Land Use Chapter—Synopsis

The Land Use Chapter contains the community’s vision of land use in Muscatine, where land use should be transformed through future development and redevelopment and where existing land use patterns should be preserved. In order to implement the vision of desired future land use patterns, understanding how and why the current land use pattern has evolved is necessary. For this reason background information regarding the development of Muscatine’s current land use pattern, and analyses of the current land use pattern, zoning districts, and structure of the current zoning ordinance, is included in this chapter.

The second going component and the heart of the Land Use Element is the Future Land Use Plan, the plan is a series of maps that place each parcel within Muscatine within a specific land use category. These maps are intended to provide the framework for continuing development and redevelopment, by providing a guide to the preferred distribution of land uses. The Future Land Use Plan responds to the compatibility of various land use categories and shows how vacant or inappropriately developed land may be best utilized or redeveloped so that Muscatine can achieve the goals contained within the Comprehensive Plan.

The third component of this chapter contains the goals, which are intended to improve the environmental quality of Muscatine, making it a better place to live and do business. The goals were developed through a process of extensive input from the public and community stakeholders.

Specific topics covered in depth in this chapter include:

- Historic Land Use Patterns
- Muscatine Historic Preservation Commission, Historic Districts & Potential Historic Districts
- Overview of Current Zoning Ordinance
  - Residential Zoning
  - Commercial, Industrial, & Agricultural Zoning
  - Special Development and Mixed Use Zoning
  - Community Facility Zoning
  - Flood Hazard Zoning
  - Airport Zoning
- Current Land Use Pattern & Zoning
  - River Center Planning District
  - Western Planning District
- Mulberry Planning District
- South End Planning District
- East Hill Planning District
- North Crescent Planning District
- Island Planning District
- Future Land Use Plan
  - Synopsis
  - Land Use Categories
  - Future Land Use Plan Maps
Historic Land Use Patterns

The original plat of Muscatine is centered on a relatively flat section of land along the river, where downtown Muscatine now stands, and is framed by the surrounding hills included within this rectilinear plat. The development of Muscatine began in the flatter location near the river and grew onto the hills to the east, west, and north. Residential development occurred primarily in these surrounding areas, leaving commercial and industrial development on the more level land near the river. The “island” created by the Muscatine Slough boasted the most fertile soil of the area.

Muscatine’s location on the Mississippi River shaped its future industries, including the first major industries of lumber and pearl buttons. Muscatine developed as an agricultural processing center, supported by the surrounding countryside. Goods were shipped via the river and then also by railroad following its arrival in 1855. The lumber industry began to boom in the 1860s and remained a major industry until the turn of the century. Muscatine ranked second in the state for lumber trade. The lumber barons secured large fortunes. They built grand homes for themselves, were very active in the community, and donated money towards public buildings. The lumber from their businesses built the Victorian, Italianate, Queene Anne, and Craftsman style homes still standing in the historic districts and other areas across the city.

Pearl buttons had been being imported from Europe, but with an American tariff on importing buttons, Johann Boepple saw the opportunity to produce them locally from the mussels in the Mississippi River. He is credited with the beginning of establishing Muscatine as the “Pearl Button Center of the World”. In 1899, Muscatine’s Evening Journal wrote that there were 25 button factories employing 1,200 people who produced 98,000 buttons each week. During the time of prosperity of the pearl button industry, the community grew and several downtown buildings were built, including the Laurel building and the Hotel Muscatine. A new County Courthouse was also built during this time in the same location as the original 1840 and subsequent 1864 Courthouse. A new County jail was built as well as a new City Hall. The button industry began to decline in the 1920s and 1930s due to overfishing of mussels and clams in the Mississippi River and due to the invention of plastic.

Figure 1: 1875 Bird’s Eye View of Downtown Muscatine and West Hill Area
A.T. Andreas' illustrated historical atlas of the State of Iowa. 1875
Shortly before and following World War II, the base of the Muscatine economy began to shift from being based on a single natural resource dependent industry to a diverse industrial economy. Charles H. Lembke and John Knell founded the All-Steel-Equip Company. Charlie Young and C. Maxwell Stanley formed a new partnership, Young & Stanley that would become Stanley Consultants. C. Maxwell Stanley, with Clement T. Hanson and H. Wood Miller began Home-O-Nize making metal kitchen cabinets. They produced olive green metal storage cabinets for the office after WWII, by then changing their name to HON and later to HNI. HNI’s operations now occupy many of the sites formerly occupied by the button industry.

Gage Kent started a small feed plant in 1936 to address the nutritional needs of cattle. His company, Kent Feeds joined up with S.G. Stein III in 1943 to form Grain Processing Corporation. The firm built a grain alcohol manufacturing plant to supply the synthetic rubber program of World War II. Engineer Roy J. Carver’s company, Carver Pump, moved to Muscatine and profited greatly from World War II contracts. Later he received North American rights to the Bandag system of retreading tires.

In 1961 Monsanto opened an ammonia terminal along the Mississippi River downstream of Muscatine, the operations at this evolved into the production of herbicides and grew to become one the largest employers in the area. In 1969, Musco Sports Lighting began operations in Muscatine and has since grown into the leading sports lighting manufacturing company and one of the largest employers in the Muscatine area. A large steel mill now known as SSAB began operations just up river of Muscatine in the Montpelier area in 1997.

This pattern of new industries and companies taking place of those that have faded away have provided Muscatine the employment base to maintain a stable population, something few other cities centered on manufacturing have done. This stability extends to the location of industrial activities, Heniz has been operating in the same location for more than a century, HNI’s large operation centered on Oak Street occupies an area that was vacated by the declining button industry. While scattered disused industrial sites do exist, Muscatine does not have any of the large scale vacated former industrial sites that many of its peer communities do.

While Muscatine has defied national, state, and regional trends and maintained its industrial base largely intact in locations with long established industrial uses, it has very much followed national trends in the location and type of retail establishments. The national trend of a shift from numerous small establishments centered in the downtown to strip malls and big box stores located on the periphery of the community, is observable in Muscatine. Beginning after World War II the location of the retail hub of the Muscatine area has undergone two major shifts. First a shift away from downtown to locations along Park Avenue, followed by a shift to locations along the U.S. 61 Bypass in more recent years.

The construction of the U.S. 61 Bypass in 1986 has a tremendous impact on the land use pattern of the Muscatine area, as detailed throughout this chapter. New development, commercial, industrial, and residential has mostly occurred in close proximity to the bypass, in both incorporated and unincorporated areas, since it was completed. Development was attracted to this area by the newly provided access of the bypass and by the fact that the large and relatively level parcels in the area made larger scale development projects more feasible.
Muscatine Historic Preservation Commission, Historic Districts & Potential Historic Districts

The Muscatine Historic Preservation Commission (MHPC), formed by local ordinance in 2000, consists of five volunteer board members. The purpose of the MHPC is to safeguard the city’s historic, aesthetic, and cultural heritage by preserving sites and districts of historic and cultural significance. In 2002, Sparks Consultants was hired by the MHPC to conduct a “Planning for Preservation Study.” The development of the historic contexts and survey of the downtown commercial district was recommended as the first phase of a comprehensive survey and evaluation program. The study was completed in 2005. The West Hill neighborhood survey was recommended as a future project as well, and it was completed in 2006. Both the downtown commercial district and the West Hill areas were nominated to the National Register of Historic Places as National Historic Districts. Thirteen buildings in Muscatine have been listed on the National Register of Historic Places through other efforts, see Figure 2 on page 5-7 for the location of these building and districts.

The Downtown Commercial Historic District in Muscatine is centered on 2nd Street between Pine Street and Mulberry Street. (Figure 2, on page 5-7) Early settlement focused on this area, which was relatively flat compared with the nearby hilly terrain. This area was initially mixed in use with commercial, industrial, residential, religious, and educational uses com mingled. As the town developed, residential development began to move further from this core area along the Mississippi River. The district represents the original and oldest commercial area of Muscatine. The oldest historic building dates to 1843, with several buildings in the 1850s. Within the district there are 93 structures listed as contributing, buildings, structures, or objects that add to the historical integrity or architectural qualities qualify the area as a historic district, and 18 listed as non-contributing. The district has remained primarily commercial in its composition. Additional industrial/commercial buildings, an early settlement church, and public, civic, and religious buildings are also present. The district retains a sense of cohesion as a historic district.

The West Hill Historic District is located on a hill immediately west of the Downtown Commercial Historic District, leading up to and along the bluff in the west end of the original plat of Muscatine. (Figure 2, on page 5-7) The West Hill Historic District includes excellent examples of residential architecture in Muscatine from 1839 to 1958. The buildings represent a diverse housing stock, including high style and vernacular, large and small, and brick and frame structures. Within the district there are 258 structures listed as contributing, and 67 listed as non-contributing. By 1915, 180 of the 208 extant historic houses had been constructed. The remaining 28 were built from 1916 to 1958, with an additional eight houses built from 1960 to 1995. About two-thirds of the houses have a recognizable style, while the remainder is working or middle class vernacular dwellings. By 1915, the general characteristics of the West Hill Historic District as seen today had been formulated, with only 36 houses (of 216 houses) built in the neighborhood after 1915. While the majority of houses in the West Hill Historic District were constructed as single family dwellings, a number of two-family homes were constructed prior to 1915.

As a result of the “Planning for Preservation Study”, several other areas in the city were identified as future potential historic districts. The study showed that nearly 5,000 residential properties in Muscatine are historic, defined as built at least 50 years ago. In addition to the two already designated historic districts, an additional 16 areas have been identified as having high potential for qualify as historic districts.
Based on the study the MHPC has identified four areas as having the highest likelihood of qualifying as a historic district. They are the Mulberry Ave. corridor, Colver St., Country Club Hills, and the Fair Oaks area. Emphasis should be placed on the Mulberry Avenue Corridor and the Fair Oaks Area. (see Figure 3 on page 5-8 for the location and boundaries of these potential historic districts)

**Fair Oaks**

Fair Oaks is a neighborhood of 130 parcels platted in 1909 and is located directly east of Weed Park, which had been initially developed ten years prior. The overall curvilinear design of Fair Oaks and proximity to the park reflects national design ideals of this period. Fair Oaks represents the most complete embrace of these principles for any subdivision of this period in Muscatine. The Fair Oaks development was included in the first restricted residence district in Muscatine. A petition signed by nearly all the residents of the neighborhood requested the district in order to prevent commercial development in the area. This was the first example of the use of zoning in Muscatine and has contributed to Fair Oaks maintaining much of its initial character and design.

**Mulberry Avenue Corridor**

The Mulberry Avenue corridor is composed of 160 homes, all fronting Mulberry Avenue between Tipton Road and downtown. This corridor was one of the locations that the founders of Muscatine’s current and past businesses built their grand home. It was also where many doctors, bankers, and lawyers with offices downtown built their homes.

**Country Club Hills**

Country Club Hills, a 65 parcel subdivision, was the first post-World War II development constructed in Muscatine (1947). Nearly half the homes in this neighborhood were built by 1950, with nearly all of the remaining houses constructed by 1960. The layout of Country Club Hills stands out from as the first example of the pattern of auto-centric development of the post-WW II era.

**Colver Street**

The 35 existing homes along Colver Street were largely constructed and inhabited by workers at a nearby broom factory. Industrial workers constructed homes in close proximity to their place of employment was a very common pattern of development for much of Muscatine’s history. The homes along Colver Street are among the best preserved examples of this, as this area was the one of the first areas in Muscatine to be zoned (1926) for residential only use.

Goal LU.12 is for increased investment and revitalization within designated historic districts while maintaining the historic character of historic districts. To accomplish these designated historic districts should be placed in a zoning district that is specifically structured to preserves the historical land use pattern of the district. Additionally zoning regulations for designated historic district should include requirements that any new structures or major renovations to existing structures are sensitive to the historic form of building in the designated zoning district. This goal also supports the continued implementation of a abatement program to support the renovation in a manner that preserves their historic character of structures in designated historic districts.
Figure 2: Building Listed on the National Register of Historic Places and Historic Districts
Figure 3: Areas Most Likely to Qualify as a Historic District
Overview of Current Zoning Ordinance

The Zoning Ordinance contained in City Code governs both the use and development of land, The current zoning ordinance largely dates to early 1970’s. The stated intent of the current zoning ordinance is to implement the vision of ideal land use that was set forth in the 1968 Comprehensive Plan. For more than 40 years land use in Muscatine has been governed by regulations structured to implement a 1968 vision of ideal land use in Muscatine.

The City Council has made a top priority of completion a comprehensive review and rewrite of the current zoning ordinance. This will be done to ensure that zoning ordinance is effective tool in implementing the current vision of ideal land. There are two actions necessary for a successful rewrite of the zoning ordinance. The first is an updated vision of what the community wants to become. This comprehensive plan represents that vision. The second things is clear understanding of what the current zoning ordinance was intended to accomplish and how it is structured. The intent of the current zoning ordinance is clearly stated and reads as follows.

- These regulations have been based upon the comprehensive plan for the City of Muscatine, which was adopted by the City of Muscatine. Said comprehensive plan included estimates of population growth; land use surveys; a land use plan; plans for major thoroughfares, other transportation facilities, community facilities, public services, and utilities; and a public works program.

- Need for public services and facilities in both size and location depends upon the character and intensity of land use. Regulation of the use of land is thus fundamental to a coordinated optimum physical development of the community. The land use regulations are intended to be the foundation of the entire process of improvement of the physical environment.

- The regulations are intended to preserve and protect existing property uses and values against adverse or unharmonious adjacent uses.

- The land use regulations divide the area into a number of zoning districts:
  - Because of frequent and costly flooding, some areas should be kept in their natural state and not developed and development in other areas required to include adequate flood proofing. These would be included in a Flood Plain District.
  - The comprehensive plan indicated the need for various land uses such as commerce, residence, industry, transportation, and public uses. These urban uses should be directed into that land area where they may be most efficiently served by public services and facilities, such as sewers, water, schools, parks, public transportation, and the like. Remaining lands should be reserved agricultural and rural uses. Consequently, the regulations include an Agricultural District for agricultural and non-urban land uses.
In the past, residential neighborhoods have deteriorated due to encroachment by isolated commercial and industrial uses. The great majority of our population live in single-family homes which they own. The regulations establish residential districts particularly designed to provide maximum protection for single-family homes.

Other residential districts are established for two family homes, mobile homes, town houses, and for apartments. Density, yard, and parking regulations would insure good living conditions in these areas. Much of present day building is by large projects instead of lot by lot. A Large-Scale Residential District is provided where large-scale projects may be located with approval of the site plan. This introduces an important measure of flexibility into the regulations.

Commercial districts recognize the different types of commercial areas that will be needed by the future growth of the community. There is a zoning district for the neighborhood commercial area, i.e., the grocery store, drugstore complex serving the adjacent residential neighborhoods and for the more widely used commercial areas along major streets and highways. There is a central commercial district for the downtown area and a special "planned district" for commercial development based on a site plan.

For industry there are two districts: a "light" industrial district for manufacturing and related industrial activity, and a "general" industrial district which provides for additional uses with approval under the provision for conditional uses.

A Special Development District has also been furnished to provide the opportunity for imaginative site development with a variety of uses in special areas of the City.

The regulations emphasize the character as well as location and density of the land uses. Special inducements are offered for good design of apartment areas. Landscape planting is required in all front yards and for automobile filling stations, parking lots, and garages. Advertising is carefully controlled.

The regulations are reasonable in relation to existing conditions. Yard dimensions are adjusted to peculiarities of existing lots. Lots that are now too small may be used provided current building setbacks can be maintained. Nonconforming uses are permitted to continue for adequate time periods.

All uses are required to provide their own off-street parking (with a few exceptions). Over a period of years, enforcement of this requirement will enable streets to be used primarily for traffic movement.

Each of the regulations have been designed to work harmoniously with the others with the totality providing that minimum degree of land use control essential to the realization of the optimum urban environment.

The following pages contain an analysis of the structure of zoning ordinance and the results of over forty years of implementation. An understanding of how land use in present day Muscatine has been shaped by the current zoning ordinance is necessary prior creating a new or revised zoning ordinance.
The community vision to be implemented by the revised zoning ordinance is contained within this comprehensive plan. In addition to recommendations regarding specific land uses and specific locations, the comprehensive plan contains recommendations on how the zoning ordinances should be structured in order to be more easily understood, implemented, and enforced. Goals LU.2 and LU.17 call for the zoning ordinance to be revised to accomplish the following:

- The zoning ordinance should be structured in a manner that supports the implementation of the Future Land Use Plan.
- Ensure that land use regulations contained within the zoning ordinance have sufficient flexibility to development to be adapted unique and difficult site conditions.
- Ensure that land use regulations contained within the zoning ordinance have sufficient flexibility to preserve the unique character of individual neighborhoods.
- Promote increased diversity of employment and business opportunities, promote access to education and training, expand entrepreneurial opportunities, and promote the establishment of businesses in locations near existing housing, infrastructure, and transportation.
- Promote developments, buildings, and infrastructure that utilize sustainable design and construction standards and conserve natural resources by reducing waste and pollution through efficient use of land, energy, water, air, and materials.
- Use form based zoning where is it is the most effective tool to implement the goals of the Comprehensive Plan. Form based zoning is a method of land use regulation that places a primary emphasis on building types and dimensions, the visual aspects of the streetscape the physical characteristics of buildings and the relationship of buildings to each other and to the street, with a secondary emphasis on the uses within those buildings.
- Make the zoning code more user-friendly.
- Streamline enumerated uses into broad categories. Clearly define the general uses so that applications can easily be sorted into the appropriate category. Regulate the real items of concern—size, hours, deliveries, and emissions of noise, odor, dust, gas, smoke, or vibration.
- Be structured so as not to discourage investment in nonconforming structures where they are not actively detracting from the surrounding neighborhood.
- Ensure that infill and redevelopment projects are well designed and compatible with surrounding uses and building types and of a type, scale, orientation, and design that maintains or improves the character, aesthetic quality, and livability of the neighborhood.
- Make use of tables and illustrations in the revised zoning ordinance to make clear the different allowed uses, parking, signage, and any form standards between various districts.
- Be made fully functional online, including linked cross-references and the ability to look up zoning regulations by address.
- The City of Muscatine Zoning Ordinance and all other land use regulations will further community appearance goals and to implement the community image establish in community image/appearance master plan developed to fulfill Goal C.1
Residential Zoning

The City of Muscatine Zoning Ordinance contains seven zoning districts primarily structured for residential land uses. Six of these residential zoning districts, the R-1, R-2, R-3, R-4, R-5, R-6 districts, are prescriptive meaning that density, lot size, set back, and height requirements are specifically set for each district. As illustrated in Figure 5 the R-1 through R-6 districts functions as a progressive series where each successive district allows for greater residential density and intensity by allowing for smaller lots and denser styles of residential development. In the seventh residential zoning district, the Large Scale Residential Development District (R-L) these requirements are contained in a development plan which must submitted and approved for any new development. Table 4 on page 5-33 contains a detailed comparison of permitted residential uses and development standards for all zoning districts.

