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CHAPTER ONE: SOCIOECONOMIC ANALYSIS AND EXISTING CONDITIONS

EXISTING LAND USE

The purpose of recognizing the existing land use and zoning districts for the City of Muscatine is to identify and evaluate general locations of services, the supply of adequate infrastructure, and potential sites for development or redevelopment. The identification of land use throughout the City will provide an indicator that will help gauge the current supply of land availability and predict the amount of land that is needed to support the community in the future. The intent of this section is to identify the existing availability of each land use within the community through the evaluation of the City’s current Zoning District Map and the Existing Land Use Map. This information, along with the analysis of existing conditions, will be used to predict the amount of each land use classification that is needed in the future. A Future Land Use Map will then be created to depict the recommended future land uses for the City of Muscatine. The Future Land Use Map should be used as a guide in making land use decisions. The project area for this study includes the City of Muscatine, including a (2) two-mile radius extending from the current city limits.

EXISTING ZONING

The Zoning Map depicts the Zoning District boundaries into which the City has been divided. The City of Muscatine currently has 17 zoning districts ranging from residential to airport uses. Legally, the zoning map is adopted as a part of the local zoning code. The map is a tool that is to be used to determine how a particular piece of property or parcel is zoned.

The City is divided into zoning districts for the purpose of enforcing Muscatine’s Municipal Zoning Code. Each zoning district has specific guidelines and regulations that development must follow in order to be in compliance with the City’s Zoning Code. Only the land within the City’s limits is depicted on the City’s Zoning District Map. The total area of land contained within the city is approximately 17 square miles or 10,586 acres. The following is a list of the City’s current Zoning Districts, and the approximate amount of land currently zoned for each district.

Residence Districts: The City has seven residential districts representing a variety of housing types and densities. They range from the “R-1” Single-family Residence District which requires a minimum lot size of 20,000 S.F. for a single-family dwelling to the “R-L”, Large Scale Residential Development District, which permits high rise apartment buildings (above 6 stories) at a density of 60 unit/acre. The “R-3” Single-family Residence Zoning District is the largest single zoning district within the City. The City’s “R-3” Zoning District contains approximately 3,317 acres which is approximately 31.5% of the City's total land mass. Approximately 49% of the City’s land area is contained within the Residential Zoning Districts. Residential uses are shaded in various shades of yellow/orange on the Zoning District Map. Multifamily Zoning Districts are colored green for (R-5) and brown for (R-6). The total acreage and % of residential land area is as follows:
“R-1” Single-family Residence: 835 acres (7.8%)
“R-2” Single-family Residence: 249 acres (2.0%)
“R-3” Single-family Residence: 3,317 acres (31.5%)
“R-4” Two-family Residence: 238 acres (2.3%)
“R-5” Multi-Family Residence: 87 acres (0.8%)
“R-6” Multi-Family Residence: 192 acres (2.0%)
“R-L” Large Scale: 278 acres (2.6%)
Total Residential 5,196 acres (49%)
Special Development Districts: The City currently has three Special Development Districts. The purpose of these districts is to provide the opportunity for more flexible and creative architectural design, site layout and urban planning for certain special and unique land areas. Special Development Districts are colored various shades of purple on the Existing Zoning District Map. The zoning classification and the approximate amount of land zoned for each district is as follows:

- “S-1 Special Development: 17 acres (0.1%)”
- “S-2” Institutional-Office: 44 acres (0.4%)
- “S-3” Mixed Use: 206 acres (2.0%)
- **Total Planned Districts**: 267 acres (2.5%) 

Airport

- “A-P” Airport District: 289 acres (2.6%)
- **Total Airport**: 289 acres (2.6%)

The Existing Land Use Map presents the general locations of the various land use categories. It is used to evaluate current patterns of land uses and assess needs for future growth. By dividing the City into existing land uses one can determine the location, amount and type of development throughout the planning area. This information will be used in the preparation of a Future Land Use Map, which is discussed in the Planning Districts Section.

The Existing Land Use Map was created by using data from an aerial photograph taken on March 1999 combined with data collected from a field survey conducted during the spring of 2001. The field survey was a “windshield survey” rather than a lot by lot survey. Each land use category is designated by standard colors on the Existing Land Use Map. The map is intended to categorize all development within the City into specific land use types. The existing land uses identified for the City of Muscatine include single-family residential, multifamily residential, commercial, office, mixed use, heavy industrial, light industrial, institutional, open space, parks/recreation, agriculture, vacant, and water bodies. Streets and roads are outlined in black and colored white on the Existing Land Use Map.

The land uses depicted on the Existing Land Use Map are not to be confused with the City’s Zoning Districts. While similarities may exist, the Zoning Map and the Existing Land Use Map do not show the same information. Whereas the Zoning Map is a legal instrument that depicts how parcels are zoned, the Land Use Map shows how the land is currently being used. The Existing Land Use Map identifies land uses through observations of the physical characteristics of the actual landscape. Ideally, the Zoning Map and the Existing Land Use Map are very similar. Unlike the Zoning District Map, local roadways, state highways, and railroad right-of-ways are not included in the calculations and land uses depicted on the Existing Land Use Map. See Table 1.1. A brief description of the land use categories used on the Existing Land Use Map is as follows:
\textbf{City of Muscatine, Iowa – Comprehensive Plan}

\textit{Chapter One: Socioeconomic Analysis and Existing Conditions}

\textbf{Single-family Residential Land Use:} Residential development is divided into two categories: single-family residential and multifamily residential. Low-density, attached and detached single-family developments and structures are classified as “single-family” on the Existing Land Use Map. Most of the residential structures in the City of Muscatine are single-family, detached houses. For the purposes of the Existing Land Use Map, farms are not considered residential uses due to their relatively low density. Single-family residential land uses are shown in yellow on the Existing Land Use Map.

There are approximately 2,267 acres of single-family or low-density residential development within the City. However, the City currently has approximately 4,401 acres that fall within one of the City’s three single-family zoning districts (“R1”-“R3”). This figure is much higher than the estimated existing residential land use figure because it includes several public parks, recreation areas and other institutional uses that are permitted within the City’s single-family residential zoning districts.

\textbf{Parks & Recreation Area:} Parks and recreation areas are either owned by the City of Muscatine, the State of Iowa, or private interests. Regardless of ownership, these areas are open for use by the public at large. In addition to park and recreation areas, cemeteries are also depicted as “Park & Recreation” on the Existing Land Use Map. The City owns and maintains over 24 parks and recreation areas encompassing approximately 574 acres. The largest and most popular parks include the Muscatine Municipal Golf Course, the Muscatine Soccer Complex, Kent Stein Park, Weed Park and Riverside Park. Parks & recreation areas are shaded in dark green on the Existing Land Use Map. The City’s Zoning Ordinance permits parks and recreational uses in several zoning districts, therefore, a direct comparison is not practicable.

\textbf{Multi-family Residential Land Use:} A land use designation of Multi-Family denotes developments such as duplexes, apartments and condominiums. Due to the relatively high density of mobile home parks, they are depicted as multi-family developments. Multi-family residential areas are shaded brown. The commercial/apartment mixed use buildings located predominately within the downtown district, even though they contain residential units, are categorized as mixed use. Mixed-use developments are colored purple.

There is an estimated 149 acres of multi-family development within the City of Muscatine. The City currently has approximately 800 acres within one of the four zoning districts that permit multi-family developments. The Districts include “R4”, R5”, “R6” and “RL”- Large Scale Residential Development.

\textbf{Commercial Land Use:} Commercial and Office land use includes retail, office, and service oriented businesses. Home based businesses are generally not seen as a commercial land use, and are incorporated within the residential areas. A very limited level of manufacturing is permitted in the commercial zoning districts and is similarly seen as commercial land use on the Existing Land Use Map. There are two categories of commercial land uses identified. They are “Commercial”, which is shaded red and “Office” which is shaded pink. Most commercial areas are located within the Mississippi riverfront area of downtown; along the Grandview corridor and along Park Avenue (Route 22/38) and US 61.
There are an estimated 458 acres of Commercial and 98 acres of Office currently within the City. The City currently has over 473 acres located within the City’s “C1”, “C2” and “C3” zoning districts.

**Institutional Land Use:** Institutional land uses are areas used for the provision of government services, government administration buildings, hospitals, schools, and churches. The Muscatine Municipal Airport is identified as an institutional use on the Existing Land Use Map. Institutional uses are shaded blue.

There are approximately 679 acres of institutional development within the City. The City’s Zoning Ordinance permits institutional uses in several zoning districts, therefore, a direct comparison cannot be made between the Existing Land Use Map and the Zoning District Map.

**Industrial Land Use:** Industrial land use includes both heavy and light manufacturing, large storage areas, and the refinement of natural resources. Light industrial areas are shaded in light gray and heavy industrial land uses are colored dark gray on the Existing Land Use Map. Heavy industrial areas are generally larger operations that may contain conditions that present special safety and/or environmental impacts.

In total there are approximately 1,015 acres of “Heavy Industrial” and/or “Light Industrial” development within the city. The City currently has approximately 3,577 acres that fall within the City’s “M1” Light Industrial” or “M2” Heavy Industrial” Zoning District.

**Agriculture Land Use:** Agriculture land use identifies farmland, pastures, and open prairie on the Existing Land Use Map.

The land areas for agriculture land within the City differ widely between the Existing Land Use Map and the Zoning District Map. The Existing Land Use Map shows 3,800 acres while the Zoning District Map shows 780 acres of agriculturally zoned land. The Existing Land Use Map shows large amounts of residential and industrial zoned property as agricultural. Although this property falls within a particular zoning classification, it is void of any development or manmade improvements. Since the property has been cleared and maintained, it was classified as “Agriculture.”

**Vacant Land:** Vacant areas are undeveloped spaces in or adjacent to developed parts of the City of Muscatine. Public utilities and services are either partially or fully in place in these areas; therefore, they are the most suitable for future in-fill development and expansion. There is approximately 49 vacant acres of urban property within the City. Vacant areas are shaded purple on the Existing Land Use Map.

**Transportation Network:** Approximately 1,553 acres (14.6%) are not classified as an existing land use category. This area is comprised of rights-of-way contained within the community’s transportation network. Most streets within the City of Muscatine are public right-of-way owned and maintained by the City of Muscatine. There are approximately 121 miles of City owned roadways that make up the city’s local transportation network. Rights-of-way owned by the Iowa Department of Transportation, railroads and private entities are also included within the
community’s transportation system. For example, the Bypass consumes a significant amount of land within the city of Muscatine. There is over 10 miles of the Bypass located within the City containing right-of-way widths of several hundred feet and widths as wide as 800’ or more in some areas. In total approximately 1,553 acres of public rights-of-way, highways, streets, railroads, and private roads make up the community’s transportation network.

Table 1.1 provides a comparison of the Existing Land Uses and the City’s Zoning Districts. The existing land use data is based upon field surveys and a review of aerial photographs of the city taken in March of 1999. The zoning district information was provided by the city of Muscatine. The land area calculations are estimates.

<table>
<thead>
<tr>
<th>Existing Land Uses</th>
<th>Area (acres)</th>
<th>Zoning Districts</th>
<th>Area (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agricultural and Cleared, Undeveloped Property</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>3,800</td>
<td>&quot;AG&quot;</td>
<td>780</td>
</tr>
<tr>
<td>Total Agriculture</td>
<td>3,800</td>
<td>Total Zoned Areas</td>
<td>780</td>
</tr>
<tr>
<td>2. Low Density/Single-family Residential, Park/Recreation &amp; Open Space</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-Family Residential</td>
<td>2,267</td>
<td>&quot;R-1&quot;</td>
<td>835</td>
</tr>
<tr>
<td>Park &amp; Recreation Areas</td>
<td>510</td>
<td>&quot;R-2&quot;</td>
<td>249</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;R-3&quot;</td>
<td>3,317</td>
</tr>
<tr>
<td>Total Residential</td>
<td>2,777</td>
<td>Total Zoned Areas</td>
<td>4,401</td>
</tr>
<tr>
<td>3. High Density/Multi-Family Residential</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi Family</td>
<td>152</td>
<td>&quot;R-4&quot;</td>
<td>238</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;R-5&quot;</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;R-6&quot;</td>
<td>193</td>
</tr>
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<td></td>
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<td>&quot;R-L&quot;</td>
<td>279</td>
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<tr>
<td>Total Multi-Family</td>
<td>152</td>
<td>Total Zoned Areas</td>
<td>798</td>
</tr>
<tr>
<td>4. Commercial</td>
<td></td>
<td></td>
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<tr>
<td>Office</td>
<td>98</td>
<td>&quot;C-1&quot;</td>
<td>356</td>
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<tr>
<td>Commercial</td>
<td>458</td>
<td>&quot;C-2&quot;</td>
<td>61</td>
</tr>
<tr>
<td>Mixed</td>
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<td>&quot;C-3&quot;</td>
<td>56</td>
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<tr>
<td>Institutional</td>
<td>679</td>
<td>&quot;S-1&quot;</td>
<td>17</td>
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<tr>
<td></td>
<td></td>
<td>&quot;S-2&quot;</td>
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<td></td>
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<td>&quot;AP&quot;</td>
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<td>Total Commercial</td>
<td>1,240</td>
<td>Total Zoned Areas</td>
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</tr>
<tr>
<td>5. Industrial</td>
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<td></td>
</tr>
<tr>
<td>Light Industrial</td>
<td>499</td>
<td>&quot;M-1&quot;</td>
<td>1,396</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>516</td>
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<td>Total Industrial</td>
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<td>6. Vacant</td>
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<tr>
<td>Vacant</td>
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<td>N/A</td>
<td>0</td>
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<tr>
<td>Total Vacant</td>
<td>49</td>
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</tr>
</tbody>
</table>
City of Muscatine, Iowa– Comprehensive Plan

Chapter One: Socioeconomic Analysis and Existing Conditions

<table>
<thead>
<tr>
<th>Streets</th>
<th>1,533</th>
<th>Total Streets</th>
<th>1,533</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Acres</td>
<td>10,586</td>
<td>Total Acres</td>
<td>10,586</td>
</tr>
</tbody>
</table>

DEMOGRAPHIC AND CENSUS DATA

Population

The US Census Bureau’s 2000 census stated that the Nation’s 1990 to 2000 population increase of 32.7 million people between 1990 and 2000 represents the largest census-to-census increase in American history. The previous record increase was 28.0 million people between 1950 and 1960, a gain fueled primarily by the post-World War II baby boom (1946 to 1964). Rates of decennial population growth declined steadily in the three decades following the 1950s’ peak before rising again in the 1990s. Population growth rates varied significantly by region in the 1990s, with higher rates in the West (19.7 percent) and South (17.3 percent) and much lower rates in the Midwest (7.9 percent) and Northeast (5.5 percent), compared to the National growth rate of 13.2%. Meanwhile, despite overall population growth in each of the past five decades, the Midwest’s share of total population fell from 29% to 23%.

According to the 2000 Census, the City of Muscatine’s population is 22,697 a decrease of 184 people (less than 1 percent) from the 1990 Census (Ref. Table 1.2, Fig. 1.1).

Table 1.2: Population Growth (1970-2000)

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
<th>%change 70-00</th>
<th>%change 90-00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscatine, IA</td>
<td>22,405</td>
<td>23,467</td>
<td>22,881</td>
<td>22,697</td>
<td>1.30%</td>
<td>-0.80%</td>
</tr>
<tr>
<td>Muscatine County, IA</td>
<td>37,179</td>
<td>40,435</td>
<td>39,907</td>
<td>41,722</td>
<td>12.22%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Iowa</td>
<td>2,802,217</td>
<td>2,888,734</td>
<td>2,776,755</td>
<td>2,926,324</td>
<td>4.43%</td>
<td>5.39%</td>
</tr>
<tr>
<td>Bi-State Region</td>
<td>417,113</td>
<td>443,680</td>
<td>408,058</td>
<td>417,740</td>
<td>0.15%</td>
<td>2.37%</td>
</tr>
<tr>
<td>US</td>
<td>201,606,786</td>
<td>224,810,186</td>
<td>248,709,166</td>
<td>281,421,906</td>
<td>39.59%</td>
<td>13.15%</td>
</tr>
</tbody>
</table>

Source: US Census, BWR Corp.

Figure 1.1: Population Growth Index (1970-2000)

Muscatine County registered a 4.5% increase and the Bi-State Region, which is comprised of Muscatine and Scott Counties in Iowa and Rock Island, Henry and Mercer Counties in Illinois, registered an increase of 2.4%. The regional increase is minimal compared to the National or even the State increase, but it does show the region has a very stable population.
In the last 30 years, the City of Muscatine has only increased by about 1.3% (Ref. Table 1.2, Fig. 1.1). The Growth Index is a means of comparison of growth rates of different entities assuming the base population of one (1) for each entity. The population of Muscatine County increased by 12.2%, mainly in Cities of Wilton, West Liberty, Fruitland and Conesville (Source: Bi-State Regional Commission). These statistics show that the region as a whole is very stable, in spite of the fact that the region has a very high manufacturing base and that the sector saw a major decline in the 1980s.

Population Projections

Three alternative growth scenarios for the City of Muscatine have been presented here (Ref. Table 1.3). For a city that has shown increasing population early on and then a declining population in recent past, it is difficult to use one method to arrive at a reasonable projection.

The first scenario uses historical data for the City of Muscatine between 1960 and 2000 to project population to 2020 using linear regression techniques. When using linear regression, 20 to 30 years of history is used to project 20 years in the future. This scenario shows a bigger increase in population for 2010 (about 955 people) and then a smaller increase of about 388 people during 2010-2020.

The second scenario assumes that the City will follow the County growth pattern. The projections for the County have been prepared by the Bi-State Regional Commission and show that the County will gain population in the next two decades. If Muscatine follows the County pattern, it will gain about 581 people between 2000 and 2010, and about 903 people between 2010 and 2020.

The third and final scenario assumes that the City will follow the regional growth trend, which is projected to increase in population of 2.05 percent in 2010 and 2.52 percent between 2010 and 2020. The City will grow about 465 people by 2010 and an additional 583 between 2010 and 2020.

Table 1.3: Population Projections (2010-2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I Using Linear Regression for population 1960 to 2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscatine, IA</td>
<td>20,997</td>
<td>22,405</td>
<td>23,467</td>
<td>22,881</td>
<td>22,697</td>
<td>23,652</td>
<td>24,040</td>
</tr>
<tr>
<td>Growth Rate</td>
<td>6.71%</td>
<td>4.74%</td>
<td>-2.50%</td>
<td>-0.80%</td>
<td>4.21%</td>
<td>1.64%</td>
<td></td>
</tr>
<tr>
<td>II If Muscatine follows the County growth rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscatine, IA</td>
<td>20,997</td>
<td>22,405</td>
<td>23,467</td>
<td>22,881</td>
<td>22,697</td>
<td>23,278</td>
<td>24,181</td>
</tr>
<tr>
<td>Muscatine County, IA</td>
<td>33,840</td>
<td>37,181</td>
<td>40,436</td>
<td>39,907</td>
<td>41,722</td>
<td>42,790</td>
<td>44,450</td>
</tr>
<tr>
<td>COUNTY GROWTH RATE</td>
<td>9.87%</td>
<td>8.75%</td>
<td>-1.31%</td>
<td>4.55%</td>
<td>2.56%</td>
<td>3.88%</td>
<td></td>
</tr>
<tr>
<td>III If Muscatine follows the Regional growth rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscatine, IA</td>
<td>20,997</td>
<td>22,405</td>
<td>23,467</td>
<td>22,881</td>
<td>22,697</td>
<td>23,162</td>
<td>23,745</td>
</tr>
<tr>
<td>Bi-State Region</td>
<td>370,409</td>
<td>417,113</td>
<td>443,680</td>
<td>408,058</td>
<td>417,741</td>
<td>426,300</td>
<td>437,030</td>
</tr>
<tr>
<td>REGIONAL GROWTH RATE</td>
<td>12.61%</td>
<td>6.37%</td>
<td>-8.03%</td>
<td>2.37%</td>
<td>2.05%</td>
<td>2.52%</td>
<td></td>
</tr>
</tbody>
</table>

Source: US Census Bureau, BWR Corp., Bi-State Regional Commission.

The third and final scenario assumes that the City will follow the regional growth trend, which is projected to increase in population of 2.05 percent in 2010 and 2.52 percent between 2010 and 2020. The City will grow about 465 people by 2010 and an additional 583 between 2010 and 2020.
The third scenario indicates a modest growth rate and is the projection recommended for the plan. The region has already seen effects of the economic downturn as a result of decline in the manufacturing sector, followed by some stability in the last decade. New opportunities, increased diversification and an active interest by the City and County can stimulate growth in the existing market niches. The growth is expected to be very moderate—about 0.4% each year.

**Age Characteristics**

Muscatine has more or less followed a demographic pattern similar to the Nation, characterized by a growing percentage of population over the age of 65, since 1980. The State of Iowa has a higher percentage of people over 65 than the Nation (about 3% more). This is, however, not reflected in a large way, in the City or the County population (Ref. Fig 1.4). This implies that the elderly population, in general, favors the State of Iowa but not necessarily the County as a place of residence. This trend has been going on at least since the 1980s.

There is also no significant difference in the younger population (ages 18-35), when compared to the County and the State of Iowa. In each case 18-35 year olds comprised a healthy 41% of the total population in 1990. This had increased from about 39% in 1980. However, in 2000 the number of 15-35 year olds in the City is 27%. The percentage of population in the 18-45-age bracket has been about 3% less than the National average since 1980. The 2000 Census shows that gap to be narrowing. There is however a general indication that the City has followed regional trends and has to a large extent retained its young population.
Figure 1.3: Population Pyramids (1970-1990)

Male-Female Ratio

The Male-Female ratio in Muscatine varies slightly from the County and the National ratio. There are proportionately more women in Muscatine, than in the County or the Nation.

<table>
<thead>
<tr>
<th>Year</th>
<th>Muscatine, IA Male</th>
<th>Muscatine County Male</th>
<th>Iowa Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Numbers</td>
<td>% of Total</td>
<td>Numbers</td>
</tr>
<tr>
<td>1970</td>
<td>10,352</td>
<td>47.90%</td>
<td>18,160</td>
</tr>
<tr>
<td>1980</td>
<td>11,181</td>
<td>48.20%</td>
<td>19,807</td>
</tr>
<tr>
<td>1990</td>
<td>10,820</td>
<td>51.80%</td>
<td>19,409</td>
</tr>
<tr>
<td>2000</td>
<td>11,041</td>
<td>52.40%</td>
<td>20,661</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, BWR Corp.

Racial Characteristics

The Racial characteristics of Muscatine have been changing in the last few decades. Whites still constitute the majority of the population, but their proportion to the total population is decreasing. They constituted 99% of the population in 1970 and 90.7% in 2000 (Ref. Table 1.5). African-Americans have not traditionally been a large minority group in Muscatine. They constitute about 1.1% of the total population. On the other hand, there has been a steady increase in the Hispanic population: 127.6% between 1970 and 1980, 46.2% between 1980 and 1990 and 52.8% in the last decade (Ref. Table 1.6). Hispanics constitute about 11.9% of the City's population. According to the 2000 Census, Hispanics are now the largest minority group in the Nation (12.56%).

<table>
<thead>
<tr>
<th>Year</th>
<th>Muscatine, IA</th>
<th>Muscatine County</th>
<th>MSA</th>
<th>US</th>
<th>MSA</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White Population</td>
<td>Black Population</td>
<td>American Indian Eskimo or Aleut Population</td>
<td>Asian or Pacific Islander Population</td>
<td>Other Population</td>
<td>Hispanic Origin</td>
</tr>
<tr>
<td>1970</td>
<td>99.00%</td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
<td>2.50%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>99.20%</td>
<td>0.30%</td>
<td>0.40%</td>
<td>0.40%</td>
<td>2.50%</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>96.30%</td>
<td>3.40%</td>
<td>0.30%</td>
<td>0.30%</td>
<td>2.10%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>87.30%</td>
<td>11.20%</td>
<td>1.50%</td>
<td>1.50%</td>
<td>5.10%</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>95.10%</td>
<td>0.70%</td>
<td>0.10%</td>
<td>0.40%</td>
<td>3.70%</td>
<td>5.30%</td>
</tr>
<tr>
<td></td>
<td>95.80%</td>
<td>0.50%</td>
<td>0.10%</td>
<td>0.30%</td>
<td>3.30%</td>
<td>5.20%</td>
</tr>
<tr>
<td></td>
<td>93.40%</td>
<td>4.50%</td>
<td>0.20%</td>
<td>0.40%</td>
<td>1.50%</td>
<td>3.00%</td>
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<tr>
<td></td>
<td>83.10%</td>
<td>11.70%</td>
<td>0.60%</td>
<td>1.50%</td>
<td>3.00%</td>
<td>6.50%</td>
</tr>
<tr>
<td>2000</td>
<td>94.50%</td>
<td>0.50%</td>
<td>0.20%</td>
<td>0.30%</td>
<td>3.00%</td>
<td>7.90%</td>
</tr>
<tr>
<td></td>
<td>94.90%</td>
<td>0.30%</td>
<td>0.40%</td>
<td>0.40%</td>
<td>0.40%</td>
<td>7.10%</td>
</tr>
<tr>
<td></td>
<td>92.10%</td>
<td>5.40%</td>
<td>0.30%</td>
<td>0.70%</td>
<td>0.70%</td>
<td>3.60%</td>
</tr>
<tr>
<td></td>
<td>80.30%</td>
<td>12.00%</td>
<td>0.80%</td>
<td>2.90%</td>
<td>2.90%</td>
<td>8.80%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, BWR Corp.
CITY OF MUSCATINE, IOWA – COMPREHENSIVE PLAN

Chapter One: Socioeconomic Analysis and Existing Conditions

Table 1.6: Change in Racial Composition (1970-2000)

<table>
<thead>
<tr>
<th>%change</th>
<th>Muscatine, IA</th>
<th>Muscatine County</th>
<th>MSA</th>
<th>US</th>
<th>Muscatine, IA</th>
<th>Muscatine County</th>
<th>MSA</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-1980</td>
<td>3.17%</td>
<td>5.03%</td>
<td>2.66%</td>
<td>6.14%</td>
<td>-2.51%</td>
<td>-2.23%</td>
<td>-9.84%</td>
<td>6.90%</td>
</tr>
<tr>
<td></td>
<td>White Pop.</td>
<td>Black Pop.</td>
<td>American Indian Eskimo or Aleut Pop.</td>
<td>Asian or Pacific Islander Pop.</td>
<td>Other Pop.</td>
<td>Hispanic Origin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980-1990</td>
<td>50.37%</td>
<td>81.26%</td>
<td>40.09%</td>
<td>16.49%</td>
<td>-29.92%</td>
<td>-40.78%</td>
<td>9.72%</td>
<td>13.47%</td>
</tr>
<tr>
<td></td>
<td>694.80%</td>
<td>797.25%</td>
<td>429.21%</td>
<td>123.02%</td>
<td>96.22%</td>
<td>294.78%</td>
<td>37.15%</td>
<td>47.51%</td>
</tr>
<tr>
<td></td>
<td>127.70%</td>
<td>126.22%</td>
<td>51.20%</td>
<td>42.12%</td>
<td>-26.42%</td>
<td>31.59%</td>
<td>60.01%</td>
<td>113.89%</td>
</tr>
<tr>
<td>1990-2000</td>
<td>-2.61%</td>
<td>-0.08%</td>
<td>5.88%</td>
<td>123.23%</td>
<td>143.94%</td>
<td>16.13%</td>
<td>102.94%</td>
<td>102.94%</td>
</tr>
<tr>
<td></td>
<td>102.94%</td>
<td>121.59%</td>
<td>47.55%</td>
<td>102.94%</td>
<td>24.44%</td>
<td>21.19%</td>
<td>149.43%</td>
<td>1861.71%</td>
</tr>
<tr>
<td></td>
<td>102.94%</td>
<td>109.09%</td>
<td>1494.32%</td>
<td>112.95%</td>
<td>52.84%</td>
<td>52.84%</td>
<td>75.22%</td>
<td>61.31%</td>
</tr>
<tr>
<td></td>
<td>1861.71%</td>
<td>1494.32%</td>
<td>61.31%</td>
<td>49.78%</td>
<td>14.64%</td>
<td>9.74%</td>
<td>61.31%</td>
<td>61.31%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, BWR Corp.

Education

Analysis of the educational statistics of people over the age of 25 shows that the City of Muscatine has a lower level of education in comparison to the State. In 1990, about 25% of the adult population (25 and over) had not graduated from high school compared to 20% for the State (Ref. Fig 1.4).

The percentage of population with a high school diploma is slightly lower than the County and the State averages (only 1 percentage point) (Ref. Fig 1.4). College graduates and advanced degree holders are about two percentage points lower than the State average but higher than the county average.

The school enrollment statistics show that the percentage of people that prefer Public schools for preprimary education is higher in Muscatine than the State (Ref. Fig 1.5). The percentage of people opting for College level education or higher in Muscatine, however, is about 2.7 percentage points lower (or 8.5%) than the State and County average.
Chapter One: Socioeconomic Analysis and Existing Conditions

Figure 1.4: Educational Attainment of People aged 25 or more (1990)


Figure 1.5: School Enrollment (1990)

**CITY OF MUSCATINE, IOWA – COMPREHENSIVE PLAN**

*Chapter One: Socioeconomic Analysis and Existing Conditions*

**Income Characteristics**

Muscatine, in the 1980s, experienced an increase in average household income 57%, median household income 53% and per capita income 66%. The County and the State experienced higher increases (Ref. Table 1.7). This resulted in the fact that while in 1970 and 1980, average and median household incomes in Muscatine were higher than those in the County and the State, in 1990, the gaps narrowed considerably.

**Table 1.7: Income Summary (1970-1990)**

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>1980</th>
<th>1990</th>
<th>%change 70-90</th>
<th>%change 80-90</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Hhld Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscatine, IA</td>
<td>$9,482</td>
<td>$20,398</td>
<td>$32,019</td>
<td>115.10%</td>
<td>57.00%</td>
</tr>
<tr>
<td>Muscatine County, IA</td>
<td>$9,285</td>
<td>$20,609</td>
<td>$34,036</td>
<td>122.00%</td>
<td>65.10%</td>
</tr>
<tr>
<td>Iowa</td>
<td>$8,926</td>
<td>$19,548</td>
<td>$31,874</td>
<td>119.00%</td>
<td>63.10%</td>
</tr>
<tr>
<td><strong>Median Hhld Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscatine, IA</td>
<td>$9,584</td>
<td>$19,094</td>
<td>$29,119</td>
<td>99.20%</td>
<td>52.50%</td>
</tr>
<tr>
<td>Muscatine County, IA</td>
<td>$9,253</td>
<td>$18,268</td>
<td>$30,262</td>
<td>104.50%</td>
<td>65.70%</td>
</tr>
<tr>
<td>Iowa</td>
<td>$8,302</td>
<td>$16,974</td>
<td>$27,227</td>
<td>104.50%</td>
<td>60.40%</td>
</tr>
<tr>
<td><strong>Per Capita Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscatine, IA</td>
<td>$3,059</td>
<td>$7,348</td>
<td>$12,212</td>
<td>140.20%</td>
<td>66.20%</td>
</tr>
<tr>
<td>Muscatine County, IA</td>
<td>$2,956</td>
<td>$7,315</td>
<td>$12,566</td>
<td>147.50%</td>
<td>71.80%</td>
</tr>
<tr>
<td>Iowa</td>
<td>$2,877</td>
<td>$7,173</td>
<td>$12,228</td>
<td>149.30%</td>
<td>70.50%</td>
</tr>
</tbody>
</table>


Per Capita income in Muscatine in 1970 was about $100 more than the County. The gap reduced in 1980 and by 1990, per capita income in Muscatine was more than $300 less than the County. Average Household Income also followed similar trends and was less than the County by about $2000 in 1990. The City's income indicators are closer to the State average than to the County. This might be an indication that the County is an attractive place for high-income households but the City is slowly losing its high-income households to the rest of the County.

**Housing**

Housing statistics of the City of Muscatine show that the City’s share of the total County population in 1990 was about 57.3% while its share of housing units was 58.6% (Ref. Table 1.8). By 2000, the City of Muscatine's share of population and housing units decreased to about 56% and 54% respectively. While the population decreased, there was an 8% increase in the total number of housing units. This might indicate a healthy housing market. More housing units are being added in other parts of the County than in the City of Muscatine. The County's population increased by about 4.5% and the housing units increased by about 13.4%. This indicates either a movement from the Cities into the County, or a general preference for lower, possibly rural densities, by the newer households. This is quite typical of suburban communities but more data (out of 2000 census) is required to make conclusive arguments. See Table 1.8 and 1.9 for current 2000 Census data regarding housing characteristics.
Between 1980 and 1990, the number of households in Muscatine increased by about 2.9%, a slower rate than the County, which increased by about 3.6% (Ref. Table 1.9, Fig 1.6). 1990 to 2000 saw a similar change in the City, but the County increased by about 7.6%. Interestingly, in spite of a declining population, these were similar to the State average, which is an indication of consumer confidence in the housing market and in the economy of the region.

Table 1.8: Housing Shares (1990-2000)

<table>
<thead>
<tr>
<th></th>
<th>Total Housing Units</th>
<th>Muscatine share of Total Population</th>
<th>Muscatine share of Iowa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1990</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscatine, IA</td>
<td>8,673</td>
<td>22,881</td>
<td></td>
</tr>
<tr>
<td>County</td>
<td>14,806</td>
<td>58.58%</td>
<td>39,907</td>
</tr>
<tr>
<td>Iowa</td>
<td>1,064,325</td>
<td>0.81%</td>
<td>2,776,755</td>
</tr>
<tr>
<td>Muscatine, IA</td>
<td>9,375</td>
<td>22,697</td>
<td></td>
</tr>
<tr>
<td>County</td>
<td>16,786</td>
<td>55.85%</td>
<td>41,722</td>
</tr>
<tr>
<td>Iowa</td>
<td>1,232,511</td>
<td>0.76%</td>
<td>2,926,324</td>
</tr>
<tr>
<td>% Change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscatine, IA</td>
<td>8.09%</td>
<td>-0.80%</td>
<td></td>
</tr>
<tr>
<td>County</td>
<td>13.37%</td>
<td>-4.66%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Iowa</td>
<td>15.80%</td>
<td>-6.66%</td>
<td>5.39%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, BWR Corp.

Table 1.9: Total Households (1970-2000)

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
<th>%change 80-90</th>
<th>%change90-00</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Muscatine, IA</strong></td>
<td>7,088</td>
<td>8,436</td>
<td>8,679</td>
<td>8,923</td>
<td>2.90%</td>
<td>2.81%</td>
</tr>
<tr>
<td>Muscatine County</td>
<td>11,837</td>
<td>14,218</td>
<td>14,734</td>
<td>15,847</td>
<td>3.60%</td>
<td>7.55%</td>
</tr>
<tr>
<td>Iowa</td>
<td>891,578</td>
<td>1,047,636</td>
<td>1,065,243</td>
<td>1,149,276</td>
<td>1.70%</td>
<td>7.89%</td>
</tr>
<tr>
<td>US</td>
<td>63,313,695</td>
<td>79,887,108</td>
<td>91,993,439</td>
<td>105,480,101</td>
<td>15.15%</td>
<td>14.66%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, BWR Corp.
The average household size was 2.59 in 1990 compared to 2.66 in the County and 2.5 in the State (Ref. Table 1.10). In 2000, the average household size decreased by about 0.1% in the City and by a slightly smaller percentage in the County and the State. This has however been a nationwide trend. An average household size of 2.49 is still an indication that families with children are comfortable living in Muscatine, which also implies the schools, crime rate, and health indicators are favorable.

### Table 1.10: Household Summary (1990-2000)

<table>
<thead>
<tr>
<th></th>
<th>Muscatine</th>
<th>County</th>
<th>Iowa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Households</strong></td>
<td>8,679</td>
<td>14,734</td>
<td>1,065,243</td>
</tr>
<tr>
<td><strong>Household Population</strong></td>
<td>22,471</td>
<td>39,247</td>
<td>2,677,227</td>
</tr>
<tr>
<td><strong>1990 Group Quarters Population</strong></td>
<td>284</td>
<td>660</td>
<td>99,528</td>
</tr>
<tr>
<td><strong>Total Families</strong></td>
<td>6,242</td>
<td>10,975</td>
<td>746,331</td>
</tr>
<tr>
<td><strong>Average Household Size</strong></td>
<td>2.59</td>
<td>2.66</td>
<td>2.51</td>
</tr>
<tr>
<td><strong>Total Households</strong></td>
<td>8,923</td>
<td>15,847</td>
<td>1,149,276</td>
</tr>
<tr>
<td><strong>2000 Total Families</strong></td>
<td>6,041</td>
<td>11,290</td>
<td>769,684</td>
</tr>
<tr>
<td><strong>Average Household Size</strong></td>
<td>2.49</td>
<td>2.59</td>
<td>2.46</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, BWR Corp.
Table 1.11: Year moved in (1990)

<table>
<thead>
<tr>
<th></th>
<th>Muscatine</th>
<th>County</th>
<th>Iowa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupied Housing Units</td>
<td>8,672</td>
<td>14,806</td>
<td>1,064,325</td>
</tr>
<tr>
<td>1959 or Earlier</td>
<td>10.90%</td>
<td>11.40%</td>
<td>12.10%</td>
</tr>
<tr>
<td>1960 to 1969</td>
<td>10.70%</td>
<td>9.70%</td>
<td>11.00%</td>
</tr>
<tr>
<td>1970 to 1979</td>
<td>18.40%</td>
<td>20.00%</td>
<td>20.60%</td>
</tr>
<tr>
<td>1980 to 1984</td>
<td>15.50%</td>
<td>17.00%</td>
<td>13.50%</td>
</tr>
<tr>
<td>1985 to 1988</td>
<td>26.60%</td>
<td>25.80%</td>
<td>24.60%</td>
</tr>
<tr>
<td>1989 to March 1990</td>
<td>17.90%</td>
<td>16.10%</td>
<td>18.10%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, BWR Corp.

People moved into 59% of the occupied housing units between 1980 and March 1990 (Ref. Table 1.11). The corresponding figure for the County is 58.9 percent and the Metropolitan Service area (MSA) 56.2%.

Table 1.12 shows that owner occupancy rates have risen by about 2% in the last decade. They are still lower in Muscatine (70.7%) than the County (75.4%) and the State (72.3%).

Median housing value and monthly mortgage for the City of Muscatine are lower than the County and higher than the State values (Ref. Table 1.12). Home values are about $2,000 less than the County. This reaffirms the fact that more high-end housing is being built elsewhere in the County as opposed to the City of Muscatine. This is also reinforced by a study of the age of housing. About 33.4% of the housing in the County has been built between 1970 and 1980, while the corresponding figure for Muscatine and Iowa is 27.4% and 30% respectively. Census 2000 data is expected to reaffirm this phenomenon.

Renter occupancy in Muscatine is higher than the County and State average by about two percentage points. The median monthly rent in 1990 was $352 about $8 lower than the County and $14 higher than the State.

The 2000 vacancy rates are lower in the City (4.8%) than the County (5.6%) and the State (6.8%), indicating a need for a bigger housing market than what exists in the City of Muscatine.
CITY OF MUSCATINE, IOWA – COMPREHENSIVE PLAN

Chapter One: Socioeconomic Analysis and Existing Conditions

There might be possible market niches in the high-end housing market. Further analysis of the existing stock is needed to determine the quality of housing and for possible niches in the existing housing market.

Employment Characteristics

In the 1990s, total full and part-time employment increased in the County by about 12.7%, which is significant since the population increased by about 4.5%. Services sector saw the maximum job increase of 1,762 jobs followed by the Retail Trade sector with 495 jobs. The Construction and Transportation sectors also added over 450 jobs to the County economy. Farm employment and manufacturing sector decreased, following nationwide trends.

### Table 1.14: Employment by Sector (1990-1999) - Muscatine County

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>1990</th>
<th>% OF TOTAL</th>
<th>1999</th>
<th>% OF TOTAL</th>
<th>NET CHANGE</th>
<th>PERCENT CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total full- &amp; part-time employment</td>
<td>24,521</td>
<td>100.00</td>
<td>27,639</td>
<td>100</td>
<td>3,118</td>
<td>12.72%</td>
</tr>
<tr>
<td>- Farm employment</td>
<td>1,044</td>
<td>4.26%</td>
<td>897</td>
<td>3.25%</td>
<td>-147</td>
<td>-14.08%</td>
</tr>
<tr>
<td>- Nonfarm employment</td>
<td>23,477</td>
<td>95.74%</td>
<td>26,742</td>
<td>96.75%</td>
<td>3,265</td>
<td>13.91%</td>
</tr>
<tr>
<td>--- Private employment</td>
<td>20,541</td>
<td>83.77%</td>
<td>23,832</td>
<td>86.23%</td>
<td>3,291</td>
<td>16.02%</td>
</tr>
<tr>
<td>---- Ag.serv.,for.,fish., and other 3/</td>
<td>178</td>
<td>0.73%</td>
<td>(D)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>---- Mining</td>
<td>92</td>
<td>0.38%</td>
<td>(D)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>---- Construction</td>
<td>765</td>
<td>3.12%</td>
<td>1,252</td>
<td>4.53%</td>
<td>487</td>
<td>63.66%</td>
</tr>
<tr>
<td>---- Manufacturing</td>
<td>8,702</td>
<td>35.49%</td>
<td>8,394</td>
<td>30.37%</td>
<td>-308</td>
<td>-3.54%</td>
</tr>
<tr>
<td>---- Transportation and public utilities</td>
<td>862</td>
<td>3.52%</td>
<td>1,324</td>
<td>4.79%</td>
<td>462</td>
<td>53.60%</td>
</tr>
<tr>
<td>---- Wholesale trade</td>
<td>587</td>
<td>2.39%</td>
<td>681</td>
<td>2.46%</td>
<td>94</td>
<td>16.01%</td>
</tr>
<tr>
<td>---- Retail trade</td>
<td>3,578</td>
<td>14.59%</td>
<td>4,073</td>
<td>14.74%</td>
<td>495</td>
<td>13.83%</td>
</tr>
<tr>
<td>---- Finance, insurance and real estate</td>
<td>856</td>
<td>3.49%</td>
<td>1,045</td>
<td>3.78%</td>
<td>189</td>
<td>22.08%</td>
</tr>
<tr>
<td>---- Services</td>
<td>4,921</td>
<td>20.07%</td>
<td>6,683</td>
<td>24.18%</td>
<td>1,762</td>
<td>35.81%</td>
</tr>
<tr>
<td>--- Government and government enterprise</td>
<td>2,936</td>
<td>11.97%</td>
<td>2,910</td>
<td>10.53%</td>
<td>-26</td>
<td>-0.89%</td>
</tr>
<tr>
<td>----- Federal, civilian</td>
<td>149</td>
<td>0.61%</td>
<td>129</td>
<td>0.47%</td>
<td>-20</td>
<td>-13.42%</td>
</tr>
<tr>
<td>----- Military</td>
<td>226</td>
<td>0.92%</td>
<td>191</td>
<td>0.69%</td>
<td>-35</td>
<td>-15.49%</td>
</tr>
<tr>
<td>----- State and local</td>
<td>2,561</td>
<td>10.44%</td>
<td>2,590</td>
<td>9.37%</td>
<td>29</td>
<td>1.13%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, REIS, BWR Corp.

