 52.6 permits per year for new construction. Given the recent drop-off in housing starts across the state and nation, it is not surprising that single-family home construction has slowed somewhat since 2007. The 8-year average for duplexes is 13.1 permits per year. Somewhat surprisingly, the number of new duplexes has actually risen over the last three years. There has been an average of 2.4 building permits issued for new structures containing multiple-family dwellings over the last 8 years. Multi-family home construction has remained stable over recent years.

The total number of Building Permits for new construction of non-residential structures is illustrated in the following graph. Data related to general non-residential buildings includes retail, restaurants and other non-office commercial uses as well as industrial uses. Permits related to additions or renovations were not included in the data table created to generate this graph.



Data Source: City of Indianola Community Development Department

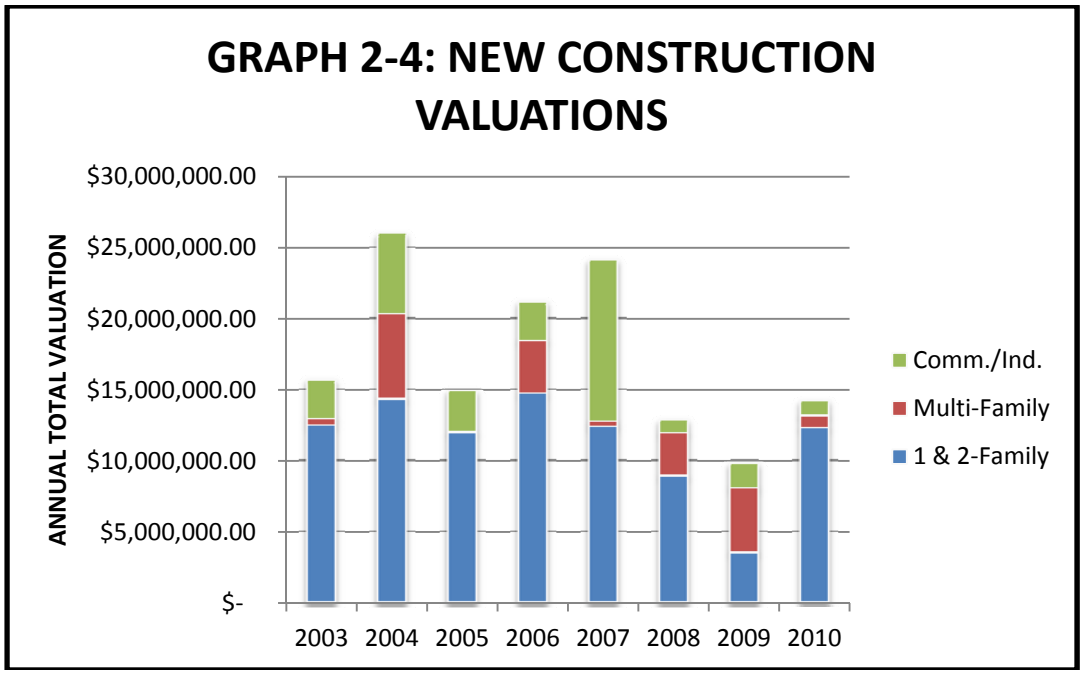
The number of general non-residential building permits demonstrates a trend line that has risen over recent years. The 8-year average of building permits issued for new general commercial and industrial buildings is 5.9 structures per year. The average number of new offices constructed has recently been 1.4 office buildings per year, however the number of building permits for office buildings has not been consistent; 7 new office building were constructed in 2005, 2 in 2004 and 2006, and no new office buildings were constructed in the other years evaluated. In contrast, the number of building permits for service stations has remained fairly stable, with an average of 0.8 building permits per year for the last 8 years. In the future, the City may wish to consider reporting industrial building permits separately from commercial building permits.

- ***Valuation of New Construction by Land Use Classification***

  A third way to look at development trends and the growth of a community is to review the annual increase in building valuations related to new construction. The graph on the following page indicates the total valuation for new construction on an annual basis since 2003. The annual valuations also reflect the valuations attributable to single- and two-family dwellings, multiple-family dwellings and commercial/industrial buildings. Data included in this evaluation include only those valuations related to new construction and

is based on Building Permit valuations, adjusted to reflect a Building Permits that were reissued 2010.

When considering tax revenue projections based on increased valuations, the City should be aware the following graph includes tax-exempt parcels.



Data Source: City of Indianola Community Development Department

As can be seen in this table, Indianola has had a healthy increase in valuations over the last eight years. Although the number of building permits for single- homes slowed in the last couple years, the increase in two-family home construction represents an uptick in the valuations for low-density dwellings as well as an increase in overall building valuations when compared to 2008-09.

Non-residential new construction represents an average of 18.9% of total valuations, based on building permits issued over the last 8 years. The highest valuation for non-residential new construction occurred in 2007. On average, recent new one-and two-family construction has an annual valuation totaling approximately $11.3 million per year. This equates to approximately 66% of the average annual valuation for new construction. Recent multi-family construction has an annual valuation totaling about $2.4 million per year, or approximately 13% of new construction valuation. Commercial and industrial new construction has averaged approximately $3.6 million per year since 2003, equating to approximately 21% of new construction valuation.

Chapter 3

Future Land Use

The Future Land Use Plan reflects the Indianola's vision for the future growth and development of their community. Developed with consideration given to environmental constraints, existing land use, transportation corridors, infrastructure demands, and the desires of the community based on input received, the Future Land Use Plan covers the entire area within two-miles of Indianola.

LAND USE GOALS

In considering land use needs and development patterns, the City of Indianola should:

- ***Create a Sustainable Land Use Plan.*** Sustainability can be defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. In the context of this Comprehensive Plan, crafting a sustainable vision means the City is encouraged to manage the land in a cost-effective manner while protecting natural resources and the environment, in addition to maintaining and increasing land values. A Land Use Plan and Growth Management Plan that guides Indianola's future growth and development efficiently will continue to maintain and improve the quality of life for the residents of Indianola. Specifically, the plan should:
    - **Provide for the efficient extension of city services.** As Indianola continues to grow, there will be a need to extend water, sewer, and electric lines. This becomes a substantial public and/or private investment since the burden of most development costs falls primarily to the developer but there may also be city costs if necessary improvements are more extensive than the Subdivision Regulations required. As a result, it is important the improvements be accomplished in a cost effective manner. In order to accomplish that, a compact pattern of growth should be promoted; development should be encouraged to occur contiguously to the existing infrastructure. Further, development should be encouraged within existing sanitary sewer service areas or reasonable expansions thereof.
- ***Utilize the principals of "Smart Growth".*** Smart growth principals should help guide the development of Indianola's Future Land Use Plan. Specific principles to be included are as follows:
    - **Preserve open space and critical environmental areas**. Indianola is set in an area dominated by highly rolling terrain and numerous rivers and streams. These areas provide habit for plants and animals and offer natural beauty. The accompanying severe slopes and wetlands have influenced the existing development patterns will continue to play an important role in shaping growth in the future. Preservation of these sensitive areas in the form of open space will help prevent adverse environmental impacts. The incorporation of parks, severe slopes and wetlands into the city's land use plan will add quality to the community and provide a balance between the built and natural environment.

- **Provide alternative transportation modes**. Indianola should make walking and bicycling attractive and viable options to driving by expanding the recreational trail system through neighborhoods as well as along the parkway, by offering mixed use developments that encourage pedestrian friendly development, by providing neighborhood commercial nodes that are walkable distances to neighborhoods and are by a trail system, and by segregating industrial and commercial transportation corridors from residential neighborhoods thereby making the streets more pedestrian friendly.
- **Provide opportunity for more housing choices.** The land use plan should include areas designated for a variety of housing types to reflect the needs of a diverse population. While the city has a good mix of single-family dwellings and traditional apartment buildings, there are relatively few townhomes that may be suitable for empty-nesters or young professionals. Consideration should be given to providing the opportunity for mixed use residential that offer housing, retail and limited commercial uses in an urban, pedestrian-friendly setting.

- ***Include transitional land uses.*** Indianola's existing land use pattern includes some adjacent, incompatible land uses, primarily in the form of industrial uses abutting residential uses. An example of incompatible, adjacent land uses is the Indianola Ready Mix plant which is surrounded by single-family homes. Complaints arise regarding truck traffic, parking, noise, dust, aesthics and re-sale values. The land use plan should reflect

transitional land such that there is a gradual progression of land use intensity. Land use incompatibility should be well defined.

- ***Provide a basis for decision-making.*** In order to successfully achieve the vision set forth by the Comprehensive Plan, and the Future Land Use Plan in particular, the plan must include concise and specific guidelines so decisions are made in a manner that is logical with respect to the dictates of the plan.

THE FUTURE LAND USE PLAN

The City's plan for Future land use is incorporated into the Comprehensive Plan Update as Future Land Use Plan (Exhibit 3-1). This Future Land Use Plan identifies more land for development purposes than has been forecasted for the planning period. Identification of more land for each use than is necessary provides flexibility, allowing for multiple development opportunities. A variety of choice avoids giving an unfair advantage to a limited number of property owners in the real estate market. Further, it provides more opportunity to developers if property owners are unwilling to sell their land, particularly farm land, for development purposes.

This Future Land Use Plan is intended to provide general guidelines for future land use. Land uses boundaries are conceptual in nature, with the emphasis being on the relationship between adjoining land uses and physical features. The Future Land Use Plan should not be considered too literally since land use boundaries do not necessarily follow property lines as do zoning district boundary lines on a zoning map.

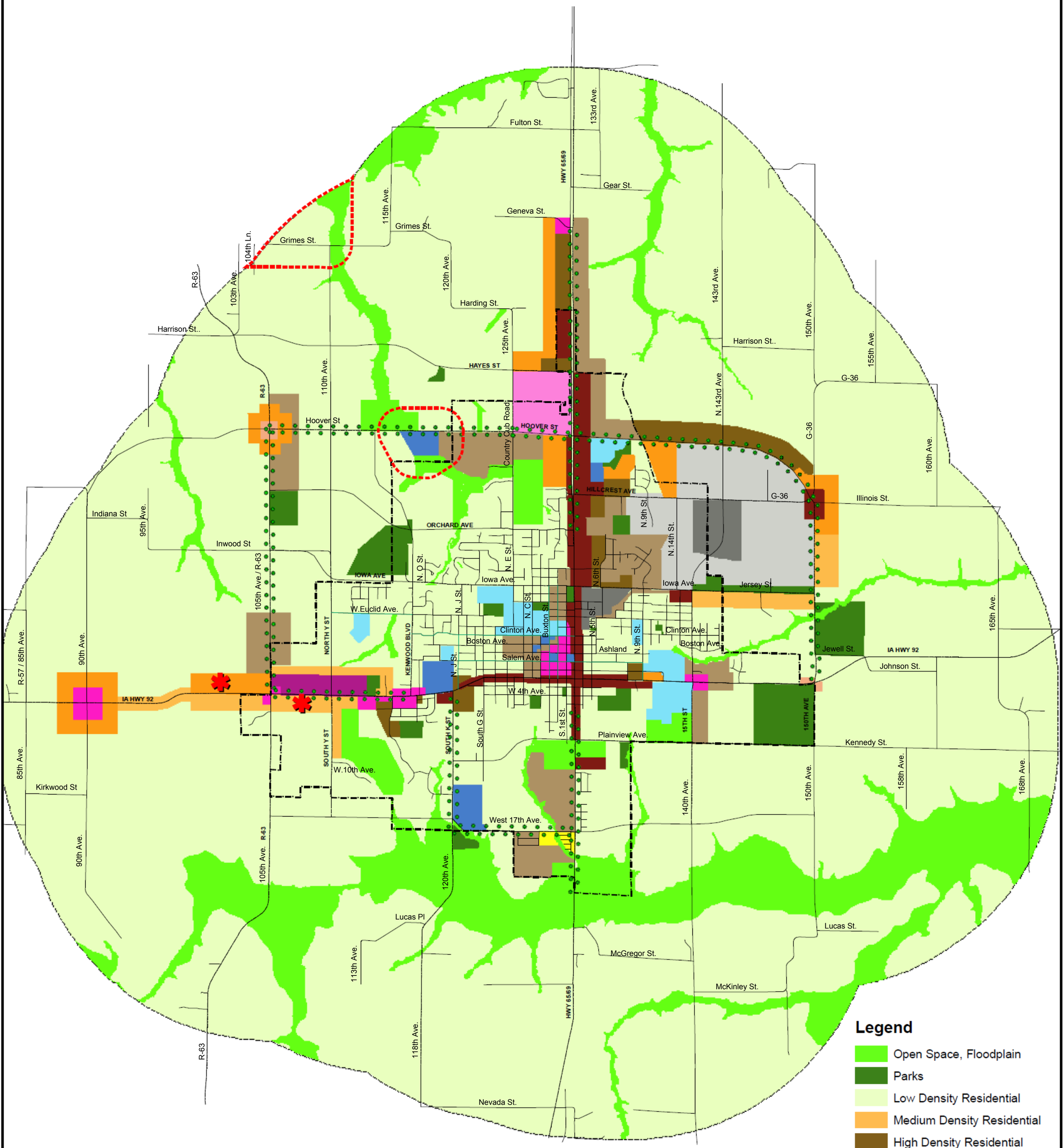
CONCEPTS FOR DEVELOPMENT AREAS

The land uses reflected in the Action Development Plans created as part of Indianola's 2003 Comprehensive Plan Update have largely been accommodated in the Future Land Use Plan.

Indianola
CONNECTING TO WHAT MATTERS

Future Land Use Plan

EXHIBIT 3-1



Legend

- Open Space, Floodplain
- Parks
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Residential
- Mobile Home Residential
- Civic/Government
- Civic/Education
- Mixed Use
- Neigborhood Commercial
- Office Park
- General Retail & Office
- Highway Commercial
- Office/Warehouse
- Light Industrial
- Heavy Industrial
- 1000' Waste Water Treatment Facility Buffer

NOTE

* May also be suitable for Office/Warehouse use or General Retail & Office use

N

0 4,900 9,800 Feet

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LAND USE DESIGNATIONS

The Future Land Use Plan designates a variety of types of land uses. In order to fully understand the intent of the Future Land Use Plan, these land uses must be defined in a manner that is understood by city officials, staff and the general public. Table 3-1 provides a clear definition for each future land use classification. An appropriate density range is indicated for each residential land use clarifications in order to provide a practical means of differentiating between these classes. The table also establishes specific criteria for each land use classification to provide for their appropriate application in development projects. Specific uses, when listed, are to be considered representative.

Table 3-1: Land Use Designations

Class	Uses	Density	Application
Open Space, Floodplain	· Restricted land uses with few or no structures such as recreational trail systems, sports fields and brush composting · Use must comply with Floodplain Development regulations	-	· Applies to FEMA floodplain · Applies to areas of significant environmental constraint
Parks	· Restricted land uses · Use should comply with Parks Master Plan · Trails should be provided for connectivity to neighborhoods and facilities	-	· Applies to existing and future park facilities
Low Density Residential	· Restrictive land uses, primarily single-family detached dwellings · Agricultural uses are allowed as urban reserve · Civic uses and churches may be allowed if compatibility standards are met · Open spaces and trails should be encouraged · Large lot rural subdivisions should be avoided where obstructive to future development	1-4 dwellings per acre	· Applies to new subdivisions · Applies to established single-family neighborhoods · May require buffering to other land uses
Medium Density Residential	· Limited land uses, primarily single-family attached dwellings (townhomes and row houses) · May include some single-family detached dwellings · Multiple-family dwellings may be permitted if compatibility standards are met · Civic uses and churches are typically allowed if compatibility standards are met · Open spaces and trails should be encouraged	4-12 dwellings per acre	· Applies to new subdivisions and development sites · Applies to established residential neighborhoods · May serve as transition from single-family to less compatible land uses
High Density Residential	· Limited land uses, primarily single-family attached dwellings (townhomes, row houses) · Civic and churches uses are generally permitted where compatible · Open spaces and trails should be encouraged · Traffic should have direct access to arterial or collector streets	> 12 dwellings per acre	· Applies to new subdivisions and development sites · Applies to established residential neighborhoods May serve as transition from low/ medium density dwellings to less compatible land uses

Table 3-1: Land Use Designations continued

Class	Uses	Density	Application
Mixed Residential	· Incorporates a mix of low, medium and high density residential uses · Civic uses and churches are generally permitted if compatible standards are met · Open spaces and trails should be encouraged	4-16 dwellings per acre	· Applies to new subdivisions and development sites · Applies to established residential neighborhoods May serve as transition from single family to less compatible land uses
Mobile Home Park	· Restricted land uses to accommodate mobile homes within a community of like dwellings · Storm shelters should be provided · Park amenities, such as laundry and recreation centers, are encouraged · Open spaces and trails should be encouraged	6-16 dwellings per acre	· Applies to new mobile home park developments · Applies to redevelopment or enlargement of established mobile home parks
Civic / Government	· Includes public facilities serving the City of Indianola, IMU, Warren County or State of Iowa, such as administration, police, fire, water, wastewater or maintenance facilities · Accommodates centers of community activity, museums, libraries, churches · High intensity uses should have direct access to arterial or collector streets	-	· Applies to existing and proposed facilities · May be permitted in several land use classifications; Special Use Permit should be required in residential areas
Civic/ Education	· Incorporates facilities serving Simpson College, community colleges, trade schools or public/private elementary and secondary schools, including administration, classrooms, dormitories, sports facilities · High intensity uses should have direct access to arterial or collector streets	-	· Applies to existing and proposed facilities · May be permitted in several land use classifications; Special Use Permit should be required in residential areas
Mixed Use	· Incorporates a mix of residential, office and limited retail and commercial uses · Developments should be designed to integrate uses through public plaza, benches · High intensity uses should have direct access to arterial or collector streets · Drive thru banking or laundry drop off lanes may require buffering to residential areas; drive through restaurants should not be permitted unless the negative impacts can be mitigated · Open space and trails are to be encouraged · Parking should avoid large lots visible from major streets or residential uses	-	· Applies to future mixed used developments · A new district for mixed uses, including residential, office and limited commercial uses within a Planned Development should be implemented