Three zoning districts are specifically intended on single residential development. The R-1, R-2, R-3 zoning districts do not permit multi-family residential structure or duplexes, aside for allowing for duplexes in some very specific and limited situations, see Table 4 on page 5-33 for details on this exception. Required lot size and frontage are what differentiate these three districts. The minimum required lot size in the R-1 district is double that of the R-2 district, and nearly triple that of the R-3 district.

Of the over 9,300 parcels of within the City of Muscatine over 62% of them are located in one of these three single family residential zoning districts. Over 80% of parcels within the City of Muscatine classified as residential by the Muscatine County Assessor’s Office are located in one of these single family residential districts. The R-3 district is the most widespread single family residential district, 5,278 parcels, 56.3% of all parcels within the City Muscatine are located within the R-3 district. Because such a large portion of the City of Muscatine is contained within the single family residential district regulations and requirements that apply to these districts significantly impact the character of the City of Muscatine.
The R-4 District, two-family residential, in addition to permitting single family homes permits various forms of two-family dwellings, and mobile home parks. The R-4 zoning district allows for a greater residential density than the single family residential districts by permitting two-family dwellings and allowing for single family dwellings to be constructed on smaller lots. The R-4 zoning district is second most utilized residential zoning district when, with 9.2% of residually zoned parcels falling within the R-4 District, Table 1 on page 5-18.

The R-4 District is the only zoning district that permits mobile home parks and mobile homes. The R-4 is effectively two distinct zoning district merged into one. The requirements pertaining to and the process for approving mobile home parks are entirely different than any other permitted or conditional use allowed within the R-4 district. Mobile home parks are the only type of land use within the R-4 district which require an approved development plan. Mobile home parks also have specific project size, lot size, set back, allowed accessory building size, and required off street parking that are different than those for other uses within in the R-4 district.

The Zoning Ordnance contains two zoning districts are specifically designed for multi-family residential development, the R-5, and R-6, districts. Like the R-4 district the multi-family residential districts permit single and two-family residential dwellings, but they also permit multi-family residential dwellings such as apartment buildings as a permitted land. The major difference between the R-5 and R-6 districts is that the R-5 district does not allow for projects larger than three acres and the R-6 district does not allow for projects smaller than three acres, see Table 4 on page 5-33. The R-5 and R-6 district also differ in that the R-5 district permits a greater residential for single, two, and multi family dwellings.

The seventh residential zoning district, the Large Scale Residential Development District (R-L) operates in a significantly different manner than all or residential zoning districts. The R-L district does not have specific density, lot size, set back, or height requirements. Instead the R-L district allows for a developer of a project of greater than five acres greater design flexibility by allowing for density, lot size, set back, and height requirements to be set in development plan. This district is intended to be used for residential development at the subdivision scale and not for single lot development. The individual development plans which contain the development standards are created by the developer of a project and then approved by the City Council using criteria contained within the zoning ordinance and the Comprehensive Plan.
Over 96% of residential parcels are located in either the R-1, R-2, R-3, R-4, R-5, or R-6 zoning districts, however only 39.2% of building permits for single or two family homes and no building permits for multi-family residential structures have been issued since 2000 have been issued in these zoning district. Over 60% of new single or two family homes and 100% of multi-family residential structures were constructed in areas within the R-L or S-3 Large Scale Mixed Use zoning districts, as illustrated in Figure 8. The defining characteristic of the R-L and S-3 Districts is the flexibility they allow in density, lot size, set back, and height requirements through the development plan process.

However, these two districts do have a minimum project size of 5 acres in the R-L district and 80 acres in the S-3 district. There is no residentially focused district that allows for this kind of flexibility for projects smaller than 5 acres, which means the flexibility they offer is only available for larger development project.

The demonstrated strong demand for the more flexible zoning districts by those constructing new dwellings makes it logical to examine if extending such flexibility to in-fill development and reinvestment in existing neighborhoods. A zoning district with flexibility of the development plan process that is geared to and can be applied to areas smaller than 5 acres would be a new and potentially very effective tool for enabling and promoting in-fill development and reinvestment in existing neighborhoods.

Figure 8: Comparison of the Zoning Districts that Parcels with a Residential Use and Where Residential Building Permits Have Been Issued
The R-1 through R-6 district all require parcels to be of a minimum. Of the 2,292 parcels in one these districts, over 32.5% do not meet this minimum parcel size requirement, see Figure 9. The location of these parcels not meeting minimum parcel size requirement of their zoning district are depicted in Figure 10 on page 5-17. As this map illustrates these parcels are clustered, there are numerous block and subdivisions in which nearly every parcel does not meet the minimum parcel size requirement. As Figure 10 also illustrates most of these parcels are located in the older parts of Muscatine and nearly all homes located on these parcels predate the adoption of a zoning ordinance and are considered to be legal non-conforming uses. Further statistics on compliance with minimum parcel size standards can be found in Table 1 on page 5-18.

Ideally non-conforming land uses should not be heavily concentrated and there should be a realistic prospect of non-conforming uses transitioning into conforming uses. There are large areas where this is currently not the case. Currently this is not the case in regards to residentially zoned parcels in Muscatine. In the R-2, R-4, and R-5 districts approximately 50% of parcels are smaller than minimum required size, an extremely high proportion of non-conforming parcels. Many block and subdivision where nearly all parcels do not meet minimum parcel size requirement, see Figure 10.

A zoning district should reflect the community’s vision for desired land use in areas which the district is applied and contain the regulatory provisions that will over time bring land use in that area more closely in line with the vision for ideal land use. Areas with a very high proportion of non-conforming parcels are indication that a zoning district is not functioning properly. This type of situation is either an indication that a zoning district is not causing the desired change in land use or that its regulatory provision do not reflect the actual desired land use of the area. In areas where the desired changes in land use are occurring the underlying zoning districts need to be examined to determine how the zoning ordinance can be better utilized to bring about this change. Scattered nonconforming parcels are not harmful, however blocks and entire neighborhoods composed nonconforming parcels, in which no change is land use desired, is bad planning practice. Land use regulations should be as simple and easy to understand as possible. Allowing for desired use through the backdoor of a nonconforming clause makes it more confusing for a property owner to understand their property rights and more confusing for the community to understand the desired land use of certain blocks and neighborhoods.

![Figure 9: Percentage of Parcel Below the Minimum Parcel Size](image)
Goal LU.5 is for residential land use to occur in a manner that enhances the quality of life in Muscatine. Specifically this goal calls for changes to the zoning ordinance that accomplishes the following:

- Protect the character of single-family residential neighborhoods by focusing higher intensity land uses in designated centers and corridors.
- Unless indicated otherwise elsewhere in the Comprehensive Plan maintain the general character of existing residential areas.
- Encourage diversity in the types of available housing, support the rehabilitation of existing housing, and promote the location of housing near public transportation and employment centers.
- Encourage residential development and redevelopment to occur in a manner that helps implement the goal of members of the community should having the opportunity to travel safely to their home to their in-town destination by foot or bike and for children should be able walk or bike to their school safely.
- Require at least two off street parking sports for each dwelling unit.
- Balance the preferences of residents with City-wide planning goals and priorities when determining the acceptability of changes to parcels of land in or adjacent to existing residential development.
- Allow no further conversion of existing single family homes into duplexes or multi-family dwellings in areas designated as Mixed Density Residential in the Future Land Use Plan.
- Recognize existing duplexes or multi-family dwellings in areas designated as Mixed Density Residential in the Future Land Use Plan are recognized as integral to the character of these area, and allow by right existing duplexes and multi-family dwellings.
- Adopt regulations and design standards to protect the desired street and block patterns, land use patterns, and development characteristics of the City’s established neighborhoods, such as building size and height, building setbacks and placement on the lot, density, parking, landscaping, and streetscape improvements.
- Set lot sizes and setbacks dating from each neighborhood’s period of initial development as the neighborhood standard in residential areas.
Figure 10: Location of Residentially Zoned Parcels not Meeting Minimum Parcel Size Requirements
## City of Muscatine, Iowa—Comprehensive Plan
### Chapter 5: Land Use

#### Residential Zoning Districts

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#### Minimum Parcel Size Statistics

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<td>54</td>
<td>1,084</td>
<td>82</td>
</tr>
<tr>
<td>% of Parcels</td>
<td>42.1%</td>
<td>26.6%</td>
<td>20.5%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

#### Parcels With a Residential Land Use

<table>
<thead>
<tr>
<th>Parcels With a Residential Land Use</th>
<th># of Parcels</th>
<th>Acreage (1)</th>
<th>% of Parcels</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Parcels</td>
<td>300</td>
<td>177</td>
<td>5,059</td>
<td>833</td>
<td>229</td>
</tr>
<tr>
<td>Acreage (1)</td>
<td>349</td>
<td>92</td>
<td>1,556</td>
<td>121</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of Zoning District Total by:</th>
<th># of Parcels</th>
<th>% of Parcels</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Parcels</td>
<td>89.0%</td>
<td>87.2%</td>
<td>95.9%</td>
<td>97.0%</td>
</tr>
<tr>
<td>Acreage (1)</td>
<td>49.2%</td>
<td>44.8%</td>
<td>56.4%</td>
<td>67.9%</td>
</tr>
</tbody>
</table>

#### Parcels With a Community Facility Land Use(4)

<table>
<thead>
<tr>
<th>Parcels With a Community Facility Land Use</th>
<th># of Parcels</th>
<th>Acreage (1)</th>
<th>% of Parcels</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Parcels</td>
<td>18</td>
<td>12</td>
<td>167</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Acreage (1)</td>
<td>141.6</td>
<td>96.3</td>
<td>683.2</td>
<td>27.3</td>
<td>3.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of Zoning District Total by:</th>
<th># of Parcels</th>
<th>% of Parcels</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Parcels</td>
<td>5.3%</td>
<td>5.9%</td>
<td>3.2%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Acreage (1)</td>
<td>20.0%</td>
<td>46.7%</td>
<td>24.8%</td>
<td>15.3%</td>
</tr>
</tbody>
</table>

#### Parcels With a Commercial, Industrial, or Railroad Land Use

<table>
<thead>
<tr>
<th>Parcels With a Commercial or Industrial Land Use</th>
<th># of Parcels</th>
<th>Acreage (1)</th>
<th>% of Parcels</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Parcels</td>
<td>1</td>
<td>13</td>
<td>33</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Acreage (1)</td>
<td>3.5</td>
<td>16.3</td>
<td>178.00</td>
<td>22.7</td>
<td>32.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of Zoning District Total by:</th>
<th># of Parcels</th>
<th>% of Parcels</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Parcels</td>
<td>0.3%</td>
<td>6.4%</td>
<td>0.6%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Acreage (1)</td>
<td>0.5%</td>
<td>7.9%</td>
<td>6.5%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

#### Parcels With an Agricultural Land Use(5)

<table>
<thead>
<tr>
<th>Parcels With an Agricultural Land Use</th>
<th># of Parcels</th>
<th>Acreage (1)</th>
<th>% of Parcels</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Parcels</td>
<td>18</td>
<td>1</td>
<td>19</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Acreage (1)</td>
<td>215.5</td>
<td>1.2</td>
<td>341</td>
<td>7.2</td>
<td>2.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of Zoning District Total by:</th>
<th># of Parcels</th>
<th>% of Parcels</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Parcels</td>
<td>5.3%</td>
<td>0.5%</td>
<td>0.4%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Acreage (1)</td>
<td>30.4%</td>
<td>0.6%</td>
<td>12.4%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

#### Building Permits Issued 2000 through 2010

<table>
<thead>
<tr>
<th>Single and Two Family Residences</th>
<th># of Permits</th>
<th>% of Permits (2)</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Permits</td>
<td>0</td>
<td>11</td>
<td>61</td>
<td>14</td>
</tr>
<tr>
<td>% of Permits (2)</td>
<td>0.0%</td>
<td>4.3%</td>
<td>23.9%</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multi-Family Residential Structures</th>
<th># of Permits</th>
<th>% of Permits (2)</th>
<th>Acreage (1)</th>
<th>% of Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Permits</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>% of Permits (2)</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

#### Variances (1996 through 2010)

<table>
<thead>
<tr>
<th>Variances</th>
<th># by District</th>
<th>% of Total (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single and Two Family Residences</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Multi-Family Residential Structures</td>
<td>10.7%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

1—Excludes areas located outside of parcels such as right-of-way.
2—Citywide.
3—Within zoning district.
5—Also includes larger wooded parcel classified as agricultural land use by the Muscatine County Assessor.
Commercial, Industrial, & Agricultural Zoning

City of Muscatine Zoning Ordinance contains five zoning districts that are primarily focused on commercial and industrial land uses. Three of them (C-1, M-1, and M-2) are arranged in series where each successive district allows for more intensive uses and is more restrictive in residential uses allowed. The C-2 district is a mixed use district designed to support the mix of commercial, retail, and institutional land use found in the Central Business District. The C-3 District is intended to allow for the greater flexibility in the development of retail, office, and professional services, by allowing for density, lot size, set back, and height requirements to be set in development plan.

Insuring that there is an adequate supply of land that is readily available for commercial or industrial development is Goal LU.8. Land zoned for future commercial or industrial developments should be located so that it is attractive to industrial or commercial development, compatible with surrounding current and planned land uses, and have the necessary infrastructure. Any new development that includes a new regulated pollution point sources should be adequate distance from planned or existing residential development. Maintaining an adequate supply of useable industrial and commercial land in appropriate locations will be a consideration in the preparation of a revised zoning ordinance.

The Neighborhood and General Commercial (C-1) zoning district permits nearly all retail, office, or personal services uses. The exception being several specific uses such as automobile service station, hotels, drive-establishments, kennels, etc. that have a greater potential to adversely impact the surrounding areas and thus are required to obtain a conditional use permit in order to ensure that they are sited in an appropriate location. The C-1 district also establishes a maximum structural height of 45’ and yard size requirements.

Much of the older commercial developments in Muscatine outside the Central Business District are in areas zoned C-1. Commercial development in the C-1 district has largely occurred as either corridors of commercial along a major street or as a small node of commercial development in an otherwise noncommercial area.

The largest commercial corridor with a C-1 zoning is located along both sides of Park Avenue from Colorado Street to the Park Avenue/Highway 38 intersection north of the U.S. 61 Bypass. The Muscatine Mall which is located in this area was originally developed under the C-1 zoning, but it was recently rezoned S-1 Special Development to help facilitate its redevelopment. Another corridor of commercial use with a C-1 zoning exists along Grandview Avenue and Mississippi Drive, however unlike on Park Avenue north of Colorado Street there is significant of residential land use occurring in this corridor. The remaining areas with a C-1 zoning are small nodes of commercial development made of smaller scale commercial uses. The area surrounding the intersection of 9th Street and Cyprus Avenue being the best example of this.
The Central Commercial (C-2) zoning district is only found in the Central Business District. This district is structured to provide a regulatory framework to support the continuation of the historic mix of land use and building style found in the Central Business District. Uses allowed in the C-2 district are consistent the types of uses established in the Central Business District. These mixes of uses were established long before the passage of the City of Muscatine’s first zoning ordinance. Generally this district allows for nearly all types of retail establishments, personal service establishments, general services establishment, offices, and upper floor residences. The required setbacks also reflect the historic development pattern of the Central Business District as there no yard depth requirements or minimum frontage in the C-2 zoning district. No off street parking is required for uses in the C-2 district. The C-2 district is a truly a mixed use district with a significant percentage of structures located in the C-2 district containing both commercial and residential uses.

The Planned Commercial (C-3) zoning district operates in a significantly different manner than the C-1 and C-2 zoning districts. The C-3 district does not have specific density, lot size, set back, or height requirements. Instead the C-3 district allows for a developer of a project of greater design flexibility by allowing for density, lot size, set back, and height requirements to be set in development plan. This development plan is created by the developer and then approved by the City Council. Uses permitted under the C-3 district are limited to the retail sale of merchandise; services, banks, and financial institutions; restaurants; general and professional offices; service stations; recreation, except outdoor theaters; parking areas; and other similar facilities.

There are only two areas zoned C-3 in Muscatine, the area at the Cedar and Houser intersection, which included such things as Fareway, the Post Office, the Muscatine Power and Water offices; another C-3 zoned area contains the hopping center anchored by Hy-Vee at the intersection of Second Avenue and Cleveland Street. The limited number of uses allowed under the C-3 district is likely the reason that this zoning district has not seen wide spread use. The S-3 Mixed Use district is very similar to the C-3 district, however it allows for a much broader ranges of potential uses, barring only some of the more intensive industrial uses that are permitted only in the M-2 General Industry district. This greater degree of flexibility in regards to allowed uses is likely the reason that all the more recent constructed commercial developments have opted for a S-3 zoning instead of C-3. With the existence of the S-3 district the existence of the C-3 district as separate zoning district serves no practical purpose. It’s one distinguishing feature, the limitation of land use to retail and office uses, can be accomplished in the S-3 district through the development plan process.