(D) Estimate not shown to avoid disclosure of confidential information -- shown as (D) on printed tables; estimate included in totals

With an average unemployment rate of 2.5 percent, Iowa reported the lowest unemployment rate in the nation in 1999. Muscatine County has traditionally had a low unemployment rate, which has decreased even more since mid 1990s. It is currently at 2.8%. 
Figure 1.7: Muscatine County Unemployment Rate (1991-2000)

ECONOMIC DEVELOPMENT FACTORS

As indicated on the Muscatine Development Corporation’s website, Muscatine is a community of 22,697 (county population of 41,195) strategically located 15 miles south of the nation’s only east/west transcontinental interstate highway, I-80 and on U.S. 61, a major north/south route through the central United States. The City of Muscatine was established on the banks of the Mississippi River, approximately 28 miles downstream from the Quad Cities (population 375,000), 150 miles east of Des Moines (population 400,000), 200 miles west of Chicago, 310 miles south of Minneapolis and 250 miles north of St. Louis.
This section identifies the main industries, as described by the Muscatine Development Corporation, which make up the City’s economic infrastructure and provides a review of the past economic trends for the City of Muscatine.

**Leading Muscatine Businesses**

There are several industry-leading companies that are located in the City of Muscatine. Among the four Fortune 1000 companies headquartered in Iowa, two were founded and remain headquartered in Muscatine. They are HON Industries, Inc and Bandag, Inc. Perhaps the greatest challenge Muscatine faces in the future is retaining and facilitating the expansion of these businesses and many other successful businesses that are already located within the City. Some of the City’s economic assets, as profiled by the Muscatine Development Corporation, include the following.

In 1997 and 1998 HON Industries, Inc., a Fortune 1000 company, added nearly 500,000 sq. feet of expansion in Muscatine, resulting in millions of dollars of new investment. In both of those years, HON Industries, Inc hired over 500 new employees. HON Industries, Inc employs 2,700 people in Muscatine.

HON Industries, Inc. is the nation's largest producer of value-priced office furniture, and the fourth largest manufacturer and marketer of office furniture in the U.S. It is also the nation's largest manufacturer and marketer of gas and wood-burning fireplaces. Listed as one of America's most admired companies in *Fortune Magazine*, HON Industries, Inc is also recognized in *Forbes* as one of the top 400 best-performing companies in the U.S.A.

Bandag, Inc., also a Fortune 1000 company, headquartered in Muscatine, manufactures retreading materials and equipment for its global network of approximately 1,300 franchised dealerships in 121 countries. This network produces and markets quality retread tires, and tire management services to their customers. With a per employee research and development investment that exceeds anyone in the rubber and plastics industry, Bandag continues to provide tire products and time management solutions that lead the industry worldwide. Bandag employs 850 people in Muscatine.

Varied Investments, Inc., is a diversified family owned corporation with operating subsidiaries involved in corn wet milling, the production of animal feeds, alcohol production and the manufacture of food products. These companies include Grain Processing Corporation and Kent Feeds, Inc., both headquartered in Muscatine, Iowa; Evergreen Mills, Ada, Oklahoma; Blue Seal Feeds, Inc., Londonderry, New Hampshire, and Precision Foods, Inc., St. Louis, Missouri; Varied Investments employs approximately 1,100 in the Muscatine area.

For more than 88 years, The Stanley Group has performed over 19,000 engagements in all 50 states and in 85 countries. The Stanley Group, includes Stanley Consultants, Inc.; Stanley Environmental, Inc.; and Stanley Design-Build, Inc. The Stanley Group is member (employee)-owned. The companies perform engineering, environmental, and construction services worldwide. Employment is currently at 600 members with approximately 230 in Muscatine.
Musco Sports Lighting, Inc. has revolutionized the lighting industry with innovative sports and movie lighting products. Musco has provided portable television-quality sports lighting for the Olympics, Goodwill Games and Extreme Games as well as permanent lighting for NASCAR’S first night race at the Daytona International Speedway. They have also received numerous awards for their movie lighting expertise including the Oscar and Emmy, and permanent lighting awards including the Waterbury Award of Excellence in Lighting Design. Musco Lighting currently employs over 200.

Not only has Muscatine proven to be an excellent business environment for companies starting out, it also has been the desired location for major businesses that are expanding or in search of new market potential. BT Prime-Mover, Inc., a division of BT Industries AB based in Mjolby, Sweden, is part of the world’s largest manufacturer of electric lift trucks. They have recently constructed a new $14 million manufacturing facility in Muscatine. The project retained 250 jobs and provided a basis for future expansion.

In 1994, IPSCO Steel, Inc., a U.S. steel making subsidiary of IPSCO, Inc., a Canadian-based steel company, announced Muscatine County as the site of a new steel mill. The complex began operation in 1997 and has the ability to produce both discrete plate, up to 2 inches in thickness and 120 inches wide, and coil plate between 3/16 and 3/4 inches in thickness and 96 inches wide. Built at a cost of approximately $425 million and employing about 375 people plus outside contractors, the Montpelier plant represents a significant investment in the U.S. market for IPSCO and is the largest single economic development in Iowa history.

The H.J. Heinz Company moved to the Muscatine area over 100 years ago. In its first move outside of Pittsburgh, Heinz established operations in Muscatine in 1893. Mr. H.J. Heinz himself, chose Muscatine for this production facility. Heinz is still operating in Muscatine today, employing approximately 630 area residents. Heinz most recently expanded its facilities in Muscatine in 1997. The Muscatine Factory makes a wide variety of products. Included in the product mix are: one gallon plastic fill for sauces and vinegar, vinegar in pint and quart bottles, sauces (Heinz 57, traditional, barbecue, cocktail, etc.) in multiple sizes, 14 & 24 oz. ketchup glass bottles, one gallon can sauces, 80+ soup varieties, Heinz gravy, single serve ketchup and sauces, 3 gallon Vol-pak ketchup and sauces. The facility has a 600,000 foot distribution center and 1 million square feet overall.

In 1961, Monsanto, a Fortune 500 company, selected Muscatine County as the location for a new production facility. Since then, this plant has grown to become one of Monsanto’s most important manufacturing facilities, providing jobs and benefiting from the skills of over 575 Muscatine area residents. In 1999, Monsanto Company agreed to merge with the Pharmacia-Upjohn Company. Monsanto and Pharmacia are engaged in the worldwide manufacture and sale of a diversified line of agricultural products and pharmaceuticals. The Muscatine facility manufactures agricultural herbicides.

In 1997, Monsanto expanded its operation with the addition of a new Glyphosate Technical facility in Muscatine and has had two expansions to the unit over the past three years resulting in over $60 million in capital investment. These expansions yielded several new jobs to its Roundup herbicide operation.
These companies, as well as the many other successful companies that make up the Muscatine business community, continue to benefit from an active public/private partnership, the Muscatine Development Corporation. The Muscatine Development Corporation along with the Chamber of Commerce facilitates continuing business growth and development.

Local and Regional Markets

The following section reviews the local and regional market, workforce, personal income and employment trends for the City of Muscatine. The analysis of these characteristics of the economy will provide a foundation on which to make recommendations regarding Muscatine’s economic future.

Iowa is in the heart of an eight-state market of approximately 840,000 businesses and approximately 34 million people. Iowa is located at the hub of America’s most traveled thoroughfares: Interstates 35 and 80 intersect in the center of the state, Interstate 380 links Iowa City, Cedar Rapids and Waterloo; and Interstate 29 serves as a direct route to Kansas City and the Dakotas on the west side of the state. Iowa also has excellent rail and air connections to all major markets and is bordered on the east and the west by the Mississippi and the Missouri Rivers respectively, navigable to the Gulf of Mexico.

The City of Muscatine is located 15 miles south of Interstate 80 and is bordered by the Mississippi River. US 61 and Iowa Highways 22, 38, and 92 cross the county and provide excellent transportation access. The Quad Cities International Airport is within 35 miles of Muscatine and the Eastern Iowa Regional Airport is within 70 miles. Both are served by most of the major airlines.

With 730 businesses, the City of Muscatine is the economic center of the County boasting $227,184,295 in net sales. The following table provides the total number of businesses operating both within the City and County of Muscatine and the total annual net sales.

Although the City has a well-equipped business climate relative to commercial and industrial services, the City needs to continue to encourage the development of a full range of housing options as well as expand and diversify the selection of retail establishments throughout the community, especially in the downtown region. It is crucial that the downtown remains vibrant and that the City provides the services and amenities the community demands. Providing a high quality, affordable housing stock and consumer goods and products will decrease the demand for services and products outside the City of Muscatine.
Table 1.15: Number of Businesses & Net Taxable Retail Sales/City of Muscatine/County of Muscatine

<table>
<thead>
<tr>
<th>Year</th>
<th>City # Businesses</th>
<th>Net Sales</th>
<th>County # Businesses</th>
<th>Net Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>689</td>
<td>$142,427,109</td>
<td>1143</td>
<td>$196,882,683</td>
</tr>
<tr>
<td>1986</td>
<td>690</td>
<td>$140,504,650</td>
<td>1134</td>
<td>$190,343,276</td>
</tr>
<tr>
<td>1987</td>
<td>682</td>
<td>$141,461,168</td>
<td>1115</td>
<td>$191,408,671</td>
</tr>
<tr>
<td>1988</td>
<td>669</td>
<td>$152,024,821</td>
<td>1099</td>
<td>$202,908,988</td>
</tr>
<tr>
<td>1989</td>
<td>673</td>
<td>$164,404,937</td>
<td>1104</td>
<td>$217,170,844</td>
</tr>
<tr>
<td>1990</td>
<td>678</td>
<td>$172,378,384</td>
<td>1104</td>
<td>$227,816,905</td>
</tr>
<tr>
<td>1991</td>
<td>670</td>
<td>$179,656,639</td>
<td>1091</td>
<td>$236,877,296</td>
</tr>
<tr>
<td>1992</td>
<td>671</td>
<td>$118,692,555</td>
<td>1095</td>
<td>$246,437,837</td>
</tr>
<tr>
<td>1993</td>
<td>709</td>
<td>$200,864,806</td>
<td>1114</td>
<td>$263,206,835</td>
</tr>
<tr>
<td>1994</td>
<td>736</td>
<td>$211,101,537</td>
<td>1119</td>
<td>$273,462,169</td>
</tr>
<tr>
<td>1995</td>
<td>742</td>
<td>$217,870,712</td>
<td>1121</td>
<td>$280,603,048</td>
</tr>
<tr>
<td>1996</td>
<td>730</td>
<td>$216,358,161</td>
<td>1099</td>
<td>$282,162,294</td>
</tr>
<tr>
<td>1997</td>
<td>730</td>
<td>$227,184,295</td>
<td>1110</td>
<td>$297,911,200</td>
</tr>
</tbody>
</table>

Source: Iowa State University Department of Economics- Iowa PROfiles Website

Top 10 Local Employers

1. HON Industries/Hon Company

<table>
<thead>
<tr>
<th>Product/Service</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>office furniture</td>
<td>2700</td>
<td>none</td>
</tr>
</tbody>
</table>

2. Bandag Incorporated

<table>
<thead>
<tr>
<th>Product/Service</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-cured tread rubber</td>
<td>850</td>
<td>Steelworkers</td>
</tr>
</tbody>
</table>

3. Muscatine Community School District

<table>
<thead>
<tr>
<th>Education</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12 schooling</td>
<td>850</td>
<td>none</td>
</tr>
</tbody>
</table>

4. Grain Processing Corporation

<table>
<thead>
<tr>
<th>Product/Service</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>corn distillates/feed</td>
<td>806</td>
<td>UFCW</td>
</tr>
</tbody>
</table>

5. West Liberty Foods

<table>
<thead>
<tr>
<th>Product/Service</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>grocery</td>
<td>692</td>
<td>N/A</td>
</tr>
</tbody>
</table>

6. Heinz, USA
CITY OF MUSCATINE, IOWA – COMPREHENSIVE PLAN

Chapter One: Socioeconomic Analysis and Existing Conditions

<table>
<thead>
<tr>
<th>Product/Service</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>food processing</td>
<td>642</td>
<td>UFCW</td>
</tr>
</tbody>
</table>

7. Monsanto Company

<table>
<thead>
<tr>
<th>Product/Service</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>herbicides and plastics</td>
<td>586</td>
<td>none</td>
</tr>
</tbody>
</table>

8. Unity Health System

<table>
<thead>
<tr>
<th>Healthcare</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical services</td>
<td>547</td>
<td>N/A</td>
</tr>
</tbody>
</table>

9. Communications Data Services

<table>
<thead>
<tr>
<th>Product/Service</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications systems</td>
<td>420</td>
<td>none</td>
</tr>
</tbody>
</table>

10. Hy-Vee Food Store

<table>
<thead>
<tr>
<th>Product/Service</th>
<th>Employment</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>grocery</td>
<td>410</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Composition of Muscatine Business Infrastructure

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of manufacturing plants in community</td>
<td>42</td>
</tr>
<tr>
<td>Number of manufacturing employees in community</td>
<td>6,745</td>
</tr>
<tr>
<td>Number of manufacturing plants with unions</td>
<td>5</td>
</tr>
<tr>
<td>Number of work stoppages in last five years</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Bi-State Regional Commission

Commercial/Industrial Services

<table>
<thead>
<tr>
<th></th>
<th>Muscatine Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Newspaper:</td>
<td></td>
</tr>
<tr>
<td>Weekly Newspaper:</td>
<td>None</td>
</tr>
<tr>
<td>Seating capacity of largest banquet room:</td>
<td>350</td>
</tr>
<tr>
<td>Number of motels/hotels:</td>
<td>9</td>
</tr>
<tr>
<td>Total number of rooms available:</td>
<td>473</td>
</tr>
<tr>
<td>Number of financial institutions in city:</td>
<td>5</td>
</tr>
<tr>
<td>Number affiliated with a bank chain:</td>
<td>1</td>
</tr>
</tbody>
</table>
Number of company-owned, national chain retail stores: 7

Chamber of Commerce: Yes

Manager is full-time: Yes

Source: City of Muscatine

Existing Workforces & Employment Factors

Iowa’s work force is highly educated and productive. Iowa’s 81% high school graduation rate places the state among the top six states in the nation. The City of Muscatine showed only a slightly lower graduation rate at 74.2%. Iowa student scores on the SAT and the ACT College entrance exams rank 1st and 6th respectively in the nation. Iowa has three state universities and 56 other public and private colleges and universities including 15 community colleges on 29 campuses. The Muscatine Community College is one of the oldest two-year colleges in the Midwest and has been a leader in providing education and training to individuals and businesses in the Muscatine area since 1929.

The Regional Financial Associates’ Relative Cost of Doing Business Index for the United States ranks Iowa as having one of the lowest costs of doing business - 45th in the nation. Iowa’s cost of labor was ranked even lower - 47th in the nation. These factors are a result of hard working Iowa employees, who rank 7th in the nation for labor productivity.

The following tables show the size, employment status and composition of the region’s workforce.

Table 1.16: Muscatine County Workforce Availability

<table>
<thead>
<tr>
<th>Population</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 and over</td>
<td>73.6</td>
</tr>
<tr>
<td>17 and younger</td>
<td>26.4</td>
</tr>
</tbody>
</table>

Table 1.17: Labor Force Summary for Muscatine County, 1980-1999

<table>
<thead>
<tr>
<th>Year</th>
<th>Labor Force</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>20,360</td>
<td>19,380</td>
<td>980</td>
<td>4.8</td>
</tr>
<tr>
<td>1981</td>
<td>21,510</td>
<td>20,310</td>
<td>1,200</td>
<td>5.6</td>
</tr>
<tr>
<td>1982</td>
<td>21,640</td>
<td>20,130</td>
<td>1,510</td>
<td>7.0</td>
</tr>
<tr>
<td>1983</td>
<td>21,610</td>
<td>19,950</td>
<td>1,660</td>
<td>7.7</td>
</tr>
<tr>
<td>1984</td>
<td>20,480</td>
<td>19,060</td>
<td>1,420</td>
<td>6.9</td>
</tr>
<tr>
<td>1985</td>
<td>20,760</td>
<td>19,180</td>
<td>1,580</td>
<td>7.6</td>
</tr>
<tr>
<td>1986</td>
<td>21,070</td>
<td>19,540</td>
<td>1,530</td>
<td>7.3</td>
</tr>
</tbody>
</table>
City of Muscatine, Iowa – Comprehensive Plan

Chapter One: Socioeconomic Analysis and Existing Conditions

<table>
<thead>
<tr>
<th>Year</th>
<th>Labor Force</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>20,980</td>
<td>19,710</td>
<td>1,270</td>
<td>6.1</td>
</tr>
<tr>
<td>1988</td>
<td>21,400</td>
<td>20,290</td>
<td>1,110</td>
<td>5.2</td>
</tr>
<tr>
<td>1989</td>
<td>21,630</td>
<td>20,540</td>
<td>1,090</td>
<td>5.0</td>
</tr>
<tr>
<td>1990</td>
<td>20,830</td>
<td>19,820</td>
<td>1,010</td>
<td>4.8</td>
</tr>
<tr>
<td>1991</td>
<td>20,900</td>
<td>19,740</td>
<td>1,170</td>
<td>5.6</td>
</tr>
<tr>
<td>1992</td>
<td>21,480</td>
<td>20,270</td>
<td>1,210</td>
<td>5.6</td>
</tr>
<tr>
<td>1993</td>
<td>21,880</td>
<td>20,990</td>
<td>890</td>
<td>4.1</td>
</tr>
<tr>
<td>1994</td>
<td>21,470</td>
<td>20,660</td>
<td>810</td>
<td>3.8</td>
</tr>
<tr>
<td>1995</td>
<td>21,350</td>
<td>20,630</td>
<td>720</td>
<td>3.4</td>
</tr>
<tr>
<td>1996</td>
<td>21,910</td>
<td>20,840</td>
<td>1,070</td>
<td>4.9</td>
</tr>
<tr>
<td>1997</td>
<td>21,080</td>
<td>20,200</td>
<td>880</td>
<td>4.2</td>
</tr>
<tr>
<td>1998</td>
<td>21,080</td>
<td>20,530</td>
<td>550</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Source: Iowa State University Department of Economics - Iowa PROfiles Website

In comparison to the above data, the City of Muscatine offered a workforce consisting of 8,686 employees in 1990 verses 20,830 individuals employed County-wide. Although the City is a fraction of the size of the county, it consistently supplies almost 50% of its employees.

Table 1.18: Place of Work - Muscatine County

<table>
<thead>
<tr>
<th>Sector</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonagricultural wage and salary workers</td>
<td>21,000</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>7,590</td>
</tr>
<tr>
<td>Nonmanufacturing</td>
<td>13,410</td>
</tr>
<tr>
<td>Construction and Mining</td>
<td>860</td>
</tr>
<tr>
<td>Transportation, Communication and Public Utilities</td>
<td>950</td>
</tr>
<tr>
<td>Wholesale and Retail Trade</td>
<td>3,690</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>490</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>3,200</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate</td>
<td>570</td>
</tr>
<tr>
<td>Services</td>
<td>4,380</td>
</tr>
<tr>
<td>Government</td>
<td>2,960</td>
</tr>
</tbody>
</table>

Source: Iowa State University Department of Economics - Iowa PROfiles Website
### Table 1.19: Number of Employees Per Employment Sector 1990-1998: Muscatine County

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total full- and part-time employment</td>
<td>24,521</td>
<td>24,585</td>
<td>24,838</td>
<td>25,145</td>
<td>25,243</td>
<td>26,012</td>
<td>26,236</td>
<td>26,103</td>
<td>27,484</td>
</tr>
<tr>
<td>Wage and salary employment</td>
<td>20,750</td>
<td>20,752</td>
<td>21,013</td>
<td>21,248</td>
<td>21,446</td>
<td>22,027</td>
<td>22,218</td>
<td>22,039</td>
<td>23,343</td>
</tr>
<tr>
<td>Proprietors' employment</td>
<td>3,771</td>
<td>3,833</td>
<td>3,825</td>
<td>3,897</td>
<td>3,797</td>
<td>3,985</td>
<td>4,018</td>
<td>4,064</td>
<td>4,141</td>
</tr>
<tr>
<td>Farm proprietors' employment</td>
<td>883</td>
<td>866</td>
<td>865</td>
<td>856</td>
<td>843</td>
<td>838</td>
<td>823</td>
<td>818</td>
<td>823</td>
</tr>
<tr>
<td>Nonfarm proprietors' employment</td>
<td>2,288</td>
<td>2,476</td>
<td>2,960</td>
<td>3,041</td>
<td>2,954</td>
<td>3,147</td>
<td>3,195</td>
<td>3,246</td>
<td>3,318</td>
</tr>
<tr>
<td>Farm employment</td>
<td>1,044</td>
<td>989</td>
<td>975</td>
<td>947</td>
<td>948</td>
<td>959</td>
<td>950</td>
<td>935</td>
<td>922</td>
</tr>
<tr>
<td>Private employment</td>
<td>20,541</td>
<td>20,563</td>
<td>20,607</td>
<td>20,069</td>
<td>21,253</td>
<td>21,912</td>
<td>22,182</td>
<td>22,039</td>
<td>23,425</td>
</tr>
<tr>
<td>Ag. serv., forestry, fishing, and other 3/</td>
<td>178</td>
<td>205</td>
<td>204</td>
<td>194</td>
<td>203</td>
<td>207</td>
<td>224</td>
<td>245</td>
<td>297</td>
</tr>
<tr>
<td>Mining</td>
<td>92</td>
<td>84</td>
<td>80</td>
<td>78</td>
<td>76</td>
<td>78</td>
<td>79</td>
<td>78</td>
<td>77</td>
</tr>
<tr>
<td>Construction</td>
<td>765</td>
<td>828</td>
<td>929</td>
<td>988</td>
<td>960</td>
<td>1,197</td>
<td>1,754</td>
<td>1,186</td>
<td>1,399</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>8,702</td>
<td>8,310</td>
<td>8,123</td>
<td>8,049</td>
<td>8,059</td>
<td>7,951</td>
<td>7,637</td>
<td>7,755</td>
<td>8,447</td>
</tr>
<tr>
<td>Transportation and public utilities</td>
<td>862</td>
<td>893</td>
<td>939</td>
<td>967</td>
<td>972</td>
<td>1,015</td>
<td>1,056</td>
<td>1,159</td>
<td>1,307</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>587</td>
<td>562</td>
<td>542</td>
<td>481</td>
<td>464</td>
<td>504</td>
<td>552</td>
<td>549</td>
<td>565</td>
</tr>
<tr>
<td>Retail trade</td>
<td>3,578</td>
<td>3,623</td>
<td>3,680</td>
<td>3,808</td>
<td>3,836</td>
<td>3,745</td>
<td>3,749</td>
<td>3,944</td>
<td>4,009</td>
</tr>
<tr>
<td>Finance, insurance, and real estate</td>
<td>856</td>
<td>876</td>
<td>848</td>
<td>898</td>
<td>807</td>
<td>993</td>
<td>982</td>
<td>998</td>
<td>1,030</td>
</tr>
<tr>
<td>Services</td>
<td>4,921</td>
<td>5,182</td>
<td>5,262</td>
<td>5,606</td>
<td>5,876</td>
<td>6,222</td>
<td>6,149</td>
<td>6,125</td>
<td>6,294</td>
</tr>
<tr>
<td>Federal, civilian</td>
<td>149</td>
<td>132</td>
<td>135</td>
<td>131</td>
<td>133</td>
<td>130</td>
<td>129</td>
<td>124</td>
<td>124</td>
</tr>
<tr>
<td>Military</td>
<td>226</td>
<td>224</td>
<td>223</td>
<td>219</td>
<td>202</td>
<td>203</td>
<td>196</td>
<td>196</td>
<td>194</td>
</tr>
<tr>
<td>State and local</td>
<td>2,561</td>
<td>2,677</td>
<td>2,898</td>
<td>2,779</td>
<td>2,707</td>
<td>2,808</td>
<td>2,775</td>
<td>2,804</td>
<td>2,819</td>
</tr>
<tr>
<td>State</td>
<td>85</td>
<td>93</td>
<td>98</td>
<td>88</td>
<td>87</td>
<td>87</td>
<td>89</td>
<td>85</td>
<td>86</td>
</tr>
<tr>
<td>Local</td>
<td>2,476</td>
<td>2,584</td>
<td>2,800</td>
<td>2,691</td>
<td>2,620</td>
<td>2,721</td>
<td>2,686</td>
<td>2,719</td>
<td>2,733</td>
</tr>
</tbody>
</table>

Source: Iowa State University Department of Economics- Iowa PROfiles Website
Regional Salaries

Table 1.20: Annual Salaries of Selected Industries- Muscatine

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average earnings per job ($)</td>
<td>$22,549</td>
<td>$23,055</td>
<td>$24,969</td>
<td>$25,701</td>
<td>$26,919</td>
<td>$26,478</td>
<td>$28,074</td>
<td>$28,913</td>
<td>$29,920</td>
</tr>
<tr>
<td>Wage and salary</td>
<td>$21,745</td>
<td>$22,455</td>
<td>$23,864</td>
<td>$24,846</td>
<td>$25,222</td>
<td>$25,778</td>
<td>$27,335</td>
<td>$28,311</td>
<td>$29,605</td>
</tr>
<tr>
<td>Proprietors</td>
<td>$10,456</td>
<td>$9,173</td>
<td>$11,792</td>
<td>$9,508</td>
<td>$14,478</td>
<td>$12,748</td>
<td>$13,317</td>
<td>$11,724</td>
<td></td>
</tr>
<tr>
<td>Farm</td>
<td>$10,212</td>
<td>$2,035</td>
<td>$12,079</td>
<td>$603</td>
<td>$20,490</td>
<td>$17,748</td>
<td>$17,436</td>
<td>$7,678</td>
<td></td>
</tr>
<tr>
<td>Nonfarm *2</td>
<td>$10,530</td>
<td>$11,256</td>
<td>$11,709</td>
<td>$12,014</td>
<td>$12,762</td>
<td>$11,460</td>
<td>$12,279</td>
<td>$12,728</td>
<td></td>
</tr>
<tr>
<td>Farm</td>
<td>$10,702</td>
<td>$3,744</td>
<td>$12,681</td>
<td>$2,793</td>
<td>$20,408</td>
<td>$17,634</td>
<td>$17,604</td>
<td>$9,755</td>
<td></td>
</tr>
<tr>
<td>NonFarm</td>
<td>$23,076</td>
<td>$23,864</td>
<td>$25,471</td>
<td>$26,598</td>
<td>$27,173</td>
<td>$27,176</td>
<td>$28,466</td>
<td>$29,333</td>
<td>$30,620</td>
</tr>
<tr>
<td>Private</td>
<td>$23,088</td>
<td>$23,892</td>
<td>$25,013</td>
<td>$27,905</td>
<td>$28,458</td>
<td>$28,464</td>
<td>$36,941</td>
<td>$32,481</td>
<td>$38,716</td>
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Source: Iowa State University Department of Economics- Iowa PROfiles Website

Tax Incentives for Local Business

A number of features of Iowa’s corporate income tax offers significant advantages to Muscatine businesses when compared to other states’ corporate taxes. Three advantages are as follows:

1. 50 percent deductibility of federal taxes from Iowa corporate income tax.
2. Single-factor, non-unitary tax. Iowa’s tax is based only on the percentage of total sales income within the state. Products sold out of state by Iowa manufacturers have no corporate income tax liability.

3. Iowa corporate income tax may be reduced or eliminated by the New Jobs Tax Credit.

Additionally, there are no sales or use taxes on industrial machinery and equipment in the State of Iowa. Industrial machinery and computers assessed as real property and used for manufacturing or used to process data by insurance companies, financial institutions or certain commercial enterprises are exempt from Iowa sales or use tax. Furthermore, no sales tax is due on purchases of electricity or natural gas used directly in the manufacturing process.

There is also no property tax on new industrial machinery and equipment. Manufacturing machinery and equipment, as well as computers used to process data by insurance companies and financial institutions installed and first assessed on or after January 1, 1995 are exempt from property tax. Pollution control equipment is eligible for exemption from property tax. An application must be filed for exemption.

Personal property is not assessed for tax purposes within the City of Muscatine. In Iowa, personal property includes corporate inventories of salable goods, raw materials and goods-in-process.

The above tax incentives give the City of Muscatine a competitive edge over businesses located within the regional market including businesses in Illinois and Missouri.

Special Districts

There are several Special Districts located within the City of Muscatine. They include an Urban Revitalization District called Progress Park, Four Tax Increment Financing (TIF) Districts, and two Enterprise Zones. Additionally, the Home and Community Environment program is active in Muscatine. Funds for this program have been used to support the Tourism and Convention divisions of the Chamber of Commerce, the Muscatine Development Corporation, and in previous years, the Mainstreet Program for the Central Business District.

Floodplain Area/Mississippi River

In 1996 the City entered into a contract with JJR Consulting for services related to the development of the upper end of the riverfront area to include all boater-associated activities and services. Strong support for this objective expanded JJR’s services to include the entire downtown riverfront area.

The Mississippi River Consensus Plan was adopted by the City Council on July 17, 1997. The plan includes a revitalized recreational boating area and a civic plaza area and an entertainment/play area.
In 1997 the Riverfront Implementation Team was appointed by the Mayor to continue development plans. The projects currently under construction or scheduled for construction during 2000/01 include the construction of a courtesy boat dock, lighting and construction of rest areas along the riverfront trail, construction of Millennium Plaza, new restrooms at Musser Park and the development of a recreation area which will include a multi-purpose building.

**Tourism with Iowa State Parks and Natural Resources**

Great River Days Festival is held the 3rd weekend in August and offers activities for the entire family to enjoy. The event features outdoor concerts, a parade of boats, fireworks display, arts & crafts and a variety of activities celebrating Muscatine and its history along the Mississippi.

Other major annual events include:
- Eagles and Ivories Festival (Eagle watching and Ragtime Music, January)
- Melon City Bike Races (Memorial Day Weekend)
- Muscatine County Fair (August)
- Holiday Stroll (December)

The City is also the location of the region’s premiere soccer facility, which provides stadium-seating accommodations for 1100 fans. The Muscatine Soccer Complex was recognized by the National Turfgrass Managers Association as “best soccer facility” in 1995. The complex is a 41-acre, 3.8 million-dollar facility that features eight full-sized, state-of-the-art soccer fields. Two of the eight fields are internationally sized, lighted and contain amended soils.

Lastly, the City is also the location of several cultural, art and recreation attractions. The attractions range from art galleries to RV camping facilities. Some of the local favorites among both residents and tourists include:

- Muscatine Art Center
- Weed Park
- Mississippi River Lock & Dam #16
- Kent Research Farm and other farms for touring
- Fairport State Fish Hatchery
- Wild Cat Den State Park
- Saulsbury Bridge Recreation Area
- Muscatine Island open-air markets
- Visitors also delight in the city’s abundance of antique and unique gift shops

**EXISTING TRANSPORTATION FACTORS**

**Highways**

Muscatine is linked to the Quad Cities by U.S. 61, which is a four-lane divided highway. State Routes 38, 22 & 92 provide north-south services. Highway 38 connects Muscatine to I-80 via a two-lane roadway approximately 15 miles in length. The City’s transportation system was
significantly improved with the addition of the US 61/92 Bypass. Meanwhile, traffic patterns have continued to operate slightly over capacity through the downtown areas of Muscatine. Muscatine’s overall transportation system provides good access into and out of town, however, east/west cross-town access routes are needed to move local traffic more efficiently.

**Railroads**

Muscatine is located approximately halfway between Chicago and Kansas City on the W Rail Link, a regional carrier serving the Midwest.

The majority of the inbound traffic is grain from northern Iowa and Southern Minnesota. Outbound products include corn syrup, animal feed, chemicals and fertilizer just to name a few. Trailer on flat car, container on flat car out of Davenport and barge loading facilities are available just 28 miles northeast of Muscatine.

In eastern Iowa, from Minnesota to Missouri, railroad tracks hug the shore along the west bank of the Mississippi River, except for the stretch between Muscatine and Burlington. From Muscatine to the southwest, the Chicago, Rock Island & Pacific Railroad (Rock Island Line) follows a straight path through Fruitland, on Muscatine Island, to a ravine which it follows to the higher prairie ground above the Mississippi River valley. At the summit the road takes a westerly course through Letts and Fredonia, then crosses the Iowa River to Columbus Junction, just north of Columbus City.

**Public Transportation**

MuscaBus provides bus service to the City of Muscatine by offering several daily routes as well as custom routes “on-request.” All Musca Buses are wheelchair accessible and provide service to all. Please see the Multi-Modal Transportation Map for bus routes.

**Utility Systems**

**Electric**

The electric system in Muscatine is operated by Muscatine Power and Water, the largest municipal utility in Iowa. Muscatine Power & Water boasts some of the lowest electric and water rates in the country. The utility presently operates three generating units with a total capacity of 275.5 MW. Unit 9 (175.5 MW), the newest unit, went on line in May, 1983, and is equipped with a flue gas desulfurization system which places Muscatine Power and Water in compliance with current environmental regulations and should eliminate the need for further capital investment on this unit in the foreseeable future. The electrical distribution system is composed of a 24.25 square mile area.
CITY OF MUSCATINE, IOWA – COMPREHENSIVE PLAN

Chapter One: Socioeconomic Analysis and Existing Conditions

Water System

The municipal water system is operated by Muscatine Power and Water and is supplied by 29 wells with average depths of 80 to 140 feet. The system has a combined pumping capacity of 40,000,000 gallons per day and an overhead storage capacity of 250,000 gallons. The average daily demand is 23,200,000 gallons and the historic peak daily demand is 33,800,000. The static pressure ranges from 40 to 120 pounds. Muscatine Power and Water operates water treatment facilities, which add chlorine, fluoride and polyphosphates.

Natural Gas

Natural gas is distributed in the county by Alliant Energy™ with corporate headquarters in Madison, Wisconsin, and an area office in Muscatine. Natural gas, with an average BTU value of 1,000 per cu. feet, is available for all residential, commercial and industrial users. Firm, interruptible and transportation contracts are available to commercial and industrial customers. Natural gas is transported to the area by Natural Gas Pipeline of America.

Sanitary and Storm Sewer System

Muscatine has a municipal sanitary and storm sewer system that serves 90% of the community. The water pollution control plan implemented in the mid 1980’s resulted in a major rehabilitation which converted the water pollution control plant to an anaerobic process and liquefied sludge disposal program in 1988. The plant has a design capacity of 32,500,000 gallons with an average load of 6,700,000 gallons and a peak load of 13,000,000 gallons.

Sewer charges received in the Water Pollution Control enterprise fund are budgeted at $3,132,200 for 2000/01. The 1999/2000 budget included an overall rate reduction for most sewer customers. These reduced rates have been maintained for 2000/01.

The extensive storm and sanitary sewer renovation and extension program is funded out of a 1% local option sales tax which was approved by the voters in the City in May of 1994. The local option sales tax was specifically designed for storm and sanitary sewer programs and originally in effect for a 5-year period beginning July 1, 1994 through June 30, 1999. A special election for the extension of the 1% sales tax for an additional 5 years was approved by voters on August 4, 1998. The extension will help fund the completion of the south end sewer extension and other sewer projects.

Telephone

Muscatine is served by Quest Communications. Quest’s communications system is one of the most advanced in the United States and allows for in-bound and out-bound WATS with unlimited capacity. The conversion of the local switching to a DMS100 digital office was completed in early 1989.

Long distance is provided by AT&T, Sprint, and MCI. Equal access was completed in April 1989.
ENVIRONMENTAL AND LEGAL CONSTRAINTS

Clean Water Act

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972, which set the basic structure for regulating discharges of pollutants to waters of the United States. The law gave the U.S. Environmental Protection Agency (EPA) the authority to set effluent standards and continued the requirements to set water quality standards for all contaminants in surface waters. The CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a National Pollution Discharge Elimination System (NPDES) permit is obtained under the Act.

The 1977 amendments focused on toxic pollutants. In 1987, the CWA was reauthorized and again focused on toxic substances. It authorized citizen suit provisions and funded sewage treatment plants under the Construction Grants Program. Recent changes include implementation of requirements for discharge permits for stormwater. These requirements were implemented in two phases. Phase 1 imposed requirements on cities of over 100,000 population and implemented some requirements on industry. The construction industry was required to implement silt and erosion control on sites greater than five acres. Phase 2 requires permits for discharge from the municipal separate storm sewer system for cities with greater than 25,000 population, and requires permits for discharge of stormwater from municipally owned industrial sites such as maintenance yards, airports, treatment facilities, and similar sites.

Additional requirements for monitoring the capacity of sanitary sewers are being implemented as NPDES permits for wastewater are reissued. The program, referred to as “CMOM,” requires analysis of the capacities of the city’s sewers, and monitoring and reporting of maintenance practices. Other NPDES permit requirements may change if the receiving stream is listed as impaired. A Total Maximum Daily Load (TMDL) may be developed for the stream, which results in limits on discharge of certain pollutants.

The management of stormwater runoff in the future will be far different than in the past. The use of concrete-lined channels, riprap, and gabions will no longer be acceptable. The design will need to reflect the natural ecology of the area and use bioengineering techniques. This more than likely means that drainage channels will be wider and will take up more area. Perhaps subdivision design will need to be approached from the opposite way it is done now. Current practice is to try and maximize the number of lots on a tract, but in the future a maximum number of lots may be determined by the ecology of the area and the design may simply be to determine how to environmentally include a specific maximum number of lots.

For large developments it will be relatively easy to design detention ponds to comply with the Clean Water Act, but the problems typically have come from small developments and expansions of existing structures. With the steep terrain in Muscatine and the proximity to the Mississippi River and Muscatine Slough, this is a serious concern for the future development of Muscatine.
Clean Air Act

The 1990 Clean Air Act is a nationwide federal law that regulates air pollution. The purpose of the law is to ensure that all Americans have the same basic health and environmental protections. The Clean Air Act is regulated by the state based on an implementation plan that is approved by the EPA. Therefore, the EPA in reality sets the limits on how much air pollution will be permitted. The pollution standard is set for the region and all the units of government must work together to maintain the quality. Each city needs to evaluate its codes, policies and practices to ensure it is contributing to the fullest degree. The implementation of the Clean Air Act is an area-wide effort rather than site specific. The City can improve the situation however by solving traffic flow problems and improving the efficiency of traffic.

Resource Conservation and Recovery Act (RCRA)

RCRA (pronounced “rick-rah”) gave EPA the authority to control hazardous waste from the “cradle-to-the grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous wastes. The 1986 amendments to RCRA addressed the environmental problems that could result from underground tanks storing petroleum and other hazardous wastes. RCRA focuses only on active and future facilities and does not address abandoned or historical sites. This law also requires the phasing out of land disposal of hazardous waste.

The City provides trash collection services, but contracts with a public solid waste agency for disposal and, therefore, is able to avoid the liability of disposal. Sharing the disposal with other units of government is a wise choice because of the complexity of managing a disposal site. The Iowa Department of Natural Resources should be contacted for specific disposal instructions for hazardous or unstable materials.

Superfund Program

The Superfund Program is used to clean up abandoned or uncontrolled hazardous waste sites. The two major parts of the Superfund are the Removal Program and the Remedial Program. The Removal Program takes quick action to correct short-term emergencies such as accidental or deliberate spills of hazardous substances. The Remedial Program provides for the long-term clean up of serious hazardous waste problems and works to correct wide-scale damage caused by hazardous waste releases. There are 1,200 Superfund sites on the National Priority List (NPL), but none are located within the City of Muscatine.

STORMWATER MANAGEMENT

The amount of rain that falls in an area as well as a city’s method and capability for dealing with the resulting storm water greatly affects the type and location of development within city limits. Areas that act as collectors for storm water, such as natural depressions and flood plains, inhibit the construction and maintenance of buildings. These areas may require special construction specifications or prohibitions to safeguard against flood damage. The following section describes the process of storm water drainage and the conditions of storm water drainage.
The development of land severely alters the natural drainage characteristics of an area. When houses, commercial areas, and roads are built, significant proportions of the land’s storm water retention and detention capabilities are destroyed. During construction, the ability for water retention is decreased when vegetation is removed and soil is compacted. Unless preventative measures are taken, critical amounts of soil erosion and sedimentation could occur during construction. Once an area has been developed, impervious surfaces not only block the absorption of rainwater, they create a surface over which water immediately starts running downhill. This results in heightened flood levels and shorter times for peak flood levels to be reached once the rain has started. In a natural state, land holds rain water and peak flood levels are not reached until hours after the peak rainfall has stopped. Streams that run through cities and towns often reach peak flood levels within minutes of peak rainfall. This is called a flash flood.

Besides the apparent dangers of flash floods, the effects of altering storm runoff are far reaching. The creation of impervious surfaces generates a need for local rainwater detention and/or adequate sewer lines to carry the water downstream. If these needs are not met, local flooding and ponding may occur on streets and parking lots, in low lying areas, along creek beds and streams, and other places in close proximity to developed areas. Damage to land, buildings, and other property may result from standing and flowing water. Simply creating a drainage system that will evacuate a certain volume of rainwater from an area, however, will only solve flooding problems locally.

Detention basins should be required for all new development that sufficiently increases the natural run-off rates. The function of a storm water detention basin is to retain rainwater at the location of the development and release it at the same rate as water would run off the site in preexisting conditions. Therefore, the rate at which water from a storm runs into streams and rivers is regulated, which decreases the contribution to flash floods and additional flooding downstream.

To abate flood damage to buildings, city code prohibits new construction of anything more than a single-family residence or addition within the 100-year floodplain. The 100-year floodplain is defined as the elevation which a given body of water has a 1% chance of reaching in any year. FEMA produces Flood Insurance Rate Maps, which illustrate the 100-year and 500-year flood levels. A significant amount of land within Muscatine and to the south of the city’s limit lies in the 100-year flood plain on either side of the Muscatine Slough. Some construction has occurred in some of these areas. To comply with FEMA regulations and to avoid injury to persons and damage to property, construction in flood plain areas should be closely monitored.

In October 1999, the United States Environmental Protection Agency issued the Stormwater Phase II Rule of the National Pollutant Discharge Elimination System. This rule seeks to establish programs to protect our rivers through the control of pollution from stormwater discharges. In short, cities like Muscatine must manage and control the runoff from storms and related systems. The Federal government provided no funding for the rule. It is what is known as an unfunded mandate. The recommended Stormwater Management Utility fee is simply a user fee and not a tax. The contributors to stormwater runoff pay their share according to the amount of runoff generated.
Flood Plain Insurance

The Flood Insurance Rate Maps (FIRM) for the City of Muscatine depict a number of areas that fall under Zones A and B. Zone A is defined as “areas of 100-year flood base flood elevations and flood hazard factors not determined.” Zone B is defined as “areas between limits of the 100-year flooding and 500-year flood; or certain areas subject to 100-year flooding with depths less than one (1) foot...”. The zones are determined by the Federal Emergency Management Agency (FEMA) and officially depicted on Flood Insurance Rate Maps. The City of Muscatine does participate in the Federal Flood Insurance Program.