Table 3-1: Land Use Designations continued

Class	Uses	Density	Application
Neighborhood Commercial	· Offers a limited range of low intensity commercial uses intended to provide services to adjoining neighborhood · Buildings to be residential in character (1-story, pitched roofs, no night operations, low lighting and noise levels) · Drive thru banking or laundry drop off lanes may require buffering to residential areas; drive through restaurants should not be permitted unless the negative impacts can be mitigated · Larger structures should broken up with articulated rooflines and facades, particularly facing public streets · Developments should be situated at commercial nodes · Pedestrian circulation within the development should provided; trail connectivity to neighborhoods should be provided · Vehicle dominance should be moderated; parking areas should be soften by design and landscaping		· Applies to future neighborhood commercial uses · A new district for Neighborhood Commercial should be implemented ·
Office Park	· Includes office buildings in a campus setting · Accommodates limited commercial uses, such as restaurants, as accessory uses only to serve the adjacent office park · Open space and trails should be encouraged · Parking should avoid large lots visible from major streets or residential uses · Buildings and should have an architectural character with uniform signage · Design should offer good internal traffic flow	-	· Applies to future office park land uses · A new district for Office Parks within a Planned Development should be implemented
General Retail and Office	· Includes retail, office, restaurants and similar commercial uses, particularly adjoining and surrounding the downtown square · Historic preservation of the downtown square area is a priority · Includes multiple family residential dwellings, particularly on second floors or above · May include civic uses or churches · For future retail and office uses in proximity to the square, parking lots should be in the rear of the building · Negative impacts on adjoining residential uses should be mitigated · Pedestrian circulation should be considered	-	· Applies to existing general retail and office facilities, including the downtown square · May apply to future retail developments

Table 3-1: Land Use Designations continued

Class	Uses	Density	Application
Highway Commercial	· Includes a variety of commercial uses, particularly those attracting regional customers · Accommodates larger, big box retail as well as larger expanses of parking areas · Should be situated on an arterial street · Design should offer alternative routes and good internal traffic flow; adjoining uses should be interconnected · Good landscaping should be required for new developments, including street trees along parkways and green streets · Restrictive signage standards should be maintained · Mitigate impacts to adjoining residential uses	-	· Applies to existing commercial development, particularly along Highway 65/69 and Highway 92 · Applies to future site development projects along Highway 65/69 and Highway 92
Office / Warehouse	· Includes office/warehouse buildings, designed to have office space in the portions of the building visible to the street, with warehousing and overhead doors facing the interior of the development · Exclude certain light industrial uses such as contractor's shops, lumberyards and the like. · More intensive uses should have access to arterial streets · Landscaping to soften the streetscape should be incorporated	-	· Applies to future office/warehouse development, particularly along Highway 65/69 and Highway 92 · A new district for Office Warehouse may need to be implemented to restrict certain limited industrial uses permitted by zoning
Light Industrial	· Includes limited industrial uses which do not generate noticeable external impacts, with the exception of truck traffic · Should be situated on an arterial street. Access off collector streets may be permitted if the street is designed to accommodate heavy truck traffic without detrimental impact to residential uses or neighborhoods. · Less intensive light industrial uses, such as warehousing, may be situated near residential uses if the negative impacts due to traffic and noise are mitigated · Strict control over signage, lighting, overhead door locations, landscaping and other design considerations are critical for uses adjoining less intensive land uses	-	· Applies to existing limited industrial developments · Applies to future limited industrial developments

Table 3-1: Land Use Designations continued

Class	Uses	Density	Application
Heavy Industrial	· Includes industrial uses that may generate noticeable external impacts including increase truck traffic · Should be situated on an arterial street. · Should be well buffered from all other uses; light industrial uses are recommended as a transitional use to less intensive uses · Access off collector streets may be permitted only if the street is designed to accommodate heavy truck traffic without detrimental impact to adjoining uses. · Truck routes should be established that bypass residential or commercial areas · Strict control over signage, lighting, overhead door locations, landscaping and other design considerations are critical for uses adjoining less intensive land uses · Uses with significant external impacts should be subject to stringent development review.	.	.

COMPATIBILITY GUIDELINES

The Future Land Use Plan strives to avoid creating new areas of incompatibility between adjoining land uses, primarily through incorporating transitional land uses which reduce the degree of incongruity. Where incompatibility exists, planning techniques may be applied to minimize negative impacts to less intensive uses. These techniques incorporate the use of buffers, screening in the form of landscaping or opaque fencing, berms or a combination thereof. Parkways may be considered such a planning technique, based upon the parkway design guidelines including appropriate landscaping buffers.

Table 3-2 ranks the relative compatibility between each of the land uses found in the Future land Use Plan with a compatibility code based on degree of incompatibility.

Proposed land use for a specific property should be studied for compatibility with the current adjacent land uses as well as with the future land uses as designated on the Future Land Use map.

Mixed Use and Mixed Residential land use classifications are not specifically included in the table since each class covers a wide range of land uses. The specific development project should be review with respect to the proposed uses being proposed for a specific portion of the site and their compatibility with immediately adjacent uses outside the development. Further, any mixed use development should be reviewed with respect to internal compatibility through the planned unit development review process.


SALEM COURT

Table 3-2: Land Use Compatibility Guidelines

Classification		A	B	C	D	E	F	G	H	I	J	K	L	M
Open Space, Floodplain, Parks	**A**	-	1	1	1	1	1	3	2	3	4	4	4	5
Low Density Residential	**B**	1	-	2	4	3	3	3	4	4	5	4	5	5
Medium Density Residential	**C**	1	2	-	3	2	3	3	3	3	4	4	5	5
High Density Residential	**D**	1	4	3	-	2	2	2	2	3	3	3	4	5
Mobile Home Park	**E**	1	3	2	2	-	3	2	2	3	3	3	4	5
Civic	**F**		3	3	2	3	-	3	2	2	3	4	5	5
Neighborhood Commercial	**G**	3	3	3	2	2	3	-	3	2	4	3	3	4
Office Park	**H**	2	4	3	2	2	2	3	-	2	5	2	2	3
General Retail and Office	**I**	3	4	3	3	3	2	2	2	-	2	2	2	4
Highway Commercial	**J**	4	5	4	3	3	3	4	5	2	-	2	2	3
Office / Warehouse	**K**	4	4	4	3	3	4	3	2	2	2	-	2	3
Light Industrial	**L**	4	5	5	4	4	5	3	2	2	2	2	-	2
Heavy Industrial	**M**	5	5	5	5	5	5	4	3	4	3	3	2	-

Compatibility Code:

1. Proposed land use is identical to or is completely compatible with adjacent land uses. Developments should be designed based on good planning practices.
2. Proposed land use is reasonably compatible with adjacent land uses. Structures should be consistent with the surrounding buildings in character, massing and scale. Traffic from higher intensity uses should be directed away from lower intensity uses.
3. Proposed land use may have possible conflicts with the adjacent land uses that may be mitigated through proper planning and design. Orientation of structures, landscaping, buffering, and screening should be utilized to minimize negative impacts to adjoining parcels. Traffic, parking areas, noise, light pollution, dumpsters, service doors, and other influences should be directed away from lower intensity uses.
4. Proposed land use has significant conflicts with adjacent land uses. These considerable impacts must be positively mitigated to avoid detrimental effects on adjacent land uses. If the impacts cannot be property mitigated, the proposed use should not be permitted.
5. Proposed land use is incompatible with adjacent land uses. Generally, proposed land uses with this level of conflict will not be permitted.

LAND USE DECISIONS

The Future Land Use Plan provides the basis for the formulation of land use and zoning regulations. Since the Future Land Use Plan cannot be expected to predict the design of each future development, nor can it contemplate each individual request for rezoning that may come before the City, it must therefore provide the framework necessary to aid the city in making land use decisions. Used in conjunction with the Future Land Use map, the Land Use Designation table and the Land Use Compatibility table together form a powerful tool in the review of prospective development projects.

RECOMMENDATIONS

Recommendations for achieving the goals of the Future Land Use Plan are:

- ***Create new zoning districts***. Update the Zoning Ordinance to include new zoning districts to reflect the desired characteristics of the following land use classifications:
    - **Mixed Use District.** Creation of a mixed use district would permit the incorporation of a mix of residential, office and limited commercial uses into a cohesive neighborhood as a planned unit development. Developments could be permitted to use land more efficiently by clustering buildings while providing larger areas of open space and accommodating pedestrian and bike circulation. Design standards should be included to consider architectural character, traffic, parking, buffering, and landscaping.
    - **Neighborhood Commercial District.** Creation of a neighborhood commercial district allow the city to rezone certain areas of the city as commercial while restricting the permitted uses only to those uses considered neighborhood friendly . Uses that are not wholly contained inside the building or are high traffic generators, such as drive-through fast food restaurants, should not be permitted. Building size and height should be limited in such as way that retail shops are permitted, but "big box" retail is not.
    - **Office Park District.** Creation of an office park district would allow the city to rezone certain areas of the city into a commercial zoning district with the ability to specifically designate those areas for office parks. By restricting the permitted uses in the Office Park District to offices, those future office parks would be less likely to become eroded by the development of general commercial/retail uses. Accessory restaurant and limited retail uses would be permitted only when they serve the demonstrated needs of an existing office park.
    - **Office/Warehouse District**. Creation of an office/warehouse district would allow the city to rezone certain areas of the city specifically for offices and warehouse space, rather than general commercial. Creation of this district would preserve

specific areas of the city, such as along west U.S. Hwy 92, for these uses. Further, it would avoid allowing pedestrian-oriented retail uses to intermingle with uses that generate significant truck traffic.

- ***Establish the Parkways.*** Zoning overlay regulations should be adopted to establish design criteria for the parkways, and properties that abut the parkways, prior to construction of the Hoover Street extension. The design standards should include regulations for design elements such as street trees spaced at 40-foot on center, a 10-foot wide recreational trail on a specific side of the street, undulating berms at least 4-feet tall along residential property lines abutting the parkway, access spacing of at least 450 feet between streets and driveways, interconnection of commercial parking lots to promote internal circulation and prohibition of single-family or two-family driveways form direct access to the parkway. Guidelines for special lighting and pedestrian crossings should be included.

  The parkway design guidelines should reinforce a positive first impression at Indianola's main entryway from the north and west. The parkway overlay should also include properties fronting on parkways, particularly in the areas serving as gateways into the community. Guidelines should be established to enhance these gateways through design such as the use of landscaped islands in expansive parking lots, situating the majority of parking stalls to the rear of the buildings, or limiting the mass of large buildings through the use of articulated building facades and rooflines.

  The design of major transportation nodes should be considered, including amenities such as street furniture and public art, creating a sense of place as well as welcoming visitors to the city. Major transportation nodes are located at the following intersections:

  - US Hwy 65/69 at Hoover Street
  - County Hwy R -63 at Hoover Street
  - County Hwy R-63 at IA Hwy 92
  - IA Hwy 92 at 150th Ave
  - 150th Ave at Hillcrest Ave

- ***Continue to require buffers.*** Provision of buffers to separate uses is a priority for Indianola. The City recently adopted an ordinance requiring buffers between incompatible land uses. Implementation of this new ordinance should be monitored to be certain it is accomplishing its original intent.

Chapter 4

Transportation Plan

Transportation is a critical element of Indianola's Comprehensive Plan update. The street network in Indianola provides the primary transportation system for City residents, as well as through traffic from the surrounding region. These streets provide for truck traffic and personal vehicle use, as well as for bicycles and sidewalks for pedestrians. As such, the street network is intimately related to the Land Use Plan as it forms the means of connection between residences, employment locations, shopping trips and recreation opportunities. In addition, it often provides right-of-way for other necessary City utilities such as water, wastewater, electricity and communications. Future streets will form the primary network off of which future development can build. Therefore, it is important to recognize the function current streets provide in the City and also plan for future streets that can provide continuity, ease of movements and access to future development.

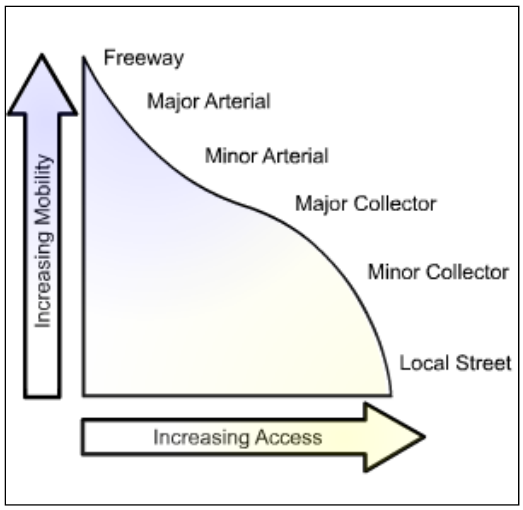
REGIONAL TRANSPORTATION SYSTEM

The City of Indianola is connected to the City of Des Moines and surrounding region by numerous US, State and County highways. The City is bisected by US Hwy 65/69, a north/south highway also referred to locally as Jefferson Way. North of the City, US Hwy 65/69 connects to the City of Des Moines as a four-lane divided highway that intersects IA Hwy 5, a four-lane bypass of the south Des Moines metro area. At this point US Hwy 65/69 continues north as US Hwy 69, while IA Hwy 5 connects west to Interstate 35 and US Hwy 65 follows IA Hwy 5 east before continuing northeast, eventually intersecting with Interstate 80. Another important north/south highway link is County Hwy R-63, a two-lane paved highway from northwest Indianola to downtown Des Moines as SW 9th Street. In addition, IA Hwy 92 forms the primary east/west route through Indianola, continuing east to Knoxville and Oskaloosa and connecting to Interstate 35 12 miles to the west.

CITY STREET NETWORK

The street network is expected to provide a dual purpose of mobility (i.e. the ability to move traffic across town) and accessibility (i.e. the ability to access destinations). With a well planned hierarchy of streets, both purposes can be accomplished. This concept is often referred to as the "functional classification" of a street network. Streets that are primarily designed for mobility provide less access to individual properties, and should be planned to provide continuity across the City. Streets providing a higher degree of access are less efficient at moving traffic, and should easily access higher function streets. Figure 4-1 illustrates these concepts as well as listing the typical designations used for the different street classifications.

Figure 4-1
Functional Classification of Streets



The Iowa DOT develops a Federal Functional Classification (FFC) map for each City with the input of local government, traffic volumes and statewide network planning. Iowa DOT 2008 traffic volumes are included as Exhibit 4-2, and the current 2007 Iowa DOT Federal Functional Classification map. The Major Streets Plan was developed using the Iowa DOT FFC map, traffic volumes and future land uses to plan for City designation of street classifications, and is provided as Exhibit 4-1. The Indianola Major Streets Plan has four levels of classification as discussed below, to provide more specific designation for how the streets are used in the City of Indianola.

As its name indicates, this plan focuses on the major routes that provide citywide connectivity and will provide access to future development. These include major and minor arterials, and major and minor collectors. The City development process must ensure that future residential developments provide local streets that result in continuity with existing street system and avoid 'dead-end' streets, as to ensure commercial and industrial developments provide internal site circulation, support cross-site access and comply with access restrictions on the major streets.

MAJOR ARTERIALS

Major Arterials are high capacity roadways that primarily provide for the movement of through traffic and limit access to adjacent land. When the road is part of the State or County road system, they serve to move regional through traffic. A major arterial under City jurisdiction will serve to connect different areas of the City to the other major arterials. Major arterials typically provide four to five lanes for traffic and turn lanes, are often spaced 1 mile to 2 miles apart, have a higher speed limit from 35 mph to 55 mph, and limited access spacing with lower capacity roads and site entrances, generally between 1/2 mile to 1/4 mile spacing.

- ***US Hwy 65/69 (Jefferson Way)***

  The primary north/south major arterial in the City of Indianola is US Hwy 65/69. The roadway transitions from a two-lane rural highway south of the City to a four-lane roadway north of IA Hwy 92, eventually to a five-lane cross section north of Girard Avenue and to a four-lane divided highway north of Hillcrest Avenue. This roadway carries an annual average daily traffic (AADT) volume of 15,000-19,000 vehicles per day (vpd). A number of plans are underway to improve US Hwy 65/69 for future traffic and development.

  To the south, the City has worked with the Iowa DOT to develop a plan to widen corridor south of IA 92 to 17th Street from the two-lane cross section to a three-lane cross section, providing a shared center two-way left turn lane (TWLTL). This will provide a left turn lane to separate turning traffic from through traffic, reducing crashes and delay.

  To the north, the City partnered with the Iowa DOT in 2010 through the Traffic Engineering Assistance Program (TEAP) to study the corridor from Hillcrest Avenue north to the City limits. This study was finalized in September 2011 and recommendations from this study included construction and improvements at intersections with Hoover Street (extension), Hayes Street and a new access to proposed developments. Access points will be limited to 1/2 mile to 1/4 mile spacing, and developments will provide internal streets. In order to construct these intersection improvements, reconstruction of the northbound lanes was recommended to reduce the current 60 ft wide divided median to a narrower 32 ft wide median with a more urbanized cross section, which will also allow for single positive offset or future dual left turn lanes where needed.

- ***IA Hwy 92 (E 2nd Avenue)***

  IA Hwy 92 serves as the primary east/west connector for regional traffic. The cross-section transitions from two-lanes west of the City to three lanes near R Street, four lanes east of US Hwy 65/69 and then to two lanes east of 15th Street.

  Working with the Iowa DOT the City undertook a TEAP study to evaluate improvements to the corridor from I-35 east to the three-lane section near R Street. Primary recommendations included widening the two lane section from County Hwy R-57 east to R Street to three-lanes with a center TWLTL. ROW acquisition and construction of these improvements are programmed in the Iowa DOT Transportation Improvement Program for years 2012-13.

  The intersection of IA Hwy 92 & J Street/K Street is currently an offset intersection. The City has a current goal of aligning this intersection and monitoring for traffic signalization. This goal should be maintained, particularly acquiring right-of-way as available. Preliminary signal warrant analysis based on daily traffic volumes indicates a

traffic signal could be warranted. In addition, the intersection of County Hwy R-63 should be monitored for potential traffic signalization, as County Hwy R-63 provides another north/south arterial route.

- ***County Hwy R-63***

  County Hwy R-63 is a paved county highway used for regional traffic, and also by Indianola residents as an alternative north/south commuter route to IA Hwy 5 and SW 9th Street in Des Moines.

  As illustrated in the Major Streets Plan, as the City of Indianola develops westward, other arterial and collector streets are proposed to connect with County Hwy R-63, most notably improving Hoover Drive and an extension of Iowa Avenue along the current Inwood St alignment. These future intersections may require improvements to turn lane and traffic control on County Hwy R-63. The plan also designates County Hwy R-63 from IA Hwy 92 to Hoover St as a "Parkway" corridor.

- ***Hoover Street***

  As illustrated on the Major Streets Plan, Hoover Street is proposed to be improved to a Major Arterial. From the west, this involves paving the section from County Hwy R-63 to the current terminus at Country Club Rd (as a "Parkway" corridor), and then constructing a new segment to US Hwy 65/69. A new road would be constructed east of US Hwy 65/69 intersecting with a roadway connecting E 15th Street to 143rd Avenue, and then to 150th Avenue. This high priority corridor would result in an east/west connector across town and provide access to new development, as well as connect to improved north/south routes.