Goal LU.6 is for commercial land use to occur in a manner that enhances the quality of life in Muscatine. Specifically this goal calls for changes the commercial zoning districts that accomplish the following:

- Allow for scattered commercial activity in residential areas where historic precedent exists.
- Design standards for larger commercial developments
- Enhance vitality of downtown commercial development
The Light Industrial Zoning (M-1) district in addition to allowing for all the commercial uses allowed for in the C-1, C-2, and C-3 district also allows for manufacturing, warehousing and distribution; uses that have few outside impacts, and can be located in relative proximity to non-industrial uses. There are two major types of land use that are not permitted in the M-1 district, residential (aside from located on the upper floors of a commercial building) and certain intense industrial uses that have potential adversely impact surrounding areas.

The M-2 district is the most permissive zoning district, it allows for all types of commercial and industrial land use aside from sixteen specifically identified types of land uses require a conditional use permit because they have the potential to adversely impact nearby areas. Use that require a conditional use permit include such things as bulk manufacturing; auto salvage and wrecking operations; cement, lime, gypsum, or other similar manufacture; distillation, manufacture, or refining of bones, coal, or tar asphalt; fertilizer manufacture; packing plant, slaughter house, or stockyard; etc, see Table 5 on page 5-35.

The largest areas of M-2 zoning occurs in the area located between U.S. 61 and the Mississippi River downriver of Musser park. This industrial land use is supported by the twelve river barge terminals located along this stretch of the river and the rail access provided by the Canadian Pacific Railroad mainline and numerous spurs located in this area. The unincorporated portion of this area zoned I-2, Muscatine County’s most intensive industrial zoning classification. Some of the largest establishments in the planning district are: Grain Processing Corp., the Muscatine Power & Water Generating Station, Bridgestone-Bandag, and Union Tank Car Company. Another significant area of M-3 zoning extends along Mad Creek from the Mississippi River to Clay Street, HNI, Heniz, and City of Muscatine Public Works yard are located in this area. The other area of M-2 Zoning is located at University Drive and U.S. 61 and is located of a large Allsteel facility.

Goal LU.7 is for industrial land use to occur in a manner that enhances the quality of life in Muscatine. Specifically this goal calls for changes the commercial zoning districts that accomplish the following:

- Existing industrial development and areas designated for future development will be protected from encroachment by future residential development.
- Undeveloped land zoned for industrial development should be located so that it is attractive to development, compatible with surrounding current and planned land uses, and is an adequate distance from planned or existing residential development.
- New industrial developments will be located so that any emissions of noise, odor, dust, gas, smoke, or vibration are not a nuisance to any planned or existing residually zoned areas.
The Agricultural (AG) zoning district is focused on maintaining land uses compatible with continued agricultural land use. Permissive and conditional uses that are allowed in addition to agricultural uses are either compatible or complimentary to agriculture and include but are not limited to uses such as greenhouses, road side produce stands, homes on lots of at least two acres, sale of farm supplies, animal clinic, kennels, recreational facilities, etc. The keeping of livestock in excesses of ten head requires a lot area of twenty acres, any feedlot or associated structure must at least 200 feet from any residential district.

The two largest areas with an AG zoning are located south of the Transfer Station, and around the Muscatine Municipal Airport, there are additional smaller areas of AG zoning scattered along the U.S. 61 Bypass between Mad Creek and Solomon Avenue. There are many other areas within the City of Muscatine where agricultural land use is currently occurring, but in anticipation of future development is occurring in district other than the Agricultural District.

Minimizing the amount of new development occurring on land currently being farmed is Goal LU.10. To implement this goal City of Muscatine polices, regulations, services, and infrastructure improvements should not support the development of actively farmed land designated as Agriculture in the Future Land Use Plan. Additionally any necessary revisions to the zoning ordinance or maps to support this goal will be made.
## Commercial, Industrial, and Agriculture Zoning Districts

<table>
<thead>
<tr>
<th>All Parcels Within a Zoning District</th>
<th>C-1</th>
<th>C-2</th>
<th>C-3</th>
<th>M-1</th>
<th>M-2</th>
<th>AG</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Parcels</td>
<td>292.0</td>
<td>174.0</td>
<td>27.0</td>
<td>447.0</td>
<td>325.0</td>
<td>116.0</td>
<td>1,381.0</td>
</tr>
<tr>
<td>Acreage</td>
<td>248.0</td>
<td>40.1</td>
<td>45.1</td>
<td>1,172.0</td>
<td>1,774.0</td>
<td>1,057.2</td>
<td>4,336.4</td>
</tr>
<tr>
<td>Percentage of the Citywide Total by:</td>
<td># of Parcels</td>
<td>3.1%</td>
<td>1.9%</td>
<td>0.3%</td>
<td>4.8%</td>
<td>3.5%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Acreage</td>
<td>2.6%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>12.1%</td>
<td>18.3%</td>
<td>10.9%</td>
<td>44.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All Parcels With a Residential Land Use(6)</th>
<th># of Parcels</th>
<th>94</th>
<th>8</th>
<th>0</th>
<th>195</th>
<th>37</th>
<th>54</th>
<th>388.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreage</td>
<td>15</td>
<td>2</td>
<td>0</td>
<td>37.5</td>
<td>56.1</td>
<td>49.1</td>
<td>159.6</td>
<td></td>
</tr>
<tr>
<td>Percentage of the District Total by:</td>
<td># of Parcels</td>
<td>32.2%</td>
<td>4.6%</td>
<td>0.0%</td>
<td>43.6%</td>
<td>11.4%</td>
<td>46.6%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Acreage</td>
<td>6.2%</td>
<td>3.7%</td>
<td>0.0%</td>
<td>3.2%</td>
<td>3.2%</td>
<td>4.6%</td>
<td>3.7%</td>
<td></td>
</tr>
<tr>
<td>Parcels Containing Duplexes</td>
<td># of Parcels(3)</td>
<td>10</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>17.0</td>
</tr>
<tr>
<td>% of Parcels</td>
<td>3.4%</td>
<td>2.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.9%</td>
<td>0.0%</td>
<td>0.1%</td>
<td></td>
</tr>
<tr>
<td>Parcels Containing Multi-Family Residences</td>
<td># of Parcels(3)</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>10.0</td>
</tr>
<tr>
<td>% of Parcels</td>
<td>1.7%</td>
<td>2.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.3%</td>
<td>0.0%</td>
<td>0.7%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parcels With a Community Facility Land Use(4)</th>
<th># of Parcels</th>
<th>30</th>
<th>25</th>
<th>2</th>
<th>35</th>
<th>50</th>
<th>22</th>
<th>164.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreage</td>
<td>39.9</td>
<td>14.8</td>
<td>5.1</td>
<td>161.9</td>
<td>153.7</td>
<td>99.0</td>
<td>474.4</td>
<td></td>
</tr>
<tr>
<td>Percentage of the District Total by:</td>
<td># of Parcels</td>
<td>10.3%</td>
<td>14.4%</td>
<td>7.4%</td>
<td>7.8%</td>
<td>15.4%</td>
<td>19.0%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Acreage</td>
<td>16.1%</td>
<td>36.9%</td>
<td>11.3%</td>
<td>13.8%</td>
<td>8.7%</td>
<td>9.4%</td>
<td>10.9%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parcels With a Commercial, Industrial, or Railroad Land Use(6)</th>
<th># of Parcels</th>
<th>165</th>
<th>141</th>
<th>24</th>
<th>191</th>
<th>224</th>
<th>7</th>
<th>752.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreage</td>
<td>180.8</td>
<td>24.1</td>
<td>36.80</td>
<td>442.30</td>
<td>1174.00</td>
<td>21.90</td>
<td>1,879.9</td>
<td></td>
</tr>
<tr>
<td>Percentage of the District Total by:</td>
<td># of Parcels</td>
<td>56.5%</td>
<td>81.0%</td>
<td>88.9%</td>
<td>42.7%</td>
<td>68.9%</td>
<td>6.0%</td>
<td>54.5%</td>
</tr>
<tr>
<td>Acreage</td>
<td>72.9%</td>
<td>60.1%</td>
<td>81.6%</td>
<td>37.7%</td>
<td>66.2%</td>
<td>2.1%</td>
<td>43.4%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parcels With an Agricultural Land Use(5)</th>
<th># of Parcels</th>
<th>3</th>
<th>0</th>
<th>0</th>
<th>28</th>
<th>14</th>
<th>33</th>
<th>78.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreage</td>
<td>11.9</td>
<td>0</td>
<td>0</td>
<td>362.4</td>
<td>389.7</td>
<td>747.5</td>
<td>1,511.5</td>
<td></td>
</tr>
<tr>
<td>Percentage of the District Total by:</td>
<td># of Parcels</td>
<td>1.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>6.3%</td>
<td>4.3%</td>
<td>28.4%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Acreage</td>
<td>4.8%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>30.9%</td>
<td>22.0%</td>
<td>70.7%</td>
<td>34.9%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variances (1996 through 2010)</th>
<th># by District</th>
<th>4</th>
<th>2</th>
<th>0</th>
<th>12</th>
<th>0</th>
<th>4</th>
<th>22.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Total</td>
<td>2.9%</td>
<td>1.4%</td>
<td>0.0%</td>
<td>8.6%</td>
<td>0.0%</td>
<td>2.9%</td>
<td>15.7%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Variances Approved</th>
<th># by District</th>
<th>2</th>
<th>2</th>
<th>0</th>
<th>8</th>
<th>0</th>
<th>4</th>
<th>16.0</th>
</tr>
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<tbody>
<tr>
<td>% by District</td>
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<td>100.0%</td>
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<td>66.7%</td>
<td>N.A.</td>
<td>100.0%</td>
<td>72.7%</td>
<td></td>
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</tbody>
</table>

Table 2: Commercial, Industrial, and Agriculture Zoning District Statistics

1—Excludes areas located outside of parcels such as right-of-way.
2—Citywide.
3—Within zoning district.
5—Also includes larger wooded parcel classified as agricultural land use by the Muscatine County Assessor.
6—Parcels containing a structure that has both commercial and residential uses are classified as commercial in this table.
Special Development and Mixed Use Zoning Districts

The majority of zoning districts within the City of Muscatine Zoning Ordinance is designed to allow only one type of use and is based on uniform development standards for all parcels located within a district. However to promote innovative design and mixed use where appropriate the City of Muscatine Zoning Ordinance contains three zoning districts designed for mixed uses and for development based on approved development based on reviewed and approved development plans rather than predetermined and inflexible development standards, the R-L district, which is based on the development plan process, and the C-2, which allows for a significant amount residential development and is thus more of a mixed use district than a purely commercial one, there are five districts designed for mixed uses and for development based on approved development based on reviewed and approved development plans. However the R-L and C-2 are covered elsewhere in this chapter.

The purpose of the Special Development Zoning District (S-1) this district to provide an opportunity for modern and imaginative architectural design, site arrangement, and City planning for certain special and unusual areas. Within them, there should be a carefully planned combination of residential, commercial, public, and semi-public uses, or of some of these uses, as detailed in Tables 4 through 7 on pages 5-33 through 5-35. Before land is used or a building is erected or used in the Special Development District, a preliminary and a final plan shall be approved by the Planning and Zoning Commission and the City Council for all contiguous property within this District in any one location. Extensive information including topography based on field survey, a drainage plan, and a traffic analysis prepared by a registered engineer skilled in the science of traffic engineering, evidence of unified ownership and control of the area applied for, and evidence of financial capability of the petitioners to carry out the general type of development contemplated for the area, are required to be submitted by the applicant with the initial preliminary plan. There is no minimum parcel or project size for the S-1 district.

Figure 14: Example of Development in the S-1 District
A total of ten parcels across five separate locations have a S-1 zoning. While types of uses allowed in the S-1 zoning district is broad four of the five areas with a S-1 fall into one of two categories; the commercial revitalization of an existing structure, the Muscatine Mall and former Lincoln School, or the development of senior housing, Hershey Manor and Carrington Place.

The Institutional-Office Zoning District (S-2) is a mixed use district that is designed to allow a mixture of single and two family dwellings, non-retail commercial uses, and community facilities, as detailed in Tables 4 through 7 on pages 5-33 through 5-35. Retail use meeting specifically listed criteria are allowed as a conditional use. Permitted uses within the S-2 district do not require a development plan; development standards for things such as required setbacks, building height, and minimum lot size are specified. All but five of the 132 parcels of with a S-2 zoning are located along a narrow corridor running along the southern end of Park Avenue. The mix of land uses allowed under the S-2 designation is reflective of the long established land use pattern of this area. The humane society facility and medical/dental office development on Cedar Street are the other two areas with a S-2 zoning.

The primary purpose of the S-3 Mixed Use Development Zoning District to provide large scale areas in the City within which commercial, light industrial, and residential uses can locate with the assurance of a high permanent level of design quality, extensive site amenity, open space and compatibility with existing land uses. Stringent site planning, aesthetically desirable design, screening standards, buffer strips, sign requirements and other appropriate procedures will be used to achieve the desired results of compatibility with existing uses and protection between future residential and nonresidential land uses.

As the S-3 District will be a unique setting with a wide array of land uses, it requires a site with a minimum size of eighty acres for said designation. Any uses permitted in the Residential Zoning Districts or the M-1 Light Industrial Zoning District are permitted in the S-3 district provided that development shall occur on tracts of a minimum size of 5 acres and an open space buffer 50 feet wide, within which no structure is permitted, is required to separate all nonresidential uses from residential uses.
The S-3 zoning district has function largely as intended and nearly all larger scale developments that have occurred within Muscatine over the past decade have occurred within the S-3 district. A significant amount of new commercial development, most notably in the vicinity of the U.S. 61 Bypass/Mulberry Avenue and U.S. 61/University Drive has occurred in areas within the S-3 zoning district. A very significant portion new residential development has occurred within the S-3 zoning district, despite just 2.6% of all parcels with a residential use being located within the S-3 district over the past decade 31.8% of new single family homes and 56% of new multiple family dwelling have been constructed within the S-3 district.

The widespread use of the S-3 zoning district for new large scale development is strong indicator that there is a demand for mixed use zoning and for the flexibility to innovate that is created by the development plan approach. However little redevelopment or small scale development has made use of the S-1 or S-2 districts, the two zoning districts intended for mixed use or development under a development plan, for areas not meeting the 80 acre minimum project size for the S-3 district, or the 5 acre minimum project size for purely residential projects to be eligible for the R-L district. This may be cause by the way that S-1 and S-2 districts are structured.

To apply for a rezoning to S-1 extensive information including topography based on field survey, a drainage plan, and a traffic analysis prepared by a registered engineer skilled in the science of traffic engineering, evidence of unified ownership and control of the area applied for, and evidence of financial capability of the petitioners to carry out the general type of development contemplated for the area. These application requirements may be overly burdensome for the developers of very small projects where such extensive information may not be necessary. Additionally the requirement of unified ownership prevents this district being used in revitalization efforts in areas with multiple property owners. A zoning district with flexibility of the development plan process that is geared to and can be applied to areas smaller than 5 acres would be a new and potentially very effective tool for enabling and promoting in-fill development and reinvestment in existing neighborhoods.

The S-2 district permits a mix of single and two family dwellings and non-retail commercial uses. The C-2 permits a mixtures commercial uses included retail uses and upper floor dwellings. There is no non-development plan based zoning district that allows for a mixed use of retail establishments and standalone residential structures. Wider national trends indicate a demand for this type of mixed land use, so any comprehensive review of the zoning ordinance should examine this gap in allowed mix uses.
### City of Muscatine, Iowa—Comprehensive Plan

**Chapter 5: Land Use**

#### All Parcels Within a Zoning District

<table>
<thead>
<tr>
<th>All Parcels Within a Zoning District</th>
<th># of Parcels</th>
<th>10.0</th>
<th>132.0</th>
<th>237.0</th>
<th>379.0</th>
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<tbody>
<tr>
<td>Acreage(1)</td>
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<td>43.1</td>
<td>32.3</td>
<td>446.3</td>
<td>521.7</td>
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**Percentage of the Citywide Total by:**

<table>
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<tr>
<th># of Parcels</th>
<th>Acreage(1)</th>
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</thead>
<tbody>
<tr>
<td>0.1%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

| 1.4%         | 0.3%       |
| 2.5%         | 4.6%       |
| 4.0%         | 5.4%       |

#### Average Parcel Size Statistics in Acres

<table>
<thead>
<tr>
<th>All Parcels</th>
<th>4.3</th>
<th>0.2</th>
<th>1.9</th>
<th>1.4</th>
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<tbody>
<tr>
<td>All Residential Parcels</td>
<td>1.5</td>
<td>0.2</td>
<td>0.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Multi-Family Residential Parcels</td>
<td>N.A</td>
<td>N.A</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Community Facility Parcels</td>
<td>2.0</td>
<td>1.3</td>
<td>20.2</td>
<td>14.5</td>
</tr>
<tr>
<td>Commercial/Industrial Parcels</td>
<td>15.4</td>
<td>0.4</td>
<td>4.1</td>
<td>2.8</td>
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</table>

#### All Parcels With a Residential Land Use

<table>
<thead>
<tr>
<th>Parcels With a Residential Land Use</th>
<th># of Parcels</th>
<th>7</th>
<th>104</th>
<th>196</th>
<th>305</th>
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</thead>
<tbody>
<tr>
<td>Acreage(1)</td>
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<td>10</td>
<td>17</td>
<td>131</td>
<td>158</td>
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**Percentage of Zoning District Total by:**

<table>
<thead>
<tr>
<th># of Parcels</th>
<th>Acreage(1)</th>
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</thead>
<tbody>
<tr>
<td>70.0%</td>
<td>24.1%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0.0%</td>
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| 43.0%        | 0.0%       |
| 80.5%        | 30.3%      |