Toxic Substance and Control Act

The Toxic Substances Control Act (TSCA) of 1976 was enacted by Congress to give EPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. EPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

Also, EPA has mechanisms in place to track the thousands of new chemicals that industry develops each year with either unknown or dangerous characteristics. EPA then can control these chemicals as necessary to protect human health and the environment. TSCA supplements other Federal statutes, including the Clean Air Act and the Toxic Release Inventory under EPCRA.

TSCA makes those who manufacture and process chemical substances and mixtures responsible for developing data on their effects. The act also provides authority to regulate chemical substances which present unreasonable risk of injury to health and/or the environment. The EPA implements this act and has control over production, use, distribution and disposal of hazardous substances. Manufacturers of new chemicals must advise EPA of their existence so the EPA can assess them for their impact on human health or the environment.

If EPA finds that a chemical substance will pose an unreasonable risk, it may:

- Apply certain requirements prohibiting a particular use or use in a particular concentration;
- Limit the amount that can be manufactured; or
- Require the substances to be marked with warnings and instructions for use, distribution and disposal.

Site Specific Obligations and Restrictive Covenants

When areas are platted, the developer frequently files restrictive covenants or deed restrictions to regulate how land within that subdivision can be used. The purpose of the covenants or deed restrictions is to provide additional protection for the area beyond what city zoning could require. A typical covenant restricts the subdivision to single-family detached housing. This type of restriction could significantly hamper the redevelopment of an area. Amending the covenants also can be very complex and time-consuming. A first step in considering an area for
redevelopment is to examine the covenants to determine whether there are any significant items that could affect a proposal.

**LIMITING PHYSICAL & CULTURAL FEATURES**

The City of Muscatine is in the easternmost portion of Muscatine County, which is located in the southeastern part of Iowa. The City of Muscatine is the county seat and located on the northwest bank of the Mississippi River where the river is re-directed in a southerly direction. The Mississippi River forms part of the east and south boundary of the City and County. The total area of the County is 283,200 acres (442.5 Square Miles) and the total area of the City is approximately 10,586 acres (17 Square Miles).

The Mississippi River and its tributaries dominate the geography of eastern Iowa, carving spectacular bluffs and picturesque river valleys that feature hardwood forests of hickory, elm and oak. The topography around the City was not scraped smooth by the Pleistocene glaciation and is now the hilliest, most eroded part of the state.

**Flood Prone Areas**

One hundred year and five-hundred year flood zones are depicted on the Development Constraints Map. Most flood prone zones within the planning area are located adjacent to the Muscatine Slough, Mad Creek and the Mississippi River and its tributaries. The construction of any structures that would impede the flow of floodwaters should be prohibited, or at least carefully reviewed, prior to permitting development in any floodway or flood hazard area. Additionally, the storage of any toxic materials, solid waste and other contaminants should be prohibited in flood hazard areas. Developers should be required to identify any portions of a future development that falls within a FIRM flood zone. Developments located in flood prone areas shall follow any/all special procedures required by applicable local, state and federal jurisdictions. In addition, the City is encouraged to continually implement Phase II and Phase IIA of the Levee Improvement Project which is being completed through an agreement with the Corps of Engineers and other ancillary service improvements.

**Wetlands**

According to the Iowa Academy of Science, wetlands are defined as low areas where water stands or flows continuously or periodically. They are often referred to as swamps, sloughs, marshes, potholes, lakes, bogs, wet meadows, and seeps. Usually wetlands contain plant-life characteristic of such areas. While most definitions of wetlands refer only to the shallow water areas with vegetation, we have broadened ours to include natural lakes, rivers, river oxbows, overflow areas, and manmade areas such as reservoirs, lakes, and farm ponds.

Water-saturated soils in these low areas are normally without oxygen and are described as anaerobic. Because plant roots require oxygen for respiration and this oxygen is normally obtained from air spaces in the soil, most plants can live in water-saturated soils only for very brief periods. Anaerobic soils and the presence of one or more members of a small group of plants able to tolerate and grow in such soils are universal features of all wetlands. Wetland
plants have various anatomical, morphological, and physiological adaptations that enable them to live either partly or completely submerged.

Wetlands also are home to many different groups of animals that are able to find food and shelter in them. These animals also show a variety of adaptations for life in the wetland environment. Animals found in Iowa wetlands include muskrats, mink, ducks, geese, shore birds, songbirds, turtles, fish, salamanders and many different invertebrate groups.

The key feature used to classify all wetlands is their water regime or hydrology. The Iowa Natural Heritage Foundation, in conjunction with the Iowa Academy of Science, identifies four basic types of wetlands found in Iowa: palustrine, lacustrine, riverine, and seepage.

Palustrine wetlands occupy shallow basins with small watersheds. They have marked fluctuations in water level: seasonal fluctuations, reflecting rainfall patterns and annual fluctuations, reflecting long term drought cycles. In periods of drought, annual fluctuations can be so extreme that wetlands may be free of standing water for one or more years. Most palustrine wetlands, once common in the northern half of Iowa on the recently glaciated areas, have now been drained, but some can still be found in northwest Iowa. Palustrine wetlands are often called prairie potholes or prairie glacial marshes.

Lacustrine wetlands are found in shallow, protected areas of lakes. They are generally less subject to water-level fluctuations than palustrine or riverine wetlands. Although Iowa has few large lakes, good examples of this wetland type may be found along the shores of Spirit Lake, Clear Lake, and many smaller Iowa lakes. Wave action that can uproot plants restricts lacustrine wetlands to sheltered areas of large lakes.

Riverine wetlands, which are associated with rivers, are not common in Iowa, except for those found in the backwaters of the Mississippi and in clear-water trout streams of northeastern Iowa. Most Iowa rivers today are too turbid to support the growth of aquatic plants, and they are either shaded out or buried under the settling load of suspended material. Plants that occasionally do become established are often scourred out by floods. In the few rivers where plants can take hold, their growth is often luxurious. The flowing water constantly supplies them with new sources of nutrients.

The major wetland areas of Muscatine are adjacent to the Muscatine Municipal Airport and within a curve in the Muscatine Slough. Both areas share characteristics commonly found in palustrine wetlands and each provide habitat for many waterborne species as well as waterfowl. The wetland area located at the airport may pose potential hazards to aircraft as wetlands provide excellent habitats for the feeding and breeding of waterfowl and other birds. Development should be excluded from encroaching upon these areas and any other wetland areas found within the project area. The designation of wetlands in itself would not necessarily prevent development, but does indicate the area is sensitive and development will need to be approached in a more sensitive manner. The Iowa Department of Natural Resources and Army Corps of Engineers should be contacted prior to any alteration of any wetland area.

Soil Characteristics
Three main elements make up the topography of Muscatine; upland plains, broad flood plains, and highly eroded valley sides. Although the city was greatly modified by glaciers, the present topography is primarily the result of stream erosion. The north and northwest portion of the City has a level to gently undulating bottomland topography. Most of the soils are deep, silty or loamy. Floodplains are chiefly along the Muscatine Slough, Mad Creek, Geneva Creek, and the Mississippi River and its tributaries. The floodplain elevations range from 550 feet at the southeastern end of the city to 545 feet on the sand plains in the northern part. The floodplains are underlain by water-deposited sand, silt, and clays. They are relatively shallow and located over limestone and shale bedrock.

The Soil Association Map identifies the soil types found in Muscatine. A soil association is a landscape that has a distinctive proportional pattern of soils. It normally consists of one or more major soils and at least one minor soil. The name of the association is derived from the names of the major soils present in the given association.

The predominant soil associations within the City of Muscatine include the following:

1. **Fayette-Lindley Association**: Underlies most of the developed/urban areas within the City.

2. **Colo-Coland-Ambraw Association**: Follows the banks and watershed areas of the Muscatine Slough in the Muscatine Island region.

3. **Fruitfield-Elrick-Toolesboro Association**: Occupies portions of the Muscatine Island from the Muscatine Municipal Airport to the Mississippi River, including the sand and gravel pits located just outside the city limits.

4. **Downs-Tama Association**: Located along the central ridge region of Muscatine. (Refer to Soil Associations and Wetland Identification Map)

The Fayette-Lindley association generally consists of gently sloping to very steep hillsides. The surface is well drained and consists of silty and loamy soils that formed in loess and glacial till. Due to a well developed system of drainageways, runoff is rapid. This association is suitable for additional development, however, special consideration should be given to areas with steep slopes and areas with unstable soils containing shrink-swell characteristics. This soil association makes up about 17% of the county.

The Colo-Coland-Ambraw association is nearly level, poorly drained and contains silty and loamy soils that formed in alluvium. Bottomland areas, such as the areas adjacent to the Muscatine Slough, fall within the Colo-Coland-Ambraw soil association. Natural surface drainage is poorly developed. Drainage ditches have been installed to remove excess surface and sub-surface water. They also convey runoff water from nearby uplands to permanent streams, such as the Muscatine Slough, or major drainage ditches. The gray silty clays that are commonly found within this association provide moderate permeability. Flooding can be a hazard, especially in areas that are not protected by levees or stream channel improvements. This soil
association is suitable for future development when special consideration is given to flood protection and wet soil conditions. The Colo-Coland-Ambrarrow association makes up about 6% of the county.

The Fruitfield-Erlick-Toolesboro association is nearly level to gently sloping and contains sandy and loamy soils that formed in alluvium. This association is found in wide bottomlands that are excessively drained. Most areas within the City of Muscatine containing this soil association are protected by levees. It is subject to rare flooding when high river levels cause levee protection to fail. The soil consists mostly of sand, therefore the permeability of the Fruitland soil is very rapid. Available water capacity is very low. This soil association is suitable for additional development if it is protected from flooding. This association makes up about 4 percent of the county.

The Downs-Tama association consists of gently sloping to strongly sloping, well drained, silty soils that formed in loess. It is located in the north-central urban regions of the planning area and dips south into the City limits along Mulberry Avenue and to the southwest of Mulberry Avenue. It is commonly found on upland ridgetops and side slopes. Permeability of the Downs soil is moderate with medium runoff. Available water capacity is high, with shrink-swell tendencies when unstable shales and clays are present. This soil association makes up 26% of the county.

Factors influencing soil quality with respect to development include slope, permeability, shrink-swell characteristics, corrosive potentials, load bearing capacities, wetness, and drainage characteristics. Most prevalent soils within the planning area appear well drained, having been formed in loess on the upland till. Most of the soil types found in the developed areas of Muscatine are silty loams with surface and subsurface characteristics that vary considerably. Except for portions of the Colo-Coland-Ambrarrow association, nearly all soil types in the City of Muscatine are suitable for future building sites and most soils have a bearing strength rating of “good”.

The areas of probable limitations on development lie primarily along the creeks. Steep slopes, severe erosion and flooding are the main development constraints in these areas. It is recommended that soil tests are performed prior to the design of foundations in areas known to have expansive soils and rock units. Expansive soils, such as clays, can significantly change in volume due to shrink and swell and freezing and thawing. Characteristics of expansive or swelling materials are highly plastic clays and clay shales that often contain clay materials such as montmorillonites. The City should maintain soil maps at City Hall and require developers to identify soil types and measures taken (if any) in the design and drainage of each development.

Geology

The topography of Muscatine is the result of several forces ranging from subsurface geologic events to glacier till. Factors that contribute to the appearance and stability of the topography include hydrology, geology, soils, slope, microclimate, plants and animals and weather/precipitation. Slope and elevation both impact the development and the use of land. Areas that are poorly drained and sites that contain unstable soil and/or steep slopes (greater than 10%) are not suitable sites for traditional construction methods. These natural conditions are
often minimized through grading and cut and fill operations. However, mechanical cut and fill of slopes, deforestation, and drainage alteration are three common disturbances to the natural environment including slope, elevation and hydrology.

The land within and around Muscatine consists of peaks and depressions, ridges and valleys, rolling hills and flat areas near the rivers. Many sloped areas within the city have been flattened to make way for development. For purposes of this study, slope areas within Muscatine have been mapped with grades greater than 15%. It was assumed that charting anything less than 15% would characterize data that is not essential since a slope less than 15% generally represents a buildable area.

Overall, gently rolling hills characterize Muscatine and its planning area's topography. The vast majority of land area has gentle to moderate slopes (0% to 8%). Moderate (8% to 15%) and steep slopes (above 15%) occur along the major creeks and their tributaries. Future development along the Mississippi River and its many tributaries may encounter added costs due to mitigation of potential problems created by slope conditions. Areas of steep slope require special design and construction techniques and result in significant development limitations.

The highest elevations in Muscatine are around 700 feet above sea level. They can be found along a ridgeline in the west central portion of the upland area, generally within an area between Lucas Street to Mulberry Avenue. The highest elevations in this area are about 160 feet above the banks of the Mississippi River.

The steepest slopes in Muscatine are associated with the valley and bluffs carved out of the landscape by natural watersheds that feed the Mississippi River. These areas are generally found between the elevations 600 feet and 700 feet above sea level. Refer to the Development Constraints Map to identify locations containing slopes greater than 15%.

**Water Features**

Water features within the City of Muscatine planning area include man-made lakes, the Mississippi River, Mad Creek, Geneva Creek, Papoose Creek and the Muscatine Slough. Water features are highlighted with a dark blue boarder on the Soil Associations and Wetland Identification Map. These areas are depicted on the Development Constraints Map due to their potential for flooding, the relatively close proximity to the water table and the unstable sub-surface soil conditions characteristic of watershed and flood prone areas.

**Archaeologically Significant Sites**

Native American Indians lived within the areas currently know as the City of Muscatine. Their artifacts and ceremonial mounds are mostly of Middle Woodland and Late Woodland Indian Cultures. The Indians used many of the local natural resources in their farming, gathering, hunting, and fishing practices. The City was named for the historic Muscoutin Indians, who lived on what is now called Muscatine Island when the first settlers arrived in 1833. The settlers established a trading post at the current location of downtown Muscatine. Early enterprises included lumbering, wood product finishing and farming. Later, the City became renowned for
its pearl button manufacturing. Currently, farming and manufacturing are the main enterprises. Corn and soybeans are the main crops. Manufacturing, including the processing of agricultural products, is located near downtown and along the Mississippi River.

The closest public archaeological site is the Toolesboro Indian Mounds National Historic Landmark. This five-acre site contains some of the best-preserved and accessible Hopewellian mounds in the region. Occupied from around 200 B.C. to A.D. 400, the site preserves several large mounds, and also has an education center. The site is located near Wapello in Louisa County. Due to the possibility of vandalism and theft, archeological sites have not been mapped for distribution to the general public. Prior to major excavation projects, developers should contact the State Historical Society of Iowa to confirm the future impact on historical or archaeologically significant sites.

Cultural Inventory and Historic Structures

Muscatine County was organized on Jan. 8, 1837 with Bloomington (renamed Muscatine in 1849) named as the county seat. Bloomington's nickname was "Town of Pinch'em Silly." The name Muscatine is said to come from either an Indian tribe, the Indian word for prairie, or an island in the Mississippi River.

By an Act of Congress, any county could select a quarter section of government land for the county seat at a minimum price of $1.25 per acre. Muscatine County took the southeast one-fourth of Sec. 35, T77, R2W; the courthouse now stands near the center of that area. Using plans and specifications which cost $200, the Board of Commissioners, in 1840, began construction of a courthouse. The building was 50-foot x 60-foot, with a portico across the end, and it cost $15,000. The original courthouse was burned out in 1864 and rebuilt at a cost of $29,000. No records were lost in the fire, as far as can be determined.

The contract for the present courthouse was awarded by the Board of Supervisors on Sept. 26, 1907. Six pillars and a porch had to be removed from the old courthouse as there was only two feet separating the present courthouse and the original courthouse. The new courthouse was constructed at a cost of $150,000, of which approximately $15,000 was for electrical work. When it came time to move, some of the records were passed from the second floor of the old courthouse out the window to the new one. Court was first held in the new courthouse on June 9, 1909.

The first jail was ordered built in January 1839 on the northwest corner of the public square. The "old" jail that stands across Fourth Street from the courthouse was built in 1857. It is listed on the National Register of Historic Places, as is the courthouse. The "old" jail was replaced in 1907 at a cost of $15,000 for the building and $6,000 for the steel cage and fittings.

The combination of prosperous growth in the late 1800’s, followed by modest growth in the 1900’s is the primary reason Muscatine has such a wealth of classical nineteenth century buildings still standing. Since there was little demand for new buildings in the twentieth century, as compared to the previous century, the city has not totally experienced the pressures of real estate economics, which have let to the demolition of older buildings. However, during the
Chapter One: Socioeconomic Analysis and Existing Conditions

middle to late twentieth century the City saw a new era of prosperity, accompanied by a building boom. Most of the new construction has occurred at the outskirts of town where it was not necessary to demolish older structures for site development opportunities. It is likely that the City’s inventory of older buildings will diminish in the future unless preventative action is taken by citizens, civic groups and local government.

In an effort to record the many historic structures in the area, the City of Muscatine prepared a comprehensive inventory of architecturally significant structures. Completed in 1977, the Historic Architecture of Muscatine, Iowa identified 329 structures having special value for historic, architectural or aesthetic reasons. Of these, 239 were deemed eligible for nomination to the U.S. Department of the Interior’s National Register of Historic Places. In order to protect these structures and ensure future design continuity, consideration may need to be given to establishing special overlay districts and special district standards.

MAJOR CENTRALIZED SERVICE FACILITIES

The Community Facilities Map depicts the location of public buildings, institutions, hospitals, colleges, the airports and other significant traffic generators located within the City of Muscatine. These facilities represent focal points that will help future residents and business owners locate real estate investments and future site improvement plans.

Downtown Muscatine is the historic, commercial and governmental center of the City. It is located on the eastern boundary of the City limits on the banks of the Mississippi River. Attractions include several mixed-use retail, hospitality, service, institutional and residential facilities. More recently, a revitalization effort of the riverfront area has taken place to restore and beautify the open spaces that separate the City from the Mississippi River. Many older buildings have also been restored and provide a wide selection of services and uses to current and future generations, just as they did at the turn of the 20th century.

In addition to the downtown area, the 2-3 mile segment of Park Avenue, south of US 61, contains several activity centers and traffic generators. Included in this corridor are several hospitality, retail and service uses. Most of the hotels and restaurant franchisees serving the City of Muscatine are located along this corridor. Additionally, the City’s only shopping mall and movie theatre are located in this area. Wal-Mart also provides a location for area consumers just northeast of the Route 38 /US 61 intersection.

There are two major industrial sites located within the City. They are located in the northeast portion of the City off US 61 and University Drive and in the southwest portion of the City along the Mississippi River and along the US 61/92 corridor. These locations generate a significant portion or the area’s truck traffic.

Other centralized service facilities include several local businesses. A few major community businesses include Bandag (2905 N. Hwy 61), Hon Industries (414 E. Third Street), Heinz (1357 Isett) and Stanley Consultants (225 Iowa Ave.)
In addition to the several industrial, commercial and retail activity centers, the City of Muscatine owns and operates several community activity centers. Included is an expansive park system consisting of a municipal golf course, a riverfront park and public boat marina, Weed Park, the Muscatine Soccer Complex and a variety of other park facilities located throughout the City. The many parks, special events, programs and miles of trials throughout the City offer recreation and enjoyment for all ages. The following is a list of major public facilities in the City of Muscatine.

1. City Hall- 215 Sycamore
2. Musser Public Library-304 Iowa Avenue
3. Muscatine Art Center and Museum-1314 Mulberry
4. Municipal Golf Course (170 acres- 18 holes)
5. Municipal Boat Harbor (134 slips) East Harbor Drive
6. Major City Parks:
   - Kent Stein Park (Oneida Avenue) 66 acres
   - Riverside Park (Riverfront) 14 acres
   - Soccer Complex (Houser Street) 30 acres
   - Weed Park (Park Drive) 72 acres
7. Public Works Facility
8. Muscatine Municipal Airport 5701 Grandview
CHAPTER TWO: TRANSPORTATION MANAGEMENT & ANALYSIS

Planning for the City of Muscatine’s current and future transportation needs is an important element of the Comprehensive Plan. This section reviews the City’s existing transportation conditions and suggests improvements that are necessary in balancing the City’s circulation needs with existing and anticipated development and growth.

The community strongly believes that better access to Route I-80 and better cross-town transportation links will resolve many of the current traffic circulation problems. However, prior to implementing major development proposals it is necessary to evaluate the community’s existing conditions and prioritize the anticipated needs. This plan takes an integrated approach to reviewing the City’s transportation needs and takes a comprehensive, systems planning approach, to the development of objectives and recommendations to address these needs.

FUNCTIONAL CLASSIFICATION

To better review and evaluate the City’s roadway system the streets have been classified into functional categories. The Functional Classification System is a system used to categorize the design and operational standards of roadways according to their purpose in moving vehicles. The classification system adheres to a hierarchical structure to describe the operation of roadways within a transportation system. A higher functional classification implies higher traffic capacity and speeds, and typically longer traveling distances.

The hierarchy of street types in descending order includes Interstate/Freeways, Arterial, Collector and Local. The differentiation between street classifications is based upon a combination of factors including traffic volumes, through traffic movement and access to adjacent land. Lower functional class roadways, such as local and collectors, provide greater access to adjacent land or individual properties. Higher functional classifications, such as arterials and freeways, provide greater mobility and not as much driveway accessibility. If the transportation system works correctly, all portions of this hierarchy should work together to facilitate efficient and safe movement between origins and destinations.

Individual streets do not serve trips independently rather most trips involve movement through a network and system of roadways. Developing a functional classification provides a method for channeling traffic in a logical and efficient manner. Roadways are classified by the function they serve and not necessarily by the amount of traffic they carry; however, higher traffic volumes are generally found on higher classified roadways. This classification is used throughout this document to establish a functional hierarchy of roadways. The functional roadway classifications of Muscatine’s transportation system are as follows:

Freeways/Expressways

Freeways and expressways are fully or partially access controlled facilities. These routes typically carry the highest traffic volumes, serve major activity centers, and carry the major portion of trips entering or leaving the study area. The City of Muscatine is strategically located 15 miles south of the nation’s only east/west transcontinental interstate Highway, I-80.
Chapter Two: Transportation Management & Analysis

Muscatine is also located on U.S. 61, a major north/south route through the central United States that serves as an expressway between Muscatine and the Quad Cities. Both highways have limited access. Due to the high speed and increasing volumes on these roadways, grade-separated interchanges may be necessary at major intersections in the future.

Arterials

Major arterial streets are intended to provide a high level of mobility to traffic passing through a community, with limited access to local development. Due to high traffic volumes, arterial roadways are attractive for local developments that seek to capture this traffic for business. This frequently results in pressures for direct access onto the arterial from the abutting properties. However, the proliferation of curb-cuts onto an arterial roadway decreases the functional design capacity and maximum speed at which vehicles can safely travel on an arterial roadway. As a result, many arterial streets within the city’s transportation system provide higher levels of accessibility to locally generated traffic, rather than for through traffic. These streets no longer function as primary arterial streets, but have assumed the function of minor arterial streets. Arterial streets typically operate in the range of 10,000 to 40,000 vehicles per day (VPD).

Lucas Street, Iowa Avenue, Cedar Street and Mulberry Avenue each function as a minor arterial roadway as they link downtown Muscatine to the US 61 Bypass. These roadways provide primary ingress and egress to neighborhoods and businesses located between the bypass and downtown Muscatine. The high level of access onto these roadways, reduce the capacity and maximum speed the roadways can accommodate, therefore these roads are classified as minor arterial. Clay Street, Washington Street, 5th Street, 8th Street and Houser Street are also classified as minor arterial roadways as they provide critical linkages across the city’s transportation system.

State Route 22 is a minor arterial roadway that provides an alternate east-west route to and from the Quad Cities from the City of Muscatine. Route 22 brings traffic into the city via a scenic corridor that follows the Mississippi River before entering the City at Park Avenue. Traffic volumes on Route 22 entering the City of Muscatine range from approximately 7,000 VPD (vehicles per day) near the Park Avenue intersection to approximately 5,000 VPD outside the corporate limits.

An example of a major arterial roadway includes Route 38 (Park Avenue) as it connects downtown Muscatine to Interstate 80. The busiest section within the City of Muscatine’s transportation network, according to the Iowa Department of Transportation, is State Route 38 between Ford Avenue and Colorado Street. In this area of the north-south spur of Park Avenue, traffic volumes approach 18,000 VPD in some locations. The highest volume of traffic was observed just south of the intersection of Ford Avenue and Park Avenue. The annual average daily traffic count in this location during 1998 was 17,900 VPD.

Additional examples of major arterial roadways include State Route 92/Business Route 61 (Grandview Avenue) as it provides a link to and from the southern portion of the City from US 61. Prior to construction of the US 61 Bypass, through traffic was routed along Grandview Avenue and Mississippi Drive directly through downtown. By way of Grandview Avenue,
Route 92 still provides a direct southerly route to and from US Route 61 to the City of Muscatine and also provides easy access to the Muscatine Municipal Airport. Traffic volumes along Grandview Avenue at Franklin Street are approximately 12,600 VPD according to 1998 traffic counts. State Route 92 also provides access across the Mississippi River into Illinois via the Beckey Bridge. The VPD usage on Beckey Bridge was approximately 4,050 in 1998.

Downtown Muscatine is served by one major arterial corridor that is made up of several streets. Mississippi Drive is classified as a major arterial as it carries traffic through downtown Muscatine from Hershey Avenue to the Mulberry Avenue. The major flow of traffic is then routed north at Mulberry Avenue where traffic must then quickly make a 90-degree turn onto 2nd Street. Second Street then passes through HON Industries, Inc. and connects to Park Avenue where the arterial flow of traffic continues north along Park Avenue to Route 61.

**Collectors**

Collector streets provide direct service to local residential neighborhoods, commercial areas, local parks, churches, etc. Collector routes generally provide service to other traffic generators not directly served by arterial roads. Collector roads may penetrate neighborhoods and function to distribute trips from arterials through the area to the ultimate destination. Conversely, collector streets collect traffic from local streets in residential neighborhoods and channel it into the arterial street system.

Examples of roads identified as collectors by the Iowa Department of Transportation include:

- Hershey Avenue
- Fulliam Avenue
- Bidwell Road
- Logan Street
- Weir Street
- Woodlawn Avenue
- Isett Ave. (From Clay to the bypass)
- Leroy Street
- Colorado Street
- Lincoln Boulevard
- Lake Park Boulevard
- Roscoe Avenue
- 3rd St (From Main St. to Iowa Ave.)
- University Drive

**Local Streets**

The local street system includes all streets not included in one of the higher functional classifications. Local roads primarily serve residential areas and provide direct access to abutting land. Local streets offer the lowest level of mobility and through traffic movement is deliberately discouraged. These streets often connect to collector roads or can connect directly into an arterial roadway.

In general the local streets within the City of Muscatine’s transportation network are made up of a combination of the traditional grid pattern roadway system (as seen downtown) and a spiked wheel system. As the local streets extend beyond the downtown area, the street system tends to break away from the formal grid pattern. Due to the creation of larger lot sizes and topography,
several streets in the outer fringes of the urban core run in varying directions. Oftentimes this can create confusion to safety concerns for motorists. If the proper provisions for signage, sight distances and overall design considerations are not met.

**EXISTING TRAFFIC VOLUMES AND CAPACITY**

Level of service (LOS), as described in Figure 2.1, is a means by which to rate traffic operations. Traffic conditions are divided into various categories ranging from LOS A (very good travel condition) to LOS F (very poor, very congested travel). A roadway that is generally operating at an acceptable level will fall in the range of LOS A to LOS C. As the traffic capacity of a roadway becomes unacceptable it will generally fall into LOS E and LOS F, which reflects congested travel conditions. LOS D is frequently found to be acceptable in major metropolitan areas, but is generally not acceptable in communities the size of Muscatine except within the downtown area.

![Figure 2.1: Level of Service Description](image)

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td><strong>FREE FLOW.</strong> Low volumes and no delays.</td>
</tr>
<tr>
<td>B</td>
<td><strong>STABLE FLOW.</strong> Speeds restricted by travel conditions, minor delays.</td>
</tr>
<tr>
<td>C</td>
<td><strong>STABLE FLOW.</strong> Speeds and maneuverability closely controlled due to higher volumes.</td>
</tr>
<tr>
<td>D</td>
<td><strong>STABLE FLOW.</strong> Speeds considerably affected by change in operating conditions. High density traffic restricts maneuverability, volume near capacity.</td>
</tr>
<tr>
<td>E</td>
<td><strong>UNSTABLE FLOW.</strong> Low speeds, considerable delay, volume at over slightly over capacity.</td>
</tr>
<tr>
<td>F</td>
<td><strong>FORCED FLOW.</strong> Very low speeds, volumes exceed capacity, long delays with stop-and-go traffic.</td>
</tr>
</tbody>
</table>

The majority of traffic volumes indicate roadways are operating under capacity. However, in recent years it has become apparent that there are some locations where peak hour traffic congestion is present. The top priority is access management along Park Avenue. This corridor experiences peak period traffic congestion and is being considered by the Iowa Department of Transportation for supplemental traffic improvements. Mississippi Drive as it passes through downtown Muscatine is another location that experiences some peak period congestion.
The following table identifies 1998 traffic volumes at select locations within the City of Muscatine.

Table 2.1: 1998 Muscatine Traffic Volumes

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>1998 Traffic Counts</th>
<th>Number Of Lanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 61 (East of State Route 38/Park Avenue)</td>
<td>18,000</td>
<td>4</td>
</tr>
<tr>
<td>Park Avenue (South of Ford Avenue)</td>
<td>17,900</td>
<td>4</td>
</tr>
<tr>
<td>Park Avenue (South of Colorado Street)</td>
<td>16,100</td>
<td>4</td>
</tr>
<tr>
<td>Bidwell Road (South of US 61)</td>
<td>13,300</td>
<td>2</td>
</tr>
<tr>
<td>2nd Street (East of Mulberry)</td>
<td>12,300</td>
<td>2</td>
</tr>
<tr>
<td>Mississippi Drive (East of Grandview Avenue)</td>
<td>12,000</td>
<td>2</td>
</tr>
<tr>
<td>Isett Avenue (North of Bidwell Road)</td>
<td>11,900</td>
<td>4</td>
</tr>
<tr>
<td>US 61 (North of 41st Street)</td>
<td>11,200</td>
<td>4</td>
</tr>
<tr>
<td>Mulberry Avenue (North of 11th Street)</td>
<td>7,200</td>
<td>2</td>
</tr>
<tr>
<td>Route 22 (East of Park)</td>
<td>7,000</td>
<td>2</td>
</tr>
<tr>
<td>Houser Street (South of Cedar)</td>
<td>5,300</td>
<td>2</td>
</tr>
<tr>
<td>Stewart Road (North of 41st Street)</td>
<td>4,670</td>
<td>2</td>
</tr>
<tr>
<td>Cedar Street (North of 8th Street)</td>
<td>4,700</td>
<td>2</td>
</tr>
<tr>
<td>Iowa Avenue (North of 6th Street)</td>
<td>4,570</td>
<td>2</td>
</tr>
</tbody>
</table>

Major Trip Generators

Major trip generators are developments that either produce or attract large number of trips. The major activity centers represent focal points within the community. They are often traffic generators that usually by their nature of being an attractive resource within the community generate interest to those traveling throughout the community. Although there is no single traffic generator that is responsible for traffic congestion throughout the city, there are several activity centers throughout the city that create traffic congestion problems. It is important to take note of major trip generators to identify the potential impacts they could have on traffic operations. (Refer to Community Facilities Map)

The most significant traffic volumes are found along Park Avenue. A portion of the traffic on Park Avenue uses this corridor as a connector to US 61 or as a linkage to other activity centers. Meanwhile, the density and scale of the businesses and other attractions located along this corridor contribute significantly to the high volumes of traffic using Park Avenue. The presence of many of the City’s major trip generators combined with the high volume of users on this corridor result in traffic congestion. The design and configuration of ingress and egress along this route limit the functional capacity of Park Avenue to efficiently move vehicular or pedestrian traffic.
The collection of professional and governmental offices, retail and hospitality establishments located within downtown Muscatine represent another major traffic generator. Access to the downtown is generally provided by Route 38 and Route 92 with both roadways providing a connection to US 61. Additional access into downtown is provided by Cedar Street as well as several collector streets such as Mulberry Avenue, Hershey Avenue, Lucas Street and Isett Avenue.

The industrial areas located throughout the City constitute another potential major trip generator. Industrial areas are located in the southwest and northeast portion of the City. The industrial activity in the northeast portion of the City is located near the intersection of Park Avenue (Highway 38) and US 61. Industrial uses in the southwest portion of the City are accessed via the Industrial Connector and US 61. North-south access is provided via Stewart Road with access to US 61 via 33rd Street, 41st Street and 57th Street.

Both of these locations provide easy access to and from the industrial developments. Industrial users in these areas generate significant truck traffic, between 13,000-15,000 truck trips per year. In addition to addressing traffic volumes, the design and durability of heavily used truck routes must be considered in future road improvement plans.

The Soccer Complex and several of the other City parks are also popular destinations. The 41-acre Soccer Complex, with its 8 full-sized award winning soccer fields, is host to several local, state and national sponsored competitions. This highly popular facility generates significant volumes of traffic during national and regional tournaments. Kent Stein sports complex and the High School also significant traffic generators.

**Rail Transportation**

Currently, there are a total of two companies operating in the Muscatine market region. These lines, the Burlington Northern Santa Fe (formerly the Soo and jointly used by the W Rail Link) and the Iowa Interstate Railroad, provide freight connection with other markets. The northern portion of the W line carries less than one million tons per year, while the southern portion carries over ten million tons/year. The Iowa Interstate carries over 5 million tons per year. Iowa Interstate line is in poor condition, and rail cars must travel at 25-30 miles per hour.

At present there is no passenger rail services in the Muscatine region. However, officials from the area have expressed support for passenger rail services that would extend from Chicago to Omaha along the Iowa Interstate Railroad.

**Barge Transportation**

As part of the inland waterway system, the Mississippi River provides the Muscatine region with a link to the Mississippi tributaries, the Gulf of Mexico, the Great Lakes and connections to foreign ports. The navigation season last just over 10 months in the portions of the river in the Muscatine region, however, the length of the season varies, and tows will operate as long as there are commodities to move and ice conditions do not present serious risks. While barge transportation requires more shipping time than other forms of transport and the navigation
season is limited, the lower shipping rates and energy efficiency of this mode of transportation provide a significant cost savings to bulk material shippers. Total freight tonnage decreased from 44.1 million in 1992 to 31.6 million in 1993, a decrease of 13.7 million tons or 45.1%. The dramatic decrease in freight tonnage passing through this region can be directly traced to the great flood of 1993 which ravaged the region and brought river traffic to a standstill from early April to last July. Currently there are ten river terminals in Muscatine/Quad City region.

**Air Transportation**

The Muscatine Municipal Airport is located near the industrial development in the southwest portion of the City just off of US 61. Muscatine Municipal Airport, operated by Carver Aero, Inc. is a non-commercial facility for use by the entire community.

The Muscatine Municipal Airport is categorized for basic transport and has runway lengths of 5,500 and 2,765 feet. The main 5,500 feet runway is 100 feet wide and constructed with grooved concrete. The main runway is lighted and has a full parallel taxiway. Runway renovations were completed in late 1994. The airport is considered a Level II airport by the Iowa DOT and, therefore is of national regional significance. The facility can accommodate large transport aircraft. The facility includes the terminal building, three corporate hangars, (20) twenty T-hangars and a maintenance building.

VOR/DME, VASI, MIRL, clearance on the ground and the REIL systems are in place along with a non-directional beacon. The Automated Weather Information System (AWOS III) provides actual, up-to-the-minute on-site wind speed, direction, visibility, cloud height and local altimeter. An Instrument Landing System (ILS) is scheduled for installation in 2002.

The airport is open 7 days a week. Regular hours are from 7:00 a.m. to 7:00 p.m. Additional services available include an Executive Charter Service, flight instruction and aircraft rentals. To meet the growing commuter and commercial/industrial airline needs it is recommended the runways are expanded and adequate safety, maintenance, and security improvements are made to the Muscatine Municipal Airport.

Commercial air service is available through the Quad City Airport in Moline, Illinois, 35 miles east of Muscatine. There are approximately 55 flights per day available.

Carriers serving this facility include:
- Mesaba/Northwest Airlink
- United Express
- TWA
- Trans World Express
- American Eagle
Commercial air service is also available through The Eastern Iowa Airport in Cedar Rapids, Iowa, 70 miles northwest of Muscatine. There are approximately 78 flights per day available. Carriers serving this facility are:

- American Eagle
- Comair
- The Delta Connection
- Northwest Airlines
- Northwest Airlink
- United Airlines
- United Express
- US Airways Express
- Air Tram

Both these airports provide one-stop service to virtually anywhere in the world through the central U.S. hubs of Chicago, Denver, Detroit, Minneapolis, Orlando and St. Louis.

**TRANSIT**

The City of Muscatine operates a fixed route transit system and a curb-to-curb paratransit service. Great River Bend Services, Inc. (GRBS) is a non-profit corporation that has been designated by the Iowa Department of Transportation as the regional transit provider for the counties of Muscatine and Scott, as well as Cedar and Clinton Counties. GRBS utilizes a contractual relationship with counties, municipalities, social service agencies and other organizations. An existing fleet inventory for both systems indicates that they have a good disbursement of older and newer revenue vehicles.

Currently the City of Muscatine utilizes the City’s Public Works Building as both the administrative and maintenance center for the transit system. The building is ADA accessible and was constructed in 1985. It is anticipated that no facility growth will be required for Muscatine Transit. Great River Bend Services, Inc. completed construction of a new maintenance and administrative center in 1996.

In FY 1997 the Muscatine Transit System had a total ridership of 105,468 riders for both fixed and paratransit service. In FY 1997, GRBS had a total ridership of 8,430 riders from its contracts in the rural portions of Muscatine and Scott Counties. Table 2.2 indicates the total ridership for the past five years of the two transit systems.

In addition to localized service, the region is located on an intercity bus route, Burlington Trailways, connecting Chicago via Davenport and St. Louis via Wapello.
Table 2.2: Region 9 Transit Ridership 1993-1997

<table>
<thead>
<tr>
<th>Year</th>
<th>Muscatine Transit Ridership</th>
<th>Great River Bend Services Inc. Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>104,226</td>
<td>9,109</td>
</tr>
<tr>
<td>1994</td>
<td>102,193</td>
<td>9,255</td>
</tr>
<tr>
<td>1995</td>
<td>103,925</td>
<td>10,240</td>
</tr>
<tr>
<td>1996</td>
<td>111,976</td>
<td>9,904</td>
</tr>
<tr>
<td>1997</td>
<td>105,468</td>
<td>8,430</td>
</tr>
</tbody>
</table>

**TRAIL SYSTEM**

Currently, bicyclists use existing city, county, state and even US roadways/highways. In the City of Muscatine there are two main trail segments, one along Mad Creek near the northern City Limit and another along the Mississippi River linking the central business district to Musser Park.

**Parking**

The City owns 6 downtown parking lots at Sycamore and Mississippi, Second and Pine, Third and Chestnut, 100 block of W. Third Street, and Third and Cedar Streets (2), plus approximately 469 on-street parking stalls (metered), and 351 free parking stalls along the riverfront.

Although the City currently owns six downtown parking lots plus approximately 469 on-street parking stalls (metered), and 351 free parking stalls along the riverfront, downtown Muscatine is still the primary area that lacks adequate parking. Parking lots and additional on-street parking have been required in conjunction with redevelopment. However, additional parking areas are needed to accommodate residents and customers in downtown Muscatine. As future redevelopment is considered, it is important that supplemental parking facilities are constructed in order for the downtown to remain competitive within the greater Muscatine market area. Additionally, all surface parking should be constructed of a dust-free surface, such as asphalt, concrete or paving stones/blocks.

**TRANSPORTATION RECOMMENDATIONS**

The transportation system appropriately supports a community when it integrates and enhances the social, physical (environmental) and economic components of the community. In the development of transportation projects these elements must be considered fully along with technical issues so that final decisions are made in the best overall public interest. Attention should be given to such considerations as:

1. **Preservation** of the existing infrastructure. Managing and maintaining current road, bridge, transit, and intermodal assets.

2. **Safety** and security in travel, decreasing the risk of personal injury and property damage on, in and around transportation facilities.
3. **Congestion management**, ensuring that congestion on the region’s roadways does not reach levels which compromise economic competitiveness.

4. **Efficient movement** of goods, improving the movement of freight within and through the region by rail, air, water and surface transportation modes.

5. **Alternative modes of transportation** must be addressed with an emphasis on pedestrian and bicycle linkages to community activity centers.

6. **Sustainable development** coordinating land use, transportation, economic development, environmental quality, and community aesthetics.

Proper consideration of these items requires that proposed improvements be viewed from the perspectives of the user, the nearby community, and larger statewide interests. To the user, efficient travel and safety are paramount concerns. Meanwhile, the community often is more concerned about local aesthetic, social, and economic impacts. The general population, however, tends to be interested in how successfully a project functions as part of the overall transportation system and how large a share of available capital resources it consumes. Therefore, the City must prioritize improvements on the basis of overall system benefits as well as community plans, goals, and values.

The following items summarize potential issues or improvements that the City will be facing.

1. **Improve Park Avenue (Route 38).** Access and turning movements are currently a concern. Additionally, continuing development along this corridor will lead to increasing traffic volumes and capacity concerns. The city should consider conducting a transportation study of this corridor to determine improvement needs.

2. **Improve Intersection of 2nd and Mulberry.** Given the capacity concerns at this intersection, the City should strive to explore geometric improvements at this location.

3. **Implement and Enforce Access Management Policy.** Developing corridors or potential development corridors such as Park Avenue can greatly impact traffic operations. The City should adopt access management guidelines that will protect the capacity and maintain a high level of safety as these and other corridors develop. Specifically, the City should limit the number and width of access points that front on major arterials.

4. **Address intersection problems/concerns along US 61.** There are currently traffic operation concerns at the following locations along US 61.

   - 49th Street
   - 41st Street
   - Hershey Avenue
   - Cedar Street
   - Route 38
Traffic studies should be completed to identify potential mitigation strategies to improve traffic flow.

5. **Review signage and access to/from US 61.** The City should explore the current signage along US 61 to determine if some traffic could be encouraged to exit at locations other than Route 38 (Park Avenue).

6. **Cross-Town Access.** The City’s current transportation system provides limited cross-town accessibility. The City should review alternative locations to determine the most effective cross-town route, and implement that solution. One recommendation is to provide a cross-town connection between Mulberry and Cedar.