- ***90th Avenue & 150th Avenue***

  The Plan shows future north/south major arterials on the west (90th Avenue) and east (150th Avenue) sides of the planning area. These arterials involve improving existing gravel, rural cross sections to urbanized arterial streets. These future segments are described as "Parkways" (as discussed at end of this chapter), and would therefore likely include 1/8 mile to 1/4 mile access spacing and possibly medians.

  The eventual connection of these two street segments to Hoover Street will provide a north and southbound connection from IA Hwy 92 to the northern section of US Hwy 65/69 without requiring traffic to go through the center of the City and better access to the annual Indianola Balloon Festival grounds. These streets will relieve congestion on US Hwy 65/69, and result in improved local traffic and through traffic experience.

MINOR ARTERIALS

Minor Arterials are moderate to high capacity streets that primarily provide for the movement of through traffic and some access to adjacent land, primarily by access to lower capacity collector streets. Minor arterials provide continuous routes between major arterials and in this Plan bisect the northeast and northwest 'quadrants' of the City, providing access to residential and industrial developments. Desirable access spacing on minor arterials is 1/8 mile (660 ft). Traffic will generally flow freely on these streets and lower classification roads will be STOP controlled when intersecting. Minor arterial intersections with major arterials will generally be controlled with a traffic signal or modern roundabout. These streets will have more access than major arterials, and may have two or four lanes, and may provide turn lanes at intersections and will have speed limit from 25 mph to 45 mph.

- ***Iowa Avenue***

  Iowa Avenue provides one of the few continuous east/west streets in the City. As such, it is currently used as a minor arterial and will continue to do so. The proposed Hoover Street major arterial improvements will relieve some of the east/west future traffic demand from this route. Currently, the segments of Iowa Avenue east of US Hwy 65/69 control access better than those older segments to the west. Future improvements to Iowa Avenue include paving east of 15th Street to connect to 150th Avenue. In addition, an extension is proposed for the western segment to continue a new street west of Kenwood Street to North Y Street, and then connect northwest to the existing gravel Inwood Street and intersection with County Hwy R-63.

- ***Kenwood Boulevard***

  Kenwood Boulevard is currently a minor arterial that connects IA 92 to Iowa Avenue and Euclid Street. It currently carries 1,500-2,000 vpd and will continue to grow as western Indianola residential develop. As with 15th Street, the street currently has a number of residential driveways along its entire length. Future improvements to Y Street are expected to relieve some future traffic growth. Future extensions of Kenwood Boulevard will extend it north from Iowa Avenue to future Orchard Avenue extensions, and then to extensions of Hoover Street.

- ***15th Street/143rd Avenue Connection***

  15th Street in southeast Indianola is currently used as a north/south route to connect IA Hwy 92 while avoiding the central segments of US Hwy 65/69 via Hillcrest Avenue or Iowa Avenue. The segment has an AADT of approximately 3,000 vpd, similar to Iowa Avenue traffic volumes. However, 15th Street also has a number of house driveways directly accessing the street leading to higher than ideal access spacing. The proposed 150th Avenue major arterial improvements are expected to divert and relieve future

traffic growth on 15th Street, but 15th Street currently provides an attractive route to the Middle School, Pickard Park, and other destinations. Future improvements to the north of Iowa Avenue involve a new street to the northeast to connect with 143rd Avenue at Hillcrest Avenue and then to Hoover Street.

MAJOR COLLECTORS

Major Collectors are moderate capacity streets that primarily serve to connect the local street network to arterials. Such roadways will typically have two lanes for traffic with a speed limit between 25 mph to 35 mph and may provide one side of on-street parking. Some of these streets (e.g. Orchard Avenue) already include houses with driveways directly abutting the street. Future extensions of these streets should avoid this pattern, and desirable minimum access spacing is between 300-400 feet, or typical city block.

The City has recently completed an investigation regarding potential closing of C Street on the west side of the Simpson College Campus due to frequent pedestrian crossings. C Street is currently one of the few continuous north/south streets from IA Hwy 92 north, and forms the northbound half of a one-way pair with D Street. If this occurs, D Street will likely convert to two way traffic and C Street traffic will be diverted to D Street and E Street. In the 2010 traffic study, the consultant's recommendation was that C Street remain open and that pedestrian safety issues, such as the addition of crosswalks, be addressed with the upcoming C Street reconstruction project.

Major Collectors included on the Major Street Plan include:

East/West Streets

- W 17th Avenue
- Plainview Avenue
- Orchard Avenue (new extension)
- E Hillcrest Avenue
- Hayes Street (new extension)

North/South Streets

- Y Street
- S K Street
- E Street/Country Club Road
- S 15th Street

MINOR COLLECTORS

The minor collectors designated on this plan are primarily the through streets that proceed through the established potions of the City. These corridors generally have a speed limit of 25 mph, and provide a continuous path for traffic on one side of US Hwy 65/69. They are the primary routes to trip destinations such as the downtown square, Irving, Wilder and Whittier Elementary Schools as well as the High School.

Minor collectors included in the Major Streets Plan include:

East/West Streets

- Salem Avenue
- Clinton Avenue
- W Euclid Avenue

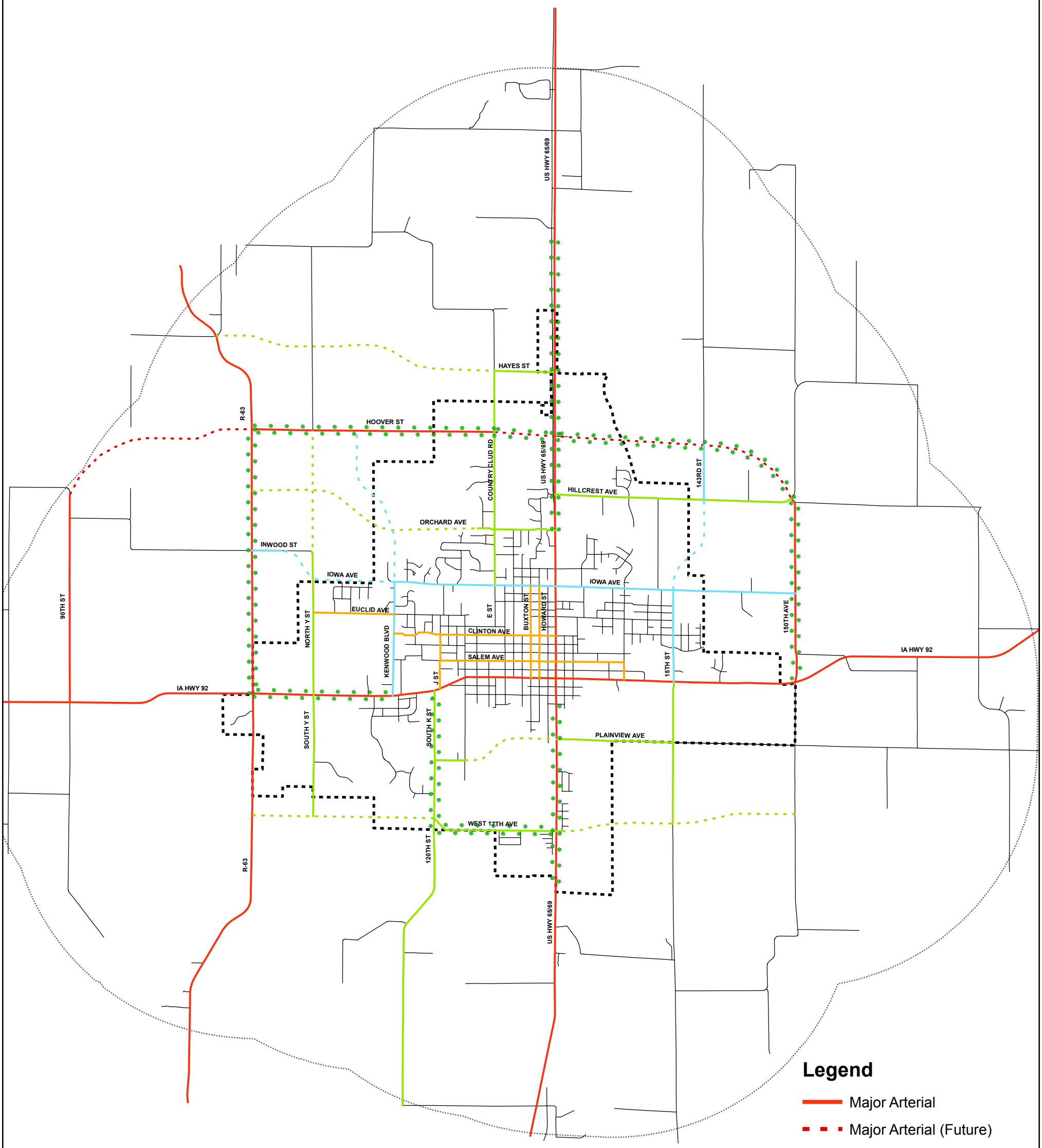
North/South Streets

- J Street
- Buxton Street and Howard Street (One-Way pair)

Indianola
CONNECTING TO WHAT MATTERS

Major Streets Plan

EXHIBIT 4-1



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SPECIAL STREET DESIGNATIONS

Streets and rights-of-way are a significant part of the city's public space and their appearance has a major impact on the visual quality of the community. Two special street designations are incorporated in this Comprehensive Plan that contribute to the functionality of the street corridor and enhance the aesthics of the community.

GREEN STREETS

An additional feature of the higher functional classification streets discussed in this report is the "Green Street" designation. The network of Green Streets is described in the City of Indianola *Parks and Recreation Plan (1998),* stating that a Green Street will provide sufficient right-of-way (ROW) to accommodate:

- street trees planted along both sides of the roadway
- 10 ft. wide recreational trail on at least one side of the street,
- 'buried' below ground utilities.

According to the *Parks and Recreation Plan*, any new major/minor arterial streets and major collector streets, and where possible on such existing streets, shall have these characteristics.

PARKWAYS

The Future Land Use Plan and the Major Streets Plan recommends some existing and future major arterials have an additional designation as "Parkways". These Parkways should be designed to provide connectivity between neighborhoods as well as providing alternate routes to workplaces, civic centers and commercial uses; they are not intended to serve as a by-pass. Streets designated as Parkways will share some features with the Green Streets, but

are differentiated by additional characteristics to provide buffering for incompatible land uses and to preserve the streets' function as high capacity arterials. Specific corridor elements should be developed in corridor access management plans, and may include:

- Landscape trees at approximately 40' on center along the parkway, either within the right-of-way or as required street trees.
- Possible medians and potential right-turn only driveways
- 10' wide recreational trails on at least one side of the street. Bike lanes may be an acceptable alternative where truck traffic is limited.
- Landscaped berms to buffer the adjacent residential land uses from the noise and intensity the arterial street.
- Restricted intersection spacing and restricted driveway spacing in multi-family residential, commercial and industrial areas; accomplished by combined driveways serving multiple uses by means of consolidated driveways with cross-site access or backage roads.
- No direct single-family or two-family residential driveway access will be allowed on these streets.

GOALS

The goals for Indianola's transportation system were established during the planning process. These goals are summarized as follows:

- Indianola should develop an improved local transportation system that will focus on providing alternate traffic routes to help mitigate congestion on US Highway 65/69 (Jefferson Way) between Iowa Street and IA Hwy 92.
- Indianola's entrance corridors provide a first impression of the community so the major streets should include attractive landscaping and special features such as lighting and/or public art.
- Indianola should continue to utilize the Comprehensive Plan in the review of development projects, particularly with respect to the continuation of arterial and collector streets.
- Indianola should invest into the construction of certain public streets for the purpose of opening up new areas for development purposes, thereby increasing the tax base of the city.
- Indianola should control the location and number of driveways onto arterial streets to avoid further congestion and maintain the capacity of arterial streets, thereby reducing the need for additional lanes and the cost thereof.
- Indianola should implement the Green Streets plan developed by the Indianola Parks Department.
- Indianola should provide additional landscaping along streets to buffer incompatible uses that may be located across the street from each other.

RECOMMENDATIONS

Recommendations for implementing the city's goals for the Transportation System are:

- ***Parkway Development.*** Many of challenges of Indianola's existing transportation system is their nearly exclusive reliance on US Hwy 65/69 for north-south traffic movement. IA Hwy 92 is depended upon for a significant portion of the east-west movement. Alternate routes of travel should be developed to allow local traffic to move throughout the city without relying so heavily on these two main street corridors. The City of Indianola should create a continuous parkway around the northwest and northeast sections of the city. This parkway is not intended to be a by-pass, but rather as a way to improve circulation between neighborhoods.

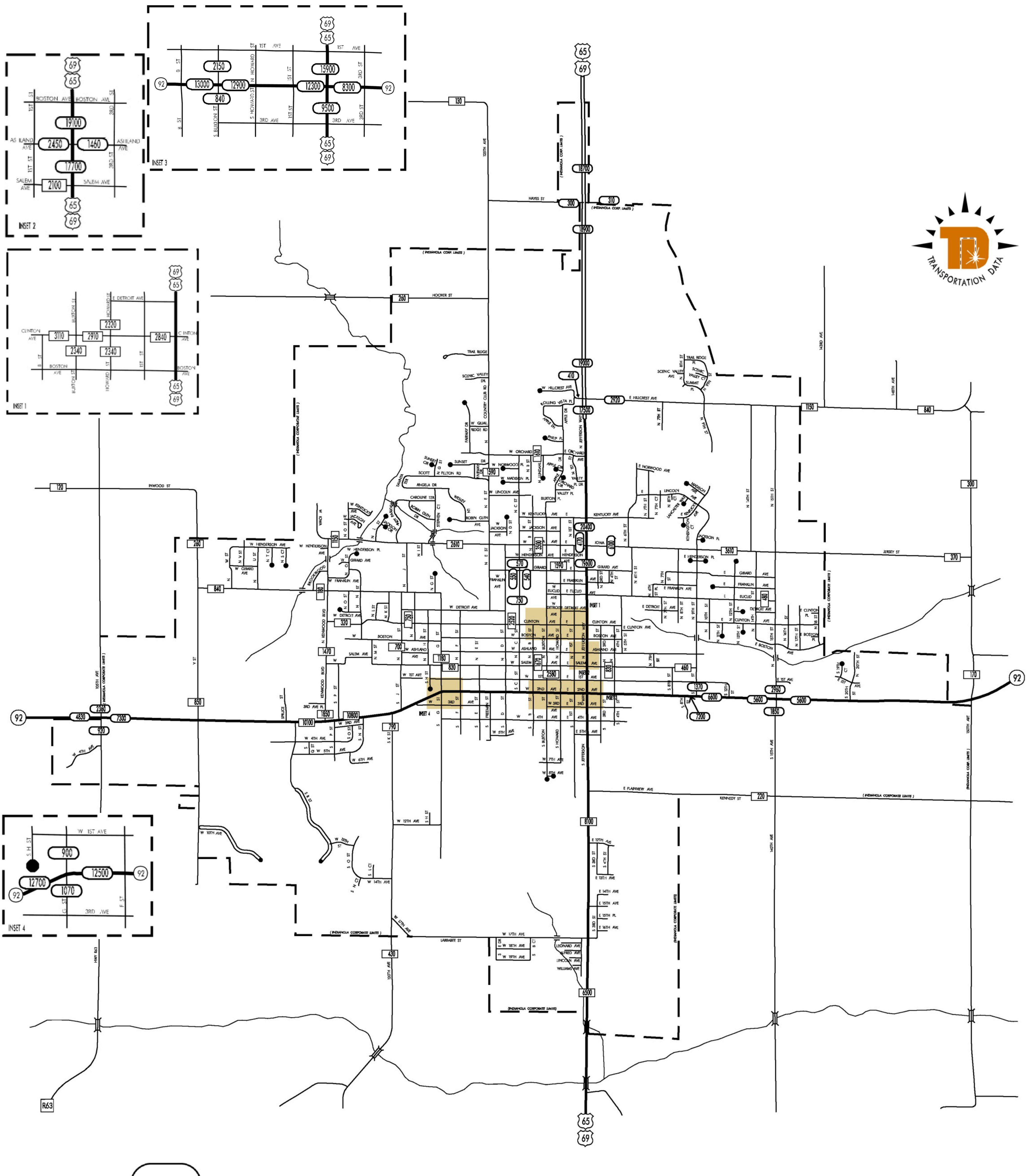
    - ***Hoover Street Extension.*** In developing the Parkway system, the City should place a high priority on the construction of Hoover Street, from US Hwy 65/69 west to Country Club Rd. This project would help achieve several of the City's transportation goals by improving future connectivity.

- ***Access Management Plan***. Indianola should adopt an access management plan for the existing and future arterial streets to maintain the capacity of those streets. Given the City's reliance on E Hillcrest Avenue for access to industrial land uses east of US Hwy 65/69, an access management plan for this street should be considered a priority. An access management plan should be developed for Hoover Street prior to the extension being constructed.

TRAFFIC FLOW MAP OF
INDIANOLA
WARREN COUNTY

2008 ANNUAL AVERAGE DAILY TRAFFIC

EXHIBIT 4-2



PREPARED BY
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LEGEND

RECORDER ONLY
MANUAL COUNT

Chapter 5

Parks & Trails

The residents of Indianola enjoy excellent access to a wide variety of parks, including both local and regional facilities. These parks are an important component of life in this community. Larger facilities range from DeNelsky Park, a peaceful natural woodlands resource, to Pickard Park, a haven for outdoor activities. Smaller parks dot residential neighborhoods across the city. To compliment their park facilities, the city has also begun to develop a trail system, providing connectivity between neighborhoods, parks, schools and the community at large via the Summerset Trail.

The Indianola City Council recently adopted the 2008 Trails Master Plan which includes a Capital Improvement Program for future trails and trail extensions as well as identifying general locations for future parks in growth areas. This Comprehensive Plan addresses the future of the parks and trails systems, particularly in relationship to the city's future facility needs.

- ***Goals for Indianola's Parks and Trails System***
  - **Create new neighborhood and community parks in growth areas.** As Indianola continues to grow, it will be critically important to set aside quality park land during the early planning stages of new residential developments. Locations for future parks should be designated in the Comprehensive Plan, correlating to the 2008 Trails Master Plan. Future parks should have safe, convenient, and desirable pedestrian access from neighborhoods to parks and should fit within the framework of the Comprehensive Plan.
  - **Create larger, neighborhood parks in new subdivisions rather than smaller tot lots or mini parks.** Future parks in new residential subdivisions should be 6 to 12acres in size in order to function as a neighborhood park. Neighborhood parks should offer a balance of active and passive recreational opportunities for a wide variety of people.
  - **Develop a trail network through the city that links parks, public facilities, and schools to neighborhoods.** The city's trail system continues to be a priority. The 2008 Trails Master Plan set out a phased program for the construction of new trails in the city. The projects recommended by this capital improvements program should continue to be constructed over time.