<table>
<thead>
<tr>
<th>Parcels Containing Duplexes</th>
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<tr>
<td>% of Parcels</td>
<td>20.0%</td>
<td>0.0%</td>
<td></td>
</tr>
</tbody>
</table>

| # of Parcels(3) | 0 | 0 |
| % of Parcels    | 0.0% | 0.0% |

| 3.4% | 2.1% |

#### Parcels With a Community Facility Land Use(4)

<table>
<thead>
<tr>
<th>Parcels With a Community Facility Land Use</th>
<th># of Parcels</th>
<th>1</th>
<th>3</th>
<th>9</th>
<th>13</th>
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<tbody>
<tr>
<td>Acreage(1)</td>
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<td>2.0</td>
<td>3.9</td>
<td>182.0</td>
<td>187.9</td>
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**Percentage of Zoning District Total by:**

<table>
<thead>
<tr>
<th># of Parcels</th>
<th>Acreage(1)</th>
</tr>
</thead>
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<td>4.6%</td>
</tr>
<tr>
<td>2.3%</td>
<td>12.1%</td>
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</table>

| 3.8% | 40.8% |
| 3.4% | 36.0% |

#### Parcels With a Commercial, Industrial, or Railroad Land Use

<table>
<thead>
<tr>
<th>Parcels With a Commercial or Industrial Land Use</th>
<th># of Parcels</th>
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<th>30</th>
<th>60</th>
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</thead>
<tbody>
<tr>
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<td>30.7</td>
<td>12.1</td>
<td>123.07</td>
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**Percentage of Zoning District Total by:**

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<tr>
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<th>Acreage(1)</th>
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</thead>
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<td>71.3%</td>
</tr>
<tr>
<td>21.2%</td>
<td>37.5%</td>
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</table>

| 12.7% | 27.6% |
| 15.8% | 31.8% |

#### Parcels With an Agricultural Land Use(5)

<table>
<thead>
<tr>
<th>Parcels With an Agricultural Land Use</th>
<th># of Parcels</th>
<th>0</th>
<th>0</th>
<th>1</th>
<th>1</th>
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</thead>
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**Percentage of Zoning District Total by:**

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<td>0.0%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0.0%</td>
</tr>
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</table>

| 0.4% | 2.2% |
| 0.3% | 1.8% |

#### Residential Building Permits Issued 2000 through 2010

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<th>81</th>
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<td>31.4%</td>
<td>31.8%</td>
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<table>
<thead>
<tr>
<th>Multi-Family Residential Structures</th>
<th># of Permits</th>
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<th>0</th>
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<th>14</th>
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<tr>
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#### Variances (1996 through 2010)

<table>
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<th>Variances Applied For</th>
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<th>3</th>
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</thead>
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<tr>
<td>% of Total(2)</td>
<td>0.0%</td>
<td>3.6%</td>
<td>0.0%</td>
<td>5.7%</td>
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<table>
<thead>
<tr>
<th>Variances Approved</th>
<th># by District</th>
<th>0</th>
<th>5</th>
<th>3</th>
<th>8</th>
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</thead>
</table>

Table 3: Special Use Zoning District Statistics

1—Excludes areas located outside of parcels such as right-of-way.
2—Citywide.
3—Within zoning district.
5—Also includes larger wooded parcel classified as agricultural land use by the Muscatine County Assessor.
Community Facility Zoning

There is no zoning district within the City of Muscatine Zoning Ordinance that is primarily focused and structured for community facility type of land uses. These non-commercial uses are primarily governmental or institutional in nature and include but are not limited to uses such as governmental offices, schools, hospitals, parks, cemeteries, religious institutions, police stations, fire station, lift stations, recreational facilities, golf courses, etc. Table 7 on page 5-36 lists in which zoning district these uses are permitted in and what development standards apply to these developments.

Community facility uses fit very well within the nonresidential zoning districts as they are simply a subset of nonresidential land use. Allowed community facility uses within the non-residential zoning districts generally correspond with similar type of commercials uses, i.e. governmental offices are allowed in the same places as and must meet the same development standards as commercial offices.

Community facility land uses do not fit as neatly within residential zoning districts. There is tension between the fact that it is desirable to have many community facilities such schools, churches, etc., in very close proximity to residential uses and the fact that building size, intensity of use, traffic generated, etc. of many of these facilities can be problematic for nearby residents. The manner in which community facilities are allowed within residential zoning districts is a reflection of this tension as well as the fact many of these uses where established in residential areas prior to the adoption of a zoning ordinance, the hospital being the best example of this.

As is illustrated in Table 7 on page 5-36, nearly all community facility type uses are allowed within the residential zoning districts. However many provisions are made to maintain compatibility between community facility uses and any adjoining or nearby residential uses. As the footnotes to Table 7 show many community facility uses in residential zoning district may be required to have larger parcels, additional setbacks, or are allowed greater building heights than are required of residential uses in the same district. Many community facilities use a conditional use permit. An approved site plan is also required for all non-residential development in residential zoning district. Taken together the regulatory mechanisms that allow for community facilities within residential zoning districts function as a zoning district independent from any residential zoning district. However because a community facility zoning district is not explicitly created, community facility uses are not addressed in centralized or comprehensive manner.
The vision for community facilities is contained within Goal LU.9. This goal calls for the retention and enhancement community facilities, such as governmental offices, schools, hospitals, parks, cemeteries, religious institutions, police stations, fire stations, recreational facilities, golf courses, etc. as important neighborhood centers and providers of employment, services and amenities. Expansion or construction of major community facilities should be carefully planned and constructed so as to avoid undue negative impacts on adjacent neighborhoods, such as loss of housing stock, increased traffic congestion, or spill over parking on neighborhood streets.

Community facilities recognized as use compatible with residential development when appropriate development standards are applied, however Goal LU.9 also recognizes that these appropriate standards do not fit well with in the structure of residential zoning district. Community facilities are recognized as an ideal land use to transition between areas of commercial and industrial land use and residential land use.

To address this, a community facility specific zoning district designed to accommodate all community facilities will be developed with extensive input from the community and relevant stakeholders. This new community facility zoning district will be clear, consistent, and easily understandable. It will be based on the requirement of an approved development plan, similar to how the R-L, S-3, and S-1 zoning districts currently function in Muscatine. The proposed development plan for a new or substantial expansion of an existing community facility is checked against guidelines contained within the community facilities zoning district regulations and for compatibility for compatibility with surrounding land use. Upon development of the new community facilities zoning district all existing community facilities, currently located within a residential zoning district, within this new district. The rezoning of single parcel to a new community facility zoning district in an area zoned for residentially zoned will not be considered to be spot zoning so long as the proposed community facility use is compatible with the surrounding residential uses.
**Flood Hazard Zoning**

The City of Muscatine’s floodplain management regulations, most recently updated in 2011, are implemented through two overlay zoning districts, the Flood Plain Zoning District and the Flood Channel (Floodway) Zoning District. These overlay districts function by adding additional land use regulations on top of those required by the underlying zoning district. These regulations are necessary to qualify property owners for flood insurance under the National Flood Insurance Act of 1968.

Areas classified as “Zone AE or Zone A”, commonly known as the 100-year flood plain on the Flood Insurance Rate Map (FIRM) for Muscatine County are placed in Flood Plain Zoning District. No development within a flood plain shall affect the capacity or conveyance of the channel or floodway of any tributary to the main stream, drainage ditch or any other drainage facility or system. Maps depicting the 100-flood plain can be found in Chapter 4.

There are two categories of uses allowed in the Flood Plain Zoning District, permissive and conditional. The following uses are generally permitted within the Flood Plain District.

- Open recreational uses such as golf courses, picnic grounds, boat launching ramps, swimming areas, parks, wildlife and nature preserves, and trails.
- Agricultural uses.
- Marinas.
- Industrial-commercial uses such as loading areas, parking areas, airport landing strips.
- For residential districts, area within the Flood Plain District may be used for computing lot area requirements and may, therefore, be used for yard and park areas.
- Storage yard for materials and equipment not subject to removal or major damage by flood waters.

New construction or substantial improvements including the placement of factory-built buildings may be permitted if a conditional use permit is obtained. Some of the most important standards that must be met for conditional use permit to be issued include, but are not limited to, the following:

- Any proposed new construction or substantial improvements including the placement of factory built building be constructed using methods and practices that shall minimize flood damage and use construction materials and equipment that are resistant to flood damage.
- All new construction or substantial improvements of residential structures located in the flood plain shall have the lowest floor (including basement) elevated one foot above the level of a 100 year flood (base flood elevation).
Factory-built homes, including those placed in existing factory-built home parks or subdivisions, shall be elevated on a permanent foundation such that the lowest floor of the structures is a minimum of one foot above the level of a 100-year flood (base flood elevation).

- All new and substantially improved residential and nonresidential structures with fully enclosed areas below the "lowest floor" (not including basements) that are subject to flooding shall be designed to allow for the entry and exit of flood waters.

- Utilities are required to be located and constructed to minimize or eliminate flood damage to the system and the risk associated with such flood damaged or impaired systems.

Areas shown as Floodway on the Flood Insurance Rate Map are placed in the Flood Channel (Floodway) Zoning District. No use shall affect the capacity or conveyance of the channel or floodway of any tributary to the main stream, drainage ditch, or any other drainage facility or system.

The following open space uses shall be permitted within the Flood Channel (Floodway) District are generally permitted in the Flood Channels District.

- Open recreational uses such as golf courses, picnic grounds, boat launching ramps, swimming areas, parks, wildlife and nature preserves, and trails.
- Agricultural uses.
- Marinas.
- Industrial-commercial uses such as loading areas, parking areas, airport landing strips.

Any use that includes structures, placement of factory built buildings, fill, other obstructions, excavation, alteration of a watercourse, or storage of materials or equipment requires a conditional use permit. No structure (temporary or permanent), fill (including fill for roads and levees), deposit, obstruction, storage of materials or equipment, or other uses shall be permitted which acting alone or in combination with existing or proposed uses affects unless it has been demonstrated in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood. For any such use, review is conducted by the Iowa Department of Natural Resources to determine if the proposed use would increase flood levels within the community during the occurrence of the base flood.

Goal LU.11 is for the City of Muscatine to take all actions necessary to maintain legally enforceable floodplain management regulations that are compliant with Title 44 Code of Federal Regulations 60, in order to ensure that Muscatine residents and business are eligible to participate in the National Flood Insurance Program.

Figure 21: Flooding along the Riverfront
Airport Zoning

Maintaining compatibility between adjoining land uses is one of the primary functions of the zoning ordinance. Compatibility of surrounding land uses is especially critical around airports as incompatibility between airport operations and surrounding land use creates a unique life to life and health. It is for this reason that an Airport Zoning District has been established, based on Federal Aviation Administration recommendation and regulations, to ensure that land use in and around the Muscatine Municipal Airport does not endanger the safety of aircraft and their occupants while in the air and on the ground, as well as the safety of persons on the ground located in proximity to airports. Four primary characteristics of land use that reflect safety related issues are: high concentrations of people, tall structures, visual obstructions, and wildlife and bird attractants.

Available accident data suggests that the greatest concentration of aircraft accidents occur near runway ends during approach and departure. The risk of damage and personal injury to both people on the ground and in the aircraft can be reduced significantly by limiting the number of people in areas adjacent to airports, particularly near runway ends. Another pertinent aspect of airport safety is height restrictions for buildings and structures on or near airports. Low-level flight occurs during approach, departure, crop dusting, and search and rescue operations. Inadvertent collisions with tall structures during any of these stages of flight are detrimental to the safety and welfare of those in the aircraft and those on the ground. Tall structures may include building and objects, as well as natural features such as trees and terrain. It is critical to avoid tall structures within the airport approach and departure surfaces. Land uses that obscure pilot visibility should be limited to ensure safe navigation. Visibility can be obscured by a number of items including: dust, glare, light emissions, smoke, steam, and smog. Aircraft collisions with wildlife are a threat to human health and safety and are steadily increasing. Wildlife strikes killed more than 194 people and destroyed over 163 aircraft according to the FAA Wildlife Strikes to Civil Aircraft in the United States 1990-2000. Undesirable situations that can be limited with proper placement and management of areas that serve as wildlife attractants.

The Airport Zoning District function by imposing a variety height, land use, and lighting restrictions with intent of protecting lives, property, and the viability of continuing airport operations. These restrictions are designed to prevent the placements of high concentrations of people, tall structures, visual obstructions, and wildlife and bird attractants in locations where there incompatibility of airport operation would create unacceptable risks to lives and property.

Not all areas where land use has the potential to effect operations, and be effected by operations at the Muscatine Municipal Airport are within the jurisdiction of the City of Muscatine. For this reason Goal LU.13 calls for The City of Muscatine will work with the Iowa Department of Transportation, Muscatine County, Louisa County and the City of Fruitland to ensure that land use regulations ensures that land use in the vicinity of the airport is compatible with the continued aviation operation at the airport and that it does not create an unacceptable risk to the safety of both of the airport users and those living and working nearby.
## Residential Uses and Development Standards by Zoning District

<table>
<thead>
<tr>
<th>Use</th>
<th>R-1</th>
<th>R-2</th>
<th>R-3</th>
<th>R-4</th>
<th>R-5</th>
<th>R-6</th>
<th>C-1</th>
<th>C-2</th>
<th>C-3</th>
<th>M-1</th>
<th>M-2</th>
<th>S-1</th>
<th>S-2</th>
<th>S-3</th>
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<td>A</td>
<td>A</td>
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<td>X</td>
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<td>P</td>
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<td>C</td>
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### Table 4: Residential Uses and Development Standards by Zoning District

- **A**—Allowed use
- **C**—Conditional use
- **P**—Permitted use with an approved development plan
- **X**—Use not permitted
- **1**—Two Acre Minimum Parcel Size
- **2**—Allowed where on July 19, 1973, more than 40% of the frontage between 2 intersection street was used for two-family or multi-family homes.
- **3**—½ Acre minimum parcel size
- **4**—Construction of more than 4 units requires a site plan approved by the Site Plan Review Committee.
- **5**—Maximum parcel size of 3 acres
- **6**—Minimum parcel size of 3 acres
- **7**—Minimum development size of 5 Acres
- **8**—When located on the second story of building or above
- **9**—Must be located at least 50 feet from any R District, minimum parcel size of 20,000 square feet; and maximum of 50% of the site area is occupied by buildings.
- **10**—Must comply with the development standards contained in 10-7-1(H) of the City Code.
- **11**—If located in an approved mobile home park.
- **12**—Must be sponsored by a religious, education, or eleemosynary institution; have single kitchen facilities, be under 24 hour adult supervision; not be a penal or mental institution; and no more than 50% of the site is occupied by buildings.
- **13**—Must be located on the second floor or above of the same structure
- **14**—No more than one per tract only occupied by persons employed on the premises or immediate family members.
- **15**—As specified in the approved development plan.
- **16**—Maximum density per acre - garden apartments (2-3 stories) 15 units or 38 bedrooms; mid-rise apartments (4-6 stories) 28 units or 57 bedrooms; high-rise apartments (above 6 stories) 60 units or 130 bedrooms; and town-homes 15 units or 25 bedrooms.
- **17**—Maximum floor area ratio of 4:1
- **18**—Minimum size for a single development.
- **19**—There shall be a maximum floor area ratio of 4:1 with buildings not to exceed eight (8) stories, except that where a building is set back from one (1) or more lot lines, the floor area of such building or buildings may be increased by two (2) square feet of additional floor area for each square foot of open area provided. Maximum floor areas may be further increased by one (1) square foot of open space that is landscaped and planted and not paved.
### Commercial Uses and Development Standards by Zoning District

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Table 5: Commercial Uses and Development Standards by Zoning District

A—Allowed use
C—Conditional use
P—Permitted use with an approved development plan
X—Use not permitted
1—Not to exceed 2 chairs, provide at least 2 off-street parking stalls for each chair and substantially comply with the definition of a home occupation.
2—Must be connected to a sanitary sewer; off street parking is available as determined by the Zoning Board of Adjustment; and parking areas must be screened from adjacent property with a minimum four-foot high screening fence.
3—Provided that any play lot used in connection therewith be suitably fenced and screened in accordance with the requirements of the Zoning Board of Adjustment
4—Within an existing residence constructed prior to 1930.
5—Not to exceed 2 chairs, provide at least 2 off-street parking stalls for each chair and substantially comply with the definition of a home occupation.
6—Provided that buildings or enclosures are at least one hundred feet (100') from any lot in an R District
7—Provided that service yards or docks are located at least two hundred feet (200') from any lot in an R District.
8—Not more than ten percent (10%) of the lot or tract occupied by such establishment shall be used for the open and unenclosed storage of materials or equipment.
9—Not more than ten percent (10%) of the lot or tract occupied by such establishment shall be used for the open and unenclosed storage of materials or equipment.
10—As specified in the approved development plan.
11—Maximum floor area ratio of 4:1
12—There shall be a maximum floor area ratio of 4:1 with buildings not to exceed 8 stories, except that where a building is set back from 1 or more lot lines, the floor area of such building or buildings may be increased by two 2 square feet of additional floor area for each square foot of open area provided. Maximum floor areas may be further increased by 1 square foot of open space that is landscaped and planted and not paved.
### Table 6: Industrial and Agricultural Uses and Development Standards by Zoning District

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Table: Industrial and Agricultural Uses and Development Standards by Zoning District

- **A**—Allowed use
- **C**—Conditional use
- **P**—Permitted use with an approved development plan
- **X**—Use not permitted

1.—All livestock operations or farms with livestock in excess of ten head shall have a minimum lot area of 20 acres and shall not locate any feed lot or accessory structures within 200' from any lot in an R-District.

2.—All livestock operations or farms in excess of ten (10) head shall have a minimum of twenty (20) acres.

3.—Not located within 200' from any R District.

4.—Provided that all operations are conducted within an area enclosed on all sides with a solid wall of fence not less than 8' in height, located not less than 200' from any R District and 100' from any C District. No pile of salvage, scrap, or other material shall be higher than eight feet 8'.

5.—As specified in the approved development plan.