7. **Airport Runway Expansion.** Plans to expand the airport runway and additional expansion should be supported by the City.

### Access Management

Although access management is needed most along Park Avenue, it should be applied to all existing and proposed arterial roadways within the City’s transportation system.

Access management involves the planning and design of points of access to a public roadway system in an effort to increase the safety and operational performance of roadways. The goals of access management are to improve roadway safety, improve traffic operations, protect taxpayers’ investment in roadways and create better conditions for non-automobile modes.

#### Table 2.3: Access Management Standards

<table>
<thead>
<tr>
<th>Access Management Standard</th>
<th>What it means</th>
<th>Why is it important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway classification system</td>
<td>Access management standards should vary by the functional roadway type; the system classification should be mapped</td>
<td>Allows access management standards to properly fit the functional role of the highway, street, or road- the higher function, the less direct access is allowed</td>
</tr>
<tr>
<td>Driveway spacing and driveway density</td>
<td>The amount of distance between driveways and the number of driveways per unit of frontage. Said standards shall vary with the roadway classification, the expected land use, and the speed limit for the road</td>
<td>Short spacing between driveways and high driveway densities generates conflict points that in turn lead to higher accident rates and more traffic congestion.</td>
</tr>
<tr>
<td>Corner clearance and clearance of the functional areas of intersections</td>
<td>The minimum distance allowed between an intersection and the first driveway</td>
<td>Insufficient corner clearance is a major cause of access-related accidents.</td>
</tr>
<tr>
<td>Sight Distance Standards</td>
<td>The sight distance conditions under which a driveway should not be allowed</td>
<td>A driveway opening where there is insufficient sight distance is inherently dangerous.</td>
</tr>
</tbody>
</table>
Chapter Two: Transportation Management & Analysis

<table>
<thead>
<tr>
<th>Access Management Standard</th>
<th>What it means</th>
<th>Why is it important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway geometric standards</td>
<td>The width, turning radius, throat length, approach, angle, grade, and surfacing for driveways. These can vary by the expected land use served by the driveway and the roadway classification.</td>
<td>Insufficient driveway geometrics lead to slow driveway entrances and exit speeds. This leads to conflicts between turning and through traffic. Driveway geometric design can help or hinder pedestrian and bicyclists.</td>
</tr>
<tr>
<td>Raised Medians</td>
<td>Concrete islands placed in between traffic lanes.</td>
<td>Restricts turning movements and minimizes dangerous or unnecessary left turns into oncoming traffic.</td>
</tr>
<tr>
<td>Median opening standards</td>
<td>Where openings in medians will and will not be allowed</td>
<td>Too many median openings or closely spaced median openings detract from proper functioning of a median.</td>
</tr>
</tbody>
</table>

Source: DOT Access Management Classification System and Standards

**Raised Medians**

Medians shall be placed in areas of the center lane along applicable traffic routes to prevent dangerous turning movements onto oncoming traffic. Proposed locations and design should be reviewed by a traffic engineer prior to installation. If there is any uncertainty of the location, temporary medians shall be installed to test its effectiveness prior to permanent median construction. Permanent medians shall provide adequate storage space for car queuing. Raised medians shall be curbed, landscaped and supplied with in-ground irrigation where possible.

Raised medians are the most effective access management strategy on high-volume urban routes. They are 25 or more percent safer than multi-lane undivided sections and 15% safer than two-way left-turn lane (TWLTL) cross-sections in such high traffic situations.

Raised medians are especially recommended in corridors where the traffic volume is high (over 25,000 ADT) and the density of commercial driveways is high (over 24 per mile in both directions). Although the traffic counts in Muscatine do not indicate volumes exceeding 25,000, access management techniques should still be utilized to improve traffic circulation and safety.

**Driveway Spacing**

This standard governs the recommended spacing between private driveways on various classes of roadway. The City should discourage the proliferation of access points and conflict points of ingress/egress within the City’s roadway system to preserve both safety and traffic flow.

In order to preserve spacing, direct access should be moved to local streets or collectors (not arterials) where possible. In particular, access for corner lots should be moved to a lower traffic side street through means as frontage and backage roads, joint access, cross access and shared driveways. This standard only applies where sight distance allows. Driveways should NOT be allowed where sight distance is inadequate even if the driveway spacing standard would allow.
Driveway accesses should be provided on collector and local streets (“side streets”) rather than arterials whenever possible. Driveways should also be lined up across from each other whenever possible. When driveways to major traffic generators are not lined up, the minimum spacing of 125’ should be provided from the closest driveway on either side of the road, except where a non-traversable (e.g. raised) median exists.

On urban routes where non-traversable medians exist, shorter driveway spacing may be acceptable for right-in right-out driveways only. This standard provides for the double the number of right-in, right-out driveway access points as are allowed when left-turns into and out of driveways are permitted. It also allows for a shorter clearance distance from corners to the last driveway upstream from the corner.

**SUMMARY**

The above mentioned traffic problems were observed during field visits and confirmed through information gathered from the two Town Planning Charrettes and interviews with City officials, business owners and residents. In addition to the construction of better cross-town transportation routes, several intersections along Park Avenue and US 61 will need minor improvements to minimize future congestion and ensure safe traffic circulation. As requested by many Charrette attendees, this plan recommends increasing the functional capacity of Park Avenue by increasing the number of lanes and providing better traffic circulation improvements in the City’s traffic congested areas. In addition to the recommended vehicular transportation improvements, the plan provides recommended pedestrian and bicycle routes throughout the City. These improvements must also be incorporated into the City’s transportation system.

The recommended transportation improvements should be implemented over a 5-10 year timeframe. The improvements should be prioritized and included in the City’s annual budget and identified in the City’s Capital Improvement Plan. Whenever possible, the City should require developers to share the costs of public improvements in conjunction with the authorization of building permits, site plan approval, rezonings and plats.
CHAPTER THREE: DEVELOPMENT CONSTRAINTS & ENVIRONMENTAL MANAGEMENT

There are several physical barriers & environmental management considerations that must be considered when planning for the future of Muscatine. First there are natural barriers that may hinder future development. The natural development constraints in Muscatine include topography, flood prone areas and wetlands. In addition to natural development constraints, there are manmade physical constraints that may hinder future development. The city has a rich history that is memorialized in its many historic and architecturally significant structures. These structures and properties must be preserved and maintained for the benefit of enriching the lives of future generations. The last development constraint discussed in this section is the city’s housing stock. Providing an affordable housing stock that is of acceptable quality and design is a necessary component to the future development and economic stability of Muscatine.

These issues are all discussed in this section as they relate to the future of Muscatine. After each development constraint summary there is a list of recommendations. These recommendations represent major environmental management policies that must be addressed in the review and consideration of future development, growth and capital improvements decisions.

A. Natural Topography

The land within and around Muscatine consists of peaks and depressions, ridges and valleys, rolling hills and flat areas near the Mississippi River. Many sloped areas within the city have been flattened to make way for development. However, the existing steep slopes and bluff areas located throughout the community, specifically along Mad Creek and the Mississippi River, present natural development constraints. These constraints result in structural, design and stormwater management challenges. Special consideration should be required in the review and approval process. Items to be considered include:

- Stormwater detention/retention must be provided for all commercial sites and residential developments. It is recommended that the City expand its policy of “functional equivalency” to all proposed development within the City’s jurisdiction. This implies that new site development plans within the City and its 2 mile jurisdiction must provide the same or “equivalent” drainage performance after development as it did prior to site disturbance.

- Development proposed along creeks and in watershed areas must provide an adequate level of erosion control and stream channel protection. Zoning and subdivision regulations must be adopted that require all site development plans to provide adequate channel stabilization and erosion preventative measures. The regulations must also require developers to identify and implement channel stabilization and erosion control measures during construction.

- Future development along the Mississippi River floodplain and its many tributaries should be discouraged. Development in these areas will require added costs due to mitigation of potential problems created by slope conditions and result in irreversible
changes to a landscape that is valued for its scenic viewsheds and natural beauty. Proposed site plans should be reviewed by a qualified geotechnical and/or structural engineer who is familiar with Muscatine’s subsurface conditions and construction methods. It is also recommended that a design review committee also review these proposals to protect the integrity of the Mississippi River valley.

- It is advised that the intrinsic value of the city’s many viewsheds of the Mississippi River basin be preserved. Multiple story facilities that block scenic views of the Mississippi River should be discouraged. Where unavoidable, any structure (including signage) should be placed on the site to minimize obstructing views of the Mississippi River from adjacent properties and rights-of-way.

B. Flood Prone Areas

The City contains several areas that fall within the one hundred-year and five hundred-year flood zones, as defined by the Federal Emergency Management Agency. These areas may be prone to periodic flooding, therefore they were identified on the Development Constraints Map. Most flood prone zones within the project area are located adjacent to the Muscatine Slough, Mad Creek and the Mississippi River.

- The construction of any structures that would impede the flow of floodwaters should be prohibited, or at least carefully reviewed prior to permitting development in any floodway or flood hazard area. Developers should be required to identify any portions of a future development that falls within a designated flood zone. Developments located in flood prone areas shall follow any/all special procedures required by applicable local, state and federal jurisdictions.

- Storage of any toxic materials, solid waste, and other contaminants should be prohibited in flood hazard areas.

- Implementation of Phase II and Phase IIA of the Levee Improvement Project and other flood prevention improvements are strongly recommended. Design, construction techniques and project scheduling should be coordinated with the Corps of Engineers.

- Existing and new development located on bluffs and steep slopes throughout the City contribute to flash flooding. This has been an ongoing problem for properties located along the Mad Creek. Detention and retention requirements addressed previously are necessary to decrease the frequency and intensity of flash flooding in these areas.

C. Wetlands

The major wetland areas in Muscatine are adjacent to the Muscatine Municipal Airport and within a curve in the Muscatine Slough. Both areas provide habitat for many waterborne species as well as waterfowl. Development shall be excluded from encroaching upon these areas and any other wetland areas found within the city.
• The wetland area located at the airport may pose potential hazards to aircraft as wetlands provide excellent habitats for the feeding and breeding of waterfowl and other birds. The flight patterns of birds and the migration of waterfowl to this area must be monitored to avoid potential hazards.

• Wetlands are very sensitive areas. Any proposed development will need to be approached in a sensitive manner that does not negatively impact the fragile ecosystems and drainage characteristics associated with wetlands. The Iowa Department of Natural Resources and Army Corps of Engineers should be contacted prior to any alteration of any wetland area.

D. Historic Structures

The combination of prosperous growth in the late 1800’s, followed by modest growth in the 1900’s is the primary reason Muscatine has such a wealth of classical nineteenth century buildings still standing. Since there was little demand for new buildings in the twentieth century, as compared to the previous century, the city has not totally experienced the pressures of real estate economics, which would have led to the demolition of older buildings. However, during the middle to late twentieth century the City saw a new era of prosperity, accompanied by a building boom. Most of the new construction has occurred at the outskirts of town where it was not necessary to demolish older structures for site development opportunities. However, it is likely that the City’s inventory of older buildings will diminish in the future unless preventative action is taken by citizens, civic groups and local government.

In an effort to record the many historic structures in the area, the City of Muscatine prepared a comprehensive inventory of architecturally significant structures. Completed in 1977, the Historic Architecture of Muscatine, Iowa identified 329 structures having special value for historic, architectural or aesthetic reasons. Of these, 239 were deemed eligible for nomination to the U.S. Department of the Interior’s National Register of Historic Places. In order to protect these structures and ensure future design continuity, consideration may need to be given to establishing special overlay districts and special district standards. The table below identifies twelve structures that are currently located within the community that are on the National Register of Historic Properties.
Table 3.1: Muscatine Structures Recorded with the National Register of Historic Properties

<table>
<thead>
<tr>
<th>Description of Historic Structure</th>
<th>Locations</th>
<th>Registration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fay Pliny and Adelia House</td>
<td>112 Locust Street</td>
<td>4/23/98</td>
</tr>
<tr>
<td>Clark-Blackwell House</td>
<td>206 Cherry Street</td>
<td>1/27/83</td>
</tr>
<tr>
<td>Clark Alexander House</td>
<td>203 W. 3rd Street</td>
<td>10/14/76</td>
</tr>
<tr>
<td>First Presbyterian Church</td>
<td>401 Iowa Ave.</td>
<td>9/14/77</td>
</tr>
<tr>
<td>Fuller W. Joseph House</td>
<td>1001 Mulberry Ave</td>
<td>12/10/1982</td>
</tr>
<tr>
<td>McKibben S.M. House</td>
<td>Walnut Street between Front and 2nd Street</td>
<td>8/27/74</td>
</tr>
<tr>
<td>Muscatine County Courthouse</td>
<td>3rd Street</td>
<td>7/2/81</td>
</tr>
<tr>
<td>Old County Jail</td>
<td>411 E. 4th Street</td>
<td>7/24/74</td>
</tr>
<tr>
<td>Sinnett Octagon House</td>
<td>N. of Muscatine near IA 38</td>
<td>7/18/74</td>
</tr>
<tr>
<td>Trinity Episcopal Church</td>
<td>411 E. 2nd Street</td>
<td>10/29/74</td>
</tr>
<tr>
<td>Welch Apartments</td>
<td>224 Iowa Ave.</td>
<td>1/15/79</td>
</tr>
<tr>
<td>Warde, J. C. B. House</td>
<td>205 Cherry Street</td>
<td>4/26/79</td>
</tr>
</tbody>
</table>

E. Housing

The City of Muscatine’s housing stock has a great impact on the city’s future economic and social conditions. It is widely recognized that there is a lack of affordable housing options within the City of Muscatine. Homes ranging in price from $80,000 - $120,000 are in short supply. There is also a concern regarding the high number of single family homes being converted into multifamily dwellings. The proliferation of multifamily homes, high number of rental properties and poorly maintained structures and properties are some of the major factors leading to the deterioration of the City’s housing stock.

- Many of the substandard housing conditions in Muscatine can be addressed through more effective code enforcement measures. The adoption of new and improved code restrictions and the consistent enforcement of these new ordinances are critical in stabilizing neighborhoods within the City. Ongoing communication between neighborhoods and code enforcement entities will be needed in order to sustain these efforts into the future.

- There needs to be an increase in the supply of housing options to meet all socio-economic needs. More affordable housing options need to be developed in many of Muscatine’s older neighborhoods to preserve Muscatine’s historic houses. Programs also need to be developed that promote home ownership and stewardship.
SUMMARY

This section identified several natural, structural and environmental constraints that must be considered in planning for the future of Muscatine. To best prepare for the future, the city must first preserve the built and natural assets the community possesses. The City must also build from its past successes while avoiding any potential hazards and costs incurred though poor or misguided development decisions.
Chapter Three: Development Constraints & Environmental Management

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CHAPTER FOUR: CRITICAL ISSUES REPORT

The following is a summation of the issues raised during the City of Muscatine’s Town Planning Charrettes and interviews with City Officials, business representatives and concerned citizens. In addition, demographic and economic trends of the past decade and the forecasts and projections for the future are also “background factors” that influence these major critical issue areas. How the City deals with land use change in the context of economic and demographic changes is a key focus of the Comprehensive Plan. Goals, objectives and policy statements will be developed that best respond to the critical issues for the City of Muscatine. In an attempt to address the collective response of all the citizens and Charrette participants, the concerns were grouped into seven (7) categories.

- Downtown Revitalization
- Housing and Neighborhood Stabilization
- Transportation
- Recreation & Cultural Amenities
- Community Appearance
- Economic Development
- Infrastructure & City Services

Another major background factor influencing the plans response to the issues is the development constraints of the region. Development constraints include:

- Floodplains
- Stormwater drainage impairments
- Steep ravines and slopes in excess of 20 percent
- Availability of utilities
- Adequacy of transportation system; and
- Soils that present constraints to urban development.

Many natural features present opportunities for enhancing the quality of life in Muscatine through preservation of open space and enhanced development site planning. These include:

- Wetland preservation
- Open space dedication
- Public access to stream corridors
- Preserve viewsheds of the Mississippi River Valley
- Enhance public access throughout the City, with special emphasis downtown.
DOWNTOWN REVITALIZATION

The following is a list of critical issues related to revitalizing downtown Muscatine.

A. Develop a central theme or focus for the redevelopment of downtown.
A number of ideas have been expressed such as cultural center, entertainment center, professional business center and retail center.

B. Promote infrastructure improvement of the downtown business district.
Infrastructure improvements such as people gathering spaces, public restrooms, alley improvements, utility upgrades and flood control need to be considered in the downtown business district.

C. Recruit and retain businesses in Downtown Muscatine.
Promote the development of a business incubator facility to help improve and expand business development through financial assistance, technical training and marketing. Work towards maximizing the use/occupancy of appropriate structures downtown.

D. Continue and enhance façade and urban design improvements
Improvements to existing structures and new development within the historic downtown area should follow appropriate design and performance standards. Performance standards should address the installation/improvement of sidewalks, street lighting, adequate parking facilities and other site amenities such as landscaping and the creation of outdoor meeting places. Preserve historic structures whenever possible.

E. Coordinate efforts of interest groups.
Ensure the cooperation of all business and civic groups with an interest in the downtown work towards a unified effort to enhance the Downtown experience. These groups should work together in promoting special events, sponsoring façade and streetscape improvements and acting as a catalyst in forming partnerships that fuse together cultural, professional and residential interests.

F. Riverfront Improvements
Riverfront improvements must be continued to address the City’s flood protection, transportation and recreation needs. The long-range goal of the Muscatine Riverfront should be to convert the area into a regional destination center that complements the Downtown business district.
G. Parking

Downtown Muscatine needs more parking. The most notable parking problems are related to the high volume of individuals employed in the many business in the heart of downtown. Another problem includes the provision of parking for the many residential areas inside and adjacent to the downtown area. Many elements of the City’s public transportation could be enhanced to remedy some of the parking problems currently experienced downtown.

HOUSING AND NEIGHBORHOOD STABILIZATION

The following is a list of additional critical issues related to Housing and Neighborhood Stability within the City of Muscatine.

A. Develop more restrictive zoning and building controls.

Many of the substandard housing conditions in Muscatine can be addressed through more effective code enforcement measures. The adoption of new and improved code restrictions and the consistent enforcement of these new ordinances is critical in stabilizing neighborhoods within the City. Ongoing communication between neighborhoods and code enforcement entities will be needed in order sustain these efforts into the future.

B. Promote infrastructure improvements and home ownership.

There is a demand for public private partnership in financing improvements for neighborhood stabilization. This includes home repairs and maintenance for all ages and income groups, specifically those of elderly and low-income homeowners. It also includes investment in neighborhood infrastructure, such as sidewalks and walkway linkages. Open communication between the City and neighborhood organizations will promote neighborhood well being, preserve life styles and improve the appearance of older neighborhoods. Much of the housing stock has been neglected for a variety of reasons and efforts need to be made to encourage homeownership and upgrades to all substandard properties.

C. Increase the supply and variety of housing options to meet all socio-economic needs.

The supply of a full range of housing types has been identified as a problem in the City of Muscatine. Updated affordable housing options need to be developed in many of Muscatine’s older neighborhoods. There is a deficiency of new or higher quality homes in the $80,000-$150,000 range.

Another underutilized type of housing identified was downtown apartments/lofts. There are many buildings in the downtown area that could be candidates for an adaptive reuse project. This type of revitalization would not only preserve historic structures, but also provide a much-needed supply of downtown housing stock.
There seems to be an appreciation for a mix of both older and new homes, with an emphasis on architecturally compatible homes that are well maintained and in keeping with the character of the neighborhood. There is also a need for better rental and housing types suitable for “empty nesters” and single professionals.

D. Control the proliferation of single-family structures converted to multi-family dwellings.

The community is concerned with the number of single family homes being converted into multi-family units. This trend is especially evident in the City’s older housing developments. Many of the modifications to these older (historic) properties are perceived as decreasing the property values and the overall image of the neighborhood. Parking and traffic congestion also become a problem because of the increased housing densities. Rental property fills a necessary housing niche, however, it is recommended that more effective health, safety and maintenance codes be adopted to maintain the safety and welfare of these properties. Many of the Charrette Teams advocated more restrictive regulations and better code enforcement to improve the quality of the City’s many rental properties. Another tool recommended was promoting special clean-up activities and/or offering home improvement incentives.

TRANSPORTATION

A. Improve east/west access throughout the City’s transportation system.

A common issue brought up by Charrette participants at both planning Charrettes was the lack of east/west cross-town connector streets. In addition to poor cross-town accessibility, 2nd Street, Park Avenue, Highway 61 and other problematic roadways and intersections are in need of improvements.

B. Signal timing and roadway widening

Many traffic congestion problems could be addressed by improving traffic signal timing, intersection design, street widening and providing better vehicular and bicycle accessibility. One recommendation is to complete a network of trails to provide better pedestrian linkages to various neighborhoods, parks and other amenities. Another traffic congestion recommendation was to provide better road construction scheduling.

C. Multi-Modal Transportation Considerations

In addition to these automobile-related improvements, there is an array of transportation enhancement programs that should be planned for and improved as envisioned in the Comprehensive Plan. These include enhancing transit services through expansion of the MuscaBus and aggressive recruitment of a high-speed bullet train to serve the community.
D. Pedestrian Accessibility

Pedestrian access throughout the residential, recreational, and commercial areas of Muscatine should be a priority for future community improvements. There seems to be an overall lack of sidewalks along many streets, meanwhile the sidewalks that have been installed are in poor condition. Sidewalks and trails would provide alternative routes for residents and tourists to access the City’s commercial areas and reduce the need for parking and vehicular transportation.

RECREATIONAL & CULTURAL

A. Maintain and nurture existing recreation and cultural amenities.

The City’s neighborhood parks, trails, views of the Mississippi River and cultural diversity are the strengths of the typical Muscatine neighborhood. The community is optimistic about the future of Muscatine’s recreational and cultural amenities provided these elements are preserved. Muscatine has outstanding facilities such as the soccer complex, Kent Stein Park ball diamonds and Weed Park that need to be promoted. A major need is the replacement of the City swimming pool with an expanded water park.

B. Expand Existing Cultural Events

The City should strive to provide activities and events that appeal to all age groups, ethnic backgrounds and families types and socio-economic backgrounds.

C. Exploit cultural assets within the community.

Take inventory and promote the many cultural amenities already located within the City such as Grossheim Photos, Wind Symphony and other graphic and performing arts that have a presence in the community.

D. Expand recreation opportunities

In addition to public parks and organized sporting clubs, the City should promote social activities and interaction. This includes clubs, diversified dining options and other indoor social/recreation opportunities that foster interaction among all members of the community. Currently there is a lack of indoor recreation opportunities available to Muscatine’s senior citizens and young adults.

E. Encourage development of an open space/trails system

As commercial and residential growth occurs, parks, pedestrian corridors, and open-space should be incorporated into the new neighborhoods and developments. The community strongly supports the development of a network of sidewalks and trails connecting the new and/or improved areas with parks and other community facilities.
COMMUNITY APPEARANCE

A. Address sub-standard building conditions.

Poorly maintained properties is a major problem contributing to the City’s image. Specific areas in need of improvement include the cleanup of trash along roads and in commercial areas, as well as the need for better general upkeep of buildings and properties. The enforcement of code requirements and development restrictions that preserve the existing character of the community and contribute to the beautification/revitalization of the City is necessary.

B. Promote community pride and stewardship.

The City should adopt concepts that promote neighborhood well-being, preserve lifestyles and improve the appearance of older neighborhoods. There is an indication that residents want to protect neighborhood identity while dealing with land use change through improved zoning district standards and procedures. The Comprehensive Plan should be used as a guide to establish the basis for fundamental land use policy and regulatory amendments in response to these neighborhood interests.

C. Continue neighborhood beautification and involvement.

There is strong citizen sentiment to embrace and preserve the beauty of the region, such as the preserving and enhancing the views of the Mississippi River from the many community vantagepoints. There is an interest in public education about neighborhood investment and beautification, including help with neighborhood organizations and area-wide meetings. There is support for increased standards for landscaping and other investments in the infrastructure of the City.

D. Preserve the heritage and character of the community’s neighborhoods/properties.

The community has a rich supply of historic and architecturally significant structures. The preservation of these properties is encouraged, as is the revitalization of vacant properties and renter occupied housing.

E. Gateways

Special interest should be given to the “entrances” to the City. These included all existing or proposed corridors that provide prominent entry into the City. These areas can best be described as the viewsheds and sightlines one sees as they enter the City of Muscatine from the major corridors serving the region. These areas should be treated with professional landscaping, quality signage and any other features that would display the City’s commitment to economic development and a high quality of life.
F. Infill development

The community has an appreciation for a mix for both older and new developments. There should be an emphasis on architecturally compatible structures and yards that are well maintained in keeping with the character of the community. Citizens suggested that in-fill development should be encouraged to maintain the older areas of the City. Any proposed in-fill development should happen with consideration of the character of the existing neighborhoods, and should be done in a way that promotes continued investment in the older neighborhoods. Zoning restrictions should be adopted that promote in-fill development and ensure desired results are achieved.

G. Development standards

Adopt site plan standards to upgrade the appearance of new and redeveloped properties. These standards should address landscaping requirements, stormwater detention/retention standards, screening/buffering requirements, signage and design review for all highly visible developments.

ECONOMIC DEVELOPMENT

Continued growth of industrial and commercial centers is necessary to provide continued employment opportunities and services to the City of Muscatine and surrounding areas. The following issues represent the concerns of the Charrette participants and community stakeholders.

A. Provide a wider range of retail and hospitality services

Services that the community supports most heavily included a better variety of retail shops, restaurants, and entertainment establishments.

B. Promote economic stability

Promote economic diversification in order to create long term economic stability and reduce the dependence on a few industries. It is recommended that a plan be developed to address the future of the Muscatine business community in positioning itself for the new economy. The plan should address the need for fiber optics and related high technologies, including education of the local workforce. Most importantly the plan must recommend plans, programs and incentives that assist the growth and retention of small businesses.

C. Recruit working families into the community

Promote efforts that make the city more attractive to working families by improving housing options, improving educational opportunities, and other services that attractive to working families.
D. Encourage the development of high-tech industrial/commercial facilities.

There is a need for a new industrial business park to help attract new light industrial and high tech business enterprises.

E. Increase the availability of first class retail and hospitality tenant spaces.

The current Muscatine Mall needs major revitalization efforts in order to bring a higher level of retailers and dining establishments into the community. Revitalization efforts must also be directed towards converting the Downtown back into a vibrant commercial district.

**INFRASTRUCTURE & CITY SERVICES**

A. Maintain and Expand Utility Services

Expanding utility services and making improvements to existing water, sewer, and stormwater facilities is necessary. It is recommended that a strategic plan is developed to prioritize the funding and scheduling of all future improvements and plan for any unexpected or emergency service repairs. Whenever possible, public improvements should be financed through partnerships between the city, private developers and end users.

B. Respond to service demands of an aging population

The expansion of services to an increasing elderly population is a challenge facing Muscatine as well as other urban centers throughout the nation. This challenge could be evidenced in many ways, such as the need to adapt the MetroLINK transit service more and more for elderly over the coming years.

C. Future Development

The City should try to anticipate where most of the growth will occur and supply utilities and infrastructure accordingly. Cities should avoid growth that depletes resources beyond capacity and only expand when infrastructure improvements are feasible. The fact that the City has experienced continued residential and economic growth was identified as justification for revitalizing downtown, improving residential neighborhoods and beautifying park and recreation areas.

D. Annexation

Future annexation areas should also be designated to support a well-planned mix of commercial and residential growth. Prior to future development and annexation, the city should ensure the proper roadways, utilities and services are available. These efforts must be coordinated between the County, City and private investors to succeed. New developments should be required to install sidewalks, landscaping, preserve trees and share in the cost of the construction of other infrastructure improvements.
CHAPTER FIVE: COMMUNITY RESOURCES

COMMUNITY DEVELOPMENT

The Building and Zoning Division of the Community Development Department is responsible for the administration of the zoning ordinance, building codes and a variety of environmental regulations. The division also performs building and site plan reviews for all building permit applications and conducts inspections for all rental-housing units on a regular basis in accordance with state and local law. From 1995 to 1999 the department issued an average of 1,400 permits per year.

The Department conducts over 4,000 building inspections, 1,300 rental housing inspections and over 400 Restaurant/food service inspections annually. The department also responds to over 1,000 nuisance complaints each year.

PUBLIC WORKS

The Public Works Department is responsible for providing engineering services, roadway maintenance, snow and ice control, street cleaning, traffic control, stormwater retention/detention, building and grounds maintenance, equipment services, refuse collection, transfer station operations, landfill operations, and public transportation. The Public Works Facility underwent a major renovation in 1983, which greatly expanded the existing facility located at 1459 Washington Street.

The majority of the City’s public improvements are coordinated through the Engineering Division of the City’s Public Works Department. Engineering operations typically include street paving, asphalt overlays, storm and sanitary sewers, parking lots, sidewalks, demolitions, levee improvements and flood protection. In total, the Department is responsible for the maintenance of 136 miles of streets, 3,800 street signs and the resurfacing of approximately 24,000 feet of public right-of-way annually.

The Muscatine Public Works Department owns and operates its own waste hauling fleet, transfer station, composting facility and landfill. Waste hauling, recycling and yard waste removal is provided to all City residents. The cities of Fruitland, West Liberty, Wilton and portions of Muscatine County also utilize the City’s landfill. There are several recycling drop-off sites located throughout the City in which recyclables are picked-up daily. The City also provides curbside yard waste pick-up to residents who purchase recycling bags for $1. The City utilizes various independent contractors to separate, bale and send to market all recyclables that are collected at the City’s transfer station. In the fall, City trucks are dispatched throughout Muscatine’s neighborhoods to vacuum up leaves that residents rake to the curb.
Municipal Water Supply

The municipal water system is operated by Muscatine Power and Water and is supplied by 29 wells with average depths measuring between 80 to 140 feet. The system has a combined pumping capacity of 40,000,000 gallons per day and an overhead storage capacity of 250,000 gallons. The average daily demand is 23,200,000 gallons and the historic peak daily demand is 33,800,000. The static pressure ranges from 40 to 120 pounds. Muscatine Power and Water operates water treatment facilities, which add chlorine, fluoride and polyphosphates.

Municipal Sewer System

Muscatine has a municipal sanitary and storm sewer system that serves 90% of the community. The water pollution control plan implemented in the mid 1980’s resulted in a major rehabilitation to the waste treatment facility which converted the water pollution control plant to an anaerobic process and liquefied sludge disposal program in 1988.

Five Year Local Option Tax Sewer Projects

The extensive storm and sanitary sewer renovation and extension program is funded out of a 1% local option sales tax which was approved by the voters in the City in May of 1994. The local option sales tax was specifically designated for storm and sanitary sewer programs and originally in effect for a 5-year period beginning July 1, 1994 through June 30, 1999. A special election for the extension of the 1% sales tax for an additional 5 years was approved by voters on August 4, 1998.

Approximately 1.8 million dollars is generated in each of the five years of the program for the purpose of rebuilding and expanding the City’s sanitary and storm sewer system. Improvements funded with the local tax option monies include the East Hill Sewer Separation Project, Papoose Creek Force Main and the extension of the Northeast Trunk Sewer line. Future improvements include the extension of sanitary sewer to the south end with four lift stations, the east side of Grandview Avenue and the separation of storm and sanitary in the West 2nd and 3rd Street area. These proposed improvements, along with many repair projects, are scheduled for completion within the 5-year program.

1. Oak Street Storm and Sanitary Improvements

Improvements have been completed to the storm and sanitary sewer line between E. 2nd and the Mississippi River levee. The improvements included the installation of a new 24” storm sewer line. Costs associated with the project were financed through a joint improvement agreement between HON Industries and the City of Muscatine. The cost of the project was $237,417. Additional improvements needed in this area include sewer separation work extending to 5th Street and to Orange Street. The estimated cost for this additional work is $800,000 according to the City’s Capital Improvements Program and Budget.
2. Mad Creek Storm Water Retention Basin

Under this project the City of Muscatine, in conjunction with the Federal Natural Resources Conservation Service, will locate strategic areas along the Mad Creek watershed that are suitable for the purposes of capturing and retaining excess runoff. The intent of this program is to reduce the intensity and probability of flash flooding in the developed downstream portions of the Mad Creek watershed.

3. Tipton Road Sanitary Sewer Extensions

The extension of additional sanitary sewers to service the small clusters of existing homes along Tipton Road that have septic systems is needed to minimize potential contamination. Many of the septic systems in this area are near the end of their useful life and may pose a threat if this issue is not addressed in the near future. Funding for these improvements should be covered by the Local Option Sales Tax revenues as well as with funding collected from hookup fees, where appropriate.

There is a definite need for stormwater and wastewater improvements and utility installations/upgrades in the older areas of Muscatine and unincorporated areas of the county. Many houses in Muscatine County do not have public sewers; the majority of these are in the unincorporated areas. In addition, many homes in unincorporated areas of Muscatine County do not have access to public water supplies. Therefore, prior to annexing new areas, the city needs to conduct a cost assessment to determine the feasibility of providing the necessary utilities, services and roads.

The City should continue to ensure property owners within the City’s jurisdiction have the necessary utilities and services. The city must also plan for future infrastructure improvements to meet the City’s growing demands and upgrade substandard services. Prior to authorizing change of zoning requests, annexation petitions, or building permits the City should make sure the proposed developments have the proper utility services. If costs are incurred in conjunction with a proposed request, the City should require the applicant to share the costs of utility installations of on-site public improvements and, where appropriate, off-site infrastructure.

PUBLIC SAFETY

Police Protection

A complete range of police services is provided to the community. The Police Department is staffed with 40 full-time sworn officers and 3 civilian employees. Communications Operations employ 4 full-time employees and 3 part-time employees. Animal Control Operation is staffed by a single full-time position. The three divisions have a combined annual budget of $2,513,000. Jail services are provided through the County Jail located in downtown Muscatine.
The Police Department has 20 vehicles, one motorcycle, two bicycles, and one special utility vehicle. It has a 3-person investigative division and its own evidence technician program. Two officers work full-time on regional gang and drug task forces. The Department has added two (2) K-9 officers to assist the patrol functions.

The D.A.R.E. (Drug Abuse Resistance Education) program was begun in the elementary schools in the Muscatine School District in the fall of 1990 and was introduced into the middle schools in the 1991/92 school year. Crime prevention efforts include working with both the general community and businesses.

In 1991, the Police Department began the initial stages in becoming an accredited law enforcement agency. This will bring the operation of the Department in line with the highest national standards in this field. The Police Department is also in the process of moving from traditional policing methods to a “Community Oriented Policing” model funded by three federal grants.

The police department annually offers a 6-week course called the “Citizen Police Academy” for anyone interested in more information on the responsibilities and duties of a police officer.

Fire Protection

The Muscatine Fire Department is comprised of 32 uniformed members, and 1 secretary. It operates out of two stations, one located at 1100 Oregon Street (#2 Station) and the other at 312 E. 5th Street (Central Fire Station). The fire department provides traditional fire suppression services. There is a hazardous materials team, and the department functions at the Technician Level in accordance with O.S.H.A. regulations. The fire department also has a special rescue team providing high angle rescue and confined space rescue. The department has established mutual aid agreements with adjoining fire departments and is involved with the Muscatine County Mutual Aid Association. In addition, the department services five contracts for fire suppression services with private enterprises outside of the city limits. The Insurance Services Office (ISO) which is the organization that determines fire insurance classifications gave the City a Class 4 rating. This is a good rating. A Class 3 rating is considered excellent.

Department Asset Inventory:

- Engine #1 - 1988 Smeal/Spartan
- Engine #2 - 1993 Pierce
- Aerial Tower - 1997 E1/Bronto Aerial (135 ft.)
- Attack Unit - 1981 Pierce/Chevrolet
- Tanker - 1975 Alexis/Ford
- Hazardous Materials Truck
- Engine #3 - 1976 Pierce/Ford
- 1969 National Foam Pumper
Shift Assignments (10 member):

- 1 Assistant Chief (Central)
- 1 Captain (Central)
- 1 Lieutenant (#2 Station)
- 7 fire fighters assigned to 2 engine companies and 1 truck company

In addition to emergency responses, the fire department provides a high level of non-emergency service to the citizens. Each of the three shifts has been given a different major responsibility. The Blue shift is responsible for pre-planning target hazards in the city. They visit, diagram, and pre-plan emergency responses to various structures in the city on a priority basis. The Red shift is responsible for commercial inspections. The engines and truck companies on this shift inspect all commercial occupancies in their district. They conduct all initial inspections and follow up with re-inspections through to full compliance. The Green shift is responsible for public education. This department has a very strong commitment to public education and is deeply involved with the school system in the administration of two distinct fire safety education programs. In addition, a large number of on-demand types of public education are provided for, in response to various commercial, industrial, and private citizen requests.

The department also has an in-house training program that covers fire and emergency medical response training requirements. Members often take advantage of training opportunities outside the department, which includes attending the National Fire Academy. Besides a relatively comprehensive in-house training program, individual members have routinely offered their time and talents to assist in the training activities of a number of other area emergency response agencies.

Increased industrial, commercial and residential development has increased the need for improved fire protection services in the northeast portion of the city. The current response time for emergency vehicles to this portion of the community from the existing Public Safety Building is 5 to 7 minutes. Approximately 25% of the emergency calls are in the northeast section of the community. Therefore, a new fire station is proposed in this portion of the community.

**COMMUNITY EDUCATION FACILITIES**

The Muscatine Community School District serves approximately 5,500 students and employs over 3,000 staff and faculty members from the City of Muscatine and surrounding area. The district ranks 10th in student population among Iowa’s 376 public school districts.

The District has 9 elementary schools, seven of which serve students K-5. Franklin and Garfield are neighborhood schools, with Garfield serving students K-2 and Franklin serving students in grades 3-5. There are a total of 189 teachers meeting the needs of 2448 students in grades K-5. In addition, the District has two middle schools (grades 6-8) and one senior high (grades 9-12) with 107 teachers.

Muscatine High School enrolls approximately 1700 students in grades 9-12. The high school campus includes a 4,000 seat outdoor stadium, indoor fieldhouse seating 2,600, 8 tennis courts
CITY OF MUSCATINE, IOWA COMPREHENSIVE PLAN

Chapter Five: Community Resources

and the Carver Swim Center. The facility employs over 100 teachers who provide a curriculum which consists of over 300 courses. Approximately 52% of the graduating seniors enter post-secondary educational institutions or advanced training programs, with 29% entering the workforce and 3% entering the military.

The district encourages community involvement to help enhance programs and facility needs. Parent and community Booster Clubs have helped to raise funds to support the fine arts and athletic programs. With the support of the community, the district has been able to construct the Carver swimming pool, stadium, weight room/fitness center, baseball stadium, greenhouse and renovate a large auditorium for the use of the school and the community. Voters have shown their support in endorsing “Project Reconstruct”, which is a levy to assist in the repair and renovation of education facilities.

The population of the school district is very diverse both in ethnic make-up and needs of the students. Approximately 83% of the students are European American, 15% are Hispanic American and 2% comprise approximately 10 other nationalities. The District’s education curriculum, from kindergarten through 12th grade, exceeds the standards set by the Iowa Department of Education. All elementary schools and the high school are members of the North Central Association and are evaluated every 7 years by external accreditation teams.

Parochial Schools

Bishop Hayes Catholic School is a state accredited non-public school located next to Muscatine High School. Children of all faiths are welcome at Hayes. Funding from tuition, fees, fundraisers, parish allocations, and benefactors support the education program for pre-kindergarten, preschool, and grades K-5.

There are plans to expanded the facility to accommodate the addition of a sixth grade. Seventh and eighth grade classes should be available in the future as well after additional expansion plans are completed. Plans include advanced technology to support strong math and science programs and an athletic program that would increase interaction/competition with other diocesan schools. Faith Academy and the 7th Day Adventists Junior Academy are also located within the Muscatine community.

Continuing Education

Since 1929, Muscatine Community College has been a leader in providing education and training to individuals and businesses in the Muscatine area. Muscatine Community College is one of the oldest two-year colleges in the Midwest. MCC offers courses in numerous concentration areas that will transfer to four-year institutions. The college also offers associate in applied science degrees, diplomas, and certificate programs designed to prepare students for immediate employment upon graduation.
The City of Muscatine does not have many agreements that directly affect the development of the Comprehensive Plan. The following is a brief summary of the agreements:

- The City of Muscatine has an agreement with Muscatine County to review and approve plats within 2 miles of the City of Muscatine city limits.
- The City has an agreement with the county to maintain certain roads.
- The City owns and operates the landfill site that is permitted through the county and actually serves as a countywide facility.
- Muscatine is a member of the Bi-State Regional Commission, which includes five counties and 45 municipalities. Membership in the commission is voluntary. The purpose of the Commission is to address issues of regional significance, to deliver regional programs and to foster intergovernmental cooperation.
- Water service is provided by Muscatine Water and Power, which is a separate entity that was created under state statute. The Board of Directors is appointed by the Mayor and confirmed by the City Council so it is quasi-public organization. In addition to providing power and water, it also provides communications linkages for high speed internet access. Having water supplied by an entity that is somewhat autonomous from the city is somewhat unique and requires close coordination of the two agencies in order to properly plan for the extension of utilities and other infrastructure to new areas.
- Muscatine shares a boundary with only one other city, which is Fruitland. Fruitland is located at the southern tip of Muscatine and had a 2000 population of 703. There are no agreements between the cities relating to growth boundaries. Therefore Muscatine has very few limitations on its ability to expand.
- MAGIC – Muscatine County, the City of Muscatine and Muscatine Water and Power have joined together in a 28 E Agreement to provide Geographic Information System (GIS) services.
CITY OF MUSCATINE, IOWA COMPREHENSIVE PLAN

Chapter Six: Intergovernmental Agreements

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CHAPTER SEVEN: GOALS AND OBJECTIVES

The formulation of goals and objectives is a critical process in the preparation of a comprehensive plan. Goals are general statements that address the City’s long-range plans and desired outcomes. They provide the framework for developing the objectives of the comprehensive plan. The objectives more specifically define how a goal will be achieved.

The established goals and objectives strive to overcome Muscatine’s problems and barriers to success and provide recommendations, that when implemented, create a more livable community that retains and attracts citizens, business, and tourism. The goals and objectives will assist public officials in guiding their decisions relating to the future development and the preservation of the City of Muscatine. The accomplishment of these goals will require the coordination and leadership of all levels of government, not just the City, plus strong support from community groups and private enterprise.

The goals and objectives developed for this plan respond to the critical issues raised during the Town Planning Charrettes, interviews with stakeholders and the conditions observed and researched during the formation of this plan. The goals and objectives fall under one of five categories, which include; Housing and Neighborhood Stabilization, Quality of Life, Economic Development, Downtown Revitalization, and Infrastructure/City Services. The stability and growth of Muscatine depends directly on its ability to provide the desired public services, facilities, opportunities and community amenities. These and other factors that influence the growth of Muscatine have been considered in the development of the following goals and objectives.