PARKS

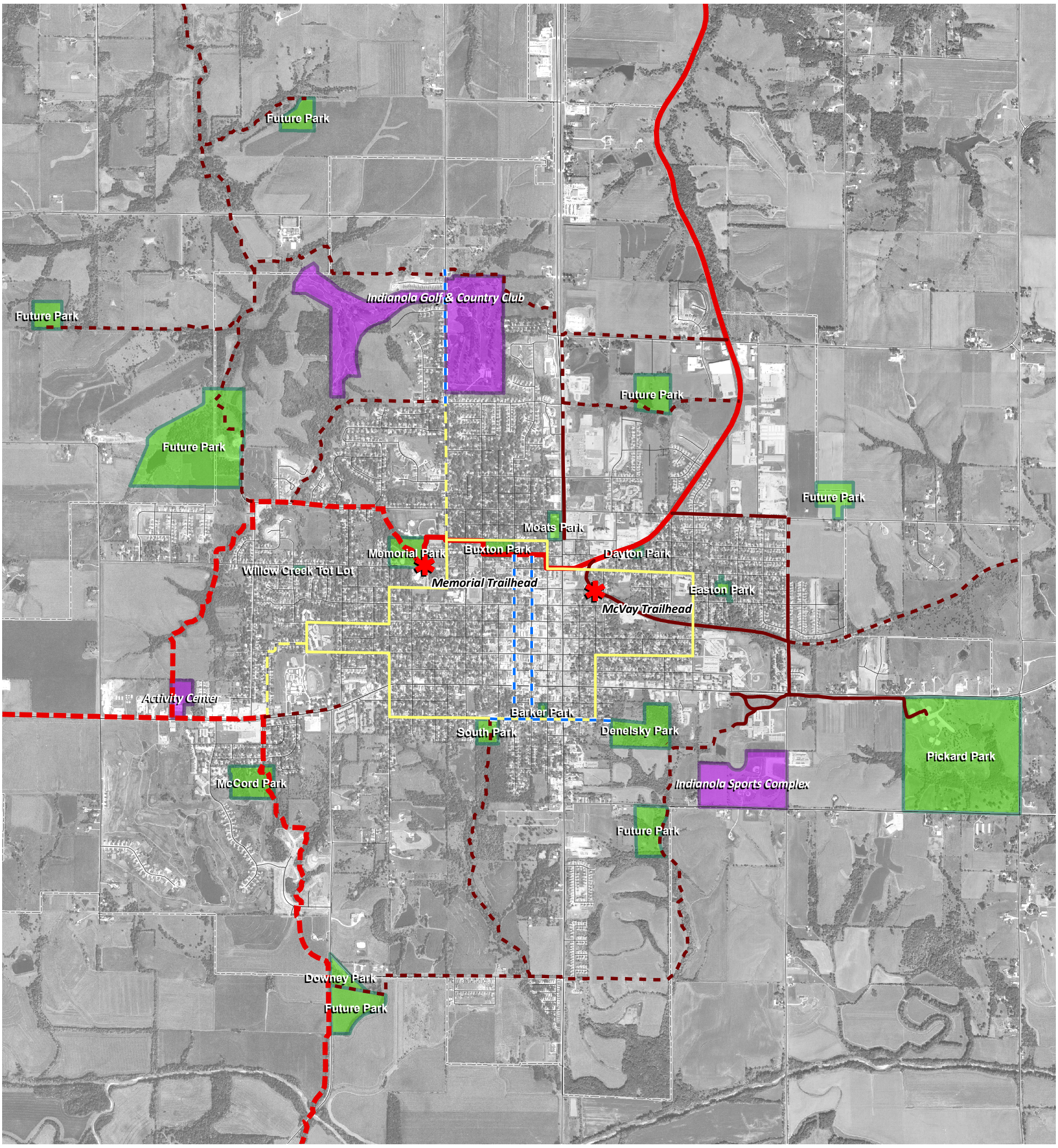
The City of Indianola has over 241.1 acres of park space, not counting the Indianola Country Club, Indianola Sports Complex, Activity Center, McVay Trailhead, or the nearby State Parks. This section includes an evaluation of these city-owned and operated park facilities.

Indianola's parks, including future parks in the 2-mile area are shown on the Parks & Trails map on the following page.

Indianola
CONNECTING TO WHAT MATTERS

Parks & Trails Plan

EXHIBIT 5-1



Legend

- Trailheads
- Existing Regional Recreational Trail
- Future Regional Recreational Trail
- Existing Local Recreational Trail
- Future Local Recreational Trail
- Future Bike Lane
- Existing Bike Route
- Future Bike Route
- Recreation Area
- Park
- Two-Mile Boundary
- Existing Corporate Limits

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N

0 2,500 5,000 10,000 Feet

- ***Evaluation of Existing Parks by Classification***

  In order to plan for parks and recreation in the future, it is beneficial to evaluate the types of facilities that currently exist in the Indianola. One way to do this is by classifying the existing parks into categories. This helps define their role in the overall park system, demonstrates the interrelationship between parks, highlights potential deficiencies, and helps develop an action program. Each of Indianola's parks has been classified as either a mini park, a neighborhood park, or a community park, using a classification system adapted from the National Recreation and Park Association (NRPA) system. The community also has access to two regional parks, the 222-acre Summerset State Park and the 770-acre Lake Ahquabi State Park, but they are not evaluated in this plan since they are not located within the 2-mile area surrounding Indianola and are not city-owned facilities. The Indianola County Club, McVay Trailhead, and Indianola Sports Complex are also not evaluated in this plan since these facilities are not owned by the city.

  The three Tables (Table 5-1 to 5-3) summarize the distinctive features that define each type of park classification. These Tables also include an inventory of Indianola's park facilities, based on their classification, and identify each park's size and amenities.

Table 5-1: Mini Parks

Mini Parks						
• Serve adjacent or nearby residences • Typically less than 1 acre in size • Service Area of less than ¼ mile • Access is primarily pedestrian and bicycle, no on-site parking • Addresses specific open space or recreational needs • Proportionally higher maintenance costs than larger parks • There are no traditional park area standards for mini parks						
Park	**Approx. Size** (Ac.)	**Play-Ground**	**Picnic Area**	**Playing Fields**	**Courts**	**Special Features**
Barker Park	1.0	Yes	Yes	Yes	Yes	
Dayton Park	1.0	Yes	Yes	Yes	Yes	
Sesquicentennial Park	0.4	No	No	No	No	flower gardens
Willow Creek Tot Lot	0.7	No	Yes	No	No	
Total Area	3.1 Acres		which equals	0.21 Acres Per 100 Residents		

Table 5-2: Neighborhood Parks

Neighborhood Parks						
• Serves one or more of the surrounding neighborhoods • Typically 5 to 10 acres in size • Service Area of ¼ mile to ½ mile • Access is primarily pedestrian and bicycle, limited on-site parking • Offers active and passive recreational activities • Core element of park system for residential areas						
Park	**Approx. Size** (Ac.)	**Play-ground**	**Picnic Area**	**Playing Fields**	**Courts**	**Special Features**
Buxton Park	5.4	No	No	No	No	Gazebo, arboretum, wind sculptures
Easton Park	2.4	Yes	Yes	No	No	
McCord Park	16.2	Yes	Yes	No	Yes	Shelter
Moats Park	4.0	Yes	Yes	Yes	Yes	Shelter
South Park	4.4	Yes	Yes	No	Yes	
Total Area	32.4 Acres		which equals	2.18 Acres Per 1,000 Residents		

Table 5-3: Community Parks

Community Parks						
• Serves multiple neighborhoods or whole community • Typically 10 to 50 acres in size, optimally 25-50 acres • Service Area of ½ mile to 3 miles • Access is primarily vehicular, parking is generally included on-site • Typical uses include unique attractions, sports facilities, natural features						
Park	**Approx. Size** (Ac.)	**Play-ground**	**Picnic Area**	**Playing Fields**	**Courts**	**Special Features**
Downey Park	10.6	No	Yes	No	No	Dog park
DeNelsky Park	22.0	No	No	No	No	Natural woodlands
Memorial Park	13.0	No	Yes	No	No	Amphitheater, aquatics, skate park
Pickard Park	160.0	Yes	Yes	Yes	Yes	Disc golf, camping
Total Area	205.6 Acres		which equals	13.82 Acres Per 1,000 Residents		

Conventional standards, established in 1981 by the NRPA, recommend at least 10 acres of park land per 1,000 residents. With approximately 241.1 acres a 2010 population of 14,872, Indianola offers the benefit of approximately 16.2 acres of park land per 1,000 residents. This overall park space is well in excess of this traditional standard, indicating the high priority Indianola places on its park system.

Further, conventional standards suggest there should be 1 to 2 acres of neighborhood parks for every 1,000 residents. Indianola currently has slightly more than 2 acres of neighborhood parks per 1,000 persons, indicating there is no shortage of neighborhood parks in the city today, based solely upon park classification. However, it will be important to continue to set aside neighborhood parks as new residential subdivisions are developed, both to maintain the city's overall high-quality park system as well as to directly serve the new residents of the community.

- ***Evaluation of Existing Parks by Classification by Geographic Location.***

A second way to evaluate a community's park facilities is by evaluating the distribution of the parks based on the size of their service area and in relationship to each other. The Park Service Area map on the following page illustrates a ¼ mile service area surrounding each park, based upon each park serving the function of a neighborhood park. The four elementary schools have been added to the Park Service Areas plan since they also function as neighborhood parks. It should be noted that neighborhood parks may potentially serve somewhat larger areas, up to ½ mile around the park provided no physical barriers exist that would limit access.

When evaluated geographically, much of the city is within the service area of at least one park, particularly if service areas are considered on the basis of a ½ mile radius. However, future neighborhood parks should also be considered in locations not covered by at least one neighborhood park. The largest existing residential area currently not served by a park is the neighborhood surrounding the Indianola Golf & Country Club. And, consistent with the evaluation of existing parks by classifications, it will be critical for the city to continue to establish new neighborhood parks as new residential subdivisions are developed.

- ***Future Parks Facilities.***

Future parks have been shown on the Parks & Trail Plan and the Park Service Areas plan in conformance with the approved 2008 Trails Master Plan. However, there are two distinctions between the 2008 Trails Master Plan and the Future Land Use Plan in this Comprehensive Plan which should be noted.

  - The 2008 Trails Master Plan indicates a large future park in the vicinity of Iowa Avenue and 15th Street. However, the Future Land Use Plan designated the

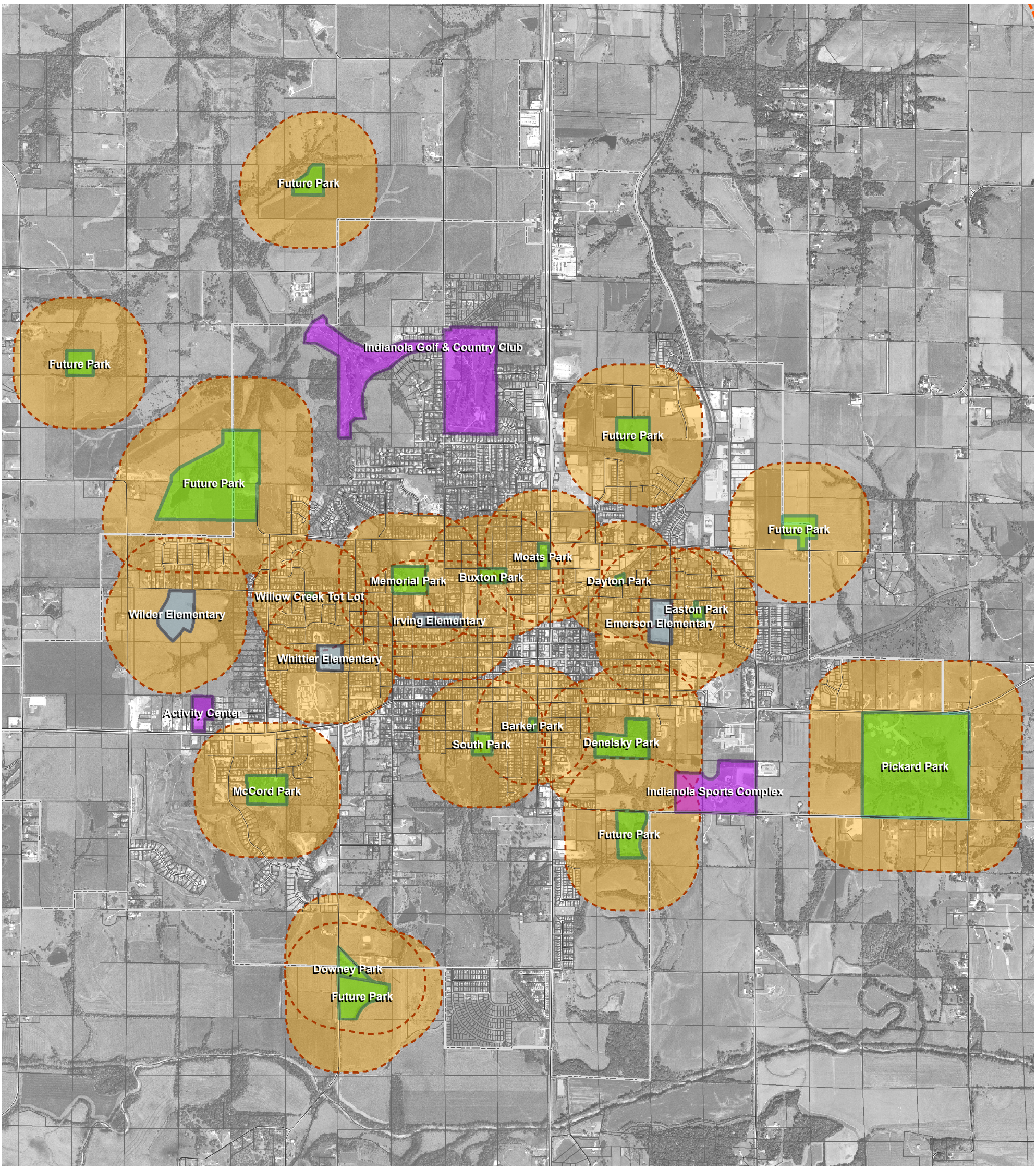
surrounding area as light industrial land use which is not an entirely compatible land use. Further, this neighborhood park would better serve the residents if it were located farther north, amid the high density residential development to the north of the industrial area.

- The Future Land Use Plan indicates a strip of park land along the north side of Iowa Avenue, between 15th Street and 150th Avenue. This park could become multi-purpose sports field or linear park. However, development pressures may make this impractical so this linear park land could also become a 60' wide buffer park between the light industrial land use and multi-family residential area. As a result, this future linear park is not included in the Parks & Trails Plan.

Indianola
CONNECTING TO WHAT MATTERS

Park Service Areas

EXHIBIT 5-2



NOTE: Park Service Areas consist of a 1/4 mile area surrounding each park.

Legend

- Park
- Recreation Area
- Elementary School
- Park Service Areas
- Two-Mile Boundary
- Existing Corporate Limits

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N

0 2,500 5,000 10,000 Feet

TRAIL NETWORK

In recent years, trail development has become an important feature to communities across the state of Iowa. Trails are now an amenity that people look for when choosing a new community in which to live. The benefits of trails to citizens include recreation, health and fitness, transportation, economic development, greenway conservation, environmental education, and enhanced community image.

Indianola is situated at the south end of the Summerset Trail, a 12-mile long asphalt trail along vacated railroad right-of-way that runs north to Carlisle. A trail spur extends to Banner Lakes at Summerset State Park. The McVay Trail has been completed, serving as an important link to Pickard Park. Indianola has completed an important trail link from McVey Trailhead to Memorial Park. A future trail extension is planned from Memorial Park to the Activity Center and to connect to future Hwy 92 trail. Regional trails from this point are planned to extend west along Highway 92 to the Great Western Trail and south to Ahquabi State Park. In addition, a trail network is planned to interconnect parks; these trails will run along greenways where possible. This network will be augmented with bike lanes though existing developed area, including Simpson College. Where bike lanes are not feasible, shared use roadways are planned. Bike routes are being designated with signage to interconnect the individual school buildings. The major components of the trail system are illustrated on the Parks & Trails map.

RECOMMENDATIONS

- ***Continue to expand on the variety of types of park facilities being constructed.*** Indianola has done a good job of providing a wide diversity of experiences for park users, including a range of both active and passive recreational activities. The recent construction the dog park in Downey Park provides further variety. In the future, the City should consider adding features such as a sledding hill, water spray grounds and enclosed shelters to enhance year-round recreational opportunities.

- ***Continue to construct trail segments in conformance with the 2008 Trails Master Plan.*** Following adoption of the 2008 plan, the City of Indianola has completed a significant portion of the proposed Area 1 Trail. The new trail links Memorial Park to both the Summerset Trail and the McVay Trail, providing regional connectivity. The City should allocate funds on an annual basis toward the further expansion of trails. The City should also seek out alternative funding sources, including grants, for trail construction.

- ***Expand trail network into growth areas.*** The 2008 Trails Master Plan did not extend much beyond the existing corporate limits. The plan recommends the trail system be extended into the 2-mile area as development occurs within that area.

- ***Acquire Recreational Trail Easements as development occurs.*** As subdivisions are developed within the city or within the city's 2-mile extra-territorial jurisdiction, easements should be required at the time of platting. These easements set aside the right-of-way for future trails in conformance with this Comprehensive Plan. This is particularly important for off-street trails. Without such easements, it may become impossible to develop trail systems since recreational trails cannot be acquired by eminent domain.

- ***Consider adoption of a park land dedication ordinance.*** The City of Indianola should continue to consider enacting an ordinance that requires developers to dedicate land to the City for use as public parks. The purpose of this Ordinance is to maintain the city's current level of service of the park system for growth areas; a parkland dedication ordinance should not be used to make up for deficiencies in the city's existing park system. This ordinance should be structured to require such park land dedications at the time of final platting for residential areas only. The amount of land to be donated should be based on the city's current average per-person park area and applying that average to specific housing types based on the average number of persons per household for each type. As a result, single-family residential dwellings typically require dedication of more park land per dwelling unit than an apartment unit. Parkland dedications should focus on usable park areas rather than encompassing only the less desirable detention ponds or wetlands. The location of parks should be in general conformance with the Comprehensive Plan; developers should be encouraged to donate larger tracts of land for neighborhood parks rather than multiple mini-parks.