6.—Maximum floor area ratio of 4:1

7.—There shall be a maximum floor area ratio of 4:1 with buildings not to exceed 8 stories, except that where a building is set back from 1 or more lot lines, the floor area of such building or buildings may be increased by two 2 square feet of additional floor area for each square foot of open area provided. Maximum floor areas may be further increased by 1 square foot of open space that is landscaped and planted and not paved.
### Community Facilities Uses and Development Standards by Zoning District

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**Table 7: Community Facilities Uses and Development Standards by Zoning District**

- **A**—Permitted use
- **C**—Conditional use
- **P**—Permitted use with an approved development plan
- **X**—Use not permitted
- **1**—Use must be located at least 200’ from any R District
- **2**—All accessory building must be located at least 200’ from any R District
- **3**—On a site of not less than five acres, provided that any building in connection therewith shall be located not less than 200’ from any lot in an R District; but not a miniature golf course or driving tee operated for commercial purposes
- **4**—Excluding golf courses
- **5**—Only a Family "Y" affiliated with the National "Y" Organization
- **6**—Must have been established prior to December 4, 1986
- **7**—Must comply with the Cemetery Development Standards contained in Section 10-19-6 of the City Code
- **8**—Must be located at least 50’ from any lot in an R District and is situated on a site of not less than 20,000 square feet; and further provided that not more than 50% of the site area is occupied by buildings
- **9**—Must be located within the geographical area described as those lots adjacent to and fronting along Young Avenue, real estate located on the southeast side of Parham Street between Young Avenue and Cedar Street and that real estate north of Cedar Street between Parham Street and Trinity Muscatine Hospital.
- **10**—Must be located on a site of not less than five acres; and further provided that not more than 50% of the site area is occupied by buildings; and further provided that the building be set back from all required yard lines an additional foot for each foot of building height.
- **11**—The 60’ height limit only applies to public, semi-public, or public service buildings, hospitals, institutions, agricultural buildings, or schools if the building is set back from each yard line at least one foot for each foot of additional building height above the height limit otherwise permitted in the district.
- **12**—Churches and temples may be erected to a height not exceeding seventy-five feet the building is set back from each yard line at least one foot for each foot of additional building height above the height limit otherwise permitted in the district.
- **13**—As specified in the approved development plan.
- **14**—Maximum floor area ratio of 4:1
- **15**—There shall be a maximum floor area ratio of 4:1 with buildings not to exceed 8 stories, except that where a building is set back from 1 or more lot lines, the floor area of such building or buildings may be increased by two 2 square feet of additional floor area for each square foot of open area provided. Maximum floor areas may be further increased by 1 square foot of open space that is landscaped and planted and not paved.
River Center Planning District Current Land Use Pattern & Zoning

The Central Business District is at the core the River Center Planning District, and is an area of mixed land use. Land use in Central Business District is largely a mix of governmental, office, small retail, and upper floor residential uses. Governmental land use in the Central Business District includes: City Hall, Muscatine County Court House, Muscatine County administrative offices, City of Muscatine Public Safety Building, Muscatine County Jail, Musser Public Library. Many building in the Central Business District are mixed use, with a dwelling units located on floors above a commercial use. Nearly all dwellings in the central business district are located in mixed use structures. The 2010 Census reported the population the central business district was 535.

Offices are a major component of the commercial land use in the central business district, HNI Corporation and Stanley Consultants two of Muscatine’s largest employers are both headquartered in the central business district. Legal, finical, governmental, and non-profit institutions account for most of the rest of the offices located in the central business districts. Historically the central business district was the retail hub for the entire Muscatine region. While the central business district is no longer the dominant retail center that it once was, there is still significant retail activity in the area. This retail activity is mostly composed of smaller specialty shops and restaurants. A number of churches are located in the Central Business District. As discussed elsewhere in this chapter a portion of the Central Business District is located within the Downtown Commercial Historic District.

The majority of the Central Business District is zoned as C-2, Central Commercial, see Figure 30. Uses allowed in the district generally reflect the types of uses established in the Central Business District. These uses were established long before the passage of Muscatine’s first zoning ordinance. Generally this district allows for nearly all types of retail establishments, personal service establishments, general services establishment, offices, and upper floor residences. The lack of minimum lot size, setbacks, or an absolute limit on the height limit on building as is also a reflection of the long established building style in this area.
Most commercial land use within the River Center Planning District occurs within the Central Business District. Outside the Central Business District small area of commercial land use can be found in various spots along Hershey Avenue, 9th Street, 5th Street, and Cedar Street. These areas all are all zoned as C-1.

Directly northeast of the central business district of the central business is an area of industrial land use contains, a large HON manufacturing plant and adjacent distribution facilities. This is one the largest employment centers in the Muscatine area. This area of industrial land use is zoned M-2, General Industrial. All of the riverfront, the area between Mississippi Drive and the river, is zoned as M-1 Light Industrial. This zoning is an artifact of past usage of this stretch of riverfront. In the River Center Planning District, the riverfront is now entirely municipally owned and has been developed with numerous recreational amenities and aesthetic enhancements. There is small area on the downtown side of Mississippi Drive, between Chestnut and Spruce Street that is also zoned M-1 Light Industrial, however current land usage in the area is more commercial than industrial in nature.

The density allowed by zoning district in the River Center Planning District generally increases with proximity to the Central Business District and the adjoining industrial area. Approximately the first block and half radiating out from these areas is zoned R-5 Multi-Family Residence. Multi-Family residences in this area typically take form of older small apartment buildings, or even more commonly older large homes that were long ago divided into multiple dwelling units. This area of R-5 zoning experienced a significant population decline between 2000 and 2010, declining nearly 25%, while the population of the rest of the planning district held relatively steady, for more details see the Demographics Chapter of this Plan.
Adjoining this band of R-5 zoning is a band of parcels zoned R-4 Two-Family Residence, which allows for duplexes and row homes in addition to single family homes. The rest of the planning district is zone as R-3 Single-Family Residence. R-3 is the most prevalent zoning district in the City of Muscatine, accounting by acreage 29.6% of the City. Of the all single family residential zoning districts, the R-3 zoning district is the most dense.

In the River Center Planning District, the vast majority of structures were constructed and uses were established prior to the City of Muscatine adopting a zoning ordinance. For this reason many structures and uses within the planning district are nonconforming within the zoning district that they are located, however so long as they do not violate the nonconforming use regulations that are contained within the City Code these structures and uses are permitted to continue. Most nonconforming uses are result antiquated setbacks, additionally there are number of two and multi-family residences in areas zoned for single family residential only. Aside from a disused block of former commercial land use that is bounded by 4th Street, 5th Street, Cedar Street, and Sycamore Street, vacant available development with the River Center Planning District is limited to a small number of scattered vacant lots.

Residential land use makes up the balance of the River Center Planning District. Residential land use in this planning district has been long established, dating back to earliest years of Muscatine’s development. Residential structures are constructed on smaller lots located on a network of local streets and alleys arranged in traditional grid pattern. The same development pattern is found in all other long established residential areas in Muscatine. As discussed elsewhere in this chapter a portion of this residential land use is locate within the West Hill Historic District.
River Center Planning District Current Land Use

- South End Planning District
- City of Muscatine Corporate Limits
- Agricultural
- Single Family Residential
- Duplex Residential
- Multi-Family Residential
- Mixed Uses (Commercial/Residential)
- Commercial Uses
- Industrial Uses
- Railroad and Utilities
- Governmental Uses
- Educational Uses
- Parks
- Cemetery
- Golf Courses
- Nonprofit Organizations
- Religious Uses
- Vacant and Potentially Developable*
- Wooded Areas

Figure 30: River Center Planning Current Land Use

*Area is not excessively sloped, has legal access to a public street, no existing structures, and is reasonably near to already urbanized areas.
Figure 31: River Center Planning District Zoning
Western Planning District Current Land Use Pattern & Zoning

Single family residential is the most common land use in the Western Planning District. The bulk of this single family residential land and the planning district population is located east Houser Street, between Cedar Street and Lucas Street, see Figure 34, on page 5-44. The areas in vicinity of Greenwood Cemetery and the eastern end of Fulliam Avenue, extensive development did not begin until the 1960’s and most development has occurred after Muscatine first adopted a zoning ordinance. The planning district continues to be the location of much of the residential development occurring in Muscatine. There is very little multi-family residential or commercial use located within single family residential subdivisions. Nearly all single family residential areas in the Western Planning District are in either R-1, R-2, or R-3 zoning districts, with the R-3 district being the most prevalent, (see Figure 35 on page 5-45.)

There is a significant amount of two-family and multi-family land use within the Western Planning District. The vast majority of two-family and multi-family residential development has occurred directly on or within very close proximity to Cedar Street or Houser Street and typically are found within complexes or clusters of apartment complexes or subdivision composed entirely of townhomes or condominiums are located in the more recently developed areas of the planning district. This is a different development pattern than what is found in older parts of the city, in these areas two-family and multi-family residential development has occurred more as single structures mixed in with single family homes, see (Figure 34 on page 5-44.)

While the single family districts are structured primarily to enable and regulate residential development they do also permit for a number for the development of a number of non-residential uses. These non-residential uses are primarily governmental or institutional in nature and in the Western Planning District account for a notable portion of the district that is zoned residentially three cemeteries, Trinity Muscatine Hospital, medical offices and clinics, the Community Y, five schools, four parks, the Muscatine Art Center, the Muscatine Power and Water administrative and operational complex, Greenwood Cemetery, St. Mary’s Cemetery and numerous churches.
Trinity Muscatine Hospital straddles the boundary between the Western Planning District and the Mulberry Planning District and can be accessed for either Cedar Street or Mulberry Avenue. The clinics and medical offices which are a complimentary land use of the hospital are located along Cedar Street, Paraham Street, and Young Street in the West Hill Planning District. Aside from these medical offices, clinics, and the Muscatine Art Center, all the surrounding land use is long established single family residences. The hospital and the surrounding medical offices and clinics are located within the R-3 zoning district.

Commercial land use within the Western Planning District tends to mostly be concentrated within corridors centered on Cedar Street and Houser Street. There is also an area of commercial land use at the western end of Lucas Street. The only large scale commercial development, which also in the location Muscatine’s Post Office, in the Western Planning District is located at the intersection Cedar and Houser Street and is zoned as C-3 Planned Commercial. The only other area of commercial zoning in the Western Planning District is small area zoned C-1 Neighborhood and General Commercial located at the intersection Lucas Street and Newell Avenue. An area of medical offices along Cedar Street is zoned S-2.

Unique among the seven planning districts, the Western Planning District contains no land zoned or used for industrial purposes. The commercial land use located on Lucas Street is within the S-3 zoning district which is similar to the C-3 district in that it requires an approved development plan, but it permits use other than commercial. The Muscatine Agricultural Learning Center was developed in and under this area of S-3 zoning.

Vacant land within the Western Planning District upon which future development could occur mostly takes the form of smaller blocks of land (ten acres or less) that are located within residentially zoned areas. The largest portion of Western Planning District upon which large scale development could most easily occur is the land to the north and west side of Fuller Park, that is currently being used for agricultural purposes, (see Figure 34 on page 5-44.) The completion of Palms Drive as part of the Fridley Theatre project could represent the first segment on a new connection between Cedar Street and Mulberry Avenue and would provide vehicular access to this area. The remaining hurdle to development in this area is that unlike nearly all of the rest of the Western Planning District which is the Papoose Creek watershed this area is within the Muscatine Slough watershed, This situation makes it difficult to connect with nearby existing sewer infrastructure.
Figure 34: Western Planning District Current Land Use
Figure 35: Western Planning District Zoning Map

Date Source: Muscatine Area Geographic Information Consortium, City of Muscatine
Prepared by: Andrew Faugman, City Planner
Date: May 22, 2013
**Mulberry Planning District Current Land Use Pattern & Zoning**

Land use in the Mulberry Planning District overwhelmingly consists of single family residences; see Figure 38 on page 5-48. The size of parcels developed for use in the Mulberry Planning District tends to be larger than that found in the other seven planning districts. The oldest homes in the planning district are located along Mulberry Avenue and are larger homes built on what was then the edge of the urbanized area and. The area south of the Geneva Hills Country Club was developed in the immediate post World War II era during which quarter acre parcel size common. Much, but not all of the more recent residential development has consisted of larger, more expensive homes on larger parcels. The topography of the planning district has also contributed to larger parcels in areas where steep, unbuildable land was made part of adjoin residential parcels. The portion of the planning district located southeast of Weir Street is almost entirely zoned R-3. The remainder of the planning district is mostly a mix of the R-1, R-L, and S-3 zoning district. (Figure 38 and page 5-48)

Both two-family and multi-family residence within the Mulberry Planning District typically are found within complexes or clusters of, such as apartment complexes or subdivision composed entirely of townhomes or condomini- ums. These units are located in the more recently developed areas of the planning district. This is a different development pattern than what is found in older parts of the city. In these areas two-family and multi-family residential development has occurred more as single structures mixed in with single family homes. Two-family and multi-family land use within the Mulberry Planning District tends to occur near, but not fronting major streets such Mulberry Avenue and Bidwell Road. As is typical with most recent residential development, nearly all two-family and multi-family land use within the planning district has occurred in areas zone R-L or S-3.

In addition to allowing for residential uses, the residential zoning districts also allow for a few specific few nonresidential uses. In the Mulberry Planning District examples of these permitted non-residential uses include two elementary schools, several churches, Oak Park, a private golf course, and a hospital. The Geneva country club golf course accounts for a large portion of the northern part of the Mulberry Planning District. Trinity Muscatine Hospital straddles the boundary between the West Hill Planning District and the Mulberry Planning District and can be accessed for either Cedar Street or Mulberry Avenue. The hospital and the surrounding medical offices and clinics are located within the R-3 zoning district.
There is very little commercial land use within the Mulberry Planning District and no large scale commercial developments. The commercial land use that does exist in the planning districts takincludes small scale retail establishments located in the vicinity of the H.J. Heinz and a few establishments near intersection of the U.S. 61 Bypass/Mulberry Avenue intersection. The under construction commercial subdivision at the southwest corner of this intersection will be the first large scale commercial development in the planning district. A movie theatre will be the first business to be constructed in this subdivision. There an additional five out lots are being made available for future commercial development within this subdivision. The only major industrial establishment with in the Mulberry Planning District is the H.J. Heinz Factory, a producer of condiments and can food products that established in this location along Isett Avenue in 1892.

Vacant land within the Mulberry Planning District upon where future development could occur is mostly located west of Tipton Road. Single family residential, multi-family residential and commercial subdivisions that are not yet built-out exist in area bounded by the U.S. 61 Bypass, Mulberry Ave, Tipton Road and Clermont Drive. South of Mulberry Avenue the completion of Palms Drive as part of the Fridley Theatre project could represent the first segment on a new connection between Cedar Street and Mulberry Avenue and would in addition to serving the new commercial subdivision would open up currently vacant land along the U.S. 61 Bypass between Mulberry Avenue and Cedar Street to development, (see Figure 38 on page 5-48.) The remaining hurdle to development in this area is that nearly all of the rest of the Mulberry Planning District is in the Papoose Creek or Mad Creek watersheds. This area is within the Muscatine Slough watershed, a fact that makes it difficult to connect with existing sewer infrastructure.

Figure 37: Land Use in the Mulberry Planning District
Figure 38: Mulberry Planning District Current Land Use
City of Muscatine, Iowa—Comprehensive Plan

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Figure 39: Mulberry Planning District Zoning Map

Mulberry Planning District Zoning Map

Corporate Limits
Mulberry Planning District
Zoning District
AG-Agricultural
C-1 Neighborhood & General Commercial
C-2 Central Commercial
C-3 Planned Commercial
M-1 Light Industrial
M-2 General Industrial
R-1 Single-Family Residence
R-2 Single-Family Residence
R-3 Single-Family Residence
R-4 Two-Family Residence
R-5 Multi-Family Residence
R-6 Multi-Family Residence
R-1 Large Scale
S-1 Special Development
S-2 Institutional Office
S-3 Mixed Use
Muscatine County-A1
Muscatine County-C1
Muscatine County-C2
Muscatine County-I1
Muscatine County-I2
Muscatine County-R1
Muscatine County-R2
Muscatine County-R3

Date Source: Muscatine Area Geographic Information Consortium, City of Muscatine
Prepared by: Andrew Fangman, City Planner
Date: June 6, 2013

Figure 39: Mulberry Planning District Zoning Map

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South End Planning District Current Land Use Pattern & Zoning

Nearly all residential land use in the South End Planning District occurs in one of distinct areas of long established residential use, one area is centered on Franklin Elementary School and the other area on the now closed Garfield Elementary School (see Figure 4 on page 5-52.) Both of these area are characterized by single family homes constructed on smaller lots located on a network of local streets and alleys arranged in traditional grid pattern. The same development pattern is found in all other long established residential areas in Muscatine. The underlying zoning district for these areas is R3 (see Figure 42 on page 5-53). A number of duplexes and smaller apartments are scattered throughout these residential areas. There are a number of mobile home parks in the vicinity of the former Garfield School. In these primarily residential areas of the South End Planning District, the zoning of these areas matches up very closely with current land use, with the majority being zoned R-3, with some smaller areas of R-4, R-5, and R-6 zonings that support the higher density dwellings. (Figure 42 on page 5-53.)

There is one area of significant residential land use in South End Planning District for which current use does not match with current zoning. The area is bounded by Kansas Street, Oregon Street, Miles Avenue, and the Canadian Pacific Railroad and is zoned M-1, Light Industrial, which does not permit residences unless they are located on the upper floors of a commercial building. This M-1 area is largely comprised of detached single family homes, that are very similar to those found in areas zoned for single family residential use. These homes were constructed prior to the adoption of a zoning ordinance and thus are allowed non-conforming uses.