HOUSING AND NEIGHBORHOOD STABILIZATION

Goal

To provide a wide-range of housing options and promote the preservation of Muscatine’s existing housing stock.

Objectives

- Develop programs and financing options that facilitate home repairs and maintenance for all ages and income groups, specifically those of elderly and low-income homeowners.

- Provide, assist and support residential growth through programs, policies, regulations, grants and incentives.

- Application for grants (Federal and State) to directly assist efforts to improve and maintain the city’s housing stock.
Chapter Seven: Goals and Objectives

- Support efforts to improve and maintain the city’s housing stock by adopting appropriate programs, policies and regulations.

- Encourage quality infill development of different housing types and density/intensity to coexist with existing neighborhoods.

- Develop planning and development regulations that protect residential neighborhoods from encroachment of incompatible activities or land uses that may have a negative impact on the residential living environment.

- Encourage a balanced range of high quality housing options that meet all socio-economic needs and ensure a variety of residential land uses, including assisted living facilities, multi-family developments and planned residential subdivisions.

- Develop a plan to extend basic utilities to all existing neighborhoods and new subdivision developments.

- Develop an annexation plan addressing the provision of infrastructure and the development of new residential growth areas, particularly outside the bypass.

- Use existing neighborhood organizations to assist in the education of housing maintenance programs.

QUALITY OF LIFE

Goal

To develop programs that promote community beautification and stability by preserving lifestyles and improving the appearance of Muscatine.

Objectives

- Promote quality development that blends well with the natural and built environment and encourage the preservation of the community’s rich heritage and natural beauty.

- Ensure that new development is compatible with adjacent uses and does not create undesirable impacts (e.g., utilities, traffic, visual, construction materials/methods etc).

- Ensure that development appropriately reflects the City’s human scale, history, aesthetics, natural environment, and sense of community identity.

- Implement code requirements and development restrictions that preserve the existing character of the community and contribute to its beautification/revitalization.
• Adopt site plan standards to upgrade the appearance of new and redeveloped properties including landscaping requirements, building design, screening/buffering requirements and signage.

• Develop plans for major entrances into the city to create an aesthetically pleasing gateway corridor leading into the community. Gateways serve as a focal point, and can consist of monument structures, distinctive building designs or unique landscaping and lighting schemes.

• Maintain and build upon Muscatine’s existing recreation and cultural successes.

• Identify any deficiencies in the community’s recreational and cultural offerings, prioritizing projects that fulfill the needs of minority groups or persons with disabilities.

• Support and encourage the development of community organizations that promote civic activities and professional relationship building.

• Promote land development policies and plans that preserve natural landscape, including topography, vegetative cover scenic viewsheds, and natural drainage patterns.

• Preserve landforms and drainage patterns when designing sites for development. Excavation and fill of any identified wetland or floodplain is strongly discouraged. The appropriate state or federal agency should review projects involving these natural areas.

• Require the installation of quality landscaping along roadway rights-of-ways and parking areas and promote the use of landscaped berms, vegetation and decorative screening to provide buffering between different zoning districts and/or uses.

• Expand City parks where practical to include the use of environmental corridors and bike lanes on specific streets to form a park network that is fully and easily accessible from all districts within the City without automobile travel.

• Review and evaluate city sidewalk policy.

• Require future development, including stormwater and utility improvements, to provide all necessary property right-of-way and consider easements for bicycle/pedestrian corridors.
ECONOMIC DEVELOPMENT

Goal

Expand, diversify, and strengthen the City’s economic base and local employment opportunities.

Objectives

- Encourage the development of high-tech industrial/commercial facilities.
- Promote the development of a business incubator facility to help improve and expand business development through financial assistance, technical training and marketing.
- Develop a new industrial business park, with high speed broadband connections, to help attract new light and high tech business enterprises.
- Designate appropriate areas and develop programs to attract light industrial land-uses such as technology base enterprises, warehousing, light assembly and manufacturing, and transportation distribution into the city.
- Expand, diversify, and strengthen the City’s economic base.
- Develop an economic diversification plan that facilitates long term economic stability and reduces the City’s economic dependence on a few industries.
- Conduct a detailed market analysis to establish viable development “niches”.
- Recruit businesses that provide a better variety of retail shops, restaurants, and entertainment establishments.
- Improve and maintain the supply and quality of Muscatine’s work force balanced with local employment opportunities for Muscatine residents.
- Work with local community colleges to provide worker training and retraining that meets the needs of existing and anticipated businesses.
- Work with local school districts, trade schools and community colleges to develop programs providing school-to-career readiness in support of a skilled workforce for Muscatine.
- Promote efforts that make the city more attractive to working families by improving housing options, educational opportunities, and other services that are attractive to working families.
Facilitate the development of commercial and industrial land uses that are well-planned, visually consistent and compatible with neighboring areas.

**Downtown Revitalization**

**Goal**

To promote investment in Downtown Muscatine in order to attract and retain businesses, provide quality residences, revitalize the commercial and entertainment opportunities and create a vitality that attracts people.

**Objectives**

- Support a Main Street program.
- Maintain a downtown master plan for redevelopment, including streetscape, design, financing, marketing and business recruitment.
- Identify and procure funding for infrastructure improvements such as people gathering spaces, public restrooms, alley improvements, utility upgrades and flood control.
- Encourage the cooperation of all business and civic groups with an interest in the downtown work together in a unified effort to enhance the Downtown experience.
- Create a special planning district or overlay that facilitates the preservation and adaptive reuse of the historic Downtown.
- Revitalize the riverfront area and Downtown Business District.
- Provide adequate parking to serve all types of uses.
- Encourage and aggressively promote new community events that capitalize on Downtown Muscatine’s social, professional and recreational opportunities.
- Encourage the development of boutique style specialty shops, restaurants, hotels and entertainment establishments within the Historic Downtown.
- Develop a central theme or focus for the redevelopment of downtown.
- Develop design guidelines requiring redevelopment plans to promote the historic character of Downtown through continued enhancements of façades and other site improvements.
Chapter Seven: Goals and Objectives

- Create a special improvement district to share the costs of public improvements such as the installation/improvement of sidewalks, street lighting, adequate parking provisions and other site amenities such as landscaping and the creation of outdoor meeting places.

INFRASTRUCTURE & CITY SERVICES

Goal

To ensure the availability of an efficient and well-managed transportation system, public service system, and utility system for Muscatine’s present and future needs. These systems and services include, but are not limited to, water, sewer, storm water, roads, streets, public transportation, schools, police, fire, library, parks, and other community services.

Objectives

- Continue to evaluate the need for upgraded or improved public safety services and identify appropriate locations for the development of new facilities to accommodate future growth needs.
- Formulate an annexation policy based upon future growth patterns, ability to provide public facilities and services, and suitability of land for development.
- Plan for long-term infrastructure improvements to serve future development along University Drive; Highways 22, 38 and 61; Downtown; and the north side of the bypass.
- Concentrate public capital investments into areas that are contiguous with currently developed land and that are currently or easily served by existing facilities.
- Require new development to install sidewalks, landscaping, preserve trees and share in the cost of the construction of other infrastructure improvements.
- Provide alternatives for funding off-site road improvements, as well as other infrastructure and services, to better serve existing and new developments.
- Initiate development agreements that help pay for the direct and indirect costs of new infrastructure development.
- Implement access management solutions along Park Avenue and wherever curb cuts are closely located and/or unnecessary.
- Encourage project developments to incorporate alternative transportation elements (pedestrian walkways, bike facilities, public transit etc.) into proposed site improvements.
• Provide a thoroughfare system that allows safe and efficient travel through the City of Muscatine— with special emphasis on improving crosstown accessibility (signage, road improvements, and the addition of new roads).

• Provide new alignment and intersection design connecting Park Avenue to Mississippi Drive and all dangerous intersections with Highway 61.

• Construct an east/west roadway system connecting Logan to Mulberry and extend Ford Avenue to University Drive.

• Consider modifying signal timing and roadway widening where traffic flow tends to back up or poses safety risks.

• Improve Mississippi Drive to a median separated corridor or boulevard that is elevated to prevent traffic disruption caused by rising river levels.

• Provide for the ease of movement of people and goods by coordinating all modes of transportation with the City transportation system.

• Promote the multi-modal aspects of the transportation system by encouraging traditionally lesser-emphasized parts of the system such as bicycle/pedestrian, transit, air, water, and rail facilities.

• Promote the upgrade of Highway 38 or Highway 22 from two lanes to four lanes from Highway 61 to Interstate 80.

• Acquire parks, open space and trails as needed to serve newly developed areas.
CHAPTER EIGHT: PARKS & RECREATION STRATEGIES

OVERVIEW OF THE CITY OF MUSCATINE’S PARK SYSTEM

The natural topography and environmental characteristics, combined with the establishment of 24 City park facilities, provide a wealth of recreation opportunities within the City of Muscatine. In total, the City of Muscatine owns and maintains over 458 acres of public park and open space distributed throughout the city. In addition to the efforts of the City’s Park & Recreation Department, the community has been a leading contributor to the ongoing success of the seasonal recreational programs, including, the softball/baseball activities at Kent Stein Park and the events held at the Soccer Complex. The City’s park system provides an abundance of diverse recreational resources available to the public, including:

1. Municipal Golf Course (160 acres, 18 holes)
2. Carver Swim Center
3. Kent Stein Park (66 acres)
4. Weed Park (72 acres)
5. Weed Park Swimming Pool
6. Fuller Memorial Park (46 acres)
7. Soccer Complex (41 acres)
8. Riverside Park (14 acres)
9. Muscatine Slough (11 acres)
10. Musser Park (10 acres)
11. McKee Park (10 acres)
12. Oak Park (6 acres)
13. Boat harbor (134 slips)
14. Mad Creek Greenbelt (1.1 miles)
15. John Duncan Memorial Park (3 acres)
16. Taylor Park (3 acres)
17. Fourth Street Park (3 acres)
18. Mark Twain Overlook (3 acres)
19. Longview Park (2 acres)
20. Lucas Street Park (2 acres)
21. Iowa Field (5 Acres)
22. Lincolnshire Park (1 acre)
23. Eversmeyer Park (1 acre)
24. Brook Street Park (1 acre)

RECENT ACCOMPLISHMENTS

In July of 1999, the City celebrated the 100th anniversary of Weed Park. However, like many midwestern cities that developed parks in the early twentieth century, Muscatine’s park system was in need of revitalization and preservation. Over the years the city has seen great success in the rehabilitation of its parks and recreation facilities. Much of the needed updates of the City’s park system took place during the latter part or 2001 and continues into the year 2002.
The City of Muscatine has taken great strides to improve the Riverfront area. Some of the Riverfront improvements include the construction of Millennium Plaza, new restrooms at Musser Park, the development of a multi-purpose building and the installation of the Riverfront Trail (from the Pearl City Station to Musser Park). New play equipment, landscaping, lighting, rest areas and other miscellaneous improvements along the Riverfront trail has transformed Riverfront Park and the Riverfront Trail into one of the city’s most popular destinations for all ages.

Most recently, the city has invested approximately $1 million modernizing many of the city’s parks through the implementation of the Playground Development Project. The project consists of the purchase and installation of playground equipment and other miscellaneous improvements to nine of the city’s parks. The improvements implemented through the Playground Development Project are distributed throughout the city’s park system as follows:

| PARK CLASSIFICATION SYSTEM |

The National Recreation and Parks Association (NRPA) has developed a classification system to serve as a guide for community parks and recreation planning. The system defines and describes several categories for parks, recreation areas, and open spaces that in combination make up a unified municipal park network (Park, Recreation, Open Space and Greenway Guidelines, NRPA, 1995).

<table>
<thead>
<tr>
<th>Table 8.1: Playground Development Project Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>COST ESTIMATE</td>
</tr>
<tr>
<td>Brooks Street</td>
</tr>
<tr>
<td>Eversmeyer</td>
</tr>
<tr>
<td>Fourth Street</td>
</tr>
<tr>
<td>Oak Park</td>
</tr>
<tr>
<td>Longview</td>
</tr>
<tr>
<td>Lucas Street</td>
</tr>
<tr>
<td>Musser</td>
</tr>
<tr>
<td>Fuller</td>
</tr>
<tr>
<td>Weed Rose Garden</td>
</tr>
<tr>
<td>Weed Volleyball</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Information courtesy of the City of Muscatine Parks & Recreation Department

**Mini Park:** Addresses limited, isolated or unique recreational needs.
- Recommended size: up to 5 acres
- Service area: ¼-mile radius

**Neighborhood Park:** Serves as recreational and social focus of the neighborhood. Emphasizes informal active and passive recreation.
- Recommended size: 5 to 10 acres
Service area: ¼ to ½-mile radius

**Community Park**: Serves a broader purpose than neighborhood park. Focus is on meeting community-based recreation needs and preserving unique landscapes/open spaces.
- Recommended size: 30 to 50 acres
- Service area: ½ to 3-mile radius

**Natural Resource Area**: Lands set aside to preserve unique natural resources, remnant landscapes, open space, visual/aesthetics buffering.
- Recommended size: based on resources
- Service area: entire community

**Greenway**: Ties park system components together to form a continuous park environment.
- Recommended size: 25 foot width minimum, 200 feet or more optimal (for right-of-way; actual path will vary, with 8 foot width minimum)
- Service area: based on resource availability and opportunities

**School Park**: Combines parks with school spaces.
- Recommended size: variable: 10 to 15 acres minimum
- Service area: based on school district’s school distribution policies (or similar to neighborhood park)

**Sports Complex**: Consolidates heavily programmed athletic fields to larger and fewer sites.
- Recommended size: 40 acres or more
- Service area: entire community

**Special Use**: Covers a broad range of parks and recreation facilities oriented toward single-purpose use.
- Recommended size: variable
- Service area: variable

**Inventory of Existing Park Facilities**

Within the context of the classification system outlined above, the park system of the City of Muscatine was inventoried. The following table lists the City’s park facilities, giving the NRPA classification, acreage, and major amenities. Though some parks may serve more than one function, they are listed under the primary classification. Play fields are open, level, grassy areas large enough to be used for informal softball, baseball, or field games and are intended for that purpose.
Table 8.2: Parks and Recreation Facilities  
City of Muscatine, 2002

<table>
<thead>
<tr>
<th>Park Classification</th>
<th>Acreage</th>
<th>Picnic Shelter</th>
<th>Play Equipment</th>
<th>Play Field</th>
<th>Rest Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Lincolnshire Park</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Brook Street Park</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Eversmeyer Park</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>4. Lucas Street Park</td>
<td>2</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Longview Park</td>
<td>2</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>6. John Duncan Memorial Park</td>
<td>3</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Taylor Park</td>
<td>3</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Fourth Street Park</td>
<td>3</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Mark Twain Overlook</td>
<td>3</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighborhood</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Musser Park</td>
<td>10</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Iowa Field</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Oak Park</td>
<td>6</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Community</td>
<td>132</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Weed Park</td>
<td>72</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Fuller Memorial Park</td>
<td>46</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Riverside Park</td>
<td>14</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sports Complex</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Kent Stein Park</td>
<td>66</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Natural Resource Area</td>
<td>12.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Muscatine Slough</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mad Creek Greenbelt</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Use</td>
<td>246</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Soccer Complex</td>
<td>41</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Municipal Golf Course</td>
<td>160</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Geneva Country Club</td>
<td>45</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Parks Area Guidelines

The NRPA establishes recommended acreage guidelines for the three basic types of parks. Mini-parks and neighborhood parks are smaller in scale and expected to serve specific neighborhoods. Larger community parks typically serve two or more neighborhoods, and can serve entire smaller communities. Below are the NRPA guidelines for the recommended acreage of the various park types per 1,000 population of the community.
Table 8.3: NRPA Recommended Distribution of Parks

<table>
<thead>
<tr>
<th>Park Type</th>
<th>NRPA Standard/Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini-Park</td>
<td>0.25 to 0.5 acres per 1,000 people</td>
</tr>
<tr>
<td>Neighborhood Park</td>
<td>1.0 to 2.0 acres per 1,000 people</td>
</tr>
<tr>
<td>Community Park</td>
<td>5.0 to 8.0 acres per 1,000 people</td>
</tr>
</tbody>
</table>

Parks Distribution Guidelines

The NRPA establishes recommended service areas for the three basic types of parks. Mini-parks and neighborhood parks should be accessible on foot to people in their neighborhoods wanting to use them. This means they should not be separated from their service areas by major streets, and sidewalks should be available. Community parks serve multiple neighborhoods or larger portions of the community, and should be serviced by arterial/collector streets. The table below shows the NRPA’s recommended park and recreation facility service areas for mini-parks, neighborhood parks and community parks.

Table 8.4: Park Service Areas

<table>
<thead>
<tr>
<th>Park Type</th>
<th>NRPA Standard/Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini-Park</td>
<td>Less than ¼-mile radius</td>
</tr>
<tr>
<td>Neighborhood Park</td>
<td>¼- to ½- mile radius</td>
</tr>
<tr>
<td>Community Park</td>
<td>1- to 2-mile radius</td>
</tr>
</tbody>
</table>

Muscatine’s Current Supply of Parks

The City’s current supply of mini parks and community parks meets the minimum requirements of the NRPA. See Table 9.5 for an overview of the current supply of parks. As the table indicates, there is a current deficiency in the supply of neighborhood parks within the City’s park system. A neighborhood park is the basic unit of the park system and serve as the recreational and social focus of the neighborhood. Development of neighborhood parks should seek to achieve a balance between active and passive recreation uses. Active recreational facilities are intended to be used in an informal and unstructured manner. With the exception of limited use by youth teams, neighborhood parks are not intended to be used for programmed activities that result in intense usage, noise, parking problems and congestion. Suggested active recreation facilities for a neighborhood park include play structures, court games, “informal (i.e. non-programmed) playfield or open space, tennis courts, volleyball courts, shuffleboard courts, horseshoe area, ice skating area, etc. Facilities for passive activities include loop trails (that could connect to a greenway system), picnic/sitting areas, and general open space. It is recommended that new neighborhood parks be developed in areas of the city that currently do not have adequate access to park facilities and within the city’s growth areas. Small parks are difficult to maintain and therefore expensive.
With twice as much mini-park space as recommended by NAPR standards, the City may be spending a disproportionate amount of funding on mini-parks. This funding would be better spent on larger parks that attract more users and appeal to a larger percentage of the population. Perhaps consideration should be given to reducing the number of mini-parks and replacing them with larger neighborhood-type parks.

Table 8.5: Park Land Surplus/Deficit Analysis- City of Muscatine, 2000 – 2020

<table>
<thead>
<tr>
<th>Park Type</th>
<th>NRPA Guidelines (in italics)</th>
<th>Current Acreage Provided</th>
<th>Year Population</th>
<th>Acres Needed</th>
<th>*S/(D)</th>
<th>Acres Needed</th>
<th>*S/(D)</th>
<th>Acres Needed</th>
<th>*S/(D)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2000 22,697</td>
<td></td>
<td></td>
<td>2010 23,652</td>
<td></td>
<td>2020 24,040</td>
<td></td>
</tr>
<tr>
<td>Mini-Parks</td>
<td>@ ¼ to ½ acres per 1,000 population</td>
<td>19 acres</td>
<td></td>
<td>11.3</td>
<td>7.7</td>
<td>11.8</td>
<td>7.2</td>
<td>12.0</td>
<td>7.0</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.8</td>
<td>2.2</td>
<td>17.7</td>
<td>1.3</td>
<td>18.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Neighborhood Parks</td>
<td>@ 1 to 2 acres per 1,000 population</td>
<td>21 acres</td>
<td></td>
<td>22.7</td>
<td>(1.7)</td>
<td>23.7</td>
<td>(2.7)</td>
<td>24.0</td>
<td>(3.0)</td>
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<td>to</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45.4</td>
<td>(24.4)</td>
<td>47.3</td>
<td>(26.3)</td>
<td>48.1</td>
<td>(27.1)</td>
</tr>
<tr>
<td>Community Parks</td>
<td>@ 5 to 8 acres per 1,000 population</td>
<td>132 acres</td>
<td></td>
<td>113.5</td>
<td>18.5</td>
<td>118.3</td>
<td>13.7</td>
<td>120.2</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td>to</td>
<td>to</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>181.6</td>
<td>(49.6)</td>
<td>189.2</td>
<td>(57.2)</td>
<td>192.3</td>
<td>(60.3)</td>
</tr>
</tbody>
</table>

* Note: S = Surplus acreage, D = Deficit acreage ; Parentheses ( ) indicate deficits

Recommended Park & Recreation Improvements

Aside from the above-mentioned needs, there is a strong demand from residents for a new or improved community center/pool and better connections between the city’s parks, neighborhoods, schools and activity centers. The city must respond to these demands by procuring property and setting aside revenue necessary to provide for these parks and recreational needs. Additionally, as new residential areas are developed and/or annexed into the city, it is necessary these new areas have access to the same high quality park and recreational opportunities the city currently enjoys. It is strongly recommended that the city acquire park property in under served areas and future growth areas prior to development activity and the resulting escalation in property values. Muscatine, however, is faced with limited local, state and federal funding sources and fierce competition for any available funding. Therefore, to ensure adequate park, recreation, and open space is provided to all residents, the City must strategically plan for the funding, implementation and maintenance of future park improvements. The annual and long-term needs must be clearly stated in the City’s Annual Budget and Capital Improvements Plan. Actively planning for future park needs now will help identify funding alternatives, prioritize needs and guide the implementation of future development and dedication of trails, greenways, neighborhood parks, and other community facilities in the future.

The City of Muscatine Comprehensive Plan proposes a concept that identifies the need for future park and recreation additions and improvements. This includes the possibility of developing an
improved community pool and designating potential areas for a greenway that could be used to fulfill present or future deficiencies within the City’s park & recreation system. The City of Muscatine Town Planning Charrettes revealed both opportunities and deficiencies in Muscatine’s park facilities and recreational activities. The most significant comments and concerns are as follows:

- A new pool or recreation center is needed (at Weed Park)
- The City needs to interconnect the parks with trails.
- Revitalize Mad Creek Greenbelt
- Extend levee trail to Michael’s Creek
- Better pedestrian access is needed throughout the city
- Preserve views of the Mississippi
- Make Muscatine a “destination” for folks outside the region

COMMUNITY POOL FACILITY

There is strong community support for the development of a modern municipal pool. The provision of a modern outdoor pool is a standard service expected by citizens. The City of Muscatine is no exception. Outdoor municipal pools make great meeting places that fulfill the social and recreational needs for residents of all ages and athletic abilities. Therefore, a new or improved outdoor pool is an excellent response to the future recreation needs of the city’s aging and diversified population. It is recommended the city develop a modern municipal pool located at Weed Park. The location of the current pool would provide a suitable location for the redevelopment of a new pool facility. However, if the existing pool location is not the future location for the new pool, it is recommended the old pool facility be adaptively reused as an active theme park such as a skateboard park, radio controlled toy park, dog park etc.

FAMILY AQUATIC CENTER

Another option to the modernization of the existing pool facility at Weed Park, is a new family aquatic center. Two water attractions, a family leisure pool and a lazy river are recommended to highlight the proposed family aquatic center. The leisure pool should feature a zero depth (beach-type) entry with integrated play elements. The play equipment could include a raindrop fountain, spray wall, water walk, and 150’ speed slide. The lazy river should be at least 600’ and allow guests to float along on inner tubes at approximately three miles per hour. Lazy rivers are popular attractions for the elderly for exercise as they walk against the current. In the center of the lazy river there should be a deck area for sun bathing and socializing with two funbrellas for shade.

While the focus in aquatic facilities is traditionally on the seventeen and under market, there is a substantial need and opportunity in the Muscatine community to provide additional recreation programming for the booming senior market. Typical activities that appeal to these age groups are lap swimming, water walking, water aerobics, and therapy programming. All of these activities would be provided in the proposed Muscatine family aquatic center, and most could also be programmed into the recommendation to modernize the city’s municipal pool.
Currently, leisure pools are the fastest growing segment of new aquatic construction in the country. Unlike the current pool at Weed Park, the proposed leisure pool would appeal to the entire Muscatine community. Leisure pools invite recreation and social interaction with wide, irregularly shaped expanses of shallow water, washing up to zero-entry beaches, where parents can sunbathe while their young children play in water levels at which they are most comfortable. There are participatory waterplay elements that turn into a dynamic interactive playmate. Fountains, bubblers, geysers, raindrops, wet playgrounds, lily pad walks, water cannons, and slides are just a few of the many relatively inexpensive features of a recreation aquatic facility that meets the needs, and the budget, of the community.

The recommended family aquatic center will also accommodate competitive and fitness swimmers and non-aquatic amenities. Non-aquatic areas are equally important considerations in contemporary family aquatic centers. The combination of non-aquatic and aquatic amenities creates more recreational and social options and encourages people to stay longer, resulting in more concession expenditures and increased potential for admission revenues. Designs for the contemporary aqua centers provide increased deck spaces with shade for more lounging opportunities and social interaction.

For the purpose of this study two locations have been identified for the proposed family aquatic center. The first is Weed Park. The 72-acre park is the current location of the City’s outdoor pool facility. An alternative to developing a new municipal pool at the existing pool location is to locate a family aquatic center at Fuller Memorial Park or the surrounding property. This location is easily accessible to the city’s population center and traffic along Highway 61, Cedar Street, Mulberry Avenue and Houser Street. Both locations are adjacent to existing neighborhoods, schools and future residential growth areas. The suggested locations are on city property that will minimize property acquisition costs and expenditures. The estimated cost to construct a family aquatic center at one of the above-mentioned locations is between $5,500,000.00 to $6,000,000.00.

Improved Pedestrian Linkages & Corridor Preservation

As evidenced in information gathered during the Town Planning Charrettes, there is also a surge of interest among Muscatine residents to enhance accessibility to the city’s parks and open spaces and preserve community open lands. Furthermore, the implementation of additional trails and sidewalks is needed to safely link the city’s residential neighborhoods, commercial districts, industrial areas and educational facilities located throughout the city. Currently, the city’s transportation system does not provide adequate pedestrian linkages to the City’s activity centers and roadways. The successful installation of pedestrian and bicycle linkages will have the potential to decrease vehicular traffic volumes as they provide direct, multi-use pedestrian links to the community’s major commercial corridors and activity centers. These improvements will also address existing and potential safety problems by taking pedestrian traffic off busy state and local roadways with poor pedestrian access.

Citizen participation activities throughout the formation of this plan also identified several natural corridors in need of protection. These areas included the Mississippi Riverfront, stream corridors, floodplains, wetlands, forests and slope areas. One effective method of preserving
these areas, while also addressing the need for better accessibility, is the development of bike trails/hiking paths along natural corridors throughout the city, such as the Mad Creek and Geneva Creek flood plains. To address these needs, it is recommended the city facilitate the development of a community-wide pedestrian pathway system that provides improved accessibility and expanded bicycle and pedestrian routes throughout the city. Sidewalks should be required on all streets to encourage pedestrian travel and to create safe pedestrian links within the community to activity centers, places of employment and existing and proposed park and recreation areas. Successful implementation will require sidewalks, trails, right-of-way and/or other pedestrian improvements on all future development proposals.

It is recommended the city initiate the development of partnerships early in the planning process to help facilitate the development and installation of a comprehensive sidewalk and trail system. These partnerships will also play a critical role in identifying funding sources to help subsidize the costs of implementing the recommendations of this plan. Table 9.7 provides an overview of the Comprehensive Plan’s recommended Park and Recreation improvements.

**IMPLEMENTATION OF A COMMUNITY-WIDE PEDESTRIAN PATHWAY SYSTEM**

Linear corridors suitable for pedestrian and cycling can be found in the open spaces along the Mississippi River and its tributaries, particularly Mad Creek and Geneva Creek. These areas have potential as passive linear parks linking active recreational areas with one another, as settings for jogging, exercise and bike trails, and as natural conduits for stormwater drainage. Perhaps equally important is the ability of these areas to provide an inclusive greenway system that integrates the city’s precious natural resources with the city's urban systems.

Greenways and trail systems are not dependent on facility development, rather they are dependent upon the absence of development and other disturbances to the natural topography. The implementation of a linear park system, following the natural drainage systems and forested hillsides, is an effective way to create a “preservation corridor” that offers an abundance of open space and recreation opportunities within the City of Muscatine. Equally important to the recreational opportunities an integrated trail system offers, is its ability to preserve environmentally fragile and otherwise unsuitable land from development. Some recommended methods of obtaining land and/or right-of-way for an integrated trail system is the creation of community land trusts, conservation easements, preservation corridors, and land dedications.

Trail locations and sidewalk improvements should be close to schools, churches, businesses, industry and neighborhoods. The general location of the recommended trails and greenways are shown on the Parks and Recreation Plan. The trail locations, widths and surface material will vary depending upon topography, soil conditions and land availability, funding sources, future growth patterns and the level of community support. In addition to the Mississippi River and its tributaries, other targeted areas for the installation of trails and greenway preservation include agricultural areas, forest regions, wetlands, abandoned railroad corridors and cemeteries. These areas, as well as other significant natural or historic features, must be protected from future development that may cause negative or irreversible impacts.
Trailheads, complete with picnic areas, restroom facilities and parking are recommended at the major points of access to primary trail/pathway segments. There are many educational subjects that are relevant to the proposed greenbelt locations. These subjects should be highlighted in educational kiosks located at trailhead locations and along trail routes. Trailheads, kiosks and trailway improvements must be designed and located in areas that attract a wide range of users.

It is recommended the city take steps to procure and/or acquire rights to property in the general vicinity of the recommended greenway locations. Alternative locations should be considered based upon land availability, cost and the level of intrinsic value prospective sites may offer. The city should prioritize greenway segments and sidewalk links that provide critical connections to schools, activity centers and to existing and future parks and recreation facilities.

The city must then determine the best method of acquiring ownership or right-of-way. It is recommended the location and design of the recommended greenbelt and sidewalk improvements utilize existing built and natural topography whenever possible to minimize erosion, the disturbance of existing vegetation and any other negative impacts. The implementation of a comprehensive greenway system not only provides a critical buffer zone between the natural and developed areas of Muscatine, but it creates an uninterrupted linear trail system that increases accessibility to the City’s activity centers and parks and complements the multi-modal systems already in place. These improvements also support the Treadways Trail Plan and the City’s Downtown Vision Plan and Mississippi Riverfront Study. Implementation of additional trails and sidewalk improvements will also complement the revitalization efforts to the Riverfront area and promote tourism and commercial activity downtown via improved surface transportation options. See Table 9.6 for information regarding possible enhancement solutions to the City’s bicycle and pedestrian systems.

### Table 8.6: Recommended Pedestrian Improvement Strategies

<table>
<thead>
<tr>
<th>Type of Improvement</th>
<th>Description</th>
<th>Recommendations</th>
</tr>
</thead>
</table>
| Revitalize and/or complete existing and proposed trails. | Provide needed surface repairs and general maintenance to existing trails and complete all proposed links and connections. | • Revitalize Mad Creek Greenbelt  
• Improve Hoover Trail  
• Complete Palisades Trail (to downtown)  
• Complete American Discovery Trail |
| Install new trails                         | Acquire needed ROW and provide necessary improvements to create seamless connections to the city’s exiting trails and activity centers. | • American Discovery Trail to City  
• Riverfront Trail (To Weed Park)  
• Mad Creek (to 180th)  
• Papoose Creek to High School & Community Y.  
• Muscatine Island to Fruitland |
| Install new sidewalks & upgrade existing sidewalks. | Construct new sidewalks along new streets and along existing streets that currently do not adequately serve pedestrian travel. Upgrade existing sidewalks. | • Install sidewalks along all new roads  
• Upgrade sidewalks along Park Ave.  
• Upgrade sidewalks along 5th Street. |
| Create pedestrian crossing and bike lanes where needed | Re-stripe existing ROW to provide safe bicycle lanes. Provide designated pedestrian crossings where needed. | • Bike lane needed on Grandview.  
• Crosswalks needed at all major trail & pedestrian crossings. |
Design Compliance

The enactment of The 1992 Americans with Disabilities Act has changed the method and direction of design decisions within all facets of public development. New procedures in renovation, management, and design of all public park and recreation areas and public facilities will be required to adhere to this equal public access act. Additionally, project improvements should be constructed in compliance with the American Association of State Highway and Transportation Officials (AASHTO) guidelines along with all other applicable local, state and federal building codes to insure the highest level of safety for all users.

The recommended design intent for the trail and sidewalk improvements should address the following criteria; accommodate a wide range of users, maximize mobility, minimize costs and minimize environmental impacts. In summary, the design and layout of the recommended bike and pedestrian improvements should utilize existing infrastructure and the use of City owned property whenever possible.

Public-Private Partnerships

Recreation responsibilities are increasingly perceived as a total community commitment. Many funding sources look for the establishment of unique partnerships when considering funding allocations. Cooperation should be sought between public sector providers and private sector providers. These include key community stakeholders such as school districts, churches, City and county officials, local businesses, Iowa Department of Natural Resources. The implementation of the recommended bicycle paths and sidewalk system will require numerous public and private partnerships. As indicated previously, it is recommended these partnerships be formed early in the planning process to ensure maximum utilization of available resources.

Due to the presence of the Community Y facility, Carver Pool, and the current supply of other parks and recreation opportunities located within the City of Muscatine, a recreational center was not proposed. It was determined that the existing recreational facilities, combined with the recommendations of this plan, provide a full-range of recreational opportunities to adequately serve the current and projected Muscatine population.

SUMMARY

By incorporating pedestrian greenways and trail facilities into this plan, the foundation will be laid for future developments to better accommodate pedestrian travel. The result of the planning and implementation of this multi-phased, integrated trail network will be a decrease in the community’s dependence on vehicular travel and an increase in the value of projects designed to complement pedestrian travel and the overall trail network. The implementation of the recommended pedestrian greenways will improve the city’s entire park system, including the recommended municipal pool, by providing exciting linkages and better overall connectivity to its residents.
Table 8.7: Overview of Parks & Recreation Strategies

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Description</th>
<th>Steps Towards Implementation</th>
</tr>
</thead>
</table>
| 1. Provide neighborhood parks to under-served areas of the community and to anticipated growth areas. | Develop additional neighborhood parks, over 5 acres, with a mix of passive and active recreational amenities. | • Identify under-served regions  
• Procure funding sources  
• Acquire property  
• Provide park improvements (phase improvements as needed) |
| 2a Develop a modernized municipal pool facility at Weed Park.  
2b Develop a family aquatic center | Upgrade existing pool located at Weed Park  
or  
Develop a new family aquatic center complete with leisure pool and lazy river at Weed Park or Fuller Memorial Park. | • Gather public input on the project  
• Determine options; revitalize existing pool or construct new?  
• Procure funding |
| 3. Develop a community-wide pedestrian pathway system. | Create a system of trails and pedestrian pathways that provides improved accessibility and expanded bicycle and pedestrian routes throughout the city. | See Trail and Pedestrian Improvement Options. |
CHAPTER NINE: FUTURE LAND USE

INTRODUCTION

The Future Land Use Plan is a fundamental policy guidance component of the Comprehensive Plan and is presented here to help the Planning and Zoning Commission and the City Council make decisions about future land use and zoning issues. The Future Land Use Plan was developed taking into consideration the comments of residents during the two Town Planning Charrettes; the Planning and Zoning Commission, the Comprehensive Plan Steering Committee, City Staff, current land use practices and development trends. The Future Land Use Map shows the recommended configuration of future uses in the Muscatine planning area given current characteristics and anticipated future development potential. This map is a guide to the preferred distribution of residential densities and their relationship to nonresidential uses. The map 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 is able to meet future development goals.

The Future Land Use Map shows a desirable distribution of land uses in Muscatine, but those recommendations will not become reality unless the daily decisions and implementation activities in Muscatine support the proposed plan. The decision to locate new uses and activities in the City should also be based upon factors such as impact on existing development, capacity of adjacent streets, planning and design principles, and the need for compatibility between the built and natural environment. The recommendations of this plan should be used with a sense of flexibility. Development proposals that do not exactly match the Future Land Use Map and Comprehensive Plan principles, but reflect market place demands, should be given reasonable consideration so long as they do not present significant new public service burdens on the community or hinder community development goals.

The areas shown on the Future Land Use Map include all land within the city plus approximately 2 miles outside the city limits. The future land uses identified on the map are as follows. A description of each of the future land use categories is provided in Table 10.1:

- Rural Residential/Agriculture
- Low density residential
- High density residential
- Neighborhood commercial
- Central Business District
- General commercial
- Office
- Light industrial
- Heavy industrial
- Public & semi-public
- Park & Open Space
### Table 9.1: Intent and Description of Future Land Uses

<table>
<thead>
<tr>
<th>Future Land Use</th>
<th>Proposed Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rural Residential/Agriculture</strong></td>
<td>-Agricultural</td>
</tr>
<tr>
<td></td>
<td>-Single-family detached</td>
</tr>
<tr>
<td>Incorporate existing buffer and</td>
<td></td>
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<tr>
<td>setback conditions into design</td>
<td></td>
</tr>
<tr>
<td>criteria to preserve rural</td>
<td></td>
</tr>
<tr>
<td>character. Typically large lot</td>
<td></td>
</tr>
<tr>
<td>developments, some available</td>
<td></td>
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<tr>
<td>infrastructure, rural roads;</td>
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<tr>
<td>clustered homes may be</td>
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<tr>
<td>permitted in planned</td>
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</tr>
<tr>
<td>developments; continued</td>
<td></td>
</tr>
<tr>
<td>agricultural uses.</td>
<td></td>
</tr>
<tr>
<td><strong>Low-Density Residential</strong></td>
<td>-Single-family detached</td>
</tr>
<tr>
<td></td>
<td>-Single-family attached (villas, condominiums and townhomes) as planned use.</td>
</tr>
<tr>
<td></td>
<td>-Cluster type subdivisions will be considered as a planned use.</td>
</tr>
<tr>
<td></td>
<td>-Public and institutional uses are allowed as a planned use</td>
</tr>
<tr>
<td>Typical suburban character,</td>
<td></td>
</tr>
<tr>
<td>single-family neighborhoods.</td>
<td></td>
</tr>
<tr>
<td>Homes are generally located in</td>
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<tr>
<td>subdivisions and may contain a</td>
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<tr>
<td>wide range of lot sizes.</td>
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<tr>
<td>Typically includes a mix of</td>
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<tr>
<td>residential styles and types,</td>
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<tr>
<td>full infrastructure availability</td>
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<tr>
<td>and sewer connection required,</td>
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<tr>
<td>residential streets; villas and</td>
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<tr>
<td>cluster homes may be permitted</td>
<td></td>
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<tr>
<td>through the planned use process.</td>
<td></td>
</tr>
<tr>
<td>Homeownership is to be</td>
<td></td>
</tr>
<tr>
<td>encouraged.</td>
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<tr>
<td><strong>High-Density Residential</strong></td>
<td>-Duplex</td>
</tr>
<tr>
<td></td>
<td>-Apartments*</td>
</tr>
<tr>
<td></td>
<td>-Single-family homes*</td>
</tr>
<tr>
<td></td>
<td>-Public and institutional uses*</td>
</tr>
<tr>
<td>* Uses are encouraged to be</td>
<td></td>
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<tr>
<td>located in planned developments.</td>
<td></td>
</tr>
<tr>
<td>Small lots, mix of multifamily</td>
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<tr>
<td>styles and types, suburban and</td>
<td></td>
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<tr>
<td>traditional subdivisions, full</td>
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<tr>
<td>infrastructure availability and</td>
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<tr>
<td>sewer connection required, good</td>
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<tr>
<td>access to residential and</td>
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<tr>
<td>collector streets, buffer</td>
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<tr>
<td>between single family residential</td>
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<tr>
<td>and non-residential uses.</td>
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<tr>
<td>Single ownership of the development or unified, perpetual control and</td>
<td></td>
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<tr>
<td>maintenance of the entire</td>
<td></td>
</tr>
<tr>
<td>development is encouraged.</td>
<td></td>
</tr>
<tr>
<td><strong>Neighborhood Commercial</strong></td>
<td>-Light retail and business services</td>
</tr>
<tr>
<td></td>
<td>-Professional office/clinics</td>
</tr>
<tr>
<td></td>
<td>-Public and institutional uses are allowed as a planned use</td>
</tr>
<tr>
<td><strong>Land Use Intent:</strong> Low intensity commercial uses intended to serve nearby</td>
<td></td>
</tr>
<tr>
<td>residents - may be mixed with</td>
<td></td>
</tr>
<tr>
<td>residential uses. Potential</td>
<td></td>
</tr>
<tr>
<td>uses include limited retail</td>
<td></td>
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<tr>
<td>services, business and</td>
<td></td>
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<tr>
<td>professional services, daycare,</td>
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<tr>
<td>financial services, dental or</td>
<td></td>
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<tr>
<td>medical services, dry cleaning,</td>
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<tr>
<td>food or drug sales without gas</td>
<td></td>
</tr>
<tr>
<td>pumps, postal or mailing services,</td>
<td></td>
</tr>
<tr>
<td>schools and churches.</td>
<td></td>
</tr>
<tr>
<td><strong>Urban Design:</strong> The scale and</td>
<td></td>
</tr>
<tr>
<td>character of the development</td>
<td></td>
</tr>
<tr>
<td>should be compatible with the</td>
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<tr>
<td>surrounding residential</td>
<td></td>
</tr>
<tr>
<td>neighborhoods. Detail architectural, urban design and landscape plans will</td>
<td></td>
</tr>
<tr>
<td>be reviewed to ensure neighborhood character is maintained. Public</td>
<td></td>
</tr>
<tr>
<td>improvements, open space, or</td>
<td></td>
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<tr>
<td>other amenities may be required</td>
<td></td>
</tr>
<tr>
<td>to mitigate authorization of these non-residential uses in essentially</td>
<td></td>
</tr>
<tr>
<td>residential neighborhoods.</td>
<td></td>
</tr>
<tr>
<td><strong>General Commercial</strong></td>
<td>-Commercial</td>
</tr>
<tr>
<td></td>
<td>-Office (ancillary)</td>
</tr>
</tbody>
</table>
### Future Land Use

<table>
<thead>
<tr>
<th>Proposed Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional commercial activities such as retail sales and services, shopping centers, restaurants, hotels, general convenience stores, and entertainment in a regional/highway-based setting; also includes most office uses and general business services. Detailed architectural, urban design, and landscape plans will be required to ensure neighborhood character is maintained. Planned commercial developments should be required where large, vacant areas are to be developed, particularly near interchange locations or key intersections of collector and arterial streets, or when a commercial area adjoins a residential area or other natural/sensitive use. Includes heavy traffic generators, big box, dealerships, entertainment, fast food, theaters, and outdoor display.</td>
</tr>
<tr>
<td>Office</td>
</tr>
<tr>
<td>-Professional office</td>
</tr>
<tr>
<td>-General business office &amp; ancillary uses</td>
</tr>
<tr>
<td>-Light retail (that supports office development)</td>
</tr>
<tr>
<td>-Office/corporate park</td>
</tr>
<tr>
<td>General office activities such as professional offices, financial institutions, business services, and ancillary light retail. Developments such as a business park or campus of an office or research institution, with limited commercial uses, are also appropriate when developed as a planned office use. The planned office designation should also apply when a proposed development adjoins a residential or natural area, larger project areas, or adjacent to sensitive uses. The planned designation may be utilized in residential areas that are transitioning to a more intense use with limited signage, parking, employees, and the preservation of existing topography and landscaping.</td>
</tr>
<tr>
<td>Central Business District (Downtown District)</td>
</tr>
<tr>
<td>-Boutique style retail</td>
</tr>
<tr>
<td>-Specialty restaurants, bars &amp; Café’s</td>
</tr>
<tr>
<td>-Hotels</td>
</tr>
<tr>
<td>-Office/service</td>
</tr>
<tr>
<td>-Limited residential (lofts, studio apartments, etc.)</td>
</tr>
<tr>
<td>-1st Floor commercial/service</td>
</tr>
<tr>
<td>-2nd Floor residential/office</td>
</tr>
<tr>
<td>-Public and institutional uses</td>
</tr>
<tr>
<td>Mixed-use commercial, professional office, medium to high-density residential, locally oriented commercial uses, specialty retail, small offices, and public/institutional uses.</td>
</tr>
<tr>
<td>Downtown should serve as a focal point for small to medium scale economic development efforts. The City may want to consider redevelopment incentives for property located within the downtown area.</td>
</tr>
<tr>
<td>Urban Design: Adaptive re-use of existing historic buildings is encouraged. All new construction or additions should blend with the historic character of downtown. Detailed architectural, urban design and landscape plans will be reviewed to ensure historic character is maintained. Public improvements, streetscape amenities, or other site considerations may be required.</td>
</tr>
<tr>
<td>Light Industrial</td>
</tr>
<tr>
<td>-Assembly</td>
</tr>
<tr>
<td>-Distribution</td>
</tr>
<tr>
<td>-Warehousing</td>
</tr>
<tr>
<td>Recommended building types are concrete, masonry, and tilt-up. Environmentally “clean” manufacturing and industrial operations; transportation and distribution related uses.</td>
</tr>
</tbody>
</table>
Future Land Use | Proposed Uses |
--- | --- |
**Heavy Industrial** | -Contractor yards  
-Manufacturing  
-Storage Facilities |
Recommended building types are concrete, masonry, and tilt-up. Outdoor storage is allowed with appropriate buffering, fencing and landscaping.