- ***Develop a long-term Capital Improvements Program for park improvements.*** The City of Indianola should continue investment in Indianola's existing park system in order to maintain its status as a major community asset. While park rehabilitation should be funded on a regular, predictable basis through the budget, a Capital Improvements Program (CIP) should be developed for enhancements to existing parks. More importantly, as additional park land is acquired, the development of these new parks should be incorporated into the CIP. Timely development of these parks helps establish

new neighborhoods and provides an amenity that may be enjoyed by the residents of the community.

- ***Update the Parks and Recreation Master Plan.*** The City Park and Recreation Master Plan was adopted in 1998; this plan is 13 years old and outdated. A new plan needs to be prepared in 2012-2013 and should then be updated every 3-5 years to properly reflect the needs of community changes and interests. Public input, growth areas and community interests should be used to determine the specific park and facility needs for the City of Indianola. Mini-parks are no longer looked at as effective to meet needs. The 1981 National Park Standards should not be used as the sole standard for determining community park and recreation facility needs and deficiencies.

Chapter 6

Infrastructure

SANITARY SEWER SYSTEM

The City of Indianola owns and operates its own wastewater collection and treatment system. This system includes gravity sanitary sewers, seven pump stations and associated force mains, an equalization basin, and one treatment plant. The Water Pollution Control Department operates and maintains all components of this system. While this report is not intended to be a detailed study of the sanitary system it provides a comprehensive overview of various elements of the system. The sanitary sewer system is described as follows:

SANITARY SEWER COLLECTION SYSTEM AND PUMP STATIONS

Indianola, along with some portions of the surrounding area, is divided into nine service areas due to its topography. These service areas are depicted on the Sanitary Sewer System Map. Those draining directly to the North Treatment Plant include:

- The large Northwest service area is served entirely by gravity sewers. A large interceptor sewer runs northerly through the center of this area, collecting flows and conveying them directly to the North Treatment Plant. This interceptor sewer also receives discharge from the Wesley lift station that serves the small Wesley service area located south of IA Hwy 92 on the west side of the city.
- The Northeast service area is also served by gravity sewers. Similarly, a large interceptor sewer runs through the middle of this service area, from 15th Street northwesterly to the North Treatment Plant. In addition to collecting flows from this service area, this interceptor sewer also receives discharge from three pumping stations. Two of these pump stations are relatively small: the N 65/69 lift station which collects flows from the highway commercial properties on the north side of the city and the Q.M. lift station which collects flows from the Quail Meadows subdivision. The third pump station connected to this interceptor sewer is the Morlock lift station, a large lift station that will be discussed on following pages.

The McCord, South Plant, Plainview, and Morlock service areas all lay on the south and southeasterly sides of the city. Due to the terrain, the gravity sewers in all four service areas generally flow toward the southeast, rather than toward the North Treatment Plant. As a result, all flows from these service areas must be pumped, in some cases multiple times, in order to reach the treatment plant.

- The McCord service area flows by gravity to the McCord lift station, located on the north side of West 17th Avenue. Discharge from this lift station is transferred into a gravity sewer in the South Plant Service Area. According to the 2003 Comprehensive Plan Update, the McCord lift station has four 20-horsepower pumps, each rated at 305 gallons per minute against a total discharge head of 91 feet. At that time, each pump operated less than one hour per day so this lift station can handle a significant amount of additional flow. Development is the McCord service area should not be limited by the capacity of this pump station; however existing downstream capacity constraints may restrict the maximum allowable discharge from

this life station which could limit growth until those capacity issues are addressed.

- The South Plant service area gravity drains to the South Treatment Plant, which is actually an abandoned treatment plant that operates as an equalization basin. The South Treatment Plant is located on the west side of US Hwy 65/69 at the southern limits of the City and encompasses the South Plant lift station. This lift station receives flows from the South Plant service area as well as from the McCord lift station. Discharge from the South Plant lift station is transferred to a gravity sewer in the Morlock service area. According to the 2003 Comprehensive Plan Update, the South Plant lift station has two 25-horsepower pumps, each rated at 250 gallons per minute against a total discharge head of 160 feet. At that time, the average operation time for each pump was 11.1 hours a day, allowing only 8% growth before exceeding typical design standards of 12 hours of operation per pump. Currently, the maximum outflow of 500 gallons per minute is becoming a bottleneck for the

system, restricting growth in both the South Plant service area and the McCord service area.

- The Plainview Service area drains by gravity to the Plainview lift station, located on the south side of Plainview Avenue east of US Hwy 65/69. Discharge from this lift station is also transferred to a gravity sewer in the Morlock service area. According to the 2003 Comprehensive Plan Update, the Plainview lift station has two pumps, each rated at 255 gallons per minute against a total discharge head of 95 feet. At that time, the average operation time for each pump was 2.1 hours a day, allowing a large amount of growth based on normal design standards. Growth is not limited by the capacity of this pump station.
- The Morlock service area gravity flows to the Morlock lift station, located north of IA Hwy 92 on the east side of the city. This lift station also receives discharges from the McCord, South Plant and Plainview lift stations. Discharge from the Morlock lift station is transferred to the large interceptor sewer in the Northeast service area. According to the 2003 Comprehensive Plan Update, the Morlock lift station has four 60-horsepower pumps, each rated at 1,400 gallons per minute against a total discharge head of 110 feet. At that time, it was determined the capacity of this lift station was six times greater than the then current flows. Development of on the east side of the city is not limited by the capacity of this pump station.

With respect to the gravity sewers themselves, the system experiences a very significant increase in flow during wet weather compared to dry conditions which can be attributed to high rates of infiltration and inflow (I&I) of storm water into the sanitary sewer collection system. As a result, the City has implemented an aggressive program to reduce I&I though a multi-year program. Existing sanitary sewers are being rehabilitated though the installation of cured-in-place liners. Manholes are being sealed through grouting, epoxy lining and chimney seal replacement. Service connections are being inspected and tested; property owners are mandated to make necessary repairs to their service lines or to disconnect sump pumps or other illegal connections. These steps have already begun to substantially reducing the amount of sanitary sewer flow that needs to be conveyed and treated, thereby helping to preserve both the treatment plant and pipe capacity. The infiltration and inflow program is currently approximately 50% complete and is anticipated to be completed in 2018.

While future growth of Indianola is not immediately limited by the capacity of lift stations, other than the South Plant lift station, the downstream sanitary sewers may not have sufficient capacity to contain all wastewater flows within existing pipes, particularly during wet weather conditions. The city does not have a sanitary sewer model to assess the capacity of the gravity sewers. And, while resolving I&I issues should help increase available pipe capacity, it may not solve all capacity issues. Additional relief sewers may

be necessary to convey flows to the treatment plant, such as a new trunk sewer from the South Plant or Morlock lift station to the North Plant.

WATER POLLUTION CONTROL FACILITY (NORTH PLANT)

The Indianola wastewater treatment plant is located just north of town on Hoover Street. The plant discharges into Cavitt Creek, upstream of the middle River. The treatment plant includes features that help provide for efficient and economical operations, including a flow equalization basin that helps increase the plant's capacity during unusually high periods of flow. The plant also has an on-site laboratory that provides for continuous testing of waste water throughout the treatment process and helps assure proper plant operation as well as compliance with discharge permits.

The current plant itself was completed in 1978 at a cost of $12 million dollars. Since that time, the facilities have been well maintained by Departmental staff. However, some of the facilities and equipment need to be upgraded or replaced due to their age. The City completed a Wastewater Treatment Facility Plan (referred to as the "Facility Plan") in 2010 that included recommendations for refurbishing the existing facilities. These improvements are expected to be complete in December, 2011. While not increasing the plant capacity beyond its current capabilities, these improvements are important to the continued operations of the plant.

The existing facility is adequately sized to serve a population of 16,500 according to the facility review completed in 2001. Based on the current population projections, the City

anticipates a population of 16,657 by the year 2020, creating a demand for additional capacity at the treatment plant before the end of the planning period in 2030. The Facility Plan includes recommendations for future improvements, based upon expanding the facility to provide treatment capacity for at least a 20-year period. The Facility Plan proposes approximately $5.9 million of future improvements at the North Plant site to provide capacity for a population of approximately 22,900 people, which was anticipated to occur in 2030 as derived from population projections in place at that time. Based on the lower growth rate used for population projections included in this Comprehensive Plan, this future North Plant expansion should be able to accommodate the City's forecasted growth through the planning horizon year, potentially until the year 2036.

The Facility Plan also includes consideration for future expansion to accommodate a population greater than 22,900, beyond the planning horizon. Further expansion at the North Plant site would allow the facility to treat a population of 27,000 which was anticipated by that report to occur in the year 2040, although current projections indicate the City may not reach that population until 2046. Once the North Plant site has no further space for expansion, it is anticipated the City will construct a new facility northwest of the city on a site acquired by the City for such purpose, situated along Middle River.

EVALUATION

Topography plays a large role in the cost of extending sanitary sewer service to a growing community and this is particularly true for Indianola. Growth areas situated to the north and west of the city will be much more cost effective to serve than areas on the south and west, due to their proximity to the water pollution control facility and relative ease of conveyance. Future growth on the northeast, east and south sides of the city will require major investment in terms of additional improvements to lift stations and trunk sewers, and will continue to have higher ongoing expenses associated with pumping. Existing capacity limitations in the South Plant/Morlock service areas will need to be evaluated, with consideration given to future growth in the adjoining annexation areas that are tributary to this system. Possible solutions to this capacity bottleneck include alternatives such as upgrading the lift stations and gravity sewers to convey additional flows around the east side of town to the North Plant or opening the South Plant back up to operate as a second treatment plant facilities.

The City is doing a good job of planning for long-term treatment plant needs as well as preserving treatment plant capacity through an aggressive infiltration and inflow program. However, given the cost of the overall rehabilitation program, there may not be a lot of funds available to accommodate regional infrastructure needs for development purposes. As a result, development should be directed to the Northwest and Northeast service areas, particularly for residential uses, to the extent possible. The

provision of expanded sanitary sewer service to accommodate growth in the McCord, South Plant and Morlock service areas will need to be planned.

- It is very important for the City of Indianola to protect the expansion capabilities of the North Plant as well as the full construction potential of the future Wastewater Treatment Facility. In order to accomplish that goal, the 1,000 foot buffer area surrounding each plant site must be protected from encroachment by development. Both of these buffer areas are illustrated on Exhibit 3-1 Future Land Use Plan. Prior to the City approving any development within either buffer area, a "Waiver of Separation Distance" document will need to be signed by the property owner and recorded in such a manner that it appears on the title opinion of each lot within the development.

RECOMMENDATIONS

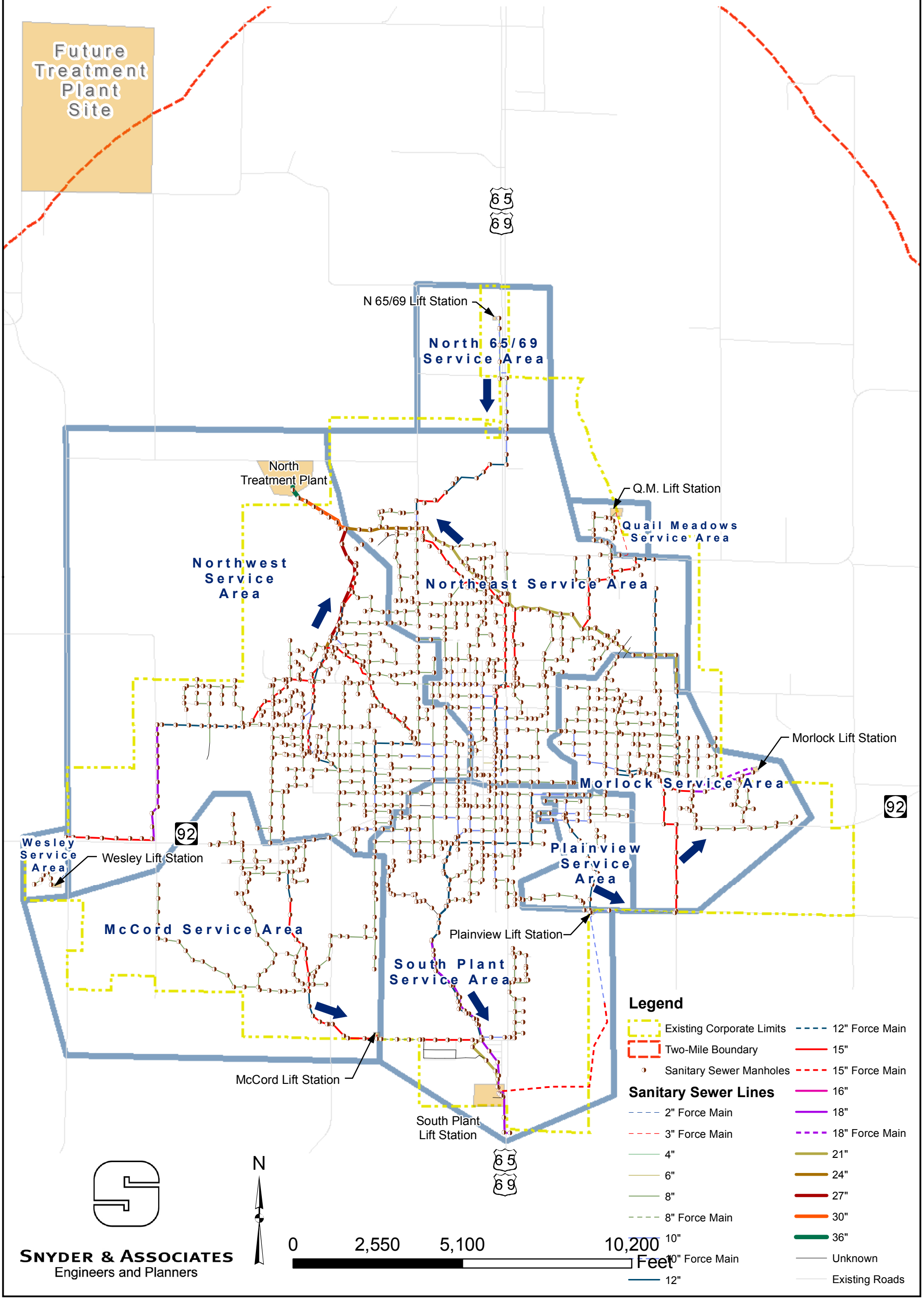
The plan includes the following recommendations for the sanitary sewer system:

- Complete a Feasibility Study of the South Plant/Morlock Service Areas, including adjoining growth areas, to address capacity issues in the system.
- Require a "Waiver of Separation Distance" for any new developments located within 1,000 feet of the property line of the North Plant site or the future Wastewater Treatment Plant site.
- Consider developing a sanitary sewer model for use as a tool to evaluate the overall conveyance system, particularly trunk sewer capacities, and plan for needed future improvements.
- Consider acquiring land adjacent to the North Plant so the City has control over the 1,000 foot buffer area surrounding the treatment plant.
- Include the future expansion of the North Plant or development of a new facility in the City's long-term Capital Improvement Program for planning purposes.
- Continue to address infiltration and inflow concerns.

Indianola
CONNECTING TO WHAT MATTERS

Sanitary Sewer System

EXHIBIT 6-1



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INDIANOLA MUNICIPAL UTILITIES

Indianola Municipal Utilities (IMU) provides water, electric and communications utilities to the citizens of the City of Indianola. IMU operates under the direction of the IMY Board of Trustees rather than as a city department, although IMU and the City enjoy a cooperative relationship. This report provides a comprehensive overview of these three utilities, but is not intended to replace a detailed engineering study. The utility services administered by IMU are described as follows:

IMU WATER SYSTEM

The IMU water department was established in 1905 and supplies water to the residents and businesses of Indianola. The water system is illustrated on the Water System Map. The boundaries for the water service area do not coincide with the corporate limits. IMU's territory extends beyond the city limits in certain areas, particularly on the north side of the city, but does not encompass all areas within the city, such as the areas on the north and south sides of IA Hwy 92 on the west side of the city. However, the boundaries of the water utility can be extended through the purchase of new territory from Warren Water District.

IMU currently provides service to approximately 5,000 meters. Water sales had been averaging over 356,000,000 gallons per year, however with the recent improvements to high efficiency appliances, annual sales have dropped to approximately 345,000,000 gallons per year.

The water supply for Indianola is obtained from four deep-water wells that extend approximately 2,600 feet down into the Jordan Aquifer. The pumping capacity of these wells ranges from 500 gallons per minute to 1650 gallons per minute. Together, all four wells pump an average of 35 million gallons of raw water per month. This equates to an average of approximately 1.15 million gallons per day (mgd) or 77.37 gallons per day (gpd) average daily use per capita for a population of 14,872.

From the wells, water is pumped to IMU's water treatment plant located on South K Street. Constructed in 1998, this plant is a lime softening water treatment facility that includes chlorine treatment. The current plant has the capability of treating over 3.8 million gallons

per day, while current output from the plant is approximately 950,000 gallons per day. Therefore, the water treatment facility has ample capacity available for growth.

Once treated, water is pumped to one of IMU's storage tanks that provide 680,000 gallons of underground storage at the treatment plant and nearly 1.8 million gallons of above ground storage in two elevated storage tanks. Located near Simpson College, the Simpson water tower can store 750,000 gallons of water. The Hillcrest water tower, located east of UW Hwy 65/69 on Hillcrest Avenue, can store 1 million gallons of water. A future water tower is planned near the Indianola Activity Center.