Single family homes make up predominate in this M-1 area there a large number of commercial establishments are scattered thought this area. Additionally across Oregon Street is area of intensive industrial land use containing Grain Processing Corporation plant and the Muscatine Power and Water generating station. In 2000 this area was home to a little more than 10% of the planning districts population. Between 2000 and 2010 the population of this area declined by 52 people. This 16% decline accounts for nearly 40% of the overall decline in population that occurred in the entire South End Planning District in the same period of time. This area now contains slightly more than 8% of the planning district population.

In the South End Planning District nearly all commercial land use occurs along a narrow corridor that runs along the entire length of Grandview Avenue as it passes through the planning district (see Figure 41 on page 5-52.) A great variety of commercial uses occur within this corridor, retail establishments, restaurants, offices, restaurants, wholesale establishments, service establishments, etc. Along the northeast end of the Grandview Avenue corridor there area number of mixed use building with dwelling units located above lower a floor commercial use. The zoning within the Grandview Avenue corridor is split between C-1 between Mill Street and Warren Street. Southwest of Warren Street the Grandview Avenue corridor is zoned M-1. All the commercial uses allowed under the C-1 and C-2 zoning districts are allowed in the M-1 district, in addition a number of specified industrial uses. Additional small areas of commercial use are locate along the southern end of Houser Street, Stewart Road and are zoned M-1 or M-2.
Industrial land use in the South Planning District are located is close proximity to one or more of the three major transportation corridors that cross the planning district, see Figure 42 on page 5-53. The Mississippi River, the railroad tracks (the Canadian Pacific Railroad both the mainline which passes through the planning district or one of the many rail spurs that exist in the planning district) or the U.S 61 Bypass cross this area. Zoning of these industrial areas is split between the M-1, Light Industrial and M-2, General Industrial districts. Areas with an M-2 zoning are found along the Mississippi River downriver from Musser Park, along Dick Drake Way from the U.S. 61 Bypass to the Mississippi River and along Musser Street. M-1 zoning is found along Grandview Avenue, in the vicinity of the U.S. 61 Bypass/Hershey Avenue interstation, and the residential areas immediately west of the Grain Processing Corporation Plant. Some of the largest establishments in the planning district are: Grain Processing Corp., the Muscatine Power & Water Generating Station, Musco Sports Lighting, Menasha Packaging, and Union Tank Car Company. The planning district is also home to numerous smaller industrial establishment and significant amount warehouse development along Houser Street.

The city has numerous and a great variety community facilities in the vicinity of where Houser Street crosses the Muscatine Slough. Located in this immediate vicinity are Kent-Stein Park, the Muscatine Soccer Complex, John Duncan Park, Muscatine Municipal Housing Agency’s Sunset Park apartment complex, the Water Pollution Control Plant, and the Transfer Station and Recycling Center. The Muscatine Humane Society, a non-profit organization operates an animal shelter is also located in this area.

There are a relatively small number of vacant parcels scattered throughout the already developed, residential, commercial, and industrial areas of the South End Planning District. However none of these are concentrated or large in size. Larger areas of undeveloped agricultural land exists in the western portion of the planning district, mostly on the west side of Houser Street and on the south side of Musser Street. Currently the zoning on these agricultural areas is split between the M-2 and AG zoning districts.
Figure 41: South End Planning District Current Land Use

- **South End Planning District**
- City of Muscatine Corporate Limits
- Agricultural
- Single Family Residential
- Duplex Residential
- Multi-Family Residential
- Mixed Uses (Commercial/Residential)
- Commercial Uses
- Industrial Uses
- Railroad and Utilities
- Governmental Uses
- Educational Uses
- Parks
- Golf Courses
- Nonprofit Organizations
- Religious Uses
- Vacant and Potentially Developable*
- Wooded Areas

*Area is not excessively sloped, has legal access to a public street, no existing structures, and is reasonably near to already urbanized areas.

Date Source: Muscatine Area Geographic Information Consortium, City of Muscatine
Prepared by: Andrew Fangman
Date: March 27, 2013
Figure 42: South End Planning District Zoning Map
The East Hill Planning District contains an extremely diverse mix of land uses. The land use in the northern portion of the planning district is a mix of commercial and industrial land use that are part of the largest concentration of employment and retail opportunities in the Muscatine area. Two corridors of major commercial and industrial land use intersect along the northern boundary of the East Hill Planning District at the intersection of U.S. 61 Bypass and Park Avenue/Highway 38. This is the busiest intersection in Muscatine. Within the East Hill Planning District this area of intense commercial and industrial usage extends in wide corridors south along Park Avenue to Colorado Street, along the U.S. 61/U.S. 61 Bypass between Mad Creek and Solomon Avenue (see Figure 45, on page 5-56.) North of the U.S. 61 Bypass the area of commercial and industrial land use is located in the North Crescent Planning District.

This area of commercial and industrial land use is anchored by large scale retail developments, large car dealerships, and an indoor mall. Nearly all the large scale retail developments in Muscatine are located within this area either in East Hill Planning District or the North Crescent Planning District. Commercial development in this are also takes the form of smaller scale retail businesses located in standalone structures or in strip malls. Numerous offices, both medical and larger scale corporate offices (Allsteel, and Bridgestone-Bandag), restaurant, and hotels/motels are located in this area. The, C1, C3, M1, S1, and S3 zoning districts, underlie this concentrated area of commercial development, see Figure 46 on page 5-57. All of the recent commercial development in this area has taken place in areas zoned S3 (see Figure 46 and page 5-57.)

Industrial land use in the East Hill Planning District is located within the larger area of intense commercial usage that is located along U.S. 61 and Park Avenue, above Colorado Street. There are three major industrial establishments within the planning area; two Allsteel facilities and Carver Pump. These industrial uses occur under a mix of the M1 and M2 zoning districts.

The character of the commercial corridor that runs the length of Park Avenue changes south of the intersection of Park Avenue and Colorado St/Clay Street. South of this intersection large commercial developments gives way to a form of commercial land use that is much smaller in scale, extending a short distance east or west from Park Avenue, and is interspersed with residential land uses. Commercial land use in the corridor mostly takes the form of small retail shops, restaurants, gas stations, and offices all located in in standalone structures. This corridor is zoned S2, a district that is primarily intended to support the development of office space, and does allow for single and two-family homes. In the S2 district retail commercial uses are only allowed with a conditional use permit. Within the East Hill Planning District other small area of commercial land use exist along Clay Street near Mad Creek, 2nd Street, Rivers Road and along the north end of University Drive.
Large areas of single family residential land use are located on either side of the Park Avenue commercial corridor (see Figure 45 on page 5-51.) These residential areas extend from Mississippi River to Lake Park Blvd on the west side of the commercial corridor, and from the Mississippi River to Muscatine Community College and Weed Park on the east side of the commercial corridor. These residential areas, which are mostly composed of single family homes on smaller lots, have been long established. They were developed on a network of local streets and alleys arranged in traditional grid pattern. The development same pattern that observed in all other long established residential areas in Muscatine. The underlying zoning district for these areas is R3 (see Figure 46 on page 5-57.)

A significant amount of residential development has occurred in the East Hill Planning District over the past ten years. This residential development has almost entirely taken place east of University Drive or along the eastern end of Colorado Street. The topography is different from that of the rest of the planning district as it is more rugged with numerous small streams and creeks located in wooded ravines. Residential development in this area breaks from the grid pattern found in most of the rest of the planning district and instead occurs in and in close proximity to these wooded areas in layout determined by topography. There is significant diversity in the type of residential development that has occurred in this area. Recent residential development includes single family homes on varying lots size, apartment complexes, condominiums, and townhomes. Most of the residential development in this area has occurred in areas zoned RL.

Weed Park, the largest, oldest, and most amenity filled park in Muscatine is located in the center of the East Hill Planning District. Muscatine Community College is adjacent to the west side of Weed Park. Two elementary schools Grant School and Colorado School located within the East Hill Planning District. All of these schools and parks are located within the R-3 zoning district. Other governmental facilities located in this planning district are the City of Muscatine Public Works complex and an Iowa Department of Transportation roadway maintenance yard.

Much of the University Drive corridor is currently being used for agricultural purposes but existing infrastructure and relatively large parcel sizes gives this area significant development potential (see Figure 46 on page 5-56.) A significant portion of recent development in Muscatine has occurred within this corridor and nearby along the eastern end of Colorado Street. The area north of where the Running River Trail System crosses University Drive is zoned M1 and the area south of this crossing is zoned RL, (Figure 46 on page 5-57.) The other large area readily developable land within this planning area is a recently annexed area at the southwest corner of the intersection U.S. 61 and Solomon Avenue. Within the long developed single family residential portions of the planning there are number of scattered vacant lots which provide the opportunity for continued infill residential development.
Figure 46: East Hill Planning District Current Land Use

*Area is not excessively sloped, has legal access to a public street, no existing structures, and is reasonably near to already urbanized areas.

Date Source: Muscatine Area Geographic Information Consortium, City of Muscatine
Prepared by: Andrew Fangman, City Planner
Date: March 29, 2013
Figure 47: East Hill Planning District Zoning Map
North Crescent Planning District Current Land Use Pattern & Zoning

The North Crescent Planning District consists primarily of agricultural lands that are occasionally interrupted by wooded areas center small creeks and streams at the bottom steep ravines. Nearer to the northern and eastern edge of the City of Muscatine, the bluffs that separate the North Crescent Planning District from the Island Planning District, and the Mississippi River, residential land use becomes the prevalent land use.

With the exception of Lutheran Homes, all housing within the North Crescent Planning District is single family residential. Most residential development within this planning district has occurred in portions of unincorporated Muscatine County that are proximity to the City of Muscatine and accessible off major roadways. The parcel size of these unincorporated residential developments is typically a half acre and up, a creating a population density that is much lower than that found in the residential portions of the City of Muscatine.

In addition to being more in character with a rural style of development, the larger parcel size found in these developments is also necessitated by the fact that a majority of the homes in this area rely on septic tanks for sewage treatment. Internal streets with in these developments are all most always private streets. These unincorporated residential developments are zoned under the Muscatine County R-1 or R-2 districts. There is one small subdivision located within the incorporate portion of the planning area located off of Park Avenue; that has a smaller parcel size that is consistent with its R-3 zoning. The 132-acre Ripley’s Mobile Home Park, located on the north side of U.S. 61, south of 180th street is the largest mobile home park in the Muscatine area. This mobile home park with a population of nearly 900 accounts for more than 25% of the population of the North Crescent Planning District, this area was annexed in 2013.

The largest concentration of commercial land uses in the Muscatine area is centered on the intersection of the U.S. 61 and Park Avenue/Highway 38. The half of this area of extensive commercial use, falls within the North Crescent Planning District and extends along the U.S. 61 Bypass to Mad Creek to the west and past University Drive to the east, north along Park Avenue and Highway 38 and continues on the south side of the U.S. 61 Bypass in the East Hill Planning District (see Figure 55 on page 5-63.) This area of commercial land use is characterized by large scale retail development, and large car dealerships. Commercial development in this area also takes the form of smaller scale retailers in both stand alone and strip-mall form, a large-scale corporate office, restaurants, and as hotels/motels. The zoning districts, C-1, M-1, S-1, and S-3, underlying this concentrated area of commercial development (see Figure 56 on page 5-64), is a mix of nearly all the zoning districts that allow for commercial uses.

Figure 48: Large Lot Residential Land Use

Figure 49: Corporate Office Along U.S. 61
There are two areas industrial land use in the North Crescent Planning District. One is located along Highway 38, with Raymond-Muscatine Inc. being the largest industrial establishment in this area and is located in the City of Muscatine and is zoned M-1. The other is located along Highway 22 east of the City of Muscatine with the HON Geneva plan being the largest industrial establishment in this area and is zoned I-1 by Muscatine County.

The Mad Creek Greenbelt, a recreational trail and McKee Park, a nine acre city park with no developed amenities are the dedicated recreational land use within the planning district. Whispering Pines Golf Course, a private golf course, was located in the planning district but was permanently closed in 2011.

Most of the planning district is potentially available for future development as agriculture is the predominant land use in the planning district. However, easily developable land is more limited within the planning district. For land to be considered viable for potential development, it needs to be easily accessible from the urban core and is or can easily be served by the necessary infrastructure to support future development. Two areas of the planning district meet this criteria. The first and most significant is the undeveloped portion of the area bounded by U.S. 61, 180th Street, and Highway 38. The combination of this area’s proximity to the urban core, particularly the large node of commercial/industrial land use centered on the U.S. 61 and Highway 38/Park Avenue intersection, and forthcoming infrastructure expansion in this area make it a likely and ideal location for any future development. The other significant area of vacant and easily developable land is in and around the site of the former Whispering Pines Golf Course. The most recently constructed subdivisions in the North Crescent Planning District are located in vicinity of the former Whispering Pines Golf Course. These subdivisions are not yet full built-out and they contain a significant amount of vacant lots ready for development. The former golf course is currently being marketed as vacant and developable ground which adds to the amount of easily developable land in this area.
Figure 52: North Crescent Planning District Current Land Use (Western Portion)
Figure 53: North Crescent Planning District Current Land Use (Eastern Portion)
Figure 54: North Crescent Planning District Zoning Map (Western Portion)
Figure 55: North Crescent Planning District Zoning Map (Eastern Portion)
Figure 56: North Crescent Planning District Zoning Map (Incorporated Portion)
Island Planning District Current Land Use Pattern & Zoning

Agriculture is the predominate land use in the Island Planning District. The area between Burlington Road and the City of Muscatine limits is used almost exclusively for agricultural purposes (see Figure 60 on page 5-67.) The incorporated areas of the planning district and the unincorporated areas nearest the Mississippi River, agricultural land use is interspersed with other types of land use. The variety of crops grown in the Island Planning District is much greater than what is found in the rest of the Muscatine area. The sandy soil that predominates in the planning district is well suited for growing fruits and vegetables such as sweet corn, squash, cabbage, potatoes, sweet potatoes, green beans, tomatoes, and most notably melons. The sandy soil of the area also creates the need for irrigation systems which is another characteristic of agriculture in this area that sets it apart from what is found in the rest of the Muscatine area.

Residential land use in the Island Planning district is almost exclusively composed of single family residences. The largest concentration of residential land use in the planning district is an area of larger lot single family residences located off 67th Avenue between U.S. 61 and the City of Fruitland. Approximately a quarter of planning district residents live in this area. There are very small subdivisions of single family homes (of less than 25 lots), one small mobile home park, and farm homes scattered through the remainder of the planning district. Within the incorporated portion of the Island Planning District most residences are located within the R-1 zoning district, which has the largest minimum lot size of any of the residential zoning districts. The largest area of residential zoning in the planning district is the portion of unincorporated Muscatine County located directly east of the City of Fruitland and is zoned R-1 by Muscatine County, see Figure 61 on page 5-68, most of this area is being used for agricultural purposes.

Land use along the Mississippi River in the Island District is mostly industrially and is a continuation of the pattern of riverfront industrial development that begins immediately upstream in the South End Planning District and continues downstream into Lousia County. This industrial land use is supported by the twelve river barge facilities located along this stretch of the river and the rail access provided by the Canadian Pacific Railroad mainline and numerous spurs located in this area.
The two largest industrial or industrial/utility establishments in this corridor are the Muscatine Power and Water generating station and the Monsanto Muscatine plant, a producer of herbicides. The availability of rail and river barge access to this area has led to the development of large number warehousing/material handling establishments. Sand and gravel mining and associated businesses are also common in this area. Aside from the Muscatine Power and Water generating station, which is zoned M-2, this area is located within unincorporated Muscatine County and is zoned I-2, Muscatine County’s most intensive industrial zoning classification.

The other area of extensive industrial land use in the Island Planning District is located northeast of the Muscatine Municipal Airport, between U.S. 61 and Canadian Pacific Railroad mainline (see Figure 57 on page 5-60). The greatest concentration of industrial use in this area is the Progress Park development. Bridgestone-Bandag, with facilities in Progress Park, is the largest industrial establishment located in this area. This area is located entirely within the City of Muscatine and is mostly zoned M-2, with a few smaller areas being zoned M-1. Nearly all the commercial land use in the Island Planning District is along U.S. 61. Aside from a small patch of C-1 zoning, this commercial land is occurring under one the industrial zoning districts. Land that is both vacant and near enough to existing infrastructure to be considered easily developable is largely located in and around the U.S. 61 corridor.

The Muscatine Municipal Airport is located in the extreme southwestern portion of the City along U.S. 61. It provides a non-commercial facility for use by the entire community. Around 260 acres of the airport are currently being farmed under a lease agreement. The airport covered under the A-P zoning district, a special district designed to ensure that land use remains compatible with airport operations.

Figure 59: Industrial Land Use in the Island Planning District
Figure 60: Island Planning District Current Land Use

*Area is not excessively sloped, has legal access to a public street, no existing structures, and is reasonably near to already urbanized areas.

Date Source: Muscatine Area Geographic Information Consortium, City of Muscatine
Prepared by: Andrew Fargman, City Planner
Date: May 22, 2012
City of Muscatine, Iowa—Comprehensive Plan

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Figure 61: Island Planning District Zoning Map
**Future Land Use Plan—Synopsis**

The Future Land Use Plan presents Muscatine’s preferred future land use scenario in map format. It guides land use decisions and policies related to land use by depicting the desired future land use for any given location. The Future Land Use Plan should not be confused with a zoning district map, which is a regulatory tool that depicts what development and activities are currently legally permitted on any given parcel of land. The land use categories that comprise the Future Land Use Plan are intended to represent preferred future land uses and reflect the unique opportunities and assets associated with neighborhoods, natural resources, and public infrastructure. The land use categories reflect a general mix of desired land uses, not specific design for development or preservation. Each land use category is described on the following pages 5-76 through 5-81 including the preferred primary and secondary land uses and approximate mix of uses that could be found within the district; the approximate or typical density and intensity; and the relationship to transportation infrastructure.