**Public/Semi-Public** | -Schools  
-Hospitals  
-Churches  
-Government Facilities  
-Nursing Homes  
-Civic Institutions  
-Not-for-profit organizations |
Existing public and quasi-public uses; those facilities that serve residential areas (such as branch libraries, post offices and schools) should be grouped together; all public/institutional facilities should have access to arterials, public transportation and major utility trunk lines; These uses should be permitted in other land use categories contingent upon meeting or exceeded all applicable zoning requirements and design criteria.

**Park/Open Space** | -Public and private parks  
-Trails  
-Greenways |
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.

**DISTRIBUTION OF FUTURE LAND USE**

**Residential**

Single family residences represent the majority of housing available within the City of Muscatine. The housing market trends for Muscatine have not witnessed a boom in new house construction in the nineties as did many markets across the U.S. The size of the local market and lack of population growth have both contributed to this. Significant population growth is also not forecasted for the city. Therefore, the amount of land set aside in the 2001 Comprehensive Plan is conservative. The future residential districts are located adjacent to existing neighborhoods to minimize associated costs of providing services to new residential areas.

To account for possible growth in the City of Muscatine’s population and an associated increase in demand for new housing, areas have been designated for new residential development. The majority of new single family residential development radiates outward from the downtown area to the bypass. Access to these areas are provided via Cedar Street, Mulberry Avenue, Tipton Road and Houser Street. The proposed supply of future land use takes into consideration current and anticipated residential development within the entire project area, which includes the City of Muscatine and a 2-mile radius from the city limits. Another significant component to the city’s
future housing stock is the infill of single family development on vacant parcels within existing neighborhoods and developments. There are approximately 50 acres of vacant land within the city that fall under this category. Approximately 200 single-family homes, with an average lot size of 10,000 square feet, can be built on infill/vacant lots located throughout the city.

The total net increase of land designated as future single-family residential, in comparison with the existing amount of land currently being used for residential purposes, is approximately 615 acres (existing single-family residential minus proposed single-family-residential land area). Based upon current residential subdivision development trends and to compensate for roads, infrastructure, parks and open space, a figure of 20,000 (square feet) was used to compute the total number of houses/lots the proposed future land use area could support. Considering each “house lot” would consume approximately 20,000 square feet of land, it was estimated that approximately 1,339 new houses could be constructed in the future low-density residential growth areas within the city limits of Muscatine. This can account for a population increase of 3,347. These growth estimates define the “reach” of single-family growth for which to plan for in the next 20 years within the project area. Given the long-range nature (10-20 years) of the Future Land Use Map, the amount of land classified as single-family residential will accommodate the City’s anticipated modest rate of growth. In addition to accommodating growth within the existing city limits, the Comprehensive Plan recommends the City annex property, as needed, to accommodate future growth. To address possible growth outside the City limits, the Future Land Use Map designates approximately 1,541 acres of land for future single-family residential use.

To allow for the provision of housing alternatives, new areas of multiple family housing are also proposed. Future multiple-family growth areas are provided through the expansion of existing multiple family developments and areas that are connected to municipal services. Due to the existing supply of government-subsidized apartments and affordable housing options, new apartment development should be geared towards moderate income residents. In addition, the development and/or revitalization of mixed-use facilities in the downtown area will allow for some loft-style apartments within the Central Business District.

Commercial

Several areas of commercial expansion are proposed for the City of Muscatine. The most prominent area of future commercial growth is along the bypass as indicated in the adopted Highway 61 Bypass Land Use Plan. Highway 61 has the highest volume of traffic. Commercial growth along this corridor is predicted to continue. Future land uses along this corridor should cater to large-scale retail, limited highway commercial, automobile oriented goods and services, and other activities which require more space than is available in downtown Muscatine or along Park Avenue.

Additional areas of commercial expansion are along Grandview Avenue and Park Avenue. The existing vacant land along Grandview Avenue could provide prime new commercial development opportunities. Additionally there are vacant buildings located along each of these roads which also provide opportunities for new development and/or redevelopment of the existing buildings. Future development along these corridors should cater to smaller businesses and local commercial establishments that need a larger building than is available in the downtown. The Grandview
Chapter Nine: Future Land Use

Avenue corridor should be used as a commercial district that offers goods and services that need to be located in facilities larger than are available along Park Avenue.

The areas designated for commercial development are identified on the Future Land Use Map. Future commercial land uses are shaded red. Additional details regarding these commercial areas are discussed in the Planning Districts Section.

Central Business District (Downtown District)

Another very important commercial component to the city is downtown. It should be a priority of the city to fill both land and building vacancies in downtown Muscatine. There are opportunities for businesses to occupy existing buildings and new construction. Commercial establishments should extend from Mississippi Drive to 5th Street within the Central Business District limits. The downtown should cater to municipal activities, mixed land uses, small-scale retail, specialty stores, offices, lodging, restaurants, and entertainment establishments.

Neighborhood Commercial

Areas designated for neighborhood commercial are located within or adjacent to residential areas. This land use district is intended to offer an opportunity to develop high quality retail at a small-scale that supports neighborhood residential development.

The areas designated for neighborhood commercial development are identified on the Future Land Use Map. Future neighborhood commercial land uses are shaded white with red stripes. Additional details regarding these commercial areas are discussed in the Planning Districts Section.

Office

The office use category is intended for business park or campus type commercial development with limited commercial uses such as professional office groupings and medical offices & clinics. Ancillary uses may include office-related sales, daycares, restaurants and recreation/wellness facilities. Areas most suitable for office development should generally contain tracts of land containing 20 contiguous acres or more with unified control or ownership of the project site. Planned office areas should be encouraged where large, vacant areas are to be developed, particularly near interchange locations and other key intersections.

The areas designated for office development are identified on the Future Land Use Map. Future office land uses are shaded pink. Additional details regarding these commercial areas are discussed in the Planning Districts Section.
Industrial

Expansion of industrial uses within the Muscatine Island region and in areas identified along University Drive is recommended. New industrial land uses should be located there as well as the areas designated in the Island Planning District. Close highway access and availability of utilities make these areas the most appropriate locations for industrial and other development requiring heavy vehicle traffic.

The areas designated for both light and heavy industrial development are identified on the Future Land Use Map. Future light industrial land uses are shaded light gray. Future heavy industrial land uses are shaded dark grey. Additional details regarding these industrial areas are discussed in the Planning Districts Section.

Park/Recreation

The City of Muscatine has a number of park facilities with a range of recreation activities available. Park facilities are discussed in Parks & Recreation Strategies. The Future Land Use Map identifies areas suitable for park and public space expansion. A pedestrian/non-motorized transportation network is introduced to provide an alternative means of safe transport throughout the city. Areas designated as Parks and Recreation areas are shaded dark green on the Future Land Use Map. In response to the current and/or anticipated deficiency of parks within the community, the Future Land Use Map identifies recommend park locations. Recommended park locations are depicted with a green circle with a black dot in the middle.

NEIGHBORHOOD IMPROVEMENT STRATEGIES

The City of Muscatine has a reasonably good housing stock. One of the main goals of the Comprehensive Plan is to promote the preservation of Muscatine’s existing housing stock by encouraging home maintenance while paying special attention to older homes that are becoming dilapidated. To better address the City’s housing conditions the housing stock has been broken down into four categories of housing types. Houses in all four categories need special attention.

Older – Dilapidated Houses make up the housing category in most need of attention. These are the easiest houses to neglect and eventually abandon. However, because of their size and plain designs, they are the easiest and most economical to repair. Simple home improvement programs can make a large impact on these homes. But if many repairs are needed, the cost of the repairs should be compared to the cost of removing the structure and building a new one. There are several programs through the U.S. Department of Housing and Urban Development, the Iowa Department of Economic Development, as well as private and religious organizations that offer financial assistance and grants to qualified persons seeking to improve their housing and financial status.

Older – Maintained Houses, can be used as a baseline to provide an achievable standard which other residences can be remodeled. The priority of repairing these houses is not as high as older – dilapidated structures, but owners may qualify for home maintenance assistance under the same programs above. It’s necessary to monitor these houses and take action before they become dilapidated.
Older – Gentrified Houses are more difficult and expensive to maintain. Often, owners of these homes try to restore unique architectural aspects of the structure that may require specialized materials and/or labor. Homeowners who have the resources to take on such housing renovations, often cannot qualify for the direct government assistance that is available to lower-income home owners. Instead, financial assistance is available in the form of tax credits. Home improvement loans which can be used for large renovation projects receive the same tax deductions as mortgage loans. In addition, if an improvement or repair is done in compliance with criteria specified in a historic district and because of that criteria the repair costs more than it would have normally, the owner could receive a tax credit for the difference.

Newer and Modern Houses are both categories that require more monitoring than anything. As stated earlier, these houses tend to be in good condition, but may easily fall into disrepair depending on the quality of the construction. In the long run, it would be beneficial to offer assistance where possible to homeowners of newer and modern houses to keep them well maintained and prevent future dilapidation. New regulations requiring occupancy permits for all residential units, rental and owner occupied, should be adopted and enforced.

AFFORDABLE HOUSING STRATEGIES

Multiple family housing is a necessary housing option for residents of Muscatine who cannot afford to own a house or who choose not to accept the responsibilities. Total units in a multiple family housing complex range from two and up. Rents vary greatly depending on the location and quality of the units. Concern surrounding many multiple family housing units stems from instances where buildings are poorly maintained, trash and personal items are stored incorrectly, and traffic generated from many people living in a small area causes problems. These can be avoided by proper planning and administration of city ordinances. Strict implementation of safety and maintenance codes, zoning ordinances and law enforcement can resolve some on-site problems, but the building must also have considerate tenants and a good owner. Enforcement of tenants’ rights and empowerment through self-policing can initiate change on the part of residents.

The assistance the City of Muscatine can offer residents for neighborhood improvements can be divided between direct and indirect support. Direct support involves action and spending on the part of the City of Muscatine that goes directly to the residents of the city. The first step in direct neighborhood assistance involves improving infrastructure in neighborhoods where conditions are deteriorating. The city can initiate neighborhood revitalization by identifying deteriorating streets and budgeting capital improvements to improve street surfaces, curbs, gutters, and sidewalks. The City of Muscatine should conduct a Housing Conditions Survey of every neighborhood to classify and identify housing as well as infrastructure conditions, throughout the city. Then by mapping these conditions, areas may be prioritized for assistance.

In addition to direct spending on neighborhood infrastructure, the City of Muscatine can collect and distribute state and federal funds that can be used for home mortgages and improvement loans. The U.S. Department of Housing and Urban Development (HUD) has a number of programs aimed at housing for which a unit of local government must apply. HUD offers Community Development Block Grants which are applied for by units of local government or non-profit organizations and are used to “fund a wide range of activities to provide decent housing, create suitable living
environments, and expand economic opportunities for low- and moderate-income persons.” Many more such programs exist and more information can be obtained from those agencies directly.

The second type of assistance the City of Muscatine can offer for improving the city’s housing stock is indirect support. This can be accomplished through encouragement of homeowner and neighborhood associations and by managing construction through smart city growth.

Homeowner and neighborhood associations enable residents of Muscatine to accept the responsibility of improving the conditions within their neighborhoods. Through the establishment of homeowner associations, by-laws are created that legally bind residents of the neighborhood to design restrictions and maintenance standards. Neighborhood associations have less legal standing than homeowner associations, but provide a venue for neighbors to meet and act as a group. Peer pressure for maintaining houses and local initiatives for neighborhood improvements are responsibilities that neighborhood associations usually adopt.

Smart growth is a policy intended to keep the number of available housing units equal to the demand. The result of such a policy would be to limit the availability of new houses on the edge of town while promoting the occupancy of houses and use of vacant parcels in established neighborhoods. This policy should be adopted in conjunction with other actions mentioned above to work towards a better overall living environment for the entire city.

Table 10.2 on the following page provide an overview of the recommended housing program policy statements & action plan.

<table>
<thead>
<tr>
<th>Policy Statements</th>
<th>Recommended Actions</th>
<th>Priority</th>
</tr>
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<tbody>
<tr>
<td>Through application for grants (federal and state) and direct spending, the City of Muscatine will directly assist efforts to improve and maintain the city’s housing stock.</td>
<td>Develop programs and financing options that facilitate home repairs and maintenance.</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Conduct a Housing Survey of every neighborhood, map results and prioritize areas in need of assistance.</td>
<td>High</td>
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<tr>
<td></td>
<td>Apply for appropriate Community Development Block Grant monies.</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Develop a plan to extend basic utilities to all existing neighborhoods and new developments</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>The City of Muscatine will provide assistance by collecting and disseminating information on public and private funds for residential improvements and mortgage assistance.</td>
<td>High</td>
</tr>
</tbody>
</table>
The City will indirectly support efforts to expand and maintain the city’s housing stock by adopting appropriate programs, policies and amendments.

<table>
<thead>
<tr>
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<th>High</th>
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<tbody>
<tr>
<td>Assist in the establishment of neighborhood associations. The associations should act as the organized voice and representation of Muscatine’s neighborhoods—both new and old.</td>
<td>High</td>
</tr>
<tr>
<td>Encourage a balanced range of high-quality housing options that meet all socio-economic needs</td>
<td>Medium</td>
</tr>
<tr>
<td>Encourage smart growth through the provision of utilities and infrastructure to new growth areas; and annex these areas as well as areas poised for growth prior to development activity.</td>
<td>Medium</td>
</tr>
</tbody>
</table>

**BUSINESS PARK DEVELOPMENT STRATEGIES**

The City of Muscatine is somewhat limited in the amount of contiguous commercial property suitable for a commercial business park or corporate headquarters. As a result, there are some industries within the city proper located near residential neighborhoods and recreational areas. This presents a conflict of uses that could pose a threat to the safety of residents who live near such operations or cause depreciation in property value.

Prior to identifying future business park locations, the city must consider the preservation of revenue generating agricultural land uses. To comply with this land use policy, the location of all development should be contiguous to existing development. The purpose of this is to consolidate development within the urban core area and leave large tracts of land along the city periphery. This pattern of growth can be more cost-effectively serviced with primary utilities, while also preserving large tracts of land, that are easier to access with farm implements. If commercial or industrial expansion reaches residential areas, but does not include a buy-out of the homes, the residences should be buffered from the industrial operations. The size, composition and design of the buffer should create enough separation between uses to shield negative land use externalities such as undesirable visual appearances, odors, sounds and intrusive lighting schemes or headlights.

**Business Park Development and Expansion**

Although, the City of Muscatine currently has limited properties zoned for office use, the City does offer several ideal locations suitable for business and industrial development. The best location for a new business park is the property along the west side of University Drive. This area is located just south of the intersection of Highways 61 and University Drive and has excellent access to highways and utilities, and has available undeveloped land. The area is also well separated from developed parts of the city and residential neighborhoods. This gives this area, and individual businesses in it, the opportunity to expand without raising conflicts with residents or other incompatible land uses.
This area is ideal for business development for several reasons. First, it has easy access to highway travel. Second, it is well separated from the main housing areas of the city. Third, major utilities and an access road suitable for truck travel (University Drive), are already in place. Lastly, there is adequate space for future growth, which can offer secondary and support goods and services.

**COMMERCIAL LAND USE DEVELOPMENT GUIDELINES**

The ability of a City to exist as an economic entity depends greatly on the health and vitality of its downtown. Historically, downtowns were the economic center of the city, usually located at the crossroads of a transportation route such as a river or railroad. As time passed America’s dependency on the automobile increased, commercial activity and trade became possible and preferable away from the town center where land along interstates was cheaper and more available. The downtown may not have the space or infrastructure capabilities to handle large income generating uses such as industries, big-box retail establishments or highway commercial activities, but it serves an important niche in city commerce. The historic downtown of Muscatine is the city’s identity. It’s where celebrations and parades are held, it’s where the main municipal buildings are located, and it’s where the City of Muscatine meets the Mississippi River.

For the downtown to remain viable as a business district it must compete with other districts both inside and outside of Muscatine. Business owners and corporations have a choice of whether to locate downtown, on Park Avenue, Grandview or even elsewhere in the region, such as the Quad Cities. Therefore, the economic environment must be appealing to attract and retain businesses. In one respect, the downtown is at a disadvantage because the buildings are old, land is expensive, and parking limited. In another respect, the downtown offers a unique environment with buildings displaying interesting architecture that are in close proximity to a variety of other businesses. It is the uniqueness and heritage of the historic downtown the City of Muscatine must sell to attract new businesses and retain existing ones.

An important factor in the development and maintenance of commercial areas is their physical appearance. Building design and land uses allowed within the city can be significantly influenced by municipal regulations and actions. The requirement of simple design elements can greatly enhance the aesthetics of a commercial development or an entire commercial district. The function of each commercial district varies. Therefore, the suggested design requirements for each district will be different. The following urban design principles and terms will be used to make recommendations for downtown as well as other commercial districts within the City.

This section provides an overview of urban design principles and land use descriptions for future commercial and industrial areas. It is recommended these urban design guidelines be implemented to preserve the character of the city. The Comprehensive Plan also describes appropriate uses of land that will keep the community accessible, safe and attractive and provides policies to help guide decisions made by city officials to achieve these ends.
CITY OF MUSCATINE, IOWA COMPREHENSIVE PLAN

Chapter Nine: Future Land Use

CENTRAL BUSINESS DISTRICT

Downtown Muscatine is a distinctive, well-established commercial district. The design characteristics of the downtown are what distinguish it mostly from other commercial districts in the city. The buildings in the downtown have small to no setbacks, vary in height, and have architecturally variable facades. The majority of the parking is behind buildings, on the street or in shared lots. The scale of the buildings only allows for businesses that are much smaller than large land users such as drive-through restaurants and large retail stores. Consequently, the land uses within the downtown are naturally restricted. Municipal regulations and actions can significantly influence the design of the district and the land uses allowed within it. Most of the buildings in and around downtown display the unique architecture of their original design, but many buildings have been left in disrepair or have been covered with generic siding materials.

Principals of Urban Design in the Central Business District

The following recommendations are intended to direct decisions regarding the further development of Muscatine’s historic downtown. The goal is to keep the traditional feel of a historic midwest city, while trying to adapt it as a business district in fierce competition with highway developments located in other parts of town.

Building Height – Developers of new buildings will be encouraged to incorporate at least two stories with mixed uses.

Definition of Street Space – Incorporate trees, planter boxes, and ornamental light posts along the perimeter of downtown and in front of parking areas. Encourage the use of sidewalks for seating for proposed businesses such as street cafes or ice cream parlors.

Streetscape – Develop and maintain small courtyards and open space at the corners of downtown. Create a defining feature memorializing Muscatine’s heritage at each major street intersection entering downtown.

Floor Uses – When buildings have two occupied stories, ground floors should have retail, restaurants, and entertainment establishments, while upper floors are used for office space and apartments.

Facades – The design of building fronts should be similar to the existing buildings in downtown. If an existing building is too obsolete, encourage reuse of the primary façade with less restrictive requirements for improvements to other less visible building elements. Exterior improvements should blend with the historic designs, materials and massing of the existing structures located within downtown.

Setbacks – Enforce a minimum setback requirement to bring storefronts as close to the street as possible. Parking lots in front of buildings are discouraged.
Signs and Canopies – Projecting and pole signs should be replaced with canopies and/or wall/façade signs. All new or replacement signage should comply with a unified, historic theme. No neon or rooftop mounted signs should be permitted.

Circulation – The sidewalks should continue to be well maintained to provide easy and safe access for pedestrians. A stronger pedestrian connection should be made from the downtown to the city’s park system and schools.

Uses of Property in the Downtown District

The leading factor that makes land desirable for commercial activity is accessibility to consumers. Central business districts were originally located along main routes of transportation such as railroads and rural routes and highways. In the last 50 to 60 years transportation has become bigger and faster. For safety reasons highways and new railroads were rerouted to pass outside of town. However, the desirability to locate a business along a main transportation route has not changed. Most new retail businesses have followed the relocation of main highways to the outer fringes of town. The increases in traffic and availability of affordable land on the outskirts of town have made those areas more desirable for business and commercial growth.

Highway oriented businesses such as restaurants, hotels, gas stations and specialty stores have always had a major presence in commercial districts. However, with the advent of big-box retail and the power centers, the commercial landscape has changed. In most commercial districts, such as Park Avenue, the typical gas station and restaurant sits in the shadow of 50,000 square foot and larger big box retail establishments. Commercial districts offer a wide spectrum of possible land uses that will put significant strain on the local transportation system. The availability of commercial land also has the potential to stagnate the revitalization of the central business district.

As a result of the migration of commercial activity to the highways at the edge of town, downtowns have been refocused to meet a demand for goods and services that strip commercial areas and “big box” developments do not fulfill. New emphasis is placed on culture and entertainment downtown. The following land uses are recommended in downtown Muscatine; specialty retail boutiques, antique shops, restaurants/cafés and tea/coffee shops. There is also a demand for recreation and entertainment such as theatre, and/or a community center or game room in the downtown region. City leaders and developers must place a new emphasis on establishing downtown as a center for culture and entertainment. To effectively accomplish this, the city must increase the utilization of downtown.

Vacant buildings are unhealthy for the downtown and the city in general. The community must discourage landowners from holding on to deteriorating properties that are located in highly visible areas.

Neighborhood Commercial Districts

Neighborhood commercial districts include convenient, small-scale businesses and/or mixed-use developments located within or nearby residential neighborhoods.
The following recommendations are intended to direct decisions regarding the further development of neighborhood commercial developments. The goal is to keep the residential scale of the neighborhood, while bringing the services and conveniences into the neighborhoods.

**Principals of Neighborhood Commercial Urban Design**

**Building Height** – Developers of new buildings will be limited to two story structures with parking located in the rear of the buildings.

**Streetscape**: Incorporate on-site trees, planter boxes, and ornamental light standards into the developments. Require the installation of sidewalks and encourage the development of outdoor eating and meeting areas.

**Site design**: Businesses shall provide pedestrian and bicycle access and amenities. These amenities shall include designated paths giving pedestrians the right-of-way as they approach, enter and exit the establishment. Dumpster and surface mounted mechanical equipment should be screened.

**Floor Uses** – When buildings have two occupied stories, ground floors should have boutique style retail, restaurants, and entertainment establishments, while upper floors are used for office space and apartments. No outdoor storage is recommended.

**Facades** – The design of building fronts should have continuity with the surrounding residential structures. All building faces shall receive the same quality of design and exterior building materials. Pitched shingled or standing seam metal roofs are encouraged. All rooftop mechanical equipment must be screened with material consistent with the overall design of the facility.

**Setbacks** – Enforce a minimum setback requirement to bring storefronts as close to the street as possible. Developments adjacent to residential development should be required to provide a landscape buffer of no less than 20’ between developments. Consideration should be given to situations in which the shared landscape buffer between the two properties equals 20’ or more.

**Signs and Canopies**: Monument, canopies and/or wall/façade signs are encouraged. Rooftop mounted signs and temporary signs, such as banners, should be prohibited. No neon signage or adornment should be permitted on neighborhood commercial developments.

**Circulation**: Access to major roads should be limited. Adjacent businesses should be required to share points of ingress/egress. All neighborhood commercial developments shall provide easy and safe access for pedestrians. Wherever possible the city should encourage pedestrian links connecting neighborhood commercial developments, Muscatine’s city parks and the city’s schools and churches.

Rather than creating a barrier to an overall pedestrian circulation system, neighborhood commercial developments should act as a catalyst in implementing pedestrian walkways. This can be accomplished through the city’s plan review and approval process. Prior to authorizing approval of a development, the city should require the developer to provide sidewalks as a condition of
approval. Even if the sidewalk does not link to existing sidewalks or paths, it is one step further to providing better pedestrian access throughout the city.

**Uses of Neighborhood Commercial Property**

Setback requirements and other development standards will require that neighborhood commercial developments are located on larger parcels of land than currently found in most residential neighborhoods within Muscatine. Such restrictions will discourage the proliferation of neighborhood commercial development. Whenever a neighborhood commercial development is proposed, it is important it does not create conditions that negatively impact the existing quality or character of the neighborhood. Public participation in the review and development of the site design and layout will be a critical indicator of how the proposed development fits into the community.

**COMMERCIAL DISTRICTS**

The following recommendations are intended to direct decisions regarding the further development of Muscatine’s commercial districts. The goal is to provide commercial land uses that are well planned, visually consistent and compatible with neighboring areas. Urban design standards and development restrictions must be adopted and enforced to meet this goal and to harness the powerful economic boost these developments can bring to the community.

**Principals of Commercial Urban Design**

*Building Height:* Developers of new retail will be limited to one story structures with parking located in front of the buildings. Often developers will create outlots (out-parcels) adjacent to the roadway right-of-way for smaller retail and hospitality enterprises. While these small-scale developments should be encouraged, they are highly visible and therefore all building faces should be aesthetically pleasing.

*Streetscape:* Incorporate on-site trees, planter boxes, and light standards into the developments. Require the installation of sidewalks and provide professionally landscaped parking lot islands, buffer strips and open spaces. Commercial developments, especially developments exceeding 10 acres, shall be encouraged to provide on-site amenities such as public art and common areas that encourage pedestrian interaction, relaxation and solitude.

*Site design:* All developments are required to comply with the applicable building and parking set backs and provide adequate on-site parking, including stalls designated for those with disabilities. The total permitted square footage shall be limited by the development’s ability to provide on-site parking and other on-site requirements.

Commercial developments shall provide pedestrian and bicycle access and amenities. These amenities shall include designated paths giving pedestrians the right-of-way as they approach, enter and exit the establishment. Dumpster and surface mounted mechanical equipment should be screened.
Facades – The design of building faces should have continuity with the surrounding built environment. All highly visible building faces shall receive the same quality of design and exterior building materials. All rooftop mechanical equipment and/or antennas must be screened with material consistent with the overall design of the facility.

For large developments, the primary façade is required to be articulated with off-sets and other design elements. The intent of this design standard is to avoid large expanses of unadorned building facades.

Signs: Signage for commercial developments shall have continuity with the overall development. The use of monument and wall signs is encouraged. Pole signs should be restricted to highway locations. Rooftop and temporary signs such as banners and balloons should be prohibited.

Circulation: Access to commercial developments shall be limited. Refer to the Transportation Section for access management guidelines. Access and on-site vehicular circulation shall provide adequate room for the turning radii of the largest vehicular type that is intended to serve that site.

Uses of Land: Commercial land uses shall be limited to the uses permitted in the zoning district. The design of multiple-use developments is encouraged to facilitate one-stop shopping for consumers. For example, the development could be shaped like a “U” would allow consumers to visit many shops without changing parking stalls.

INDUSTRIAL DISTRICTS

Designating industrial uses of land is very important to the economic diversity of a community. The leading factors that makes land desirable or not to an industrial user is the level of efficiency in receiving and exporting freight and affordability of land. Muscatine can meet these requirements, plus offer a large, well-educated workforce.

Most industrial sites are located off major roadways, ideally out of view of residential neighborhoods. Due to the low visibility and functional demands of industrial sites, urban design standards usually do not apply. Although industrial development is usually good for a community’s economy, it can sometime place demands on the community’s utilities and natural resources that are unsustainable.

Uses of Land

Industrial land uses shall be limited to the uses permitted in the Zoning Ordinance. Industrial developments consist of significant amounts of land covered by either pavement or structures. As a result, they must be reviewed to ensure the amount of stormwater run-off is functionally equivalent after construction as it was prior to construction. Other environmental conditions must also be closely monitored such as air pollution, water pollution, ground water contamination, or other conditions that present health or safety hazards to the community.
GROWTH MANAGEMENT AND ANNEXATION

Decisions regarding the growth of the City of Muscatine through annexation should be made consistently. Whether or not an area or tract of land is annexed into the city should be based on a set of criteria held consistent through time and across different situations. The following section on growth management provides a time frame for when and why areas should be considered for annexation. The next section summarizes Iowa procedures for annexation and presents a set of criteria which can be used for evaluation purposes during an annexation study.

Growth Management

Growth management can be described as a conscious public decision to restrain, accommodate or encourage development. Management techniques can be applied to any type of growth, but of particular concern to the City of Muscatine is the current and future supply of quality commercial, residential and industrial development opportunities. The growth of the land uses mentioned above are managed in part by proposing areas of commercial, residential and industrial growth on the Proposed Land Use Map and developing strategies for each district. In addition to proposing land uses, the city can manage growth by extending the city boundary and concentrating municipal services within the planning area. This strategy will minimize sprawl and the inefficient use of the land, resources and municipal services.

The purposes for managing growth in the City of Muscatine are multi-fold. Among these are: the preservation of farmland & the income generating potential of natural resources, the prevention of overextending municipal services and infrastructure, the prevention of vacancies and thus economic decline within existing city neighborhoods and commercial areas, and the control of types and quality of development at the city periphery.

The rate, manner and location in which the City of Muscatine allows residential, commercial and industrial land uses to grow will have significant effects on conditions within the city’s existing neighborhoods and commercial areas. In the current development environment, it is more economical for commercial and residential developers to construct new buildings on agricultural land than it is to redevelop an existing site or renovate an existing building within the city. As a result, most developers’ preferred construction locations are at a city’s perimeter. When this growth is allowed to progress unchecked, older sections of the city tend to be left to deteriorate. For cities to avoid vacancies, deterioration, and eventual blight among older sections of town, new construction should be balanced with maintenance and renovation of existing buildings. To best accomplish this balance, the city may need to offer incentives to encourage inner city development.

The challenge faced by the City of Muscatine is finding the balance between investing in new developments or reinvesting in what the city already has. To remain competitive with other cities in the region the City of Muscatine must allow and encourage commercial development by providing adequate commercial and industrial property with good access to the City’s transportation system and utility services. Potential for commercial development exists along Highway 38, University, Mulberry Avenue, and Cedar Street. Future commercial development in these areas can be used to generate city tax revenue, expand employment opportunities, and increase shopping and entertainment alternatives for area residents as well as tourists and travelers. However, this growth
must not occur in a manner that will contribute to the further deterioration of downtown. Businesses that could feasibly operate in a downtown building should be given incentives to do so.

The Highway 61 Bypass, as it intersects with the city’s major arterial and collector roads, is expected to experience a growth of highway oriented commercial activity such as hotels, restaurants, convenience stores, and gas stations. This activity is supported largely by high volumes of traffic generated by Highway 61 and the lack of large-scale commercial sites located elsewhere in the city. Highway 61 is the main route into the City of Muscatine from the Quad Cities and many residents, as well as visitors, use this highway to access destinations within Muscatine. Therefore, it will continue to be a prime location for commercial growth. However, given the modest population and commercial growth in the area, it is not feasible to completely develop all vacant and agricultural land along this stretch of road in the near future. All future commercial growth should be limited to areas adjacent to existing development and in keeping with the development patterns adopted by the City Council and contained in the Highway 61 Bypass Land Use Plan.

To manage the growth along Highway 61, the City of Muscatine must be able to regulate the location, type, and quality of development. However, the City of Muscatine has limited jurisdiction of land development outside its boundary. There are several areas along the bypass that are not located within the corporate limits of Muscatine. These areas fall under the jurisdiction of Muscatine County, which does not have the same level of land use restrictions as the city. For the city to have full control of the type, quality, and nature of future land use, it must annex the appropriate growth areas prior to development activity.

Another area poised for commercial expansion, which will also require annexation, is the intersection of University Drive and Highway 61. Much of the land around this intersection is undeveloped and a prime location for a future business park and related services. For this to be feasible however, the City of Muscatine will need to extend its boundary as well as the needed municipal services to support such development. The annexations proposed for the City of Muscatine are divided into two phases. Phase I annexation areas are intended to occur within five years of adoption of the plan. The objectives for Phase I are:

- To annex areas of proposed growth along the Highway 61 Bypass, specifically at major intersections with the city’s arterial and collector roadways.

- To control the establishment of undesirable land uses or developments within or near the city boundary.

- To ensure that development in these areas comply with land uses and design standards desired by the City of Muscatine.

Phase II should occur after completion of Phase I, or 6 to 10 years after adoption of the plan. There is little or no development proposed for the land in Phase II. The purpose of annexing these areas is to prevent undesirable development close to the city boundary. Undesirable developments are those that affect the aesthetics of views from property within the city; are held to design standards less restrictive than are required by the City of Muscatine; contradict the Comprehensive Plan; are
noxious, a nuisance, or potentially harmful to the residents of Muscatine or the environment; or negatively affect the value of adjacent or nearby property.

Annexation

Annexation of any land into the City of Muscatine should be considered carefully. While each situation is different, the end result should provide specific benefits to the city. The areas of land highlighted in Phases I and II of the Growth Management Plan should not be the sole determining factor in deciding whether an area should be annexed. The following questions should be considered when examining an area for annexation:

1. Will the annexation lessen demand to develop in-fill property or redevelop existing buildings within the current city boundary?
2. Will the annexation place any encumbrances upon the city for expansion of roads or services?
3. Will the annexation permit the future development of one or more desirable land uses within the city?
4. Is the annexation in the best interest of the city as a whole?
5. Will the annexation bring existing land uses into the city that are desirable and have some benefit to the city in terms of revenue and/or image?

Overview of Recommended Annexation Criteria

*Will the annexation lessen demand to develop in-fill property or redevelop existing buildings within the current city boundary?*

The proposed areas of annexation may lessen demand to redevelop existing buildings and parcels within the city. The areas contained in Phase I are prime commercial areas. Over-promotion of the area’s desirability and potential for commercial development may attract existing downtown businesses and new establishments to locate along the highways. However, if the downtown area is maintained as a cultural and activity center, smaller scale and entertainment and service oriented businesses should continue to see the downtown as a desirable location. The entire City of Muscatine should be promoted from the start and should provide a balance of outlying as well as inner city sites to accommodate all types of development that is desirable within the community.

*Will the annexation place any encumbrances upon the city for expansion of roads or services?*

The costs the city will initially incur are minimal as most of the land proposed for annexation is vacant and/or agriculture. As development occurs expansion of the municipal sewer, water services and roadway system will be required to accommodate the new businesses and residents. However, these costs will be offset by the additional tax revenue that the development will generate and by requiring new development to help pay for the extension of water, sewer, and streets. The city is
also encouraged to seek other sources of funding to help pay for these costly services and infrastructure.

Will the annexation permit the future development of one or more desirable land uses within the city?

As stated above, the annexation is taking place to facilitate highway commercial, business park and new residential development. In addition to providing services and land uses the city needs, the proposed highway commercial activity is a high tax revenue generator.

Is the annexation in the best interest of the City as a whole?

To ensure the annexation is the right choice, there are specific procedures and requirements governed by the Iowa Code. Basically, the procedure of annexing unincorporated land in the State of Iowa can be summarized by two methods of annexation; Voluntary and Involuntary Annexation.

Under the voluntary method, residents in affected portions of Muscatine County petition the city and request annexation. The State Level City Development Board holds a public hearing and decides whether the annexation is reasonable. Up to 20% of the land being annexed can be included without the consent of the owner if it avoids the creation of an island or results in more uniform boundaries. These proposals require approval of 4/5’s of the City Development Board members after a hearing. Annexations are approved by resolution, which must include the legal description of the property. If several Muscatine residents submit written objections to the annexation or if the owner(s) of more than 20% of the land being annexed object the annexation proposal, the involuntary method of annexation must be utilized.

The City Development Board, a division of the state government, oversees all involuntary annexation issues to ensure they comply with the State Code. The involuntary method recommends the preparation of a plan of intent. There are 13 criteria, set by the Iowa Code, that the City Development Board must ensure are met with regard to all future annexation proposals. The plan of intent must delineate the area to be annexed and provide proof that the proposed annexation adjoins the city and does not create an island. The plan should also include a list and timeframe of all municipal services to be provided by the city to the annexed area, the tax rate of affected properties, and zoning districts to be applied. According to the State Code, the city must provide all applicable services within a “timely manner”. Generally, the City must agree that all roads will be improved to city standards, sanitary sewers will be installed and that adequate police and fire services are provided. Without these commitments, it is unlikely that the City Development Board will approve the annexation proposal. The plan of intent must then be presented at a public hearing. Following the public hearing, the City Development Board must either approve or deny the annexation. An election is then held in which all qualified voters in the city and in the subject area must vote separately on the annexation. If this vote fails, a second vote may be held. Currently all it takes is a simple majority of those voting to be successful.
The Iowa State Code should be consulted for full procedure and legal text regarding annexation.

Will the annexation bring existing land uses into the city that are desirable and have some benefit to the city in terms of revenue and/or image?

The purpose of the annexation is to bring developable land into the city limits. Most of the proposed annexation areas are vacant or agriculture. As with all future development, annexation areas should be restricted to locations that can provide good access to all necessary public services such as water, sewer and streets. The city should encourage the supply of a full range of housing types. Housing for the moderate-income family sector is in greatest demand within the community.

The anticipated or future use of the annexation must be closely analyzed to determine the immediate and long-range impact on the allocations of the City’s General Fund, the Road Use Tax, the cost/benefit of extending sanitary sewer and other municipal services. In addition to this analysis, the city must also consider the intrinsic values a possible annexation may bring. This would include the “peace of mind” knowing the City offers a wide range of development opportunities for all land use types and that the city’s development restrictions would apply to future growth areas. Although, there is no quantifiable value in having this knowledge or peace of mind, these issues must be addressed to minimize negative land use externalities often associated with unplanned developments.

The main objective of any annexation proposal should be to respond constructively to the plan and to consider all possible outcomes. Timing will be a critical factor in all annexation proposals. Partnerships between the City, property owners and developers should be established early in the process to help avoid unanticipated negative after or side affects during or throughout the implementation of the annexation. The annexation process will reveal the strengths and weaknesses of the city’s decision-making bodies. Equally important to the outcome of the annexation proposal, is that the spirit and integrity of the city’s decision-makers actions are professional and never compromised during the oftentimes controversial and emotional annexation process.

Summary

Of principle concern for the community is the proliferation of residential development scattered along fringe areas of the city limits, such as north of the Highway 61 Bypass. The other growth management concern for the City of Muscatine is being able to manage commercial growth within and adjacent to the city limits. To ensure that the quantity, type, and timing of development occur in a manner that is beneficial to the city, growth areas must be within the city’s control. Therefore, the City of Muscatine must annex areas in which growth needs to be managed.

The condition and location of Muscatine’s existing and planned infrastructure should influence the city’s policy of growth of annexation. Portions of unincorporated Muscatine County to the north, east and west of the city limits are identified as appropriate for annexation. The city should try to anticipate where most of the growth will occur, and supply utilities and infrastructure accordingly. However, the City should not stretch its resources. It is recommended that the City only expand into recommended urban growth areas with the infrastructure that it can afford.
PLANNING DISTRICTS

Planning districts are designed to divide the entire city into parts that are easier to describe, easier to see on the Future Land Use Map, and can be afforded more detailed recommendations. Policies recommended in district plans are for a shorter time frame than the Comprehensive Plan in general. While the Comprehensive Plan is intended to remain relevant for ten to twenty years, the planning district programs are intended for five to ten years. Both the Planning District recommendations and the more general Comprehensive Plan concepts can be updated and revised independently.

Six planning districts have been designated within the City of Muscatine Comprehensive Planning Area. They are the North Crescent, Geneva, Lincoln, River Center, Hershey and the Island Planning Districts. The planning district boundaries can be seen on the Planning District Map. The boundaries were determined by considering such factors as existing land use, topography, location, character, and major roads. This section provides detailed planning and development guidelines for each district. Some of the districts will suggest more of change than other districts. In areas where neighborhoods and businesses are stable, the programs intend to reinforce those conditions. Each district will identify appropriate land use areas and suggest policies to achieve the stated objectives.

Each Planning District provides unique challenges and opportunities for the city in terms of community character, development design, environmental impact, traffic movement, new development and neighborhood stabilization. The planning district recommendations and strategies are made an integral part of the Comprehensive Plan and provide additional planning information with the following purposes:

- to identify appropriate design controls that delineate and enhance the planning districts and coordinate development along corridors;

- to coordinate land uses in areas and corridors with existing transportation improvements and to encourage the planning of future improvements in conjunction with the scale of development in the districts;

- to enhance city gateways and entry points to encourage movement into and through the city by both residents and visitors; and

- to provide specific implementation techniques to coordinate district planning with the city’s development regulations.