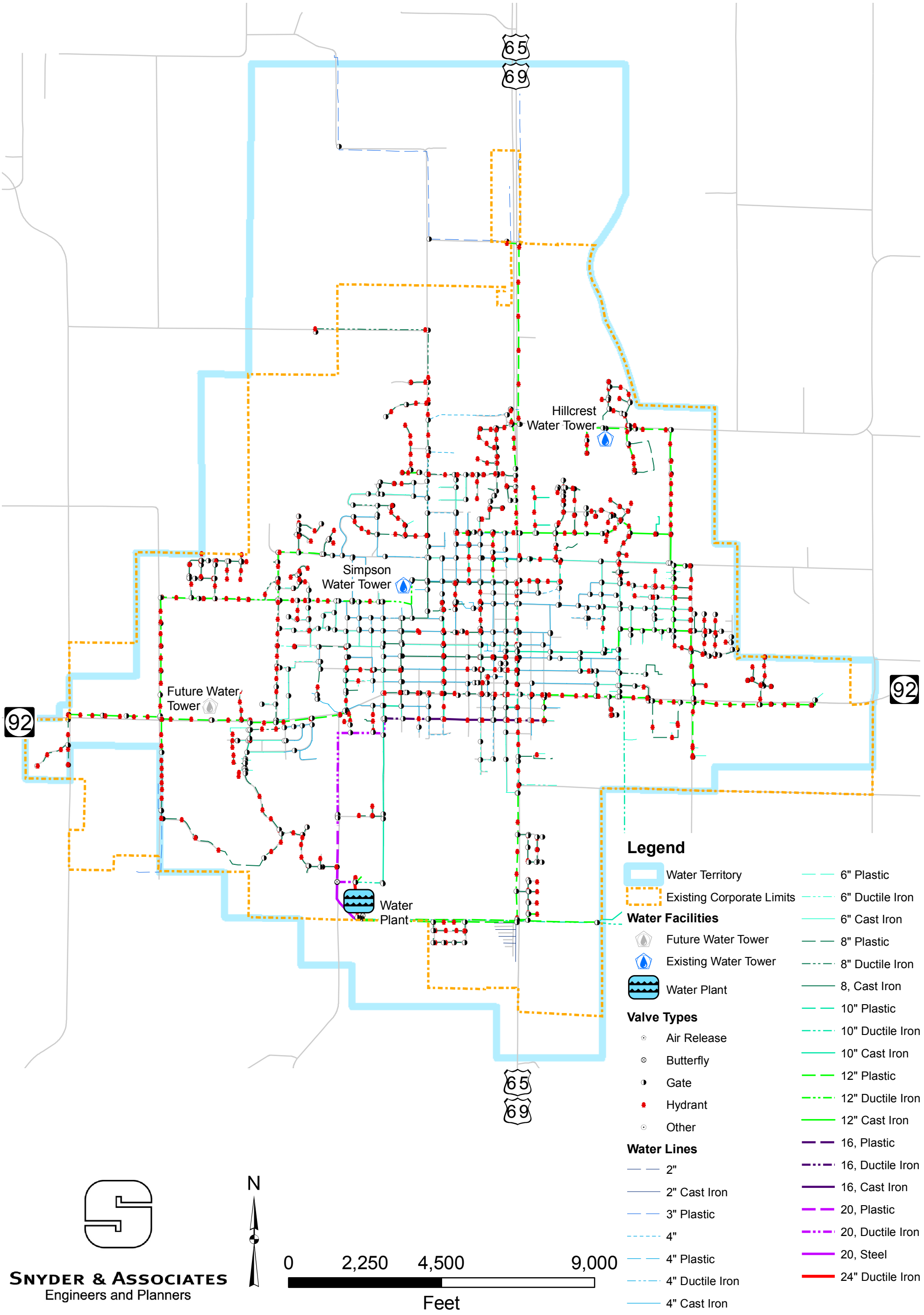
The water distribution system includes over 90 miles of water mains, 675 fire hydrants and 1,500 valves. Existing water mains range in size from 4" mains in older residential areas to 20" high service mains.

IMU has developed a detailed 5-year Capital Improvements program for the water utility. Planned improvements include replacement of fleet vehicles and equipment based on age, wear and maintenance issues; purchase of territory for future water service areas if needed; major water plant and water tower maintenance due to age and disrepair, including demolition of the old water treatment plant building; scheduled maintenance of wells; phased lime sludge removal; valve and hydrant repair and replacement program; water main replacement to coincide with city street replacement projects or age/maintenance history; completion of the automated meter reading implementation program; commercial water meter replacement, and engineering design of a new elevated storage tank.

Indianola
CONNECTING TO WHAT MATTERS

Water System

EXHIBIT 6-2



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IMU ELECTRIC SYSTEM

Established in 1890, the IMU electric department provides electric service to the residents and businesses of Indianola. IMU currently serves approximately 6,300 electric meters. Total annual sales are 111,280,029 kilowatt-hours.)

IMU currently has a 30-year contract for the purchase of wholesale electricity from the Municipal Energy Agency of Nebraska (MEAN). Three 69 kilovolt (kV) transformers, two at the East Iowa substation and one at the Westside substation, reduce the voltage to 13.2 kV before power is distribute via five feeder lines that loop the system. In addition, IMU has four transformers to serve smaller service areas, but IMU is in the process of converting all distribution to 13.2 kV.

If requested, IMU will need to generate up to 200 kilowatt-hours of electricity per year for purchase by MEAN. The utility has the capability to generate its own electricity from five diesel powered generating engines which collectively produce up to 11.4 megawatts (MW) of electricity and are used to meet the Indianola load at peak demand periods. Two large jet engine turbines are located at the East Iowa substation that are capable of supplying up to an additional 38 MW of backup power supply.

In addition to Indianola's electrical distribution lines, IMU owns approximately 18 miles of 69kV transmission lines extending from Indianola west to an MEC substation which provide redundant service to MEC costumers in the event their standard transmission line should fail. A third 69kV source extends south along R-63 and is owned by CIPCO.

IMU has developed a detailed 5-year Capital Improvements program for the electric utility. Planned improvements include major maintenance of the light plant, building and equipment; major maintenance of turbines, buildings and equipment; a variety of large debt service projects; line construction for replacing/repairing failing distribution equipment; replacement of fleet vehicles and equipment; purchase of computer software; and customer assistance and educational programs.

The area surrounding IMU's electric service territory, yet within some areas of the city, is served by MidAmerican Energy. As the city begins to annex land, expansion of IMU's electrical service area will require the purchase of territory from MidAmerican Energy. However, the sale of territory by MidAmerican Energy will need to be voluntary on their part, and the purchase price negotiated, so the further expansion of the electrical service area may not be an option.

IMU FIBER OPTIC SYSTEM

The IMU municipal communications system was established in 1997 as part of a plan to provide advanced telecommunications services to the community. This foresight allows Indianola to take advantage of technological advances, making available a secure, reliable system for telephone, data and video communications for a variety of opportunities for citizens and business in the community. IMU installed a fiber optic trunk line in 1999. This local area network was originally connected only to city departments, IMU, Indianola Schools, Warren County offices and a limited number of private customers. Since that time, IMU has partnered with franchise telecommunications service providers to expand the use of the fiber optic system to serve business in the community.

IMU's 5-year Capital Improvements program for the communications utility is focused entirely on the engineering and construction costs for the extension of the fiber loop in three phases, with annual expenditures of approximately $1,000,000 in each of the five years included in the CIP.

EVALUATION

Indianola Municipal Utilities is proactive with respect to the services they offered by providing incentives and educational programs such as the Project 700 which encourages replacement of overhead electric service lines with underground services or the Energy Efficiency program which encourages customers to obtain energy audits and purchase efficient appliances and equipment.

Indianola Municipal Utilities is well-poised to handle the anticipated future growth of the city. IMU indicates they have the ability to accommodate outward growth in any direction from the city. However, water pressures and flows will need to be evaluated in growth areas, such as along G Street, to be sure adequate capacity and pressure is available for fire flows and service expectations.

RECOMMENDATIONS

The plan includes the following recommendations for IMU:

- Continue to replace 4" water mains with 8" or larger water mains to provide fire protection to all properties within the water service territory.
- Continue to plan for the expansion of water utility service territory, based on potential future development needs.
- Evaluate the need to install or upgrade water mains in growth areas to provide capacity and pressure for future development.
- Prior to annexing new land into the City, re-open negotiations with MidAmerican Energy regarding expansion of the electrical service area if at all possible.
- Consider expanding the IMU Fiber Optic System to offer services to residential users, provided the anticipated level of participation by residential uses is sufficient to reasonably offset the cost of providing such service.

Chapter 7

Services & Facilities

CITY HALL

- ***Description***

For purposes of this report, Indianola's City Hall encompasses the offices of the City Manager/Mayor /City Council, the Finance & Administrative Services Department and the Human Resources Department, all of which are based in the Municipal Building. The Mayor and City Council are elected officials and the policymakers of the community. The City Manager manages the day-to-day operations of the City, ensuring policies are carried out. Finance & Administrative Services comprises the duties of both the Finance Director and City Clerk and their departmental responsibilities include record keeping, utility billing, accounting, and public information distribution. The Human Resources Department handles city personnel issues.

In addition to the Mayor and City Council, City Hall has a staff of approximately nine full-time employees, including the City Manager and department heads. The city's treasurer is a contract employee.

City Hall is located in the Municipal Building located at 110 North 1st Street. The Municipal Building also houses the Community Development Department, Police Department and the Fire Department. Centrally located in proximity to the town square and county offices, the

building offers a convenient location for citizens to take care of their business with the City as well as providing a central point of origination for emergency response activities.

City Hall occupies approximately 7,307 square feet of the municipal building including offices for the Mayor, City Manager, department heads and an open office area for departmental employees. City Hall also includes Council Chambers, reception area, training room and vaults. The Municipal Building also includes general use areas including public restrooms.

- ***Evaluation***

Originally constructed in the 1960's, with three subsequent building additions, the Municipal Building is in good structural condition. In 2004, the City worked with a consultant to evaluate the departmental space needs for the Municipal Building. Phase 3 of the Municipal Services Space Needs Assessment included four design alternatives for accommodating these needs. However, the bond referendum in 2005 was unsuccessful so the City has looked at other creative means for addressing those needs in the near term, including the re-allocation of existing space for its best use. A remodeling project which relocated the Community Development Department freed up 768 square feet of space for use by City Hall and the Fire Department. In addition, a new shared conference room was also created with the remodel.

- ***Recommendations***

Recommendations for City Hall (City Manager/Mayor /City Council, Finance & Administrative Services and Human Resources Departments) are as follows:

- Continue to consider creative alternatives to address the departmental space needs at the Municipal Building. One such alternative might be the relocation of the City Hall /Community Development to another building at a nearby location, maintaining a centralized and reasonably consolidated location for city services; the current Municipal building would then become a public safety building for the Police and Fire Departments. Other alternatives may be considered.

- Although no specific long-term staffing or information technology needs have been identified at this time, continue to monitor these needs in the future as technology evolves and the city continues to grow. Continue to maintain a cooperative relationship with Warren County on GIS needs.

COMMUNITY DEVELOPMENT DEPARTMENT

- ***Description***

  The Community Development Department provides services related to planning and zoning, building permits, and construction inspection. The department is responsible for reviewing and approving development proposals for new construction and the administration of many capital improvement projects. The offices of the Community Development Department are located in the west central area of the Municipal Building.

  The Community Development Department has three full-time employees, including the Director who also serves as the Building Official, an office manager and one building inspector.

- ***Evaluation***

  Based upon recommendations of the Municipal Services Space Needs Assessment, the Community Room was remodeled to accommodate the Community Development Department. Community Development now occupies approximately 1,200 square feet of space, comprising a reception area, three offices and a workroom, generally conforming to the recommendations of Design. One of these offices is used by the Information Technology staff person. While the remodeling project fulfilled the short-term space needs for the department, the needs assessment indicates a long-term programmed need for a total 1,840 square feet of space.

- ***Recommendations***

  The recommendation for the Community Development Departments is as follows:

  - Continue to work with the Mayor, City Council and City Manager to address issues related to overall space needs for city departments located at the Municipal Building.

POLICE DEPARTMENT

- ***Description***

The Indianola Police Department is headquartered in the Municipal Building, with approximately 6,638 square feet on the south side of the Municipal Building being allocated to the Police Department.

The Police Department is staffed by 19 sworn officers, including the Police Chief and Captain, and an administrative staff that include 2 full-time and 2 part-time employees. The police force answers approximately 7,000 calls for service annually; the number of calls has remained reasonably consistent over the last several years.

The Police Department owns and maintains six marked units and three unmarked units. These cars are replaced on an alternating cycle, replacing one vehicle one year and two vehicles the next; thus keeping all cars under 100,000 miles.

The department's current staff facilities comprise a reception area, clerical dispatch, seven offices, squad room, locker room, work room, crime lab, and evidence and record storage. The facilities also include a holding area, an interview room and sally port.

A new 5,000 square foot building was recently constructed to serve as an off-site storage. This building was constructed by city crews and was financed through drug asset seizures, rather than tax dollars.

- ***Evaluation***

Phase 3 of the Municipal Services Space Needs Assessment indicates the Police Department has a need for approximately 10,900 square feet of space, equating to 4,255 square feet of additional space. Of this, over 3, 300 square feet would be added for evidence, record and file storage. For the short term, storage needs will be addressed by the new off-site storage building. Long term needs will need to be addressed, potentially through relocation of either City Hall and Community Development or the Fire Department to another site, thereby freeing up space for expansion of the Police Department at its current location.

- ***Recommendations***
  - Recommendations for the Police Departments are as follows: Continue to prepare and follow the established programs for the replacement of vehicles and equipment.
  - The Police Department has a somewhat flexible time schedule to accommodate annexation and development. While they can be more reactive to growth, staffing, vehicle and equipment levels should be monitored as the number of calls increase in order to maintain a consistent level of service.
  - Continue to work with the Mayor, City Council and City Manager to address issues related to overall space needs for city departments located at the Municipal Building.

FIRE DEPARTMENT

- ***Description***

The Indianola Fire Department provides both fire and emergency medical services to the citizens of Indianola as well as to the surrounding area. The department covers a service territory in the center of Warren County that is approximately 118 square miles in size. The Fire Department operates out of one station, located in the northeast portion of the Municipal Building. Approximately 8,873 square feet of the Municipal Building are allocated to the Fire Department. Emergency 911 communications are based out of Warren County's Sherriff Department.

The Fire Department is staffed by 9 full-time employees; including a fire chief, deputy chief and six firefighter/paramedics. In addition, the department includes 48 personnel holding part-time or paid-on-call positions in firefighter/medics, firefighter/paramedics or administrative positions.

The Fire Department owns and maintains three ambulances, seven fire apparatus, two specialty/command vehicles, one all-terrain vehicle, and one boat.

Existing facilities comprise offices, day room, kitchen, bunk rooms, showers, and storage rooms. The department's facilities also include apparatus bays comprised of 3 double-bays and 1 single-bay for vehicle storage. Off-site storage accommodates an attack truck, boat and all-terrain vehicle.

- ***Evaluation***

Phase 3 of the Municipal Services Space Needs Assessment indicates the Fire Department has a need for approximately 17,300 square feet of space, nearly twice their allocated space in the Municipal Building. A significant amount of this space would be dedicated to apparatus bays and associated work areas. Some of those needs are currently being met through the use of off-premises garages. Other identified needs include additional space for bunk rooms, locker rooms and showers. Gear and hose storage areas, bio-hazard containment room, and offices were identified as space needs.

- ***Recommendations***
  - Recommendations for the Fire Departments are as follows: Continue to work with the Mayor, City Council and City Manager to address issues related to overall space needs for city departments located at the Municipal Building.
  - Continue to work with the Mayor, City Council and City Manager to address staffing issues.
  - Continue to prepare and follow an established program for the replacement of vehicles and equipment.
  - Evaluate the need for a satellite fire station, based on response time, as the community continues to grow.
  - In coordination with Warren County, complete a GIS project that can evaluate emergency response time that can be updated as development occurs.

PUBLIC LIBRARY

- ***Description***

Located at 207 North B Street, the Indianola Public Library is located just one block off the town square, close to other city and county services.

The Indianola Public Library provides free and equally available resources and services for the entire community. The Library promotes reading readiness, access and guidance for information technology, and life-long learning, relaxation and enjoyment. The Library is staffed by a Library Director, 3 full-time employees, and 6 part-time employees. The building houses a collection of 48,234 materials, including books, recordings, movies, magazines, and a growing collection of items available in electronic format.

In June of 2010, circulation was reported as 147,680. This equates to 10.1 items per resident per year.

The building is a one-story brick structure constructed in 1984, encompassing 9,816 square feet of finished space. An unfinished basement brings the total space to approximately 11,500 square feet. An adjacent parking lot provides parking space for approximately 25 vehicles; additional handicap parking stalls are located on the south side of the building.

In addition to housing shelving and seating space, the building comprises one office with cubicles for staff and one meeting room. A story time room provides programming space. Ten computers are accessible for public use; wireless internet is available on site. Cosmetic improvements, for items such as carpeting and electrical upgrades, are currently being installed.

- ***Evaluation***

The library building is in good condition; however, there appears to be some need for additional space. This space would accommodate comfortable seating and gathering areas as well as library tables with chairs and study rooms. Additional area is needed for shelving space. A space needs assessment conducted in 2004 indicated that a building of approximately 35,000 square feet is necessary for a community with Indianola's population and projected growth.

- ***Recommendations***
  - Recommendations for the Library are as follows: Continue to follow the recommendations of the Library's strategic plan, prepared in 2008.
  - Consider updating the space needs assessment to ensure the public library's physical space continues to meet the need of a growing community.
  - Monitor trends in formation delivery to insure that residents of the community receive information in the format that works best for them.
  - Continue to work closely with Dunn Library at Simpson College to maintain online catalog and circulation system.

INDIANOLA ACTIVITY CENTER

- ***Description***

  The Indianola Activity Center, located at 2204 W. 2nd Avenue, is home to the Indianola Senior Center, community rooms as well as the offices of the Parks & Recreation Department. The Buxton Room has a 200-240 person capacity. An arts and crafts room and a meeting room each have a 15 person capacity. A computer lab has space available for up to 8 persons. The building also has a billiard room and exercise room.

  The Parks & Recreation Department is responsible for developing and maintaining public parks and facilities, including the Indianola Activity Center and Veterans Memorial Aquatic Center. The department partners with interest groups, including Warren County, Indianola Schools and Simpson College, on a variety of facilities to increase recreational opportunities for Indianola citizens. The Department also provides year-round programming for leisure activities.

  The Parks & Recreation Department has a total of eight full-time employees. The department also includes four permanent part-time employees, each working approximately twenty to thirty hours per week. The department also employs approximately ninety to one hundred seasonal employees, including lifeguards at the Aquatic Center as well as coaches and maintenance personnel. Seasonal employees have a variety of work schedules, ranging from only a couple hours per week to forty-hour work weeks. Most of these employees work out of the park shop or specific park facilities rather than the Indianola Activity Center.

- ***Evaluation***

  Built in 1993, the Indianola Activity Center is in good condition. With approximately 10,350 square feet of space, the building helps serve the needs of the community. The building serves a senior center as well as offering a full range of activities for senior citizens. The large community room, two smaller meeting rooms and computer lab are available for renting to the public for special events. The large Buxton room is used for recreation programs weekday evenings. The facilities are typically reserved most available hours of the week.

  The building includes several departmental offices, providing a total of seven workstations.