The Future Land Use Plan summarizes the Muscatine community’s vision of how development, preservation, and public realm investment should occur. It is intended to be used in conjunction with all the goals and implementation strategies contained within the entire Comprehensive Plan to make the community’s vision of the desired future Muscatine a reality. The maps show the geographic layout of Muscatine’s preferred future land uses, however does not capture the full detail of the Comprehensive Plan goals, identify the full range of recommended implementation strategies, or present any staging of development priorities.

The City of Muscatine will soon undertake a comprehensive review and rewrite of its 40-year-old zoning ordinance. Goal LU.1 calls for this review and rewrite will be undertaken to implement the vision set forth for Muscatine in this new comprehensive plan. The zoning ordinance should be structured in a manner that supports the implementation of the Future Land Use Plan. All future rezoning should be in compliance with the Future Land Use Plan. As this new zoning ordinance is created each decision will be evaluated against the yardstick of the Comprehensive Plan; does the proposed change rationally move the Muscatine toward the land use future portrayed in the Future Land Use Plan.

Infill development which is the new development of vacant, abandoned, passed over, or underutilized land within built-up areas of Muscatine where infrastructure is already in place is Goal LU.3. Infill reduces growth pressure on productive farm land, provides for efficient use of land, maximizes the return on investment already made in public infrastructure, reduces costs associated with providing municipal services and amenities to new development, and can improve quality of life in older communities.

Infill can enhance the character, viability, and function of existing neighborhoods. However, Goal LU.3 recognizes that infill development is not inherently “good” simply because it is infill; any infill development needs to be compatible with the surrounding neighborhood and positively contribute to the quality of life of the surrounding neighborhood. The Future Land Use Plan is the mechanism by which it is ensured that that infill development projects are compatible with surrounding uses.
Revitalization is complementary strategy that will accompany efforts to promote infill. Goal LU.16 is for the revitalization of established neighborhoods, particularly blighted areas by promoting development that conserves land, protects historic resources, promotes pedestrian accessibility, and integrates different uses of property. Remediation and reuse of existing sites, structures, and infrastructure is preferred over new construction in undeveloped areas. City of Muscatine policies, regulations, incentives, will be structured to implement this goal.

It is not feasible or desirable for all types of development to occur as infill development, for these reasons there will be development of previously undeveloped areas along the fringe of the currently urbanized area. Goal LU.4 For development to occur in a manner and location along the urban fringe to occur that is rational and beneficial to quality of life in Muscatine. This goal calls for new development on previously undeveloped land along the urban fringe to only occur in locations that are suitable for intensive urban development and have easy access to essential urban infrastructure and services. It also calls for the extension of Muscatine services and infrastructure to occur in a logical and efficient manner that avoids leapfrog development patterns where new development skips over areas of land that is currently undeveloped but is potentially developable. The Future Land Use Plan serves as a key instrument in implementing this goal by mapping out the most desirable locations and types of growth along the urban fringe.

Maps depicting the Future Land Use Plan follow on pages 5-82 through 5-92. Based on community input a primary characteristic of the Future Land Use Plan is for the preservation of existing land use patterns in developed areas. The preservation of nearly all farmland is a goal of the Comprehensive Plan (Goal LU.10). Additionally large areas are located in the floodplain, are excessively sloped, or otherwise unsuitable for development. For this reason the bulk of the planning district has been placed in the land use classification that best support current land uses. Areas available for infill development have been placed into land use classifications that are the most consistent and complementary with the land use of surrounding neighborhoods. The net effect is that a large majority of the planning area is reflective of current land use patterns. However there are portions of the planning area for which the Future Land Use Plan envisions significant changes in land use. Following are a brief overview of some of the most notable elements of the Future Land Use Plan for each of the seven planning districts.

**Western Planning District** (Figure 67 on page 5-82)

Across the overwhelming majority of the Western Planning District the Future Land Use Plan envisions no change in land use with scattered infill development consistent with or complementary with the land use of surrounding neighborhoods. One of the few large undeveloped, but reasonably flat, areas inside the U.S. 61 Bypass is the area to the north and west of Fuller Park, between Cedar Street and Mulberry Avenue. The recent construction of Palms Drive provides access to this area for the first time. Goal T.9 calls for the extension of Palms Drive to Cedar Street. When this occurs this entire area will have good access for the first time. Once access to this area is provided, its proximity to the rest of Muscatine make it a logical and desirable place for new development to occur.
The area north of Fuller Park and west of the Heritage Heights subdivision is envisioned as an area low density residential development. Proximity to Fuller Park makes this area attractive for residential development and it would be compatible with Heritage Heights. There is an existing node of commercial use at the intersection Highway 22 and Cedar Street, and the Future Land Use Plan envisions only slight growth in this commercial node. North of this node of commercial land use, residential land use is envisioned in the area located between the U.S. 61 Bypass and Fuller Park. This is to take advantage of the desirability of proximity to Fuller Park for residential uses. A higher residential density is envisioned in the area closer to the U.S. 61 Bypass. The business park classification serves a transition between envisioned residential areas and an envisioned area of intense commercial use centered on the Mulberry Avenue/Palms Drive intersection and the new Palms Theatre.

**Mulberry Planning District**
(Figure 68 on page 5-83)
Across the overwhelming majority of the Mulberry Planning District the Future Land Use Plan envisions no change in land use with scattered infill development consistent with or complementary to the land use of surrounding neighborhoods. The construction of Palms Drive, has opened a large area on the southwest corner up to potential development. The Future Land Use Plan envisions an area of intense commercial use centered on the Mulberry Avenue/Palms Drive intersection and anchored by the new Palms Theatre. To east of this new commercial node, an area of high density residential development as envisioned is a natural transition to existing low density residential developed areas that located further east.

**River Center Planning District**
(Figure 69 on Page 5-84)
The River Center Planning District contains the oldest parts of Muscatine and has long been built out; it also contains both of Muscatine’s registered historic districts. Preserving historic land use patterns and the character of the River Center Planning, while promoting revitalization, is a major aim of the Comprehensive Plan. The Future Land Use Plan is structured to support this by establishing land use classifications that are the most consistent with historical land use patterns and that will best support efforts to revitalize and preserve the character of this area. Goal LU.14 calls for vibrant and attractive mixed residential and non-residential land uses that enhance the quality of life along the Mississippi Drive corridor.
East Hill Planning District  
(Figure 70 on page 5-85)  
Across most of The East Hill Planning District the Future Land Use Plan envisions no change in land use with scattered infill development consistent with or complementary to the land use of surrounding neighborhoods. Goal LU.14 identifies Park Avenue as a critical corridor along which a vibrant and attractive mix of residential and non-residential land use is desired. The Future Land Use Plan envisions the Park Avenue corridor south of Colorado Street as an area of mixed land use. Goal LU.14 calls for a detailed study, with extensive stakeholder participation to be done to determine what the ideal form of mixed use for this area. Determining the ideal land use along this corridor is part of a comprehensive effort to enhance this corridor, which also includes infrastructure improvements and beautification projects.

South End Planning District  
(Figure 71 on page 5-86)  
Goal LU.14 identifies Grandview Avenue as a critical corridor along which are vibrant and attractive areas with commercial, light industrial and mixed uses. Goal LU.14 calls for a detailed study, with extensive stakeholder participation to be done to determine the ideal form of mixed use for the areas classified as mixed use. Determining the ideal mix of land use is part of a comprehensive effort to enhance this corridor, which also includes infrastructure improvements and beautification projects.

Much of the land abutting University Drive is undeveloped, but is fully served by public infrastructure. The Future Land Use Plan envisions the further development of the medium scale commercial development that has begun to develop south of Menards on the eastside of University Drive. Further, an area of high density single family homes is envisioned stretching to 24th Street. Ideal terrain and proximity to an existing multi-use trail make this area attractive for this type of development. Much of the west side of University Drive, south of Geneva Boulevard is envisioned as a natural location of expansion of existing industrial development located north of Geneva Boulevard. Any such expansion should only occur if compatibility is maintained with current and planned surrounding uses.
There is one area, the area designated as General Mixed Use in Figure 64, of significant residential land use in South End Planning District for which current use does not match with current zoning. This industrially zoned area is largely comprised of detached single family homes that are very similar to those found in areas zoned for single family residential use. A significant number of commercial and industrial establishments are scattered throughout this area. Homes in this area were constructed prior to the adoption of a zoning ordinance and thus are allowed non-conforming uses. However despite being zoned light industrial for over 40 years the majority of land use has remained residential in nature. It is unlikely that this area will ever transition into a fully industrial or fully residential area, for this reason the Future Land Use Plan classifies this area as general mixed use. This classification both recognizes the unique mixed use nature of this area and serves as a transition between the heavy industrial uses located east of Oregon Street and residential use located west of Kansas Street.

Undeveloped land in the South End Planning District is largely found in the area located between the U.S. 61 Bypass and between Mittman Road and Grandview Avenue. The Future Land Use Plan envisions light industrial development occurring in this area. This is consistent with the developed portion of this area which is largely comprised of light industrial and warehouse uses and is compatible with the Water Pollution Control Plant and Transfer Station which are located in this area. Within the rest of the South Planning District the Future Land Use Plan envisions no change in land use with scattered infill development consistent with or complementary to the land use of surrounding neighborhoods.

**Island Planning District** (Figures 72 & 73 on pages 5-87 & 5-88)
The Island Planning District has two large areas of intense industrial development, they area located along the Mississippi River and Pettibone Avenue and between U.S. 61 and the Canadian Pacific Railroad mainline. The Future Land Use Plan envisions an expansion of industrial activity in these two areas. These areas are attractive for industrial and warehouse uses because of the transportation options offered by the convergence of highways, railroads, and the Mississippi River in the this area.
The Future Land Use Plan envisions the growth of the residential area located north of the City of Fruitland along 67th Avenue in a manner that is compatible with operations at the Muscatine Municipal Airport. Maintaining an adequate buffer between this area of residential use and the area of industrial land use located to the northeast along U.S. 61 will be a key consideration in all future land use decisions in this area.

Within the rest of the Island District the Future Land Use Plan envisions no change in land use with scattered infill development consistent with or complementary to the land use of surrounding neighborhoods. Portions of the planning district that are currently in agricultural use are envisioned remaining in agricultural use, aside from those areas classified for industrial or residential growth.

**North Crescent Planning District** (Figures 74, 75, & 76 on page 5-89, 5-90, & 5-91)

Across most of the North Crescent Planning District the Future Land Use Plan envisions no change in land use. The majority of the planning district is currently being used for agricultural purposes. Aside from a few areas classified for urban development the Future Land Use Plan envisions the preservation of agricultural lands. There are significant areas within in the unincorporated portions of planning district that have been developed residentially at very low densities. The Future Land Use Plans envisions no change in land use in these areas. Undeveloped lots within the low density subdivisions will likely develop over time and there will likely be some expansion of this type of development.

The Future Land Use Plan envisions significant change in the land use of undeveloped land bounded by Highway 38, U.S. 61, and 180th Street. This change will be driven by recent and planned infrastructure improvements in this area. The City of Muscatine recently extended sanitary sewer to Ripley’s Mobile Home Park. This sewer line was sized to serve future development in surrounding areas in addition to Ripley's. Planning for extending water service to Ripley’s is currently underway. Goal T.10 calls for the construction of a new connector road between Highway 38 and U.S. 61 as recommended by the 38/61 Connector Road Study. This study also contains two possible options for extending University Drive to 180th Street. Figure 4-65 depicts all the recent planned, and potential infrastructure improvements in this area.

Much of the recent development in the Muscatine area has occurred directly to the west and south of this area. When access to and the necessary infrastructure are constructed, development interest in this area is likely to be very high. The proximity of this area to U.S. 61, Highway 38, existing and planned infrastructure, and already developed portions of the community make it an ideal location to accommodate development that cannot be accommodated through infill. The Future Land Use Plan lays a vision of the most beneficial way for this area to be developed. Figure 66 on page 5-75, depicts the community’s vision for this area and annotated with the rational for land use classification in this area.
Figure 66: Future Land Use Plan in the U.S. 61/Highway 38 Vicinity
### Single Family Residential-Low Density

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| Single family homes on lots of over an acre. Limits the extension of municipal utilities for new development. In less urban area development is rural style, often with each home being served by an individual well and septic tank. In more urbanized areas development in this category takes the form of estate style residential development served by all municipal utilities. | - No more than one unit per acre  
- Single family homes  
- Most likely served by septic tanks  
- Undeveloped areas of large lots are used to complement open space patterns (viewsheds, buffers) |

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### Single Family Residential-Medium Density

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| Single family homes with urban services, located on larger lot of at least 15,000 square feet. Typified by curvilinear streets and attached garages. Many existing homes in this category are located on long narrow lots that contain steep wooded terrain in the rear. | - 2-3 units/acre  
- Single family homes  
- Full City services |

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### Single Family Residential-High Density

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| Single family homes with urban services, located on lots between 15,000 and 5,000 square feet. typified by curvilinear streets or a traditional grid and alley street pattern. | - 3 to 8 units/acre  
- Single family homes  
- Full City services |

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### Multi-Family Residential

**Description**
Areas with the highest residential density. Includes such things as duplexes, apartment complexes, row homes, condominiums, mobile home parks.

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**Density/Intensity/Design**
- 8 units/acre and up
- Complexes of duplexes or apartments.

### Neighborhood Mixed Use

**Description**
A transitional use between more intensive commercial uses and purely residential neighborhoods. Includes conversions of houses to office or live-work spaces. May include limited commercial-only space oriented to neighborhood or specialty retail markets.

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**Density/Intensity/Design**
- Site design should maintain a largely residential building character
- Commercial-only uses should be adjacent to non-residential or other mixed use areas

### Mixed Density Residential

**Description**
Characterized by grid or connected street pattern, houses oriented with shorter dimension to the street and detached garages, some with alleys. Contains a mix of single family homes, duplexes, and small multifamily homes. Duplex and multi-family homes are not contained in complex but rather are mixed in with single family homes. Located in area designated as historic district or eligible to be designated a historic district.

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**Density/Intensity/Design**
- Density to be preserved at current levels
- Form standards is an option
- Mix of housing densities on any given block
### Business Park

**Description**
Primarily office and light industrial areas developed in a unified manner, with standards for site design and circulation patterns, signage, landscaping and building design.

**Density/Intensity/Design**
- Larger parcels
- Variable densities

### Downtown

**Description**
Encompasses a broad range of uses and intensities:
- Governmental campus
- Significant retail
- Entertainment and lodging
- Opportunities for high-density housing
- Central plaza, public/open space
- Public parking facilities

**Density/Intensity/Design**
- High height and density limits
- Recognition of historic buildings or building groups
- Form-based guidelines
- Pedestrian-oriented design
- No off-street parking required, but loading required

### Neighborhood Commercial

**Description**
Small to moderate scale commercial, serving primarily the adjacent neighborhood(s). May include specialty retail; community gathering businesses such as coffee shops or lower intensity entertainment; offices; studios or housing above retail (storefront retail with vertical mixed use). Typically situated in or adjacent to residential neighborhoods. May transition to neighborhood mixed use.

**Density/Intensity/Design**
- Building footprints generally > 20,000 sq. ft.,
- Can be directly adjacent to residential uses.
- Parking is less prominent than pedestrian or bicycle features
- Generally a ‘node’ rather than strictly a corridor
- Edge or buffer standards along residential areas
### Medium Scale Commercial

**Description**
Commercial and office development focused primarily on needs and convenience of the motorist, without losing pedestrian access and connection. No residential uses. Situated along arterial roads. Can include a mix of auto-and neighborhood-oriented commercial uses or transition into neighborhood commercial.

**Density/Intensity/Design**
- Building footprints less than 50,000 sq. ft.
- Located along highly trafficked streets.
- Can be located near but not adjacent to residential uses.

### Large Scale Commercial

**Description**
Mall, shopping center and big box retail development, with associated surrounding retail and service uses, but only ancillary office uses and no residential uses. Oriented primarily to the motorist, with planned internal circulation patterns while still accommodating pedestrian movement.

**Density/Intensity/Design**
- Building footprints exceed 50,000 sq. ft.
- Site design includes generous landscaping of parking areas;
- Buffering of adjacent residential, improved pedestrian connections to and through sites.

### General Mixed Use

**Description**
The broadest mix of uses, including light industrial, office, commercial, and residential use, with performance standards to ensure compatibility. General or heavy industrial can be included when a large site is master planned to allow appropriate separation of uses.

**Density/Intensity/Design**
- Pedestrian circulation and open space amenities should be provided for larger sites
- Master planning for large sites.
### Light Industrial

**Description**
Areas for manufacturing, warehousing and distribution; uses that have few outside impacts, and can be located in relative proximity to non-industrial uses.

- Variable densities
- Performance standards

### General Industrial

**Description**
Areas for manufacturing, processing and other activities that may have off-site impacts and are generally isolated from other uses or buffered from them. Sites should have direct access to major regional transportation facilities and other infrastructure.

- Larger parcels
- Variable densities
- Performance standards for environmental effects and nuisance mitigation

### Community Facility

**Description**
Applicable to university and college and public school campuses, large religious facilities or government campuses, cemeteries, hospital, etc.

- Relationship to institutional master plans for larger community facilities, which should guide expansions of existing faculty.
- Buffer and transition between surrounding land use of differing nature
### Parks & Open Space

**Description**
Active and passive public parks and open space corridors with public access; also include FEMA designated floodplain, designated wetlands, drainage areas and any other lands reserved for open space purposes.

- Public and private parks
- Trails
- Greenways
- Golf Courses

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### Agriculture

**Description**
Areas principally devoted to agricultural production.

- Agricultural production
- Limited residential and commercial development that directly support the primary agricultural use.