The Planning District recommendations address general issues, design intent, site planning, vehicular access, building design, landscaping, signage and land development regulations. These recommendations are intended to guide applicants, staff and city decision-makers to site development projects and to guide the city in addressing future development. Future land use categories are presented as opposed to zoning categories to leave future conditions open to interpretation and allow flexibility in the decision making process. It is up to the decision makers to decide which zoning category fits the Future Land Use Plan as related to the goals and objectives of the comprehensive plan, the policy statements within the Planning District, and the context of existing and future conditions of the area.
General Planning District Policies

1. **Consistency with Master Plan.** Development should be consistent with the planned land uses. Where existing zoning is inconsistent with the Comprehensive Plan, the property should be rezoned to a consistent classification. Where less than an entire parcel is proposed for development, a concept plan for the entire parcel, including adjacent lands under common ownership should be submitted to the city for review.

2. **Nonconforming Uses and Structures.** The City should consider integrating the land uses and guidelines recommended in the Comprehensive Plan into the City’s Zoning Ordinance. Then existing uses and designs that do not comply with these guidelines and land uses should be considered non-conforming uses and/or structures and subject to the non-conforming provisions of the Zoning Ordinance.

3. **Land Planning Analysis.** As determined by the Planning and Zoning Commission, a land planning analysis may be required for development projects within any of the Planning Districts. This study shall be prepared in accordance with nationally recognized planning principles and urban design standards and shall assess the non-traffic related on-site and off-site impacts of the project, as well as the site design and layout. The city requires the expense for the planning study to be borne by the developer.

4. **Implementation.** The Planning District recommendations are a component of the Comprehensive Plan and should be implemented in conjunction with the city’s land development regulations. The recommendations are guidelines that are intended to help public and private decision-makers interpret the intent of the plan as specific development standards are applied to individual development parcels.

5. **Review and Amendment.** In order to assure that the District plans are applicable and current, residents, businesses or other interested parties may submit comments or suggestions to the Muscatine Planning and Zoning Commission each year on the anniversary of the adoption of the Muscatine Comprehensive Plan. If the Planning and Zoning Commission determines that amendment will be necessary or desirable, it may initiate an amendment. If the Planning and Zoning Commission concludes that amendment will not be necessary or desirable, it will prepare a brief report to the City Council explaining this conclusion. The City Council and/or Planning and Zoning Commission may initiate plan amendments at any time.

General Design Guidelines

**Land use.** Each of the Planning Districts is characterized by a mix of land uses which may include retail, commercial, office, neighborhood commercial, public, institutional, and residential uses. While a mixture of uses should be encouraged, it is important that the allocation of uses be clearly distributed and located. Each use will have somewhat different needs and requirements that should be considered in the respective plan.
Streets. Muscatine should maintain a balance between traffic movement and access to adjacent land development. Improvement projects such as signalization, intersection improvements or lane additions should be planned to reduce conflicts between through traffic and traffic accessing new or existing development. All street improvements should be coordinated with the Department of Public Works and the City’s Capital Improvements Program. New development should pay its share of the cost for all public improvements.

Sidewalks/Bikeways. Sidewalks and bikeways should be planned in accordance with the Parks, Recreation and Trailway Plan. With few exceptions, sidewalks should be constructed on both sides of residential streets, collectors and arterials. Pathways may be appropriate for rural arterials as determined by the Planning and Zoning Commission and City Engineer. Sidewalk widths may vary depending on the function and location of the roadway, but a minimum of 4 feet is recommended. All sidewalks should have curb cuts or ramps for the elderly and/or physically handicapped and be designed and constructed to conform to ADA requirements. Special sidewalk materials may be used to define and articulate key pedestrian areas.

Streetscape. Landscaping along public right-of-way should be implemented along major corridors, including street trees and median treatments. Public improvements such as sidewalks, curbs and gutters, streetlights and directional signage/graphics should also be provided. Overhead utility lines should be buried whenever practicable and all other utility improvements made as needed.

Access. Site access and internal circulation systems within major commercial, business and residential development should be designed to seamlessly and safely connect with the surrounding public street system. Their design should consider the direction of traffic flow to the site, the capacity of surrounding roadways, and any external improvements required to adequately serve vehicles entering or leaving the development area. Sight distance, potential limits on turning movements, the need for acceleration or deceleration lanes, and the availability of alternative access shall be considered when a request is made for direct arterial access. Access points on arterials and at intersections should be strictly limited. A traffic study should be required when the city anticipates that a development may reasonably create a public safety problem or other substantial off-site impacts.

Outdoor Storage. Outdoor storage areas should be screened and buffered from views along major traffic routes. Screens and buffers may include landscape berms, vegetation, walls or sight-proof fencing. Where possible, outdoor storage should be enclosed by walls that are consistent with the design and materials of the principal structure. These areas should also be located on-site away from view from the public rights-of-way.

Signage. Portable signs, temporary signs, and signs with moving parts or flashing lights should not be permitted outside buildings. Interior window signage or window painting advertising special sales and services should be avoided. Multi-tenant developments should establish coordinated site design standards to minimize clutter and establish a sense of project continuity. Applicants proposing the development of shopping centers, business and office centers and industrial parks should prepare and submit master signage plans to ensure that signage is cohesive, aesthetic, and harmonizes with adjacent development. The use of monument based signage is strongly encouraged.
INDIVIDUAL PLANNING DISTRICT DISCUSSIONS

The following is the description of the objective and strategies recommended for each Planning District. See also the Future Land Use Map in Planning District Map for a graphical representation of these recommendations.

NORTH CRESCENT PLANNING DISTRICT

The North Crescent Planning District is located outside the northern portion of the city limits. The district includes the land adjacent to the bypass (Highway 61) and State Highway 38. The area is generally undeveloped, open land with Mad Creek running through its center. Predominate land uses within the North Crescent Planning District are agriculture and residential. Some of the major residential neighborhoods located in the North Crescent Planning District include, Northwood Estates, Mark Twain Estates, Rolling Acres, Kent Estates, Mulberry Manor and Briman Prairie. The Muscatine Municipal Golf course and the proposed Whispering Pines Golf facility are both located within the North Crescent Planning District.

Although, low-density residential and agriculture are the most dominant existing land uses in the North Crescent Planning District, the most intense proposed land uses are general commercial & light industrial. The proposed commercial and industrial development areas within the North Crescent Planning District are concentrated at the intersections of University Drive, Isett Avenue, Tipton Road and Mulberry Avenue. The proposed commercial areas along Highway 61 should be used to cater to large-scale retail, limited highway commercial, automobile oriented goods and services, and other activities which require more space than is available elsewhere in the community. The purpose of designating these areas for future business and industry are multi-fold. First, is to capture potential customers using Highway 61 and Highway 38; second is to designate areas for economic development that can accommodate larger commercial operations; third; is to increase the city’s tax base through increased sales, property taxes, and increased property values; last, but certainly not least, is to accommodate business enterprises that provide goods, services and additional job opportunities to the residents of Muscatine. As mentioned in the Growth Management Section, annexation of the proposed business park, highway commercial and industrial land uses located along the Highway 61 Bypass is a priority.

There is already a considerable amount of land suitable for low-density residential within the City limits. However, future urban growth will create a demand for additional residential development outside the current city boundaries. The land availability and proximity to transportation, shopping and educational facilities make the North Crescent Planning District desirable for quality single-family residential development. There are several areas that have already been development and/or platted for future residential subdivisions. Annexing these areas will provide the existing and anticipated demand for additional moderate housing options within the community. The city should refer to the previous Growth Management and Annexation Sections and prioritize the future low-density residential areas depicted on the Future Land Use Map for immediate annexation. New residential subdivisions should only be permitted adjacent to the existing subdivisions to minimize costly utility extensions. There is a large mobile home park located in the North Crescent Planning District. Future mobile home or manufactured housing users should be directed to this location in lieu of developing additional clusters of mobile homes or manufactured housing units.
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The preservation of Mad Creek and the bluffs, forests and riparian areas that surround the creek is recommended. Tributaries, such as Mad Creek, offer fish and other aquatic animals a refuge from the Mississippi’s fast moving waters. The open space and natural corridor created by Mad Creek provides a perfect setting for a linear park system or greenbelt. Mad Creek corridor is a critical link to the city’s proposed trail system. Therefore, it is recommended that the city take steps toward the preservation and acquisition of this property for future park and recreational opportunities.

Communities who want to protect naturally significant or unique property have a variety of options. One option recommended in the Parks and Recreation Plan is the conservation easement. A conservation easement is a legal way for willing landowners to permanently protect their land from future development in order to preserve natural resources and open space. The owner retains title to the property, continued use of it (subject only to the easement restrictions), and the right to sell, lease or bequeath the property. Because the easement is granted in perpetuity and will apply to all future landowners, conservation easements provide permanent environmental protection for the land.

Objectives and Strategies for the North Crescent Planning District

The goals and objectives presented in the Comprehensive Plan represent the desired condition of the City of Muscatine as a whole. Within the North Crescent Planning District more specific objectives are outlined to define a vision for the area. Location specific strategies are then derived from the objectives to define the paragraphs above and guide decisions made by elected officials, the Planning and Zoning Commission and staff of the City of Muscatine.

North Crescent Planning District Objectives

- Transform State Highway 38 and Highway 61 (the bypass) into aesthetically pleasing corridors (gateways) leading into the city.
- Provide for highway oriented commercial growth and economic development opportunities.
- Plan for the annexation of both residential and commercial growth areas as depicted on the Future Land Use Map.
- Sustain and improve the current recreational opportunities available to the community.
- Provide for future business park expansion.

North Crescent Planning District Strategies

- Commercial areas on the northwest side of Highway 61 should be considered for immediate annexation.
- Annex future residential & commercial development areas outside the city limits, requiring developers to provide for the necessary utility and infrastructure improvements prior to
construction or further subdivisions of property. Solomon Avenue to the west and Bayfield Road to the north are reasonable Phase I annexation limits.

- Support the acquisition of property and/or rights-of-way for the establishment of the recommended neighborhood parks, Mad Creek Greenbelt, Mark Twain Trail and the Lyle Run Trail (See Parks & Recreation Map)

- All new residential subdivisions shall be required to install sidewalks.

- Encourage businesses with outdoor storage to relocate or screen their properties with a combination of trees, shrubs, landscape berms and/or architectural screening.

- Improve State Highway 38 to a three to five lane section to more efficiently and safely move traffic. Consideration should be given to installing a landscaped median to increase the safety, provide better access management and enhance the aesthetics of the roadway.

- Review subdivision plats to ensure new subdivisions are designed to the same urban standards as are required within the city.

- Ensure developments comply with the city’s Stormwater Impact Policy, which states the post development rate (of stormwater runoff) must be less than the pre-development rate for the one hour storm event between one year and two year intervals. *(Functional Equivalency)* It is recommended that all commercial, industrial, and residential development greater than 5 acres comply with this policy.

- The city should identify strategic areas along Mad Creek watershed that are suitable for the purpose of capturing and retaining excess runoff. The intent of this strategy is to reduce the intensity and severity of flash flooding in the developed downstream portions of Muscatine. Development that integrates aesthetic retention features such as ponds or lakes into site designs (with capacities beyond the city’s required Stormwater Impact Policy rates) is strongly encouraged.

- Prohibit development that would impede the future implementation of Mad Creek greenway.

- Plan for major intersection improvements, along major intersections with Highway 61. This would include prohibiting development or driveways within the functional area needed for the anticipated intersection improvements and taking steps towards procuring funding for said improvements. Include the Iowa Department of Transportation in all planning and land use decisions affecting future transportation improvements in these areas.

- Adhere to the access management and transportation improvement recommendations identified in the Transportation Management and Analysis section of the Comprehensive Plan.
GENEVA PLANNING DISTRICT

The Geneva Planning District is located south of the North Crescent Planning District and northwest of the River Center Planning District. The Highway 61 Bypass, Hershey Avenue, 11th Street and Mad Creek define the limits of the Geneva Planning District. Single family residential development makes up the largest portion of land use within the Geneva Planning District. There are also several areas that are designated as future multi-family, office, and neighborhood commercial sites. It is recommended that all multi-family, commercial and industrial development be reviewed to make sure it is compatible with the character of the established neighborhoods. The development of incompatible land use without sufficient buffering and/or screening should be avoided.

Many of the 850 Muscatine Community School District employees work in one of the seven public school facilities located in the Geneva Planning District. There are a number of additional public and private employment centers such as Heinz, the Federal Post Office, and the Unity Health System that also provide employment opportunities to Muscatine residents within the Geneva Planning District. These employment centers are critical to Muscatine’s economy. It is recommended the city take precautions to ensure these institutions and industries continue to provide quality employment and education opportunities to Muscatine residents.

Development that may create conditions that are unsafe or undesirable to the schools, or that negatively impact the safe and continued operation of an enterprise should be prohibited. A full impact analysis should be conducted for development proposed near school facilities. The analysis should include a review of the land use, traffic, and environmental impact any proposed use may have on the existing conditions. Development corridors or potential development corridors such as Mulberry Avenue and Cedar Street, can also greatly impact traffic operations. The city should adopt access management guidelines that will increase the capacity and maintain a high level of safety as these and other corridors develop. Specifically, the city should limit the number and width of access points that front on major arterials. Transportation studies should be required for developments that will significantly change or impact the current transportation system.

Several public facilities are located in the Geneva Planning District. They are as follows:

- Greenwood Cemetery
- Lucas Street Park
- Eversmeyer Park
- Oak Park
- Longview Park
- Fuller Memorial Park
- Mulberry School
- 7th Day Adv. Jr. Academy
- Muscatine High School
- McKinley School
- Grant School
- Bishop Hayes Catholic School
- West Middle School
OBJECTIVES AND STRATEGIES FOR THE GENEVA PLANNING DISTRICT

The goals and objectives for the Geneva Planning District are to provide improved traffic circulation and support the continued use and improvement of the existing residential, commercial and institutional developments located within this District. More specific objectives are outlined to help define a vision for the area. Location specific strategies are then derived from the district objectives to guide future land use and development decisions.

**Geneva Planning District Objectives**

- Allow new commercial, residential and industrial development to occur in the areas shown on the Future Land Use Map.
- Provide a broader selection of new housing options within the City of Muscatine.
- Improve pedestrian accessibility throughout the Geneva Planning District.
- Provide better accessibility to current and future commercial and residential development, while maximizing the utilization and quality of the residential neighborhoods and parks located in the area.

**Geneva Planning District Strategies**

- Requests for land use changes to the City of Muscatine’s Zoning District Map should be consistent with the proposed land uses illustrated on the Future Land Use Map.
- Ensure the appearance, safety and maintenance of all institutional uses and facilities, including, but not limited to the public schools and parks, do not detract from adjacent uses.
- The entrance to Unity Hospital from Mulberry Avenue is an aesthetic enhancement that must be preserved. The level of buffering and quality of entrance features at this location should be throughout the city.
- Permit the development of “Neighborhood Commercial” establishments as shown on the map or where neighborhood commercial development opportunities are appropriate as planned developments.
- Comply with the urban design and land use recommendations concerning Commercial Districts and Neighborhood Commercial Districts as stated in the Commercial Land Use Development Guidelines Section. Special attention should be given to businesses located along the Cedar Street corridor.
- Establish a commercial use area at Mulberry Avenue and Highway 61 to accommodate limited highway-oriented and neighborhood commercial growth opportunities.
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- Plan for major intersection improvements, along major intersections with Highway 61. This would include prohibiting development or driveways within the functional area needed for the anticipated intersection improvements and taking steps towards procuring funding for said improvements. Include the Iowa Department of Transportation in all planning and land use decisions affecting future transportation improvements.

- Adhere to the access management and transportation improvement recommendations identified in the Transportation Management and Analysis section of the Comprehensive Plan.

- Planned residential development, consisting of a variety of housing types, styles and lot sizes is recommended adjacent to the Geneva Golf Course and close to the Muscatine High School.

- Improve Cedar Street from a two-lane to a three-lane median separated section. Continuing development along this corridor will lead to increasing traffic volumes and safety concerns. There are currently traffic concerns at the intersection of Fulliam and Cedar Street.

- Improve the intersection of Isett Avenue and Bidwell Road. Given the anticipated capacity concerns at this intersection, the City should strive to improve the signalization at this intersection and explore geometric improvements.

- Extend Logan Street to Tipton Road. Any proposed development that impedes the extension of Logan Road or its alignment with Mulberry Avenue or Tipton Road should be prohibited.

- Public art, distinctive building designs, unique landscaping and/or lighting schemes should be encouraged at the commercial service area proposed at the intersection of Mulberry and the Highway 61 Bypass.

- Install a loop trail (Hi-Y Loop) and all other proposed bike paths, greenbelts and sidewalks. These serve as park and recreational amenities, meanwhile, they are also necessary in creating pedestrian connections to employment and activity centers throughout the city. Refer to the Parks and Recreation Map.

- Develop neighborhood park facilities as depicted on the Proposed Land Use Map and described in the Parks and Recreation Section. The City should take steps towards the purchase and/or lease of the property located within the vicinity of the proposed neighborhood park locations as shown on the Future Land Use Map.

- Construct a Family Aquatic center at or near Fuller Memorial Park, as an alternative to locating the aquatic center at Weed Park.

- Improve parking availability and pedestrian access along Cedar Street between Houser Street and Tipton Road to accommodate events at the High School, the Carver Swim Facility, and the Community Y.
• Encourage businesses with outdoor storage to relocate or buffer their properties with a combination of trees, shrubs, landscape berms and/or architectural screening.

• New residential construction should be permitted, as needed, in the areas designated for proposed residential land use. Multi-family, including attached single family, shall be limited to the areas designated “Multi-family” on the Future Land Use Map.

• Maintain and monitor the housing conditions and safety of the neighborhoods, especially those adjacent to City parks and public use areas. This area should be monitored to ensure that actions taken as a result of the Housing Program, have direct, positive affects on the conditions of the housing stock.

• All new residential subdivisions shall be required to install sidewalks.

• Ensure developments comply with the city’s Stormwater Impact Policy, which states the post development rate (of stormwater runoff) must be less than the pre-development rate for the one hour storm event between one year and two year intervals. (Functional Equivalency) It is recommended that all commercial, industrial, and residential land developments 5 acres or larger comply with this policy.

**LINCOLN PLANNING DISTRICT**

The Lincoln Planning District is located south of the North Crescent Planning District and east of the Geneva and River Center Planning Districts. This Planning District represents the widest spectrum of land uses ranging from heavy industrial to rural residential. The two most heavily traveled roadways, Highway 38 and the Highway 61 Bypass, intersect in Lincoln Planning District. Currently there is some traffic congestion at the intersection of these two major traffic routes.

Local destination centers along Park Avenue such as Walgreens, the Muscatine Mall, and several restaurants attract high volumes of local traffic. Future development along Park Avenue, should follow the access management standards established in the Transportation Management & Analysis Section of the Comprehensive Plan. The City should limit the turning movement along the northern portions of Park Avenue by minimizing the number and width of access points. Traffic studies should be required for developments that will significantly change or impact the current transportation system.

Due to the amount of vacant land and proximity to major traffic corridors, future commercial/industrial growth and traffic circulation are the main issues in the Lincoln Planning District. The proposed commercial areas within the Lincoln Planning district comprise of the largest contiguous portion of commercial land within the city. This development pattern was recommended due to the areas excellent accessibility and proximity to Highway 61 and State Highway 38. Development of the area will not conflict with residential uses or create traffic congestion on the City’s local streets. Refer to the Business Park Development Strategies in the previous Section for specific guidelines and strategies for the development of a business park in this district. It is recommended that commercial development be permitted where Park Avenue and University Drive intersect Highway 61. Development in these areas should consist of large-scale highway oriented commercial
facilities. In addition to the expanded commercial and industrial land uses in this district, it is recommended that the residential areas along Colorado be expanded to encompass Weed Park and continue west toward Solomon Avenue.

Some of the significant features located in the Lincoln Planning District include:
- Weed Park
- Oak Park
- Muscatine Community College
- Colorado School
- Madison School
- All-Steel
- Bandag Learning Center
- Muscatine Public Works Facility
- Hy-Vee
- Mad Creek Greenbelt

Objectives and Strategies for the Lincoln Planning District

The goals and objectives presented in the Comprehensive Plan represent the desired condition of the City of Muscatine as a whole. Within the Lincoln City Planning District more specific objectives are outlined to define a vision for the area. Location specific strategies are then derived from the objectives to define the paragraphs above and guide decisions made by elected officials, Planning and Zoning Commission and staff of the City of Muscatine.

Lincoln Planning District Objectives

- Improve road conditions and pedestrian and vehicular circulation.
- Encourage businesses to occupy and improve existing commercial and industrial development in this district.
- Improve traffic circulation to facilitate ingress and egress to Muscatine’s businesses, employment centers, neighborhoods and other points of interest.

Lincoln Planning District Strategies

- Requests for land use changes to the City of Muscatine’s Zoning District Map should be consistent with the proposed land uses illustrated on the Future Land Use Map.
- Public art, distinctive building designs, unique landscaping and/or lighting schemes should be encouraged along Park Avenue to create a pleasing entrance (gateway promenade) into the downtown.
- Comply with the applicable urban design and land use recommendations as stated in the Commercial Land Use Development Guidelines Section of the Comprehensive Plan.
- Commercial and industrial properties along Highway 61, between University Avenue and Park Avenue, should be revitalized and/or developed to create an aesthetically pleasing gateway corridor leading into the city. Gateways serve as a focal point, and can consist of monument structures, distinctive building designs or unique landscaping and lighting schemes.

- Plan for major intersection improvements at the intersections of major roadways and the Highway 61 Bypass. This would include prohibiting development or driveways within the functional area needed for the anticipated intersection improvements and taking steps towards procuring funding for said improvements. Consideration should be given to installing a full access overpass or single-point interchange at these locations. The Iowa Department of Transportation should be involved in all planning and land use decisions affecting future transportation improvements to these areas.

- Adhere to the access management and transportation improvement recommendations identified in the Transportation Management and Analysis section of the Comprehensive Plan.

- Address intersection, site distance and access problems along Park Avenue. The design and construction of the needed improvements to the intersection at Cleveland Street into Wendy’s Restaurant should be a high priority.

- Restrict left turn movements on drives onto the northern portions of Park Avenue by installing channelization and signage permitting right-in and right-out turning movements only.

- Eliminate redundant curb cuts providing multiple egress/ingress to commercial development along Park Avenue.

- Reconfigure Park Avenue to a three to four lane median divided roadway with median breaks providing access to major points of access.

- Extend Ford Avenue to University Drive. Any proposed development that impedes the extension or alignment with University Drive should be prohibited.

- Straighten Colorado Street east of Park Avenue. Colorado Street currently makes two sharp turns which create conditions that are contrary to drivers’ expectations.

- Maintain and monitor the housing conditions and safety of the neighborhoods, especially those adjacent to City parks and public use areas. Neighborhoods should be monitored to ensure that actions taken as a result of the Housing Program, have direct, positive affects on the conditions of the housing stock.

- Ongoing occupancy and maintenance of the residential properties in this district should be a priority, while the conversion of single-family homes to multi-family should be prohibited.

- Encourage the occupancy and/or improvement of all existing commercial facilities located along Park Avenue.
• Create gateway features, including public art, landscaping and signage, in the areas depicted in the Future Land Use Map.

• Preserve the riparian/watershed areas of Mad Creek. The City should take steps towards the purchase/lease of this property and set it aside for a passive greenway system linked to Riverfront Park.

• The City should identify strategic areas along Mad Creek watershed that are suitable for the purpose of capturing and retaining excess runoff. The intent of this policy is to reduce the intensity and severity of flash flooding in the developed downstream portions of Muscatine. Development that integrate aesthetic retention features such as ponds, lakes or other water features into their site designs, with capacities beyond the city required functional equivalency, should be strongly encouraged.

• The City should support the expansion, including the acquisition of adjacent land, and public use of Weed Park. A Family Aquatic Center, consisting of a lazy river, leisure pool, and aquatic play equipment is recommended either at Weed Park or Fuller Memorial Park.

• Install the River Trail and Colorado Branch Trail and all sidewalks as necessary to create the pedestrian connections and greenbelt system as depicted on the Parks and Recreation Map.

• Ensure developments comply with the city’s Stormwater Impact Policy, which states the post development rate (of stormwater runoff) must be less than the pre-development rate for the one hour storm event between one year and two year intervals. (Functional Equivalency) It is recommend that all commercial, industrial, and residential land developments 5 acres or greater comply with this policy.

**HERSHEY PLANNING DISTRICT**

The Hershey Planning District is located just south of the River Center and Geneva Planning Districts. The planning limits are defined by Lucas Street, Kemper Avenue, Houser Street and the Highway 61 Bypass. Single family residential, park and industrial land uses make up the majority of the proposed land uses. The industrial growth areas were selected due to their close proximity to transportation systems and natural buffering between established residential neighborhoods. There is a major multi-family development area designated within the Hershey Planning District. Future multi-family development must be of high quality, which would include large areas of green space, screened parking and dumpster areas and professional landscaping. All future development adjacent to dissimilar uses must provide buffering, adequate in quality and quantity, to shield existing and future land use impacts.

Grandview Avenue is the major commercial corridor located in the Hershey Planning District. Special attention must be given to the planning, zoning and design requirements within this corridor to ensure high occupancy rates and mindful land use decisions. Currently there are several structures and parcels that are vacant and/or in need of modernization. Unlike the buildings downtown, the structures along Grandview Avenue generally are not historic or architecturally
significant. Therefore, if the cost to renovate an existing building exceeds new construction, new construction is recommended. All new construction should comply with the commercial design guidelines.

Grandview Avenue provides a primary entrance into the downtown central business district. It is recommended that the design criteria and development types established for the River Center District should begin on both sides of Grandview Avenue beginning at the Carver Pump site (Hershey Avenue) and continue along Mississippi Avenue into the downtown.

Several features of this planning district that must be considered in future land use decisions are:
- Muscatine Slough
- Kent Stein Park
- Soccer Complex
- River Trail
- Musser Park
- John Duncan Memorial Park
- Sunset Park (public housing development)
- Water Pollution Control Plant
- Garfield School
- Franklin School

**Objectives and Strategies for the Hershey Planning District**

The goals and objectives presented in the Comprehensive Plan represent the desired condition of the City of Muscatine as a whole. Within Hershey Planning District more specific objectives are outlined to define a vision for the area. Location strategies are then derived from the objectives to define the paragraphs above and guide decisions made by elected officials and staff of the City of Muscatine.

**Hershey Planning District Objectives**

- Maximize the utilization and improvement of commercial facilities located along Grandview Avenue.

- Improve road conditions to allow better vehicular circulation.

- Convert Grandview Avenue into a gateway corridor leading to Downtown Muscatine.

- Provide road improvements that help separate truck/commercial traffic, local vehicular traffic and pedestrian travel.

**Hershey Planning District Strategies**

- Requests for land use changes to the City of Muscatine’s Zoning District Map should be consistent with the proposed land uses illustrated on the Future Land Use Map.
• Comply with the applicable urban design and land use recommendations as stated in the Commercial Land Use Development Guidelines Section of the Comprehensive Plan.

• Begin planning for future commercial development at the Hershey Avenue/Highway 61 intersection. This area may require the installation of slip ramps to allow vehicles to safely enter and exit Highway 61.

• Purchase or lease additional property adjacent to Musser Park and expand the park facility to include vacant land between it and Riverfront Park. See the Parks and Recreation Plan.

• Install the recommended pedestrian circulation routes and landscaping as depicted on the Parks & Recreation Map.

• Improve the geometrics and realign Grandview Avenue at the intersection with Hershey Avenue. Consideration should be given to the installation of a roundabout.

• Create a gateway feature at the intersection of Grandview Avenue and Hershey Avenue. The Carver Pump site and/or a roundabout should be utilized as focal point, consisting of monument structures, fountains, distinctive pavement features and unique landscaping and lighting schemes.

• Provide the road and sidewalk improvements as depicted on the Future Land Use Map in conjunction with or prior to new development.

• Some of the residences south of Hershey Avenue may become or have reached a degree of dilapidation. This area should be monitored to ensure that actions taken as a result of the Housing Program, have direct, positive affects on the conditions of the housing stock.

• Ongoing occupancy and maintenance of the residential properties in this district should be a priority, while the conversion of single-family homes to multi-family should be prohibited.

**ISLAND PLANNING DISTRICT**

The Island Planning District is located to the south of the North Crescent and Hershey Planning Districts and to the west of the Geneva Planning District. Several features make this District unique. First, the Muscatine Slough separates the Island Planning District from the city’s urban core, hence the title “Island Planning District”. Highway 61 cuts diagonally through the center of the planning district as it bypasses the city core at the Grandview Avenue intersection. Other noteworthy features in the Island Planning District include the gravel pits, the Muscatine Municipal Airport, Muscatine Power and Water, Muscatine Power Plant, well fields and several industrial users located in Progress Park.

The Island Planning District is protected from the river by a levee. No surface run-off can penetrate the levee. Most stormwater runoff is collected by the Muscatine Slough and the gravel pits. These natural features also provide habitat to diverse populations of wildlife. Therefore, the impact of
existing and future uses must be measured to minimize the destruction of these sensitive ecosystems. Existing and future land uses must also be monitored to ensure the City’s water supply is protected. There are also two wetlands located along the Muscatine Slough. These represent the only recognized wetland areas within the city. Neither of these wetlands is significant in size. Small wetlands limit the sustainability of dynamic wetland ecosystems. Therefore, it is recommended that the City take steps towards increasing the overall size of its contiguous wetlands, as opposed to preserving several small wetland areas. One alternative is to consolidate the two wetland areas together to provide a single, much larger, wetland area that could be used for future mitigation.

Although the Island Planning District is rich in natural features, the area is void of public parks or facilities. Due to the lack of parks and the steady increase of residential development activity, it is recommended that the city set land aside for parks and recreational facilities. Although, the gravel pits pose a development constraint to future industry, they provide natural amenities and play a major role in stormwater retention. Therefore, it is recommended that the gravel pits are preserved for future park and recreational opportunities. There are several proposed trail segments located in the Island Planning District that are critical to the completion of the city’s overall greenbelt system. These include the Lyle Run Branch and the Hoover Trail, which are components of the Treadways, as well as the proposed Mississippi River Trail and Muscatine Slough Trail. Action must be taken early to ensure the property and rights-of-way needed to complete these trail segments are acquired prior to or in conjunction with future development activity.

Objectives and Strategies for the Island Planning District

The goals and objectives presented in the Comprehensive Plan represent the desired condition of the City of Muscatine as a whole. Within the Island Planning District more specific objectives are outlined to define a vision for the area. Location specific strategies are then derived from the objectives to define the paragraphs above and guide decisions made by elected officials, the Planning and Zoning Commission and staff of the City of Muscatine.

Island Planning District Objectives

- Monitor existing and proposed industrial development for compliance with local, state, and federal regulations.

- Exploit the unique natural features of the Island Planning District through the development of greenbelts, parks and trails.

- Encourage business to occupy and develop the commercial and industrial development areas designated for this district.

- Protect the natural resources, including the city’s water supply in the Island Planning District.
Island Planning District Strategies

- Requests for land use changes to the City of Muscatine’s Zoning District Map should be consistent with the proposed land uses illustrated on the Future Land Use Map.

- New development and/or improvements that are highly visible from major roadways, such as Grandview Avenue and Highway 61, should comply with the applicable urban design and land use recommendations as stated in the Commercial Land Use Development Guidelines Section of the Comprehensive Plan.

- Review directional signage and access to/from Highway 61 to reduce traffic volumes on Grandview Avenue. The City should explore traffic flow options to determine if some traffic could be encouraged to access portions of the downtown from roadways other than from Grandview Avenue.

- Driveway access onto Grandview Avenue should be limited. Driveways should be across from each other whenever possible. When driveways to major traffic generators are not lined up, the minimum spacing of 125’ should be provided from the closest driveway on either side of the road, except where a non-traversable (e.g. raised) median exists.

- Ensure all land uses are serviced by the city’s municipal sanitary and storm sewer system by continuing the expansion of the city’s municipal sewer system in the Island Planning District.

- Provide the necessary geometric and signalization improvements to the intersections of the Highway 61 and 49th Street, 41st Street and Hershey Avenue. Improve the traffic flow at Grandview and the Bypass. Currently the major flow of traffic must yield to the minor flow of traffic. Reconfigure this intersection to provide better traffic flow, possibly eliminating the need for bypass traffic to stop.

- All primary utility services must be provided to existing and future industrial operations and monitored by the city, or appropriate agency, annually. (Or more frequently if needed)

- Make necessary airport improvements to the runways and increase the capacity of the facility, as needed, for both economic development and transportation purposes.

- Procure ownership or rights-of-way for future neighborhood parks (5 acres or more), trails, and greenways in the areas identified on the Parks and Recreation Map.

- Complete the installation of the Mississippi River trail and all other trails and sidewalks improvements necessary in creating the planned pedestrian connections as depicted on the Parks and Recreation Map.

- Monitor the water quality of the sand pits and take steps towards their preservation and conversion to a passive nature park.
River Center Planning District

Although, the River Center Planning District has few undeveloped parcels, in-fill development of both residential and commercial areas can occur. Developers should be encouraged to adaptively reuse historic structures or construct in-fill structures that are cohesive in both scale and design with the existing architectural character. Where in-fill or the removal of existing structures are proposed, the City should employ a design review committee to ensure the desired design continuity is achieved.

Due to the limited amount of undeveloped property within the River Center Planning District, the City must review proposed users and their business plans to ensure the proposed use is compatible with the existing uses. In the past, downtown Muscatine has experienced high turnover rates with business enterprises. The City, in conjunction with business organizations, must play a proactive role in recruiting and retaining businesses in the Central Business District. These efforts will minimize turnover rates and help establish a vibrant downtown atmosphere. Feedback from the public participation exercises yielded several potential uses that are needed in the River Center District, such as hospitality services, specialty shops, and entertainment.

Due to the uniqueness of this planning district it is recommended the City adopt a planned commercial district or historic overlay district that will help tailor the types of development permitted in this district to preserve its historic character. Planned districts and overlays provide a level of flexibility to help new development blend in with the site layout, design and building configurations used during the period the River Center was first developed.

Although the Central Business District is located in this planning area, older, urban-style residential land uses dominate the River Center Planning District. Many of the homes along the bluff areas portray distinct architectural styles as they overlook the Mississippi River. As indicated in the Housing Strategies, these homes are often the most difficult and costly to maintain. It is recommended these historic residential landmarks be maintained, and do not become dilapidated or converted to rental units.

Significant land uses located within the River Center Planning District Include:

- Jefferson School
- Central Middle School
- 4th Street Park
- Brook Street Park
- Riverfront Park
- County Courthouse
- County Jail
- Muscatine Art Center
- City Hall
- Municipal Boat Harbor
- HON Industries
- Downtown
- Musser Public Library
Objectives and Strategies for the River Center Planning District

The goal is to keep the traditional feel of a historic downtown, while trying to adapt it as a business district in fierce competition with highway developments located in other parts of town. More specific objectives are outlined below to define a vision for the area. Location specific policy statements are then derived from the district objectives to guide decisions made by elected officials and City Staff.

River Center Planning District Objectives

- Encourage the preservation of the historic character of the River Center Planning District.
- Promote the utilization and commercial revitalization of the River Center businesses.
- Energize the social atmosphere of the River Center.
- Improve pedestrian and vehicular circulation and parking within the River Center District.

River Center Planning District Strategies

- The River Center Planning District should be utilized as a unique cultural district with an emphasis on entertainment, tourism, and office with mixed residential and commercial land uses.
- Improve parking availability in the Central Business District.
- Encourage proposed businesses to adaptively reuse historic structures or construct in-fill structures with two stories of usable space that are compatible with existing historic structures.
- New construction shall be designed to blend with the historic character of downtown Muscatine. Refer to the urban design principles and land use recommendations stated in the Commercial Land Use Development Guidelines Section of the Comprehensive Plan.
- Comply with the urban design principles and land use recommendations of the Comprehensive Plan.
- Requests for land use changes to the City of Muscatine’s Zoning District Map should be consistent with the proposed land uses illustrated on the Future Land Use Map. The Riverfront Park area should be rezoned from light Industrial to an open space/recreation district.
Commercial development in the Central Business District should be restricted to boutique style hospitality, entertainment, and retail services.

When buildings have two occupied stories, ground floors should have retail, restaurants, and entertainment establishments, while upper floors are used for office space and apartments.

Incorporate trees, planter boxes, and ornamental light posts along the pedestrian use and parking areas.

Encourage the use of street fronts, sidewalks and the development of outdoor plazas for outdoor dining, entertainment, and shopping activities.

Create a defining feature memorializing Muscatine’s historic downtown and riverfront at each major street as it approaches the River Center Planning District.

Develop a central theme or unifying design criteria to create continuity between the existing historic infrastructure and development and renovations.

Install the recommended sidewalk and trail improvements, as shown on the Parks & Recreation Map. These improvements must be undertaken to provide a more comprehensive sidewalk network with links to activity centers.

A stronger pedestrian connection should be made from the downtown to the riverfront.

Redevelopment and in-fill of vacant properties is encouraged.

Encourage the introduction of more river-oriented entertainment.

Develop the riverfront area into a regional attraction or destination center memorializing the history of Muscatine and the significance of the Mississippi River and the adjacent railroad tracks.

Install sidewalks, streetlights, landscaping and other site amenities along the riverfront area.

Resurface and provide additional infrastructure improvements to Iowa Avenue and 2nd Street.

Preserve the unused rights-of-way along the bluff area and discourage development that obscures the viewshed of the Mississippi River.

All vehicular use areas shall be paved with a dust fee surface. Paving the gravel parking lot behind the County Courthouse should be a priority.

Raise the elevation of Mississippi Drive to provide better flood protection to downtown and restrict turning movements along Mississippi Drive through the installation of a raised median
complete with professional landscaping, irrigation, decorative light standards and landscape lighting.

- Create a special assessment district to assist in the installation of adequate public improvements such as public parking facilities, streetscape enhancements, modernization of utilities, installation of fiber optics, etc. In addition to sustaining the downtown’s appeal and competitiveness, the special assessment district is specifically recommended to avoid the removal of historic buildings and other irreversible development trends that compromise the historic character of the downtown.

- The city, in partnership with local businesses and local, state and federal agencies, should work together to provide incentives for improving the development conditions in the River Center Planning District.

- A Self-Supported Municipal Improvement District (SSMID) should also be explored as a viable means of establishing a long-term means of generating revenue to support downtown revitalization efforts.
APPENDIX A: PUBLIC PARTICIPATION

The preparation of the Muscatine Comprehensive Plan benefited from a variety of public participation processing which included the following:

- Town Planning Charrette I included over 50 participants divided into 10 teams and addressed the residential neighborhoods and the community as a whole.
- Town Planning Charrette II included approximately 40 participants divided into 8 teams and addressed the “Business Development and Economic Stability” of the City.
- Stakeholder Interviews were conducted with thirteen individuals in the community.
- A Goal Setting Workshop was held with the Steering Committee, Planning Commission and City Council.

The following is a summary of each of the public participation events.

THE TOWN PLANNING CHARRETTE I SUMMARY

The Town Planning Charrette is used extensively within the master planning and strategic planning processes to involve concerned citizens, organizations, and decision-making bodies within the community. The planning workshops involve both evening and day sessions to offer flexibility and foster the greatest amount of participation and creative discussion, strategizing, and networking. These inspiring planning programs are tailored to the non-planning/design citizens of a community, and present an exciting, teamwork-based mechanism for identifying problems and solutions.

The Town Planning Charrette Process

The first step in the Town Planning Charrette Process is identifying the planning area. A map of the City depicting the limits of the project area was provided to each team participating in the Charrette. Groups were encouraged to use the map to visually present their ideas, visions and concerns. To ensure the ideas and concerns discussed were relevant to the planning process at hand, the participants were provided specific instruction of the intent and purpose of the workshop.

The second step was to invite a representative portion of the community. A community such as Muscatine, with a population of over 23,000, should strive for 30-80 participants. The intent was to invite a wide range of individuals ranging from school officials, city staff, business leaders, residents and students—the future of your city. To better attract volunteer participation and generate awareness of the Town Planning Charrette, public notices were mailed and otherwise distributed to a representative portion of the community. The most important goal in conducting an effective public participation event for the City of Muscatine was to get a well-informed, dynamic cross representation of the community.
The third step was educating and increasing awareness of the planning process. It was important to acknowledge that the Town Planning Charettes were a part of the process in developing an update to the 1968 Comprehensive Plan. Participants were informed of their role in the Town Planning Charrette Process and familiarized with the tools used to identify problems and opportunities. It was important that all participants and group discussion topics were recorded for future analysis and consideration. Many times inviting a specialized group, relating to the issue at hand, is quite helpful.

The fourth step was to identify the issues, problems and opportunities. Charrette participants were advised that they have to be aware of the issues and problems, before they can come up with a solution. If a solution is derived without knowing all the problems or issues, the solution could result in undesired side or after affects.

The fifth step was to plan and analyze possible scenarios. Participants were asked to visualize what type of place they would like Muscatine to become. Visioning what the City “could be” was an important component of the Town Planning Process. This information provided critical feedback as to how the community wants to grow and develop. Although these visions may not all be realized, they provided a direction or target for the City’s long range planning efforts.

The sixth step was to survey the results. Information was recorded on Maps of the project area, worksheets and on individual surveys. Teams were directed to present their findings on either the project map and/or on the worksheet. Additionally, surveys were given to each participant to provide a more personalized anonymous medium for retrieving information. All of the information recorded was combined and consolidated into one document for future reference.

The seventh step was to make the outcome official. This involved incorporating the Town Planning Charrette findings into the adopted Plan.

Format of the Muscatine Town Planning Charrette

The workshop was structured around teams of randomly selected participants. Teams were formed as participants signed into the workshop. This procedure allows for a mix of team members and not teams composed of persons participating together with similar interest. Each of the teams that were formed had a unique and specific program. Although several teams may have shared similar questions or approaches to the questions, each scenario was different. Some questions were the same for all groups in order to obtain the maximum input on the particular question or subject. If only one team was given a set of questions, some responses would be skewed inappropriately, or if a question was misunderstood by one team but not the other than the question would not be judged unfairly. It was not intended that the questions had a right or wrong answer but that it assisted in facilitating a dialogue among the team members that would reflect a clear vision for the community and potential solutions to issues that may arise. The questions additionally reflect the latest issues that relate to neighborhood development within the City of Muscatine and the County of Muscatine.

The City of Muscatine scheduled the first Town Planning Charrette for Saturday, April 7, 2001 at the Bandag Corporate Training Center. Registration for the Charrette started at 8:00 am and was followed by a four (4) hour interactive workshop. The Charrette was entitled “Residential
Neighborhoods and Our Community” and concentrated on housing, parks and transportation issues. The second workshop concentrated on economic development.

The workshop was divided into two (2) parts that were intended to promote the participation of attendees by providing an appropriate setting to for the exchange of ideas. This forum consisted of facilitated discussion groups, which followed questions presented to groups individually. The groups were allowed to answer the questions at their own pace. This format has proven to be an enjoyable and fair method to ensure all participants are given ample opportunity to comment and discuss issues in which they have expertise or an opinion upon. At the end of the team discussions, all participants were given the opportunity to hear the responses from other groups as part of a team summary session at the conclusion of the workshop.