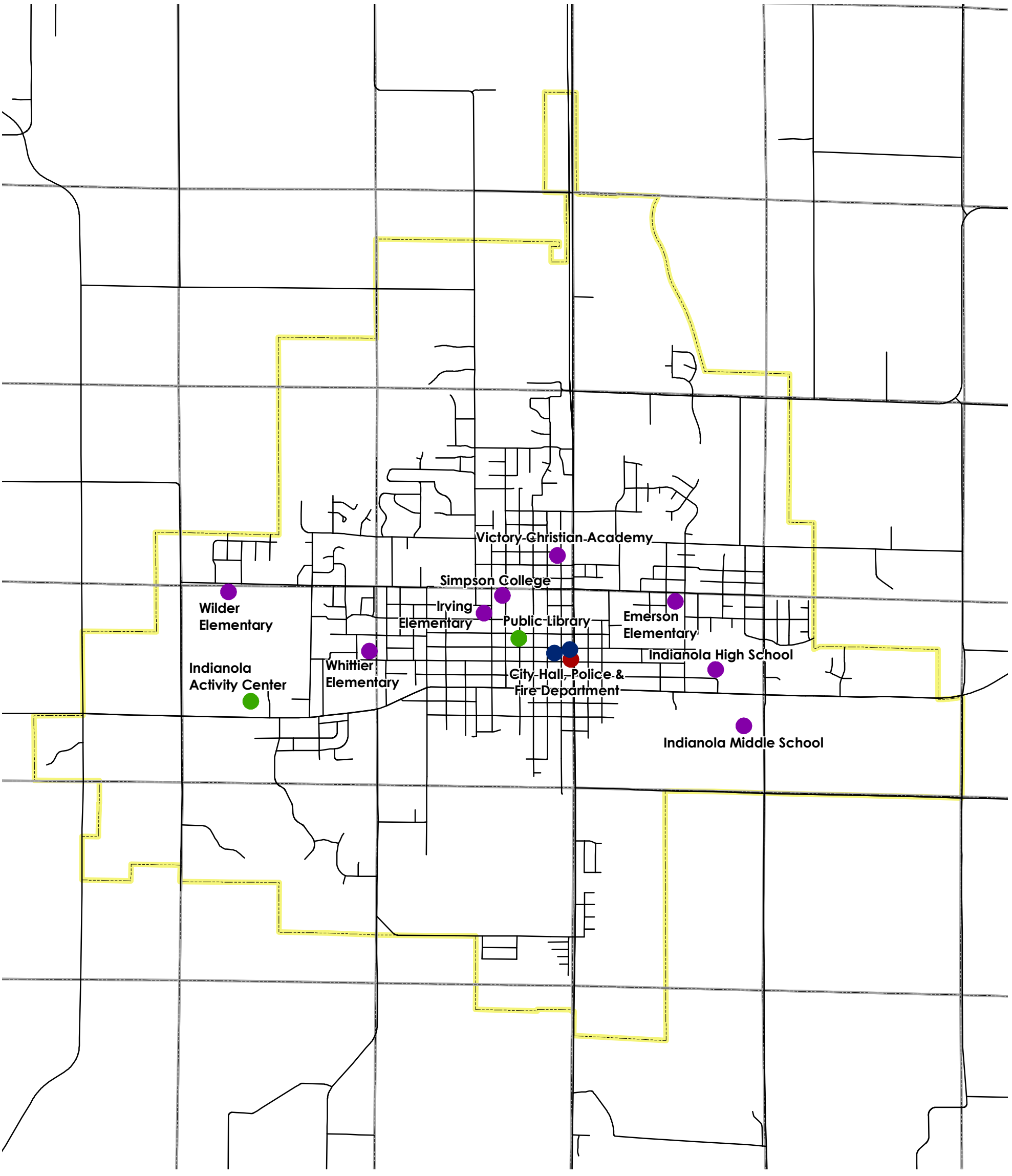
- ***Recommendations***

  - Recommendations for the Indianola Activity Center are: Continue to follow the recommendations of the Strategic Plan for Recreation Programs regarding the delivery, marketing and philosophy of the city's recreational programming including the types of programs being offered to meet the varying interests of the community.
  - Acquire additional park land as development continues in conformance with the Parks & Trails Master Plan and as reflected in the Comprehensive Plan.
  - Develop a cooperative relationship with the YMCA such that the City and the YMCA are partners in providing recreational opportunities to the community.
  - Continue to maintain a partnership with Indianola Community Schools, Simpson College and Warren County regarding shared facilities and programming.
  - Develop a room enlargement plan for rooms on west side of the Activity Center so rooms can be provided that will handle 50-75 people for both programming and rental use.

Indianola
CONNECTING TO WHAT MATTERS

Facilities Plan

EXHIBIT 7-1



SNYDER & ASSOCIATES
Engineers and Planners

Chapter 8

Growth Management Plan

GROWTH MANAGEMENT POLICIES

Policy statements identify key strategies for implementing the community's goals to accommodate growth and development. These statements provide the guiding assumptions for the comprehensive development plan and implementation.

The City of Indianola should:

1. Encourage a variety of land uses and living environments in order to maintain the City's tax base, provide ample development opportunities and provide for the established and future needs of the citizens.
2. Require new developments to assume a share the burden of improved and/or extended regional infrastructure including neighborhood parks.
3. Direct growth to prioritized growth areas and encouraged in areas that are cost efficiently served by the sanitary sewer system.
4. Review and update the city's development regulations to meet the city's objectives for sustainable development and to offer opportunities for innovative approaches to development.
5. Encourage redevelopment of vacant commercial and residential sites within the city to utilize existing infrastructure and/or maximize use of existing service areas.
6. Actively consider paving of specific existing gravel roads to open up new development areas that are located within existing service areas.
7. Make transportation-related decisions in consideration of land use impacts including, but not limited to, access management, adjacent existing and future land use patterns, and designated uses and densities.
8. Preserve and develop transportation corridors, including the parkway, as development occurs and establish design guidelines for parkways.
9. Encourage, promote and harness economic development partnerships between local entities and private companies to assist existing and expanding business enterprises and to attract new businesses, particularly to the industrial park.
10. Require new developments to design subdivisions in an environmentally sensitive manner, including protection of wetlands and areas of severe slopes.
11. Require open space, park land and trail easements to be dedicated to the City as development occurs.
12. Encourage regional detention to serve larger commercial and industrial areas rather than multiple, smaller basins.

13. Create new zoning districts, including mixed use district, neighborhood commercial district and office park district, to implement the recommendations of the Future Land Use Plan.

14. Require sound planning principals for buffering incompatible land uses such as highway commercial and single-family residential. Buffers between industrial and residential uses have already been addressed in City Code.

SUBDIVISION REGULATIONS

Through the planning process, the city's existing development standards have been reviewed and discussed. Recommendations regarding the Zoning Regulations have been provided in conjunction with the Future Land Use Plan. The City of Indianola should consider updating the Subdivision Regulations based on the following:

1. The developer's responsibility for provision of construction drawings for review and approval by the City of Indianola prior to Final Plat approval should be addressed by Code. In addition, Construction Drawing requirements should be defined, similar to the Preliminary Plat and Final Plat. These requirements should include a storm water management plan, a storm water pollution prevention plan including detention, sanitary sewer flow calculations, plan and profile drawings fire hydrant coverage plan, and appropriate details as necessary. The procedure for review and approval of the construction drawings should be included.

2. The developer's responsibility to obtain an NPDES Storm Water Discharge Permit from Iowa DNR should be added to the erosion control design standards.

3. Consider adopting the Statewide Urban Design Standards as the city's standard specifications.

4. The requirement for maintenance bonds prior to final plat approval and/or acceptance of the public improvements should be included in the ordinance. A 4-year maintenance bond is recommended for all underground utilities and paving.

5. The section discussing easements should be revised to specifically include the requirement for dedication of trail easements for trails designated on the Comprehensive Plan. A minimum easement width of 20' should be specified.

6. Continue working toward adoption of a park land dedication ordinance now that the court case has been decided. This ordinance would help ensure that neighborhood parks are provided as development occurs. The ordinance should be based on maintaining the city's current level of park service, based on square footage of parks per capita, rather than making up for any existing deficits in the park system. The ordinance should require dedication of park land for residential development only, based on need. This can be accomplished by establishing an average number of persons per dwelling for each

type of housing and then multiplying that occupancy by the established square footage of park land per capita to develop the amount of park land dedication required for each single family, townhome, and apartment dwelling unit. The park land to be dedicated must be shown on the plat. Any funds received must be placed in an escrow account for park improvements for the specific park serving the neighborhood.

7. When a final plat is approved prior to construction of the public improvements, consider requiring the developer to post a Subdivision Bond prior to final plat approval. This bond will cover the developer's responsibility for performance and payment as well as helping ensure timely completion.

GROWTH AREAS

This Comprehensive Plan forecasts the greatest potential for future growth occurs in the north, west and east which reflect the city's current and historic growth trends. This forecast is also consistent with the growth projections in the 1996 Comprehensive Plan and the 2003 Comprehensive Plan Update.

Future expansion should also consider cost efficiency of utility extensions, particularly as it relates to sanitary sewer system. It is more economically feasible and sustainable for the city to expand sanitary sewer service areas through the extension of gravity sewers wherever possible. Alternative development opportunities should be made available to discourage growth in areas that are tributary to the Morlock lift station.

Although the current and historic growth trends are important indicators of where future growth will occur, the location of future growth areas is also subject to the direction of development pressures. The City should encourage growth in the desired direction by providing the appropriate infrastructure to support such growth. In particular, this includes street improvements that open up desirable areas for development purposes.

The phasing of future annexations will need to address the needs and desires of the city at the time, while considering the City's long-term growth potential and desired future land uses.

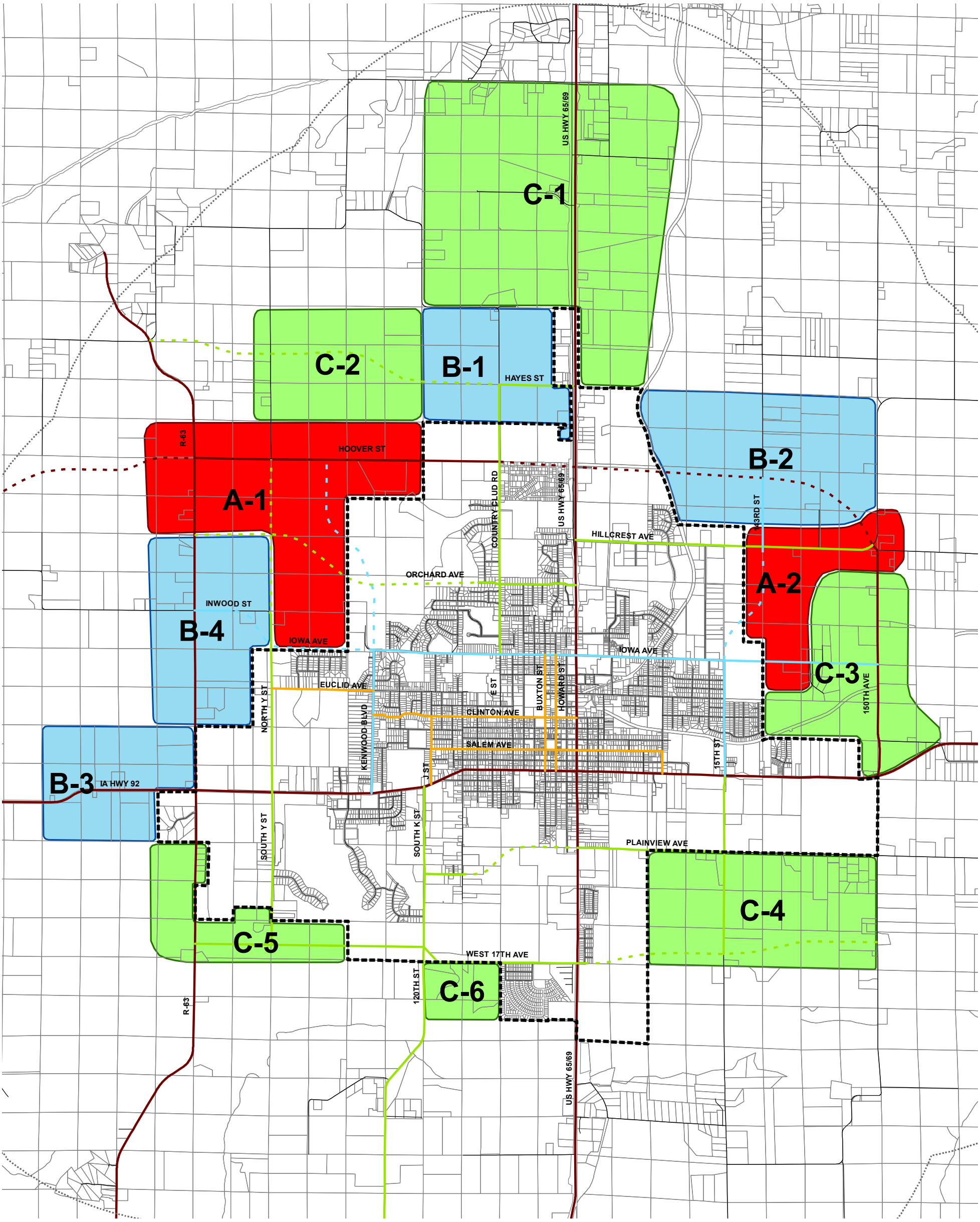
The Growth Areas Plan is illustrated on the following page. This plan prioritizes future growth areas into three classifications: high priority, moderate priority and priority. Specific growth areas are categorized based on growth potential, accessibility to existing and future transportation corridors, availability of municipal utilities, and future land use.


DEAD
END
SPEED
LIMIT
30

Indianola
CONNECTING TO WHAT MATTERS

Growth Areas Plan

EXHIBIT 8-1



SNYDER & ASSOCIATES
Engineers and Planners

N

0 2,500 5,000 10,000 Feet

Legend

GrowthAreas

- High Priority
- Moderate Priority
- Priority
- Indianola Corporate Limits

HIGH PRIORITY GROWTH AREAS

Two areas have been identified as high priority growth areas that should be considered for annexation to the city in the near future. Such annexation would provide for continued growth, provide additional basis for street improvement projects and protect areas designated for future industrial land use from encroachment of residential uses.

- ***Area A-1.*** Located on the northwest side of the city, this area is approximately 1,044 acres in size. The area fronts onto R-63 and Hoover Street. Future Land Use is primarily low density residential, with the exception of a commercial node at the R-63/Hoover intersection and adjoining transitional uses. The area is desirable for residential development purposes due to its terrain and frontage onto R-63 and Hoover Street however the area will be more attractive to developers once Hoover Street is paved from US Hwy 65/69 west to Country Club Road. In addition, this area encompasses the future parkway which will follow Hoover Street and R-63 which will become a major transportation corridor for the Indianola.

  Sanitary Sewer Service: Nearly all of Area A-1 is located in the Northwest Service Area, so the area is serviceable by gravity sewers with appropriate design. However, a small, low lying area downstream of the plant, potentially not developable due to environmental constraints, may require special design considerations if developed.

  IMU Service: The eastern portion of this growth area is located in IMU's water service area and can be served by extension of the 8" water main along Hoover Street. The remainder of the area lies outside IMU's current service area so the City will need to purchase service rights to this area from Warren Water District. Water mains will need to be brought into this expanded service area from Hoover Street to the east and from North Y Street, Orchard Avenue, and Kenwood Blvd as these areas develop. A water main should also be extended along R-63 to Hoover Street as part of the water main looping system. A water main should also be installed on Hoover, between US Hwy 65/69 and Country Club Road, when that street is paved for looping purposes. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

  Street & Storm Sewer Improvements: For purposes of this report, it is anticipated that the City of Indianola will be responsible for paving streets that are identified on the Major Streets Plan as major or minor arterial streets. Streets identified as collector streets, whether major or minor, are anticipated to be paved by the developer as part of the platting process. All costs in this report are for preliminary budgetary purposes only. Street improvement projects related to Area A-1 are identified as follows:

Hoover Street	from US Hwy 65/69 west to Country Club Road 2700 LF; $2,717,000
Hoover Street	through Area A-1 1750 LF; $938,000
Iowa Avenue	through Area A-1 3500 LF; $2,139,000
Kenwood Blvd	from Iowa Avenue north to corporate limits 4100; $2,559,000
Kenwood Blvd	through Area A-1 3100; $1,800,000

Revenue: When a city annexes territory, it receives financial benefit to help offset the cost of providing services to the area. For purposes of this report, we have evaluated only the potential benefit from immediate tax revenues. Future tax revenues will be based on new development and should be projected prior to annexation of the territory. Other revenue, such as increased Road Use Tax, should also be considered.

Nearly all of Area A-1 is classified as agricultural use by Warren County. Current taxable valuation is approximately $1.32 million based on a 69% rollback for agricultural property. Current taxable value for the residentially-classified properties is approximately $175,000, based on a 48.5% rollback for residential property and assuming homestead credit for each dwelling. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area A-1 is approximately $16,900.

- ***Area A-2.*** This area is situated east of Indianola, just east of the current industrial park, and is approximately 574 acres in size. The area fronts onto Hillcrest Avenue. Future Land Use in this area is primarily light and heavy industrial with a commercial node located at the intersection of Hillcrest Avenue and 150th Avenue. South of Iowa Avenue, future land use is designated as medium density residential, transitioning to low density residential to the south and with a park/buffer on the north to separate residences from the industrial uses. The primary reason this area has been designated as a high priority growth area is to recognize the value of industrial land as a resource for the city and to protect such land from further encroachment of residential uses.

  Sanitary Sewer Service: Area A-2 is located just east of the Northeast Service Area. The area drains toward Short Creek and will need to be pumped west to the Northeast Service Area for conveyance to the North Plant.

  IMU Service: This area lies entirely outside IMU's current service area so the City will need to purchase service rights to this area from Warren Water District. However, this area is very near the Hillcrest Water Tower and this expanded service area could easily be served by extending the water main along Hillcrest Avenue and East Iowa Avenue, and connecting these mains as this area develop. A water main will also be needed along

150th Avenue for eventual looping purposes. IMU has the capability to provide electrical service to all areas within their existing territory, but it appears unlikely that additional territory can be purchased so this area will be served by MidAmerican Energy.

Street & Storm Sewer Improvements: Street improvement projects are identified as follows:

Hoover Street	through Area A-2 950 LF; $353,000
15th Street	Iowa Ave north to corporate limits 1650 LF; $933,000
15th Street	through Area A-2 2800 LF; $, 596,000

Revenue: Much of Area A-2 is classified by Warren County as agricultural use; however there are several dwellings in this area. Current taxable valuation is approximately $ 3.2 million based on a 69% rollback for agricultural property. Current taxable value for the 8 non-farm residential properties is approximately $844,000 based on a 48.5% rollback for residential property and assuming homestead credit for each dwelling. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area A-2 is approximately $55,000.

MEDIUM PRIORITY GROWTH AREAS

Four areas have been identified as medium priority growth areas that should be considered for annexation to the city as growth continues. Such annexation would provide for continued growth, provide additional basis for street improvement projects and protect vital transportation corridors that have been identified as parkways on the Major Streets Plan.