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Figure 67: Western Planning District Future Land Use Plan Map
Figure 68: Mulberry Planning District Future Land Use Plan Map
Figure 69: River Center Planning District Future Land Use Plan Map
Figure 70: East Hill Planning District Future Land Use Plan Map
Figure 71: South End Planning District Future Land Use Plan Map
Figure 72: Island Planning District Future Land Use Plan Map
Figure 73: Island Planning District Future Land Use Plan Map (Incorporated Portion)
Figure 74: North Crescent Planning District Future Land Use Plan Map (Western Portion)
Figure 75: North Crescent Planning District Future Land Use Plan Map (Eastern Portion)
Figure 76: North Crescent Planning District Future Land Use Plan Map (Incorporated Portion)
**Land Use Goals and Implementation Strategies**

In order for goals to be achieved there must be strategies to implement the vision of a better Muscatine as laid out in the Comprehensive Plan. Each goal contained in the plan is accompanied by specific implementation strategies necessary to make that goal a reality.

There are three types of implementation strategies: policies, actions, and projects. Policies contain the standard which, if followed in all city actions and activities subject to review by the City, will advance the goal that they support. Policies contained within the comprehensive plan are advisory and compliance is not mandatory, however when taking an action contrary to what is contained in the plan this fact should be noted and an explanation given.

Actions detail the specific initiatives that the City can take to achieve a listed goal. Actions include such things as creating the necessary regulations to implement a goal, perform a study to understand how a goal might be achieved, or identify funding to achieve a goal.

Projects are specific capital improvement projects that, if constructed, would advance a listed goal. When the city develops future capital improvement plans, strong consideration should be given to the specific projects listed in the comprehensive plan.

**Goal LU.1: Implement the Future Land Use Plan**

Implement the Future Land Use Plan contained within the City of Muscatine Comprehensive Plan through regulations such as the zoning code, subdivision regulations.

- **Policy LU.1.A:** All future rezoning should be in compliance with the Future Land Use Plan.
- **Policy LU.1.B:** The zoning ordinance should be structured in a manner that supports the implementation of the Future Land Use Plan.

**Goal LU.2: Zoning Ordinance Rewrite**

A zoning ordinance that implements the vision of an ideal community as contained in this Comprehensive Plan.

- **Policy LU.2.A:** The Comprehensive Plan will be the basis of the Zoning Ordinance.
- **Policy LU.2.B:** Ensure that land use regulations contained within the zoning ordinance have sufficient flexibility to be adapted unique and difficult site conditions.
- **Policy LU.2.C:** Ensure that land use regulations contained within the zoning ordinance have sufficient flexibility to preserve the unique character of individual neighborhoods.
- **Policy LU.2.D:** The zoning ordinance should promote increased diversity of employment and business opportunities, promote access to education and training, expand entrepreneurial opportunities, and promote the establishment of businesses in locations near existing housing, infrastructure, and transportation.
Policy LU.2.E: The zoning ordinance should promote developments, buildings, and infrastructure that utilize sustainable design and construction standards and conserve natural resources by reducing waste and pollution through efficient use of land, energy, water, air, and materials.

Policy LU.2.F: Use form based zoning where it is the most effective tool to implement the goals of the Comprehensive Plan. Form based zoning is a method of land use regulation that places a primary emphasis on building types and dimensions, the visual aspects of the streetscape the physical characteristics of buildings and the relationship of buildings to each other and to the street, with a secondary emphasis on the uses within those buildings.

Policy LU.2.G: Make the zoning ordinance more user-friendly.

Policy LU.2.H: Streamline enumerated uses into broad categories. Clearly define the general uses so that applications can easily be sorted into the appropriate category. Regulate the real items of concern—size, hours, deliveries, and emissions of noise, odor, dust, gas, smoke, or vibration.

Policy LU.2.I: The zoning ordinance will be structured so as to encourage investment in nonconforming structures where they are not actively detracting from the surrounding neighborhood.

Action LU.2.J: With extensive public and stakeholder input and participation, Comprehensively reviewed and rewrite the zoning ordinance in manner that implements the vision of an ideal community that is contained in this Comprehensive Plan.

Action LU.2.K: Make use of tables and illustrations in the revised zoning ordinance to make clear the different permitted uses, parking, signage, and any form standards between various districts

Action LU.2.L: The revised zoning ordinance will be made fully functional online, including linked cross-references and the ability to look up zoning regulations by address.

Goal LU.3: Infill
Increase new development (housing and commercial) on vacant lots in portions of the City already served by public infrastructure.

Policy LU.3.A City that polices, regulations, and projects should promote infill development.

Policy LU.3.B: Ensure that infill and redevelopment projects are well-designed and compatible with surrounding uses and building types. Infill should be of a type, scale, orientation, and design that maintains or improves the character, aesthetic quality, and livability of the neighborhood.
Policy LU.3.C: Recognize that infill development is not inherently “good” simply because it is infill, or a higher density because it is higher density. Where increased density is recommended the benefits of infill must be balance among many community and neighborhood goals.

Action LU.3.D: Take advantage of already existing investments in infrastructure extension and improvement, by implementing a tax abatement to promote development on vacant parcels in currently existing subdivisions which are not yet built out.


Goal LU.4: Urban Fringe Development
New urban growth into previously undeveloped land will only occur in locations that are suitable for intensive urban development and have easy access to essential urban infrastructure and services.

Policy LU.4.A Extend City of Muscatine services and infrastructure in a logical and efficient manner that avoids leapfrog development patterns where new development skips over areas of land that is currently undeveloped but is potentially developable.

Policy LU.4.B: Development should only be permitted to occur in a manner that leaves a viable corridor for the extension of Palms Drive to Cedar Street.

Policy LU.4.C: Development should only be permitted to occur in a manner that leaves a viable corridor for the construction of the 38/61 Connector Road.


Goal LU.5: Residential Land Use
Residential land use occurring in manner that enhances the quality of life in Muscatine.

Policy LU.5.A: Protect the character of single-family residential neighborhoods by focusing higher intensity land uses in designated centers and corridors

Policy LU.5.B: Unless indicated otherwise elsewhere in the Comprehensive Plan the general character of existing residential areas should be maintained.

Policy LU.5.C: City of Muscatine policies, regulations, and projects should encourage diversity in the types of available housing, support the rehabilitation of existing housing, and promote the location of housing near public transportation and employment centers.

Policy LU.5.D: Residential development and redevelopment should occur in a manner that helps implement the goal of community members having the opportunity to travel safely to their home to their in-town destination by foot or bike and for children should be able walk or bike to their school safely.
**Policy LU.5.E:** In residential zoning districts at least two off-street parking spots will be required for each dwelling unit.

**Policy LU.5.F:** Balance the preferences of residents with City-wide and planning goals and priorities when determining the acceptability of changes to parcels of land in or adjacent to existing residential development.

**Policy LU.5.G:** Allow no further conversion of existing single family homes into duplexes or multi-family dwellings in areas designated as Mixed Density Residential in the Future Land Use Plan.

**Policy LU.5.H:** Existing duplexes or multi-family dwellings in areas designated as Mixed Density Residential in the Future Land Use Plan are recognized as integral to the character of these area, and on parcels where duplexes and multi-family dwelling currently exist, two or multifamily dwellings will be allowed by right.

**Action LU.5.I:** Adopt regulations and design standards to protect the desired street and block patterns, land use patterns, and development characteristics of the City’s established neighborhoods, such as building size and height, building setbacks, density, parking, landscaping, and streetscape improvements.

**Action LU.5.J:** During the process to review and revise the zoning ordinance a zoning district(s) that complies with both policy LU.5.G and LU.5.H will be created and the applied to areas designated as Mixed Density Residential in the Future Land Use Plan.

**Action LU.5.K:** Set lot sizes and setbacks dating from each neighborhood’s period of initial development as the neighborhood standard in residential areas.

**Goal LU.6: Commercial Land Use**

Commercial land use occurring in manner that enhances the quality of life in Muscatine.

**Policy LU.6.A:** Scattered commercial activity in residential areas where historic precedent exists, and desired by area residents is to be considered positive assets to the community and not spot zoning.

**Policy LU.6.B:** Design standards for larger commercial developments.

**Policy LU.6.C:** Enhancing the vitality of commercial development downtown.


**Action LU.6.E:** Develop and provide incentives for the reintroduction of neighborhood businesses and services, especially neighborhood-serving grocery stores, into appropriate locations of under-served established areas.
Goal LU.7: Industrial Land Use
Industrial land use occurring in manner that enhances both the economy of and the quality of life of Muscatine.

Policy LU.7.A: Industrial development should be located where the proper sizing of infrastructure such as water, sewer, electric, communication and transportation has occurred or can be properly planned and implemented.

Policy LU.7.B: Existing industrial development and areas designated for future development will protected from encroachment by future residential development.

Policy LU.7.C: Undeveloped land zoned for industrial development should located so that it is attractive to development, compatible with surrounding current and planned land uses, and is an adequate distance from planned or existing residential development.

Policy LU.7.D: New industrial developments will be located so that any emissions of noise, odor, dust, gas, smoke, or vibration are not a nuisance to any planned or existing residentially zoned areas.


Goal LU.8: Adequate Supply of Land for Industrial and Commercial Development
Ensure there is an adequate supply of land that is readily available for commercial or industrial development. These sites should be located so that they are both attractive to industrial or commercial development, compatible with surrounding current and planned land uses, for uses that will include new regulated pollution point sources are an adequate distance from planned or existing residential areas, are zoned appropriately, and have the necessary infrastructure.

Policy LU.8.A: Maintaining an adequate supply of useable industrial and commercial land in appropriate locations will be a consideration in the preparation of a revised zoning ordinance.

Action LU.8.B: Conduct an assessment of the currently available supply of land that is useable for industrial and commercial development and project future demand for such land.

Action LU.8.C: Provide details of how this goal is being met in the staff report that will accompany a revised zoning ordinance.

Action LU.8.D: The City of Muscatine will work with community partners to identify and promote sites that can be suitably developed for a variety of local employment projects including business and industrial parks, office and professional centers, and retail activities.
Goal LU.9: Community Facilities

Retain and enhance community facilities, such as governmental offices, schools, hospitals, parks, cemeteries, religious institutions, police stations, fire stations, recreational facilities, golf courses, etc. as important neighborhood centers and providers of employment, services and amenities.

**Policy LU.9.A:** Community facilities recognized as use compatible with residential development when appropriate development standards are applied.

**Policy LU.9.B:** Any community facility zoning district will be based on the requirement of an approved development plan.

**Policy LU.9.C:** New community facilities will be required to obtain a community facilities zoning.

**Policy LU.9.D:** Community facilities are recognized as an ideal land use to transition between areas of commercial and industrial land use and residential land use.

**Policy LU.9.E:** The rezoning of single parcel to a new community facility zoning district in an area zoned for residential use is not considered to be spot zoning so long as the proposed community facility use is compatible with the surrounding residential uses.

**Policy LU.9.F** Ensure that community facilities or neighborhood schools that are no longer utilized for their originally intended use, remain an asset to the neighborhood through cooperative efforts between the facility/building owner, the City, the neighborhood and local stakeholders.

**Policy LU.9.G:** Expansion or construction of major community facilities should be carefully planned and constructed so as to avoid undue negative impacts on adjacent neighborhoods, such as loss of housing stock, increased traffic congestion, or spill over parking on neighborhood streets.

**Action LU.9.H:** Develop, with extensive input from the community and relevant stakeholders of clear, consistent, easily understandable, and effective land use guidelines for community facilities. These regulations will take the form of a community facility specific zoning district for all community facilities.

**Action LU.9.I:** Place all existing community facilities, currently located within a residential zoning district, within this new community facility zoning district.

**Action LU.9.J:** Work with major institutions located within and adjacent to established neighborhoods to set growth boundaries and develop mutually-agreed master plans for those facilities to help ensure that their expansion projects are consistent with the Comprehensive Plan and protect neighborhoods from the potential negative impacts associated with such expansions.
Goal LU.10: Agriculture
Minimize the amount of development occurring on land currently being farmed.

**Policy LU.10.A:** City of Muscatine polices, regulations, services, and infrastructure improvements should not support the development of actively farmed land designated as Agriculture in the Future Land Use Plan and that is being used for agricultural purposes.

**Action LU.10.B:** Implement Policy LU.10.A, through any necessary revisions to the zoning ordinance.

Goal LU.11: Floodplain
To regulate the use of land in those areas of the City which are subject to predictable inundations at frequent intervals to assure that flood carrying capacity within the altered or relocated portion of any watercourse is maintained. Such land use controls are necessary to qualify property owners for flood insurance under the National Flood Insurance Act of 1968. The regulations, while permitting reasonable economic and social use of such properties, help protect health, safety, and general welfare and reduce financial burdens imposed on the community, governmental units, and its individuals caused by frequent and periodic floods and the overflow of lands.

**Policy LU.11.A:** The City of Muscatine will maintain legally enforceable floodplain management regulations that are compliant with Title 44 Code of Federal Regulations 60, in order to ensure that Muscatine residents and business are eligible to participate in the National Flood Insurance Program.

**Action LU.11.B:** Monitor and update when necessary the City’s floodplain management regulations to ensure continued compliance with Title 44 Code of Federal Regulations 60.

Goal LU.12: Historic Districts
Increased investment and revitalization within designated historic districts

**Policy LU.12.A:** Maintain the historic character of historic districts.

**Action LU.12.B:** Placement of designated historic districts in a zoning district that is structured to preserves the historical land use pattern of the district

**Action LU.12.C:** Placement of designated historic districts in a zoning district that is structured so that any new structures or major renovations to existing structures are sensitive to the historic form of building in the designated historic district.

**Action LU.12.D:** Implement a tax abatement program to support structural renovation in a manner that preserves their historic character of structures in designated historic districts.
Goal LU.13: Land Use in the Vicinity of Muscatine Municipal Airport
Land use in the vicinity of the airport that occurs in manner ensuing that is compatible with the continued operation of the airport and does not create an unacceptable risk to the safety of both airport users and those living and working nearby.

Policy LU.13.A: Land use in the vicinity of the airport will be regulated in a manner that ensures the use of land in the vicinity of the airport is compatible with the continued aviation operation at the airport and does not create an unacceptable risk to the safety of both airport users and those living and working nearby.

Action T.13.B: The City of Muscatine will work with the Iowa Department of Transportation, Muscatine County, and the City of Fruitland to ensure that land use regulations ensure that use of land in the vicinity of the airport is compatible with the continued aviation operation at the airport and does not create an unacceptable risk to the safety of both airport users and those living and working nearby.

Goal LU.14: Critical Corridors
The City’s major corridors Park Avenue, Grandview Avenue, and Mississippi Drive, should have a significant positive impact on the image, appearance and future economic vitality of the City, by serving as both welcoming corridors into the community and vibrant areas of mixed residential and non-residential land uses that enhance the quality of life of the entire Muscatine community.

Policy LU.14.A: Changes in land use, development, and redevelopment in these corridors should occur in manner to both enhance these corridors as attractive gateways into Muscatine and area vibrant mixed land use.

Action LU.14.B: Work with community stakeholders to develop a specific corridor land use plan for each of these corridors to achieve Goal LU.14 in conjunction with infrastructure and aesthetical improvements called for elsewhere in the Comprehensive Plan.

Action LU.14.C: Land use regulations, including the zoning ordinance, will be revised to implement the plans prepared under Action LU.14.B.

Goal LU.15: Downtown
A vibrant and thriving downtown that enhances the quality of life in Muscatine

Policy LU.15.A: City regulations, policies, projects will structured to encourage land use and redevelopment in the Downtown that:
- Creates reasons for people to frequent the Downtown through activities such as entertainment, recreation and special events;
- Encourages the preservation of historic buildings and enhances the historic flavor of the Downtown;
- Strengthens and diversifies the retail, economic and employment base in the Downtown;
- Encourages the development of art, cultural and educational opportunities;
- Ensures that Downtown livability is enhanced

Action LU.15.B: Regulations, including the zoning ordinance, will be revised to implement the Policy LU.15.A.
Goal LU.16: Revitalization
The revitalization of established neighborhoods, particularly blighted areas by promoting development that conserves land, protects historic resources, promotes pedestrian accessibility, and integrates different uses of property. Remediation and reuse of existing sites, structures, and infrastructure is preferred over new construction in undeveloped areas


Policy LU.16.B: Building code requirements for the rehabilitation of existing buildings should protect the safety of building occupants, while also recognizing the need for flexibility that comes with rehabilitating existing buildings

Action LU.16.C: Encourage rehabilitation and improvement programs to conserve and upgrade existing properties and buildings.

Action LU.16.D: Implement a tax abatement program to support the renovation in a manner that preserves their historic character of structures in designated historic districts.

Action LU.16.E: Promote the use of local, state and federal programs that are intended to foster reinvestment and redevelopment of polluted, blighted and abandoned properties.

Action LU.16.F: Land use regulations, including the zoning ordinance, will be revised to more effectively implement Goal LU.16.

Action LU.16.G: The City will actively encourage the redevelopment of the Sun Mart block.

Goal LU.17: Connection to Appearance Plan
Land use regulations that are structured to achieve community appearance goals.

Policy LU.17.A: The City of Muscatine Zoning Ordinance and all other land use regulations will further community appearance goals and to implement the community image establish in community image/appearance master plan developed to fulfill Goal C.1.

Goal LU.18: Code Enforcement
Implementation of the vision of the desired Muscatine contained within the Comprehensive Plan through effective code enforcement.

Policy LU.18.A: The City will continue to enforce applicable property maintenance, building, and zoning codes to minimize the physical deterioration of properties.

Action LU.18.B: The City will work with neighborhood and community groups to educate residents about their responsibility under City Code.
**Action LU.18.C:** Promote and expand community-based neighborhood cleanup programs.

**Action LU.18.C:** Increase amount of City resources dedicated to code enforcement.

**Goal LU.19: Annexation Policy**
Growth of the City of Muscatine through voluntary annexations

**Policy LU.19.A:** The City of Muscatine prefers to pursue voluntary annexations.

**Policy LU.19.B:** Only properties within the City of Muscatine or for which there is a signed annexation agreement will be allowed to connect to the City of Muscatine sanitary sewer system.

**Action LU.19.C:** To encourage Muscatine Power and Water to adopt a policy that would require that any property served by future extension of the water system be annexed within the City of Muscatine or be the subject of signed annexation agreement.