- ***Area B-1.*** Growth area B-1 is located north of Indianola on the west side of US 65/69. This area is approximately 417 acres in size and a portion of the area fronts onto the highway. The area is bisected by Hayes Street and Country Club Road. Future Land Use includes office park at the south east corner, south of Hayes as well as high/mixed residential just west of the existing highway commercial area and north of the future office park. The remainder of the area is low density residential. The area is desirable for growth due to its proximity to US Hwy 65/69, completing annexation of this stretch of the highway. It will become more desirable in the future, once Hoover Street is constructed and development to the south has begun.

  Sanitary Sewer Service: The east half of AreaBA-1 is located in the N. 65/69 Service Area and may be served by gravity; flows will be carried to the N. 65/69 lift station for transporting to the plant through the Northeast Service Area. The west half of this area drains to the northeast toward an unnamed tributary of Plug Creek. Flows from this area will need to be pumped to the northeast Service Area before gravity draining to the North Plant.

IMU Service: Area B-1is located entirely within IMU's water service area. There is an existing water main along Hayes/125th/Harding however this main does not appear to be of sufficient size to provide capacity and pressure for fire flows and development purposes and would need to be replaced. A new water main would be needed along Country Club Road, between Hoover and Hayes. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

Street & Storm Sewer Improvements: Street improvement projects are identified as follows:

Hoover Street	from US Hwy 65/69 east to corporate limits 3100 LF; $2,350,000
Hoover Street	from corporate limits to Area A-2 3100 LF; $4,253,000

Revenue: Area B-1 is primarily classified as agricultural, with only one no-farm dwelling. Current taxable valuation is approximately $ million based on a 69% rollback for agricultural property. Current taxable value for the residential property is approximately $85,000 based on a 48.5% rollback and assuming homestead credit. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area B-1 is approximately $8,400.

- ***Area B-2.*** Located just beyond the northeast corner of the city, this area is approximately 783 acres in size. The area fronts onto the future parkway, although current access is only available from 150th Avenue. Future Land Use includes light and heavy industrial uses south of the parkway, with high/mixed residential to the north and west of the industrial area. The north half of the area is low density residential. The area is desirable for growth primarily because it is an important component of the future parkway corridor which will provide access to the industrial park and help encourage its development.

  Sanitary Sewer Service: Area B-2 is located northeast of the Quail Meadows service area. A portion of this area lies inside that service area and, if developable, it can gravity drain to the Q.M. lift station. The remainder of this area drains either to Plug Run or to smaller creeks flowing to the north. This area will need to be served by one or more lift stations that discharge into the Northeast Service Area before draining to the North Plant. As an alternative, this area could be pumped northwesterly to the future Water Pollution Control Facility.

  IMU Service: This growth area lies wholly outside IMU's current service area so the City will need to purchase service rights to this area from Warren Water District. Water mains will need to be brought into this expanded service area from Hillcrest Avenue by extending a new main along 143rd Street. New water mains will need to be extended

from US 65/69 along the parkway and connecting the area A-2 water main along 150th Avenue, thereby completing a loop back to the Hillcrest Ave water main IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

Street & Storm Sewer Improvements: Street improvement projects are identified as follows:

Iowa Avenue	through Area B-2.	
	2000 LF;	$1,152,000

Revenue: Much of Area B-2 is classified as agricultural; however there are currently five non-farm dwellings in this area. Current taxable valuation is approximately $0.81 million based on a 69% rollback for agricultural property. Current taxable value for the 5 residential properties is approximately $601,200 based on a 48.5% rollback for residential property and assuming homestead credit for each dwelling. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area B-2 is approximately $ 16,000.

- ***Area B-3.*** Located near the southwest corner of Indianola, this area fronts on IA Hwy 92 and encompasses land on both the north and south sides of that highway. Area B-3 includes approximately 403 acres of land. Future Land Use along the highway is mixed use and medium density residential. Areas farther from the highway are designated as low density residential. The area is desirable due to its ease of access and the variety of development options available for commercial and multi-family residential uses.

  Sanitary Sewer Service: The portion of Area B-3 located south of IA Hwy 92 drains to the south and could potentially be served by upgrading and expanding the Wesley Lift Station to accommodate this additional flows. The portion of Area B-3 located north of IA Hwy 92 drains to the north. With appropriate design, particularly if no basement service is required, this area may drain to the Northeast Service Area with little or no pumping.

  IMU Service: Growth Area B-3 is located outside IMU's current service area so the City will need to purchase service rights to this area from Warren Water District. Water mains will need to be brought into this expanded service area by extending the IA Hwy 92 to the west. A new water main will need to be extended along R-63 from IA Hwy 92 as part of the water main looping system. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

  Street & Storm Sewer Improvements: No special street improvement projects are identified.

Revenue: Nearly all of the land in Area B-3 is classified as agricultural, with the exception of property owned by the City of Indianola and three non-farm dwellings. There are also two commercial buildings in this area. Current taxable valuation is approximately $ 1.12 million based on a 69% rollback for agricultural property. Current taxable value for the residential properties is approximately $235,300 based on a 48.5% rollback for residential property and homestead credit. Current taxable value for the commercial properties, based on full value, is approximately $416,100. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area B-3 is approximately $20,000.

- ***Area B-4.*** Area B-4 is located on Indianola's west side. This area comprises approximately 705 acres and fronts on R-63. The area is bisected by Inwood Street which will be realigned to connect to Iowa Avenue in the future. Future Land Use is primarily low density residential and park, with some mixed residential on the south side of the area, closer to IA 92. The area is desirable for residential development purposes due to its ease of access to R-63, but will become more appealing one Inwood realignment is completed.

  Sanitary Sewer Service: The portion of this area lying east of R-63 is located in the Northwest Service Area, so that area is serviceable by gravity sewers. The area lying west of R-63 will require pumping.

  IMU Service: This area is also located entirely outside IMU's current service area so water rights will need to be purchased. The area can be served by constructing a new main along R-63, connecting to both the Area A-1 water main and the B-3 water main running along that same street. This will complete a large western loop across the city. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

  Street & Storm Sewer Improvements: No special street improvement projects are identified.

  Revenue: While much of Area B-1 is classified as agricultural, this area also includes 8 residential dwellings and one commercial building. Current taxable valuation is approximately $1.09 million based on a 69% rollback for agricultural property. Current taxable value for the residential properties is approximately $1.03 million based on a 48.5% rollback and assuming homestead credit for each. Current taxable value for the commercial properties, based on full value, is approximately $264,100. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area B-4 is approximately $26,900.

PRIORITY GROWTH AREAS

Six areas have been identified as priority growth areas that may be considered for annexation to the city before the 2030 planning horizon. While these annexation areas are a lower priority, each of them would provide for continued growth during the planning period.

- ***Area C-1.*** Encompassing approximately 1,479 acres, Area C-1 is the largest defined future growth area. This area is located north of the city, along US 65/69, fronting on both the east and west side of the highway. Future Land Use on the highway frontage includes mixed/high residential with a commercial node at the Geneva Street intersection. The remainder of the area is low/medium density residential. The area is desirable for residential development due to its ease of access, its location on the desirable north side of the city, and the terrain and woodlands.

  Sanitary Sewer Service: All of Area C-1 is located north of the North Plant. This area will need to be served by pumping flows to the North Plant or the Future Water Pollution Control Plant.

  IMU Service: The southern portion of this growth area is located in IMU's water service area and can be served by extension of the Area B-1 water main along Country Club Road. In addition, the water main along US 65/69 should be extended north as part of the water main looping system. This main will then connect to the Country Club Road main as this area develops. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

  Street & Storm Sewer Improvements: No special street improvement projects are identified.

  Revenue: Given its accessible location, area C-1 has seven commercial buildings and a substantial number of non-farm dwellings in addition to the agricultural properties. Current taxable valuation of the agricultural uses is approximately $2.40 million based on a 69% rollback. Current taxable value for the 28 residential properties is approximately $3.75 million based on a 48.5% rollback for residential and including homestead credit. Current taxable value for the commercial properties is approximately $780,200 based on full value. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area C-1 is approximately $78,400.

- ***Area C-2.*** This approximately 562 acres area is located north of area A-1. The area fronts onto North Y Street. Future Land Use is low density residential. The area is desirable for residential development purposes due to the woodlands and terrain, but will be more desirable once the adjoining A-1 and B-1 areas have developed.

Sanitary Sewer Service: Area C-2 is located north of the North Plant. This area will be serviceable by gravity sewers once the Future Water Pollution Control Facility is constructed.

IMU Service: The eastern portion of this growth area is located in IMU's water service area and can be served by extension of the North Y Street water main that was installed with Area A-1 development. The area can also be served by extension of the Hayes Street water main installed with Area B-1 development. These water mains will eventually form a loop connection once Hayes Street is paved. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

Street & Storm Sewer Improvements: No special street improvement projects are identified.

Revenue: Nearly all of Area C-2 is classified as agricultural and its current taxable valuation is approximately $693,500 on based on a 69% rollback. This area also has one commercial building, having a taxable value of $18,500. Current taxable value for the 3 non-farm swellings and 1 vacant residential parcel is approximately $332,200 based on a 48.5% rollback for residential property and assuming homestead credit for the 3 dwellings. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for AreaC-2 is approximately $11,700.

- ***Area C-3.*** Located east of Indianola along 150th Avenue north of IA Hwy 92, this area is approximately 596 acres in size. At its northwest corner, the area encompassed the southeast portion of the future industrial park. Future land use includes medium density residential east and south of the industrial park, with a combination of parkway, park and buffers transitioning between these uses. The southeastern portion of the area is low density residential with a large park. The area is desirable for development purposes because it completes the industrial park. With respect to residential development, it is desirable due to its proximity to the school, Pickard Park, a future park and improved access once the parkway is complete.

  Sanitary Sewer Service: Area C-3 flows to Short Creek and will require pumping to convey flows to either the North Plant or Future Water Pollution Control Facility.

  IMU Service: This area lies outside IMU's current service area so the City will need to purchase service rights before serving. New water mains will need to be constructed along 150th Avenue and Iowa Avenue, connecting to the A-2 water mains along those same streets to form a loop. A water main should also be extended south along 150th Avenue and then west along IA Hwy 92 to connect to the existing water main, thereby completing a large loop around the east side of the city. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears

unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

Street & Storm Sewer Improvements: No special street improvement projects are identified.

Revenue: Nearly half of the parcels in Area C-3 are classified as residential, although the lots are currently vacant. The current taxable value for these 23 residential parcels is approximately $2.29 million based on a 48.5% rollback. Homestead credit may be applied once homes are constructed. This area also includes tax exempt parcels owned by the state, county and college. The taxable valuation of the agricultural properties is approximately $567,700 based on 69% rollback. The area has one commercial building with a current taxable value of $119,200. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area C-3 is approximately $33,648.

- ***Area C-4.*** Located just outside the southeast corner of the city, this large growth area includes approximately 669 acres. The area fronts onto Plainview and is entirely designated for low density residential development. Growth in and around this area is not anticipated in the reasonably near future.

  Sanitary Sewer Service: Area C-4 is located south of the Morlock Service Area and east of the South Plant Service Area. This area drains toward the South River and will require pumping, potentially multiple times, to convey flows to either the existing or future treatment plant.

  IMU Service: The future growth area is located outside IMU's current service area so service rights will need to be purchased from Warren Water District. Water mains will need to be brought into this expanded service area along the eastern extension of West 17th Street and along 150th Avenue. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased so this will be served by MidAmerican Energy.

  Street & Storm Sewer Improvements: No special street improvement projects are identified.

  Revenue: Most of Area B-1 is classified as agricultural with a current taxable valuation of approximately $1.44 million based on a 69% rollback. The ten residential properties are vacant at this time, but have a taxable value of approximately $890,900 based on a 48.5% rollback. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area C-4 is approximately $26,300.

- ***Area C-5.*** Situated just beyond the southwest corner of the City, this area includes approximately 580 acres. The area fronts onto R-63 and includes the future extension of West 17th Street. Future Land Use is low density residential use. The area is desirable for residential development purposes due to its proximity to current new residential development areas.

Sanitary Sewer Service: Area C-5 generally falls with the McCord Service Area so is serviceable by gravity sewers that drain to the McCord lift station. However, the southwestern portion of this area drains to the southwest and may require pumping.

IMU Service: This area is outside IMU's current service area so water rights will need to be purchased. Water mains will need to be brought into this expanded service area along R-63 and South Y Avenue. A water main should also be extended east to the water plant to complete the water main looping system. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

Street & Storm Sewer Improvements: No special street improvement projects are identified.

Revenue: Nearly half the parcels in Area C-5 are classified as residential; however no homes have been constructed on these lots as yet. Current taxable value for these 11 residential properties is approximately $992,000 based on the 48.5% residential rollback. Current taxable valuation for agricultural land is approximately $415,500 based on a 69% rollback for agricultural property. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area C-5 is approximately $15,900.

- ***Area C-6.*** Only approximately 153 acres in size, area C-6 is the smallest designated growth area. This area is located south of the water plant and fronts onto West 17th Avenue. Future Land Use is primarily floodplain and park; however, there is a small area available for low density residential development. The area is not expected to experience growth in the reasonably near future.

  Sanitary Sewer Service: The developable areas in Area C-6 fall within either the McCord Service Area or the South Plant area so the area is serviceable by gravity sewers to one or both of these existing lift stations.

  IMU Service: This area is entirely within IMU's water service area and can be served by extension of the water main along South K Street and looped back to the West 17th Avenue main as development occurs. IMU has the capability to provide electrical service to all areas within their existing service territory, but it appears unlikely that additional service areas can be purchased therefore annexation areas will be served by MidAmerican Energy.

  Street & Storm Sewer Improvements: No special street improvement projects are identified.

  Revenue: Area C-6 is classified entirely as agricultural use by Warren County. Current taxable valuation is approximately $63,800, using a 69% agricultural rollback. Based on a tax rate of $11.30 per $1000 of taxable valuation, annual tax revenue for Area C-6 is only approximately $720.

Chapter 9

Implementation Plan

The eight previous chapters, with their narratives and accompanying maps, are the core of Indianola's Comprehensive Plan. This chapter addresses implementation of the plan by both elected officials, city staff and the community at large.

IMPLEMENTATION

Implementation of a Comprehensive Plan is a process that occurs over time, but is one of the most importance components of the planning document. The following table presents a summary of most of the recommendations of this Comprehensive Plan. These recommendations include various types of efforts, including the following:

- Policies which indicate continuing efforts over a long period to implement the plan. In some cases, policies include specific regulatory or administrative actions.
- Action items which require specific efforts or accomplishments by the community.
- Capital Improvements which require public investments that will implement the features of the plan.

In addition, a time frame has been indicated for implementing each of the recommendations. Short-term indicates implementation should occur within five years, medium-term within five to ten years, and long-term within ten to twenty years. In some cases, the recommendations are on-going over the planning period.

Item	Type	On-going	Short Term	Medium Term	Long Term
Monitor building permits and land consumption to compare actual population growth to projections	A	•			
Conduct a Special Census when warranted, likely midway between the US Census	A	•			
Review new CIRTPA population projections once available	A		•		
Review demographics for 2010 census once available	A		•		
Create and adopt a new Mixed Use Zoning District	P		•		
Create and adopt a new Neighborhood Commercial District	P		•		
Create and adopt a new Office Park Zoning District	P		•		
Create and adopt a new Office/Warehouse Zoning District	P		•		
Establish design criteria for the parkways, including ROW, trees, trail, access control	P		•		
Add buffer requirements between commercial and residential uses	P		•		

Item	Type	On-going	Short Term	Medium Term	Long Term
Pave Hoover St.(US Hwy 65/69 to Country Club Rd, including highway intersection)	CI		•		
Adopt an access management for all existing and future arterial streets	Z		•		
Preserve right-of-way for future streets and parkway as development occurs	P	•			
Acquire and construct parks in designated future areas as neighborhoods develop	CI			•	•
Continue to construct trail segments in conformance with 2008 Trails Master Plan	CI		•	•	•
Expand trail network into growth areas prior to development occurring	CI			•	•
Acquire recreational trail easements as development occurs	P	•			
Consider adoption of a park land dedication ordinance	P		•		
Develop a long-term Capital Improvements Program for park improvements	A	•			
Complete Feasibility Study of South Plant/Morlock service areas	A		•		
Develop sanitary sewer model to analyze pipe capacity	A		•		
Require "Waiver of Separation Distance" 1000' buffer of Wastewater Treatment Plants	P	•			
Consider acquisition of land for buffer around North Plant	P		•		
Construct improvement to North Plant expansion to serve 22,900 population	CI			•	
Plan for further improvement to North Plant or at new site	P				•
Continue to address infiltration and inflow	CI	•			
Construct new lift stations and trunk sewers to serve developing areas	CI	•			
Replace 4" water mains with larger water mains capable of providing fire flows	CI	•			
Purchase additional water utility service territory as development occurs	CI	•			
Install/upgrade water mains in growth areas as needed for capacity and pressure	CI	•			
If possible, negotiate with MidAmerican Energy for purchase of service territory	P			•	

Item		On-going	Short Term	Medium Term	Long Term
Consider expanding fiber optic system to serve residential users	P		•		
Address departmental space needs at the Municipal Building	CI	•	•		
Monitor staffing needs in all departments to maintain quality service as city grows	P	•			
Address information technology need as technology advances and city grows	CI	•			
Follow programs for replacing vehicles and equipment in all departments	CI	•			
Complete a GIS project so response times can be evaluated as development occurs	A		•		
Construct satellite EMS/fire station based upon response time	CI			•	
Update library space needs assessment to ensure needs are met	A			•	
Follow Recommendations of Strategic Plan for Recreation Programs	A	•			
Develop cooperative relationship with YMCA for programming partnerships	P		•		
Maintain cooperative relationship with school and college regarding shared facilities	P	•			
Monitor usage of community rooms and other space demands	A	•			
Encourage variety of land uses and living environments	P	•			
Require new developments to share cost of infrastructure improvements/extensions	P	•			
Direct growth to prioritized growth area and areas efficiently served by sanitary sewers	P	•			
Update Subdivision Regulations	A		•		
Encourage development of vacant and in-fill properties inside current city limits	P	•			
Pave existing streets to serve growth areas and open up areas for development	CI	•			
Consider land use impacts in transportation related decisions	P	•			
Encourage economic development partnerships	P	•			
Require environmentally sensitive design for all new subdivisions	P	•			
Encourage regional detention basins	P	•			

PLAN MAINTENANCE

The scope of Indianola's Comprehensive Plan is both ambitious and long-term. Each of the many action, investment and policy items described in this plan can contribute to the betterment of the community. In order to keep the core elements of this plan moving forward, the city should implement and plan maintenance process which uses the Comprehensive Plan to develop annual improvement programs. In addition, the plan maintenance process should evaluate the plan on a yearly basis in relation to the actual development events of the prior year.


National
Balloon
Museum