**ISSUES RAISED DURING TOWN PLANNING CHARRETTE I**

Charrette participants were asked a series of questions relating to the residential neighborhoods within the community. The following is a summation of the questions asked and a brief analysis of the findings recorded during the first Muscatine Town Planning Charrette. Following the summary of each discussion topic is a list of the most popular team responses. This information will help define the problems and opportunities within the community and identify the critical issues that must be addressed in the Comprehensive Plan. A strong understanding of the City’s critical issues will facilitate the development of goals, objectives and policies that effectively direct the future growth and development of the City of Muscatine.
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Results of the City of Muscatine Community Town Planning Charrette I:

“Residential Neighborhoods and Our Community”

The following paragraphs summarize the findings of the 10 teams, (representing over 50 participants) who responded to the 19 discussion topics and urban design issues presented during the first Community Town Planning Charrette which was conducted by Bucher, Willis & Ratliff Corporation. A complete compilation of all the team’s responses is provided at the end of this document.
1.0 Problem Areas

All ten teams were asked to identify problem areas in Muscatine’s neighborhoods relating to housing conditions, traffic congestion, parking, access, visibility, image, and the environment. There were a number of issues regarding the City of Muscatine’s housing stock, transportation systems and overall image of the community that were raised during the Town Planning Charrette. The teams suggested that poorly maintained properties is a major problem contributing to the City’s image and sub-standard housing conditions. The preservation of architecturally significant structures and the revitalization of vacant properties and renter occupied housing units should be a priority according to Charrette participants. Below is a highlight of the teams’ responses.

1.1 Housing Conditions:
- Housing development outside City limits is a problem.
- Conversion of single family homes to multi-family rental units negatively impacts the neighborhood character.
- Modifications to properties that decrease property values should be regulated and/or prohibited.
- Better property maintenance/code enforcement needed.

1.2 Traffic Congested Areas:
- 2nd Avenue (Downtown)
- Park Avenue (Rte 38/22) and 2nd Street
- Cleveland Street and Park Ave.
- Hwy 61 and Hwy 38 intersection
- 67th Ave and Grandview (Hwy 61)
- 49th Ave and Grandview (Hwy 61)
- Hershey and Grandview (Hwy 61)
- Cedar and Grandview (Hwy 61)
- Cedar Street Corridor
- Mulberry Corridor

1.3 Traffic Problems:
- Lack of thoroughfare connecting to residential areas
- Lack of public transit and taxi service
- Railroad crossings (Signals)
- Street maintenance is behind (Hershey & Grandview)
- Design & safety concerns at the by-pass
- Streets are too narrow poorly laid out

1.4 Parking Problems:
- Parking Downtown- very limited due to tenant (residential) parking
- Residential parking in older neighborhoods.
- Lack of off-street parking.
- Gravel parking lot in downtown- needs to be surfaced.
1.5 Access Problems:

- Access/traffic problems exist around all of the schools.
- Side Streets entering E. 5th Street.
- Street alignment at the Carver Pump Corner needs improvement.
- Limited access should be maintained to the Highway 61 By-Pass.
- Access from Wendy’s to Cleveland (Cleveland Street and Park Avenue)
- Cross-town access: Cedar to Mulberry, Mulberry Street to Bidwell, and access to Houser Street

1.6 Visibility/Image Problems:

- Utility poles on intersections.
- Perception that we are a “dirty river town”.
- Downtown- on the cusp of redevelopment and deterioration.
- Lack of focus on downtown redevelopment.
- Appearance problems- South End (Hershey), Downtown, north side of town.
- Neighborhoods and schools are getting old (3rd oldest districts).
- Limited ability to sustain a large retail market: limited selection of retail opportunities.
- Low wage scale- high cost of housing
- Need to develop a plan for long range redevelopment of Highway 61.
- Lack of planned development- new construction “just happens” has no continuity with its surrounding.

1.7 Environmental Issues

- Hershey environmental conditions (Odor/USTS).
- Many vacant/abandoned commercial properties (Lincoln/Hershey).
- UST contamination and Brownfield properties.
- Past practices, natural geotech, air quality

2.0 Positive Development

All nine teams were asked to identify positive developments within the City of Muscatine. They were to consider such things as town character, special amenities, and undeveloped opportunities. Despite the aforementioned issues of concern, the Charrette participants seemed very optimistic about the future of Muscatine’s residential neighborhoods. All of the teams were quick to point out the positive elements of the riverfront development, City parks, Soccer Complex and the character of downtown and of older neighborhoods. Most teams related the negative issues with migration of new development to the fringes of the City limits. They also attributed many of the positive elements of the City to this shift in the community’s population center. Below is a summary of the teams’ responses.
2.1 DOWNTOWN

- 2nd Street/Riverfront: retail development
- Historic character and compactness
- River Center Area
- New developed area in downtown and along riverfront

2.2 RESIDENTIAL

- Neighborhood groups are a positive influence (IE- South-End United Neighbors-SUN)
- Community policing (IE- Safe Street Program).

2.3 COMMERCIAL

- West Hill Victorian Neighborhood
  - Investment in rehabilitation homes is a plus.
- Houser housing development
- Garfield Development
- Corporate buildings: (HON facility at 5th & Mulberry)
- West End development- Fareway & DQ
- Strong industries in the community
- Bandag Training Center
- Carver Pump Building clean-up
- Industrial connector

2.4 COMMUNITY FACILITIES

- Community trails (American Discovery Trail, Riverfront Trail, etc.)
- Weed Park
- Discovery Center
- Kent Stein Soccer complex
- Infrastructure development: South End sewer and Northeast trunk sewer extensions.
- Americorps/volunteer participation efforts to beautify parks, etc.
- Clocks/Towers
- Improvements to Mulberry Avenue and Houser Avenue.
- Preservation of public buildings: schools, courthouse, etc.

2.5 SPECIAL AMENITIES

- Bluff areas and unused right-of-way
- Viewing opportunities of the Mississippi
- Mulberry entrance to the hospital
- New entry gateways
- Seasonal decorations (show pride)
- Neighborhood diversity
- Trash pick-up and clean-up programs
- Entrance to Weed Park

3.0 Linkages to Commercial Activities

Four teams were asked to identify the pedestrian and vehicular linkages that connect the neighborhoods of Muscatine to each other and to the major commercial and industrial areas and to identify any pedestrian or vehicular linkage needed. The following roadways and trail systems were identified as residential/commercial linkages.
3.1 **EXISTING LINKAGES TO COMMERCIAL USES**

- 8th Street
- Bidwell Road
- Isett Avenue
- Lucas Street
- Mulberry Avenue
- Washington Street
- Park Avenue
- Cedar Street
- Houser Street
- Mad Creek- Green Belt
- Southend to downtown- high walk
- Riverfront Trail
- Some sidewalks

3.2 **COMMERCIAL LINKAGES NEEDED**

- Muscatine needs to be more pedestrian oriented.
- Need to require sidewalks in all new development.
- Linkage from the Soccer Complex to surrounding park and recreation facilities.
- Sidewalks are needed around the high school
- Need to connect parks and link Mad Creek Trail to Hoover Trail.
- Need to complete Riverfront Trail.
- Need to provide pedestrian links connecting neighborhoods to schools.
- Cedar, Mulberry, Park Ave, 4th and 8th Street need new/better accessibility.
- Houser needs a connection from Cedar to Bidwell.

4.0 **Links to Neighborhood & Recreation Activities**

Six teams were asked to identify the pedestrian and vehicular linkages that connect the neighborhoods of Muscatine to each other and to the major park and recreation areas and to identify any additional pedestrian or vehicular linkage needed. The following roadways and trails were identified as linkages between neighborhoods and parks/recreation opportunities within the community.

4.1 **EXISTING LINKAGES**

- Steward Road
- Grandview
- 5th Street
- 8th Street
- Washington Ave (Diagonal Rd)
- Houser Street
- Mulberry Street
- Hershey Corridor
- Logan Street
- Cedar Street (Sidewalks)
- Park Avenue
- Parham Street
- Leroy Street
- Riverfront Trail
- Slough Trail
- Musser Park Trail
- Hoover Trail
- Along Mad Creek
4.2 Linkages Needed

- Downtown Riverfront - Complete Palisades Trail.
- New trail within the inscribed circle of Highway 61/22.
- Need to complete the American Discovery Trail.
- Need to enhance city transit system.
- Need to fill in the gaps to existing sidewalks.
- Logan to Tipton.
- School linkage system via sidewalks and green belts.

5.0 Unique and Identifiable Neighborhood Characteristics

Seven teams were asked to discuss the unique and identifiable areas that make up Muscatine’s neighborhoods and briefly describe the elements of the areas that make them desirable. Most teams had extensive lists of neighborhoods that represented special or unique qualities. It seems that most neighborhoods within the community have unique qualities or identifiable elements. A summary of the unique qualities and identifiable characteristics of Muscatine’s neighborhoods are as follows.

- Neighborhood Groups
- Architecture: Nice mix of styles, designs and periods are represented
- Sunrise Circle area.
- Neighborhoods follow the river
- Neighborhood values
- Main Street
- Multi-family housing
- Many area are not organized

6.0 Property Maintenance

Substandard conditions of housing addressed primarily consist of poorly maintained homes and property. According to the participants, many homes simply need painting and minor aesthetic improvements. However, other properties will require more involved rehabilitation. Regardless of the scope of the improvements needed, the Charrette participants suggested the improvements be in keeping with the existing built and natural neighborhood features. Whenever the repairs of a property cost more than reconstruction, the City should expedite the demolition of these sites and assist in the redevelopment of the site. The City could assist by proving access to development grants, neighborhood revitalization incentives, reduced permit fees, etc.

The community is concerned with the number of single family homes being converted into multi-family units. This trend is especially evident in the City’s older housing developments. Many of the modification to these older (historic) properties are perceived as decreasing the property values and the overall image of the neighborhood. Although, rental property fills a necessary housing niche, more effective health, safety and maintenance codes need to be adopted to require better stewardship of such properties. Many of the Charrette Teams advocated more restrictive regulations and better code enforcement to improve the quality of property maintenance. Another tool recommended was promoting special clean-up activities and/or offering home improvement incentives. Four teams were asked how they would recommend the City address property maintenance issues and how frequently inspections should be conducted.
Appendix A: Public Participation

- Inspect when a complaint is filed.
- Inspect every three years.
- Conduct safety inspections upon issuing occupancy permits.
- Need to inspect rental units more often.
- Need to provide better enforcement of codes and ordinances.
- Need more tightly constructed housing appearance ordinances.
- Elderly owned and occupied structures are becoming a problem.
- Public education of current codes is necessary.

7.0 New Residential Development

Three teams were asked to discuss what types of design guidelines they would like to see in place to regulate new residential development. The teams wanted to see more sidewalks and greenspace included in new developments. In addition to the City’s zoning codes, teams wanted to see more restrictions placed on the subdivisions by the developers. The participants also indicated a lack of historic property restoration incentives. Additional comments regarding design/aesthetic guidelines included:

- New structure should blend with existing development.
- Eliminate agricultural zoning within the City limits.
- Our code system takes care of this issue.
- A tree program is desirable.
- We should not make it more difficult to build new houses.

8.0 In-Fill Development

The Charrette participants acknowledged appreciation for residential infill and adaptive reuse projects that could provide examples for future development. The Carver Pump Development was an in-fill development project that was noted as a positive investment that helped spur redevelopment of the area. Four teams were asked to discuss what types of in-fill development they would like to see in the City of Muscatine, and where they would like to see in-fill development occur. Below is a summary of the issues raised with regards to in-fill development.

- Maintain open/green space (don’t build)
- Eliminate spot zoning
- Klein Farm is suitable for in-fill
- Housing is appropriate in some areas
- Land from Lucas to Tipton to the By-pass is suitable for in-fill
- Parking is needed to decrease the demand for on-street parking

9.0 Goods & Services Needed Within the Community

Four teams were asked to identify any good or services they felt were not adequately provided within the City of Muscatine and list specific stores and restaurants they would like to have in Muscatine. Below is a summary of the responses.

- Ensure survival of essential downtown stores such as the grocery store, drug store, hardware store, etc.
- A “real” bakery is needed downtown.
- Downtown Café and/or coffee shop are needed.
Better selection of clothing & accessories is needed.  
First class department store; (Younkers, Van Mauer, Dillards) is needed.  
General retail needed (Target, Kohls)  
Better selection of restaurants. (Olive Garden, Red Lobster, Cracker Barrel, Carlos O Kelly’s)  
Bookstore (Barnes & Noble)  
Review and improve overall lighting within the community.  
Façade improvement program needed.  
Continue riverfront development.

10.0 Conditions That Have Helped/Hurt Neighborhoods

Four teams were asked to identify areas that have declined and prospered in recent years and to describe the conditions that impacted or changing the character of the neighborhood. Although two teams could not identify any areas or reasons for decline, the other teams surveyed provided valuable information regarding areas in decline. The teams were also asked to identify undeveloped opportunities that can be used, or have been used, for positive solutions to neighborhood issues. A summary of the responses is as follows:

10.1 POSITIVE IMPACTS/IMPROVEMENT AREAS

- Renovation in targeted areas.  
- Cedar and Houser improvement.  
- Riverfront improvement.  
- Highway 61 and 38 improvements.  
- Slough Town area.  
- Curbs and gutters in some areas.  
- Development of infill areas has improved some areas.

10.2 NEGATIVE IMPACTS/DECLINING AREAS

- Olive Branch Drive area.  
- Isolated housing problems.  
- Need to resist piecemeal development.  
- S. of Hershey Ave. from the park to the river.  
- East & West of Kansas Street from Demorest to Benham.  
- North of 4th Street to 7th Street from Locust to Chestnut.  
- 3rd Street from Walnut to Mad Creek north to 5th Street.  
- Lower Mulberry (continues to decline, but has great culture and architecture)  
- Need to develop a concept/theme for the entire downtown.

11.0 Housing Needs

The supply of a full range of housing types has been identified as a problem in the City of Muscatine. Updated affordable housing options need to be developed in many of Muscatine’s older neighborhoods. Charrette attendees indicated that there is a deficiency of new or higher quality homes in the $100,000-$150,000 range. Another underutilized type of housing identified was downtown apartments/lofts. There are many buildings in the downtown area that could be
candidates for an adaptive reuse project. This type of revitalization would not only preserve historic structures, but also provide a much-needed supply of downtown housing stock. There seems to be an appreciation for a mix of both older and new homes, with an emphasis on architecturally compatible homes that are well maintained and in keeping with the character of the neighborhood. There is also a need for better rental and housing types suitable for “empty nesters” and single professionals. The teams indicated that there were many strong neighborhood organizations in Muscatine that could help facilitate improvement programs. Three teams were asked what types of housing are needed throughout the City of Muscatine, and where should the various types be placed. The following is a highlight of the teams’ responses.

- Upscale rental units.
- Contemporary downtown housing- lofts, etc.
- Single family housing in a variety of price ranges.
- Assisted living facilities- located where services are located.
- Affordable single family and multi-family units.
- Townhouses- for empty-nesters.
- Incentives for young families to rehab older homes.
- City codes need to be reviewed, updated and enforced.

12.0 Commercial/Residential Traffic Conflicts

Six teams were asked to identify areas of concern where commercial traffic is interfering with residential traffic patterns and asked to describe how these areas could be improved. Some of the major areas and recommendations provided are as follows.

12.1 AREAS OF CONFLICT

- Truck traffic in downtown
- Double parking of delivery vehicles
- Traffic congestion on the South side by the trains
- Older residential streets have become major arterials- (Leroy, Burnside, Logan, etc)
- 8th Street and Mulberry
- Cedar Street near Central School.
- Houser- from Mulberry to Lucas.
- Isett & Bidwell intersection.
- Isett and Clay intersection.
- Grandview and Hershey intersection.
- Park Ave & Cleveland intersection (McDonalds)

12.2 RECOMMENDATIONS

- Schedule deliveries in downtown
- Park Avenue could be improved and widened out to the by-pass
- Reassess cross-town route(s).
- Increase level of traffic enforcement.
- Look at the by-pass intersection- maintain as limited access
13.0 Mixed Land Use

Another issue relating to housing in Muscatine is the mix of land uses that exist in and around residential neighborhoods. Undesirable commercial and industrial land uses are currently located in residential areas. This situation is difficult to avoid in older communities with working class neighborhoods, such as Muscatine. The city is small and neighborhoods are close together. This puts businesses in closer proximity to houses. At one time the industrial uses may have been on the edge or outside of town, but as the city grew, the residential areas encompassed the commercial and industrial areas. While it may be difficult or impossible to remove dangerous and undesirable commercial activity from residential areas, it is suggested that barriers be installed to block access and visibility between the different land uses. Three teams were asked to identify areas of concern where commercial activity is interfering with residential activities and asked to offer suggestions for improvements. Some of the major areas and recommendations provided are as follows.

13.1 AREAS OF CONFLICT

- Noise, odor, and pollution from GPC plant.
- Junk yard on 5th St and Morgan Trucking.
- Highway 92 corridor coming into Muscatine.

13.2 RECOMMENDATIONS

- City should target Oregon to Mississippi Drive for redevelopment.
- There is opportunity for a new apartment building at Hershey and Green Street.
- More restrictive zoning is needed to isolate certain businesses to common locations—cluster used car lots, body shops, etc.
- Better planning for industrial sites—need to acquire/require additional properties for expansion and buffering.
- Concentrate on Brownfield redevelopment (old gas stations)

14.0 Positive Neighborhood Businesses

Three teams were asked to identify neighborhood commercial areas that are important to the residents of Muscatine and describe any small-scale businesses that neighborhoods could benefit from. The teams provided the following information.

14.1 COMMERCIAL DEVELOPMENT THAT NEIGHBORHOODS BENEFIT FROM

- Intersection of Rte 38 and 61
- Intersection of Cedar and Houser
- Hershey/Mississippi/Green intersection
- 67th Ave West and Grandview Ave.
- Downtown
14.2 **Neighborhoods That Would Benefit from Commercial Development**

- Slough Town
- Downtown: Restaurants and entertainment.
- More parking downtown needed.
- West Side – variety needed.
- Control or limit commercial development to the Highway 22/61 corridor.

15.0 **Schools**

Three teams were asked to discuss any positive and negative observations about the schools in the City of Muscatine, and to recommend how the comprehensive plan can capitalize on the positive elements and address the negative issues.

15.1 **Positive Elements**

- 1 cent sales tax-funds for improvement.
- Nicely located within the community.
- Parental involvement is good.
- Latch-Key Program is positive.
- Integration of home schooled students.

5.2 **Negative Elements**

- Accessibility (no foot trails, car traffic and siting)
- Need to locate schools where kids are.
- Sports in conflict with academics.
- Need to connect professional entities with schools & kids.
- Need more volunteers.
- Counseling (under staffed)

16.0 **Community Facilities & Parks**

All of the Charrette Teams agreed that the neighborhood parks, trails and views of the Mississippi River are the strengths of the typical Muscatine neighborhood. Weed Park and Kent Stein Soccer Complex were singled out as the most desirable community places. Each team had extensive lists of recommended improvements to the City’s parks and community facilities. Six teams were asked to identify the most popular parks in the City of Muscatine. Additionally, they were asked what improvements they would make to the park system to improve services to the residential neighborhoods. The following is a highlight of the results.

16.1 **Favorite Park & Recreation Facilities**

- Kent Stein/Soccer Fields
- Weed Park
- Riverfront
- Discovery Center
- County Nature Center
- Historical Structures
- Watershed views
- Park headquarters
- Arboretum
- Musser Park
16.2 **Improvements Needed**

- We have enough parks - improve the ones we have.
- New pool at Weed Park.
- Need park in Madison School area.
- Complete the American Discovery Trail.
- Extend levee trail to Michael's creek.
- Develop Papoose Creek as a connector to YMCA, High School, historic areas, etc.
- Extend a trail along Highway 61 or along Steward Road to Fruitland.
- Revitalize Mad Creek Greenbelt.
- Continue Riverfront development per plan.
- A ramp at Musser Park.
- City maintenance needs to be expanded.
- Recreation programs need to be expanded.
- Restrooms needed at all parks.
- Band shelter needed.
- Park in Island Planning District.
- Change public attitudes about Greenspace.
- Urban-reforestation
- Use neighborhood groups to help maintain neighborhood parks.
- Convert “gravel pits” into future recreation use, parks, etc.
- Do something on the islands in the Mississippi River.
- A “destination” facility is needed that tells the “Muscatine story”.
- Need more youth oriented opportunities: community center/museum/activity center.
- Need to make all community facilities handicap accessible.

17.0 **Partnerships**

Three teams were asked what community organizations presently partner with park facilities and recreation programs within the City of Muscatine. After listing their responses, they were asked how other partnerships could be created and with what organizations. Below is a highlight of the teams’ responses.

- Family YMCA & Youth Sports Foundation
- Muscatine Parks & Recreation and the High School.
- Muscatine Soccer Association.
- Senior Resources & Parks & Recreation

18.0 **Desirable Amenities**

One discussion topic introduced during the Town Planning Charrette asked participants to identify positive developments, neighborhood character areas, and special amenities they would like to see in Muscatine. Four teams were asked to reflect on other places they have visited and to record any desirable amenities they would like to see in the City of Muscatine.

- Aquatic Park would be nice.
- Develop a venue for cultural arts/entertainment.
- Construct an indoor skating (ice) rink
- Develop another library.
- Contemporary downtown housing.
- Better facilities and opportunity for the arts.
- Historic Preservation areas.
- Riverboat with a restaurant.
- Dome downtown.
- Continuation of the development downtown.
- Improved nightlife.
- High quality restaurants.
- Old market (like in Omaha).
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- Encourage development within the City through zoning.
- Marina and boater facility.

19.0 Revitalization Activities/Events/Investments

Three teams were asked to describe special or unique projects/events/investments that would have the greatest positive impact to the preservation and development of Muscatine’s neighborhoods and where it should be located. A summary of the Teams responses are as follows.

- Bike paths, sidewalks.
- An international center with a focus on diversity in Muscatine and globally.
- Complete downtown development and improvements to downtown lighting.
- Completion of Ford Avenue.
- Corridor development for entry routes into the city.
- Leverage sports and recreation facilities into the area.
- Science Center, theatre, hotel: landmark facilities

Town Planning Charrette II

ISSUES RAISED DURING TOWN PLANNING CHARRETTE II

The Second Muscatine Town Planning Charrette took place at the Allsteel corporate training facility on Saturday June 23, 2001 at 8:00 AM. After the 40 participants were registered, they were broken into 8 groups consisting of 5 individuals. The team’s first assignment was to create a list of the top 5 issues relating to the City of Muscatine’s economy and/or business community. The teams printed their 5 issues on oversized answer sheets. Members from Bucher, Willis, & Ratliff then posted the answer sheets in front of the meeting hall and presented each of the team issues recorded. The participants were then given 5 stickers and directed to place them next to the issue/issues they felt were most important. The voting resulted in the selection of 8 major issues the Charrette participants determined the most critical. Each team was then directed to discuss the issues in greater detail and develop a list of strategy recommendations for best addressing the critical issues.

Top 8 Issues and Summary of Strategies

The following is a summary of the major issues identified during the Town Planning Charrette and an analysis of the recommended strategies provided by each team. The issues are in order starting with the issue that received the most votes during the Business Development & Economic Stability Charrette.

Issue # 1: Downtown Revitalization

The most pressing issue as identified by Charrette participants was downtown revitalization. There was strong support for a higher level of investment for infrastructure improvements such as sewers, light standards, sidewalks and alley improvements. The strategies recommended to address downtown revitalization involved gathering a consensus or unified vision for downtown, bringing interest groups together with a common goal and utilizing every available outside funding source available. The following table is a summary of each team’s strategies.
### Team 1

**Strategy 1:**
Develop a consensus- City needs to take lead in a consensus development process.

- a. Council of Government (COG)- Complete the Application & Designation
- b. Employ a “neutral” consultant to help develop a downtown plan, including financing, business development and recruitment recommendations
- c. Property acquisition- Identify properties that need to be preserved.
- d. Parking

**Strategy 2:**
Infrastructure support from City, including sewers, streetscape plan, TIF, and possibly a “self-taxing” 2/3 vote.

**Strategy 3:**
Recruit/Retain/Grow existing businesses

**Strategy 4:**
Incubation machine for finance, business development, marketing etc.

**Strategy 5:**
Anchor stores- Set the infrastructure up to bring one or two main retailers into the community

### Team 2

**Strategy 1:**
Revised building & zoning codes for light industrial needed

**Strategy 2:**
Tax abatement to building owners for building renovations

**Strategy 3:**
Improve infrastructure and parking - fix and maintain sewer system / parking solutions

**Strategy 4:**
Active renovations needed for 2nd Street and Iowa Ave. west

**Strategy 5:**
Recruit 1 or 2 large anchor stores as well as mom and pop stores

### Team 3

**Strategy 1:**
City budget- make sure there are adequate funds to renovate and upgrade downtown sidewalks, streets and alleys. (Reallocate funds to increase infrastructure improvements)

**Strategy 2:**
City needs to pursue grants and other outside funding sources.
### Team 4

**Strategy 1:**
Develop unique retail/dining areas as a major attraction for downtown interfacing with riverfront development.

**Strategy 2:**
Encourage façade improvements:
- Improve pedestrian sidewalks, lighting and plantings

**Strategy 3:**
Develop comprehensive parking plan

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### Team 5

**Strategy 1:**
Encourage and promote a sense of place that embraces a mix of residential, retail, professional, dining and governmental offices. The Downtown should be pedestrian friendly, celebrate historic architecture and provide a direct link to the riverfront.

**Strategy 2:**
Renovate downtown buildings for a mix of uses at street level with residences above by promoting public/private funding.
- Recognize that not all building can/should be revitalized.
- Encourage pedestrian friendly walks, lighting and links to the riverfront

---

### Team 6

**Strategy 1:**
Promote use/occupancy of downtown: Goal- no vacant stores
- Provide facilities/amenities to accommodate each member of the family
- Provide incentives for businesses to move downtown
- Get property owners into agreement (to work together rather than independently)
- Identify funding options- Hire/retain a development officer to assist in grant writing etc.
- Need more parking
- Recognize people who have improved their businesses, buildings etc

**Strategy 2:**
Prepare Plans to address- housing improvements, community appearance, expand hospitality industry, establish recruiting committee- Establish actions to coordinate the implementation of the above items and establish direction up-front.

**Strategy 3:**
Find out what all the groups are focusing on downtown- then find the organization(s) that has the power to make it happen.

---

### Team 7

**Strategy 1:**
Implement downtown plan and enhance cultural opportunities, historic amenities and business environment.

**Strategy 2:**
Redevelop historic district and historic neighborhoods.
Strategy 3:
Conduct a housing inventory analysis, implement strategies, and revise downtown sewer & parking.

Strategy 4:
Rehab retail establishments and streetscape.

Strategy 5:
Establish a special tax district for downtown, pursue grant assistance, promote buildings/events, identify artisan builders, and promote public art.

Strategy 6:
Fuse together interest groups to rejuvenate their efforts collectively.

---

Team 8

Strategy 1:
Implement a “Historic Downtown Promotion Day”.
   a. Historic building a month campaign
   b. Network artisan builders, painters, and electricians that specializes in historic rehab.

Strategy 2:
Encourage public art works at every corner

Strategy 3:
Boardwalk on #1 Alley to promote clean-up of backside of Second Street businesses
Lobby FEMA to tear down Old Kreiger Building

Strategy 4:
Establish Little Mexico from 3rd to 5th on Mulberry including the development of restaurants, annual festivals, and banners.

---

Issue # 2: Housing

The seconded most pressing issue facing the City’s business and economic sector was housing. All teams strongly believe that a quality housing stock is an integral component to retaining and attracting business to the City of Muscatine. It is important that the housing stock offers homes of all price ranges, specifically in the $80,000-120,000 range. The teams stress the need for a wider range of housing options, more first time homeowner incentives and stronger housing/rental code requirements. In general, the City’s housing stock must be managed by good planning and zoning practices.

---

Team 1

Strategy 1:
Affordable housing needed- not isolated but scattered throughout the City.

Strategy 2:
Remove tax disincentives of high density real estate development.

Strategy 3:
Find better real-estate financing. Implement 1st Time Home Buyer and Community Seconds-
## Strategy 4:
Encourage development near existing urban development and make sure all development is controlled and guided by good planning and zoning practices.

### Team 2
No Comments Provided

### Team 3

<table>
<thead>
<tr>
<th>Strategy 1:</th>
<th>City needs to be proactive in providing infrastructure.</th>
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<tbody>
<tr>
<td>Strategy 2:</td>
<td>Relax code requirements, which make building maintenance so expensive.</td>
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<td>Strategy 3:</td>
<td>Use tax incentives and grants where possible.</td>
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### Team 4

<table>
<thead>
<tr>
<th>Strategy 1:</th>
<th>Housing Availability:</th>
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</thead>
<tbody>
<tr>
<td>a.</td>
<td>Need more rental property at all levels.</td>
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<tr>
<td>b.</td>
<td>Need more assisted living facilities.</td>
</tr>
<tr>
<td>c.</td>
<td>Need entry level housing.</td>
</tr>
<tr>
<td>Strategy 2:</td>
<td>Low interest improvement loans needed.</td>
</tr>
<tr>
<td>a.</td>
<td>Recruitment and retention of a qualified contractor for renovation projects.</td>
</tr>
</tbody>
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### Team 5

<table>
<thead>
<tr>
<th>Strategy 1:</th>
<th>The community should foster and promote housing options and opportunities for all it’s residents and those expected to reside in the community.</th>
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</thead>
<tbody>
<tr>
<td>Strategy 2:</td>
<td>Provide more affordable options in the $90,000-120,000 price range.</td>
</tr>
<tr>
<td>a.</td>
<td>Housing options for all income levels shall be mixed throughout the community.</td>
</tr>
<tr>
<td>Strategy 3:</td>
<td>Create right climate for housing and development: zoning, infrastructure and access. (vehicular &amp; pedestrian)</td>
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### Team 6

<table>
<thead>
<tr>
<th>Strategy 1:</th>
<th>Establish housing options for all income levels.</th>
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<tbody>
<tr>
<td>Strategy 2:</td>
<td>Provide incentives for citizens and/or corporations to build apartment complexes (for all income levels).</td>
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<tr>
<td>Strategy 3:</td>
<td>Establish criteria for rental property to be approved by certified City inspectors.</td>
</tr>
</tbody>
</table>
Team 7

**Strategy 1:**
Develop infrastructure so that all kinds of housing is available.

**Strategy 2:**
Increase the availability of affordable housing ($90,000-120,000). Rebuild neighborhoods, develop quad & triplexes and abate taxes, roll back property taxes etc.

**Strategy 3:**
Develop criteria for rental property standards.

Team 8

**Strategy 1:**
Utilize the urban homesteading project’s available funding for improvements.

**Strategy 2:**
Rezone the agricultural land inside the city limits to commercial and residential use.

**Strategy 3:**
Infill with tax abatement.

Issue #3: Transportation

Ranking third among the top issues facing Muscatine’s business community was transportation. All teams stressed the need to widen Highway 38 to four lanes to Interstate 80. The teams noted that the lack of east/west traffic connections made traveling within the city extremely difficult and frustrating at times. There is strong support for expanding the community’s public transportation options and improving pedestrian accessibility throughout the City.

Team 1

**Strategy 1:**
Hwy 38 needs to be improved to 4 lanes.

**Strategy 2:**
Inter-County sources of transportation old, young- Address transportation needs of all ages.

**Strategy 3:**
Recruit the High Speed Bullet Train, which is currently long term development, to pass through or very near Muscatine.

**Strategy 4:**
Reconfigure bus routes in the City of Muscatine.

Team 2

**Strategy 1:**
Expand MuscaBus Routes.

**Strategy 2:**
Improve Routes 22 and 38 into the City.

**Strategy 3:**
Improved traffic flow and street upgrades needed.

**Strategy 4:**
Reconfigure bus routes in the City of Muscatine.
## Team 3

**Strategy 1:**
Make 38 4 lane to 80.

**Strategy 2:**
Plan for new bypass.

**Strategy 3:**
Develop cross town streets.

## Team 4

**Strategy 1:**
Encourage bus ridership in the city and expand routes to factories, retail centers and possibly develop a historic tour route.

**Strategy 2:**
Improve transportation links to Muscatine suburbs and regional connections to Quad Cities/Iowa City.

**Strategy 3:**
Worldwide connectors- Improve connections to airways, Amtrak, and introduce daily excursion boats that travel to the Quad Cities, etc.

## Team 5

**Strategy 1:**
The community generally enjoys a good transportation network. It is necessary that this priority be monitored as an ongoing priority.

## Team 6

**Strategy 1:**
Improve public transportation options (buses), Routes 38 & 22, Industrial Drive, city routes introduce a trail for out-of-town travel.

**Strategy 2:**
Develop an Internet site to provide better awareness and information regarding the City’s routes, human resources, major cooperation’s, chamber of commerce, etc.

**Strategy 3:**
Recruit the High Speed Bullet Train that is currently long term development, to pass through or very near Muscatine.

## Team 7

**Strategy 1:**
Develop regional system- Study transportation impact and improve what is already in place.
   a. 38 bypass
   b. Improve 38 to 4 lanes as needs change
   c. Conduct an industrial transportation study
Strategy 2:
Complete a comprehensive multi-modal transportation plan.
  a. Railroad plan, including rail service, passenger options, freight availability, and recreation/leisure services-bullet train.
  b. Biking trails
  c. Highways
  d. Bus services

Strategy 3:
Implement a program to prioritize needs and investigate funding sources for bike lanes needed on streets, widening sidewalks, river oriented transportation, hooking Amtrak extension, etc.

Team 8
Strategy 1: Reroute the bus system. Include transfers outside the circuit instead of downtown.
Strategy 2: Improve bike trials and parking downtown. Develop pedestrian and bicycle paths outside of riverfront area.
Strategy 3: Promote the fact that the four lane runs both directions between Davenport and Muscatine-West Davenport is quicker to Muscatine than 53rd.

Issue #4: Cultural

The riverfront was a focal point of many discussions of successful and potential cultural influences in Muscatine. The teams support investment in infrastructure improvements and beautification of the riverfront area to help revitalize the streets of downtown Muscatine. Several strong cultural amenities already exist within the community. It is these amenities that must be preserved, expanded and most importantly used as a marketing tool to attract prospective businesses and employment centers.

Team 1
Strategy 1: Expand community theatre.
Strategy 2: Encourage existing community groups to invite new folks to various activities- strive to provide activities and events that appeal to Muscatine’s youth, ethnic groups and families of all economic backgrounds.

Team 2
Strategy 1: Increase cultural exposure- City orchestra, community theatre
**Team 3**

**Strategy 1:**
Build a new downtown performing arts center.

**Strategy 2:**
City must enforce appearance codes.

**Strategy 3:**
Develop a festival area on the riverfront with all infrastructure needs.

**Team 4**

**Strategy 1:**
Increase arts: Encourage artists & craftsmen, music, dance, theatre, etc.

**Strategy 2:**
Develop a year round arts program- i.e. Summer arts in the parks.

**Strategy 3:**
Develop an industrial arts museum.

**Team 5**

**Strategy 1:**
Exploit existing assets: graphic arts, performing arts, Grossheim photos, Mississippi River art collection, and Wind symphony, marching bands and concert series.

**Strategy 2:**
Implement efforts to improve the appearance of row and private property through peer pressure, local codes and create pride of ownership.

**Strategy 3:**
Expand recreation opportunities to include downtown clubs for young adults, diversified dining options- including options for seniors.

**Team 6**

**Strategy 1:**
Build a multi-function (cultural) center downtown.

**Strategy 2:**
Build support for ordinances on the books- to improve appearance.

**Team 7**

**Strategy 1:**
Promote arts- Music, dance, industrial museum, entryways, landscaping, trails, family events.

**Strategy 2:**
Exploit Grossheim, River, Wind Symphony, and art center.

a. Invite people to look at organizations- young, new people- reach out.

**Strategy 3:**
Appearance- Encourage private property owners to keep up properties through codes and peer pressure.
Strategy 4:
Increase recreation opportunities, shopping alternatives, restaurant selection, nightlife activities (clubs) and number of museums.

Issue # 5: Community Appearance

A major detractor of prospective businesses and professional families is the first impression one gets when entering the City of Muscatine. There is community-wide support to beautify the major entryways leading into the city. The housing stock was also a major topic as teams addressed community appearance issues. Poorly maintained properties, substandard structures and many of the City’s rental properties contribute significantly to the deteriorating community appearance.

Team 1

| Strategy 1: | Empower neighborhood groups to facilitate improvements. |
| Strategy 2: | Construct sidewalks interlinking neighborhoods. |
| Strategy 3: | “Raise the bar” on vacant/abandoned properties- Specifically name the building owner- Post a bond if building is left abandoned. |
| Strategy 4: | More recreation opportunities needed- including indoor. |
| | a. Year round facilities needed. |
| | b. We need a hockey rink. |
| | c. The neighborhood parks need to be interconnected. |
| | d. Water retention areas should be designed to double as recreation areas. |
| Strategy 5: | Need to create a “united” appearance. |
| | a. Entryways at major corridors need to be aesthetically pleasing. |
| | b. Beautification through planning and zoning. |
| | c. Finish the signs. |
| | d. Increase home OWNERSHIP. |

Team 2

| Strategy 1: | Continue riverfront improvements. |
| Strategy 2: | Enforce nuisance ordinance- especially in the south end. |
| Strategy 3: | Improve-through ordinance- improvements to entryways into the city. |
| Strategy 4: | Improve recreation opportunities for the youth. |
| Strategy 5: | Hike and bike trails need continued development. |
Team 3

**Strategy 1:**
Safety - Promote and encourage neighborhood watch programs.

**Strategy 2:**
Continue pursuing grants for neighborhoods watch and officer programs.

**Strategy 3:**
Develop a new bypass.

Team 4

**Strategy 1:**
Improve/create gateways to Muscatine: Provide plantings and landscape amenities, keep them clean and neat, require on-going landscaping and maintenance of all plantings.

**Strategy 2:**
Recreation - Improve trails & expand summer functions.

Team 7

**Strategy 1:**
Promote neighborhood safety and enhance lighting.

Team 8

**Strategy 1:**
Promote the successes realized in the south end neighborhoods etc.

**Strategy 2:**
Historical Preservation Group - Promote and celebrate success stories.

**Strategy 3:**
Promote the gateways into the City with signage - keep them clean.

**Issue # 6: Labor Pool**

The City’s housing stock can either enhance or decrease the labor pool. The lack of affordable housing is one problem that currently exists that makes it difficult for some families to reside in Muscatine. It was suggested that the lack of employee benefits offered by many Muscatine businesses was detrimental to the labor pool. Many teams suggested that efforts need to be made to attract high-tech industries to the community. It was recommended that the city promote/exploit the City’s assets and high quality education facilities in an attempt to attract businesses to the area.

Team 1

**Strategy 1:**
Implement down payment assistance program.

**Strategy 2:**
Affordable housing needed close to work places.

**Strategy 3:**
Plan development by making the City more attractive to working families. (“family recruiting”)
   a. Attract high tech jobs.
   b. Develop exit strategy for existing businesses.
### Team 2

**Strategy 1:**
- Retain 18-35 year olds.

**Strategy 2:**
- Education-
  a. Excite kids about learning.
  b. More business training in the community.
  c. Increase educational opportunities – not just through college training.

**Strategy 3:**
- Living wage

### Team 3

**No recommendations provided**

### Team 4

**Strategy 1:**
- Encourage continuing education- vocational training for adults and immigrants

**Strategy 2:**
- Provide employee benefits- daycare centers, wellness opportunities, and health benefits.

### Team 5

**No recommendations provided**

### Team 6

**Strategy 1:**
- Build on what we have in our schools- class size, good buildings, etc. and encourage schools and community businesses to join together to improve future conditions for both the students and the City.

**Strategy 2:**
- Look at keeping the Hispanic groups in town to work at our factories- especially those who commute our of town on a weekly basis to work.

**Strategy 3:**
- Have a 5-year plan to recruit businesses to Muscatine.

### Team 7

**Strategy 1:**
- Publicize community assets. Recruit high tech, labor jobs and families.

**Strategy 2:**
- Housing benefits for teachers needed.

**Strategy 3:**
- More benefits for employees- Day care, living wage.

**Strategy 3:**
- Retain 18-35 year olds, maintain superior education programs that include trade schools and job training.
Issue #7: Recruit/Retain Businesses & Industry

As indicated in many other recommended strategies, the promotion of assets the city already possesses should be a major focus of business development and economic stability. This should be the focus of recruiting and business retaining efforts. There are several services and retail markets that are not represented in the local Muscatine business community. The City, in conjunction with the private sector, should identify these markets and promote a business recruitment campaign to address any market deficiencies. A new industrial/business park is also needed to attract new light industries and high tech businesses to the area.

Team 1

Strategy 1:
Exist strategy needed for the professional services.
   a. SBA
   b. Retail development

Strategy 2:
Incubator center needed for new business development.

Strategy 3:
Need to promote community assets and develop a support structure for businesses.
   a. Target retail growth and development.
   b. R.E.A.P. Funds.
   c. Develop/implement financing solutions such as a revolving load fund (especially for small businesses).

Team 2

Strategy 1:
New industrial park needed- attract new light industrial & high tech occupants.

Strategy 2:
maintain co-operative city government.

Strategy 3:
Highlight historic ties to the community.

Strategy 4:
Identify retail deficiencies in the community and develop solutions and recruit as needed.

Strategy 5:
Quality education system.

Team 3

No recommendations provided

Team 4

No recommendations provided
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Appendix A: Public Participation

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<th>Team 5</th>
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<td>No recommendations provided</td>
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<th>Team 6</th>
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<td>No recommendations provided</td>
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<tr>
<th>Team 7</th>
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<tbody>
<tr>
<td><strong>Strategy 1:</strong> Develop a plan to keep businesses and workforce in the community.</td>
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<tr>
<td><strong>Strategy 2:</strong> Develop industrial park, maintain quality school systems</td>
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<tr>
<th>Team 8</th>
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<tbody>
<tr>
<td><strong>Strategy 1:</strong> Have businesses share their long-term plans with the community so the city and other businesses can “gear-up” for the future.</td>
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<tr>
<td><strong>Strategy 2:</strong> Increase the availability of affordable housing ($90,000–120,000) Rebuild neighborhoods-develop quad &amp; triplexes and abate taxes, roll back property taxes etc.</td>
</tr>
<tr>
<td><strong>Strategy 3:</strong> Develop criteria for rental property standards.</td>
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**Issue # 8: The New Image for Muscatine**

Many of the strategies and objectives relating to this issue were addressed in the analysis and summary of previous issues.

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<th>Team 2</th>
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<tbody>
<tr>
<td><strong>Strategy 1:</strong> Market our positive attributes</td>
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<th>Team 3</th>
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<tbody>
<tr>
<td>No recommendations provided</td>
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<th>Team 4</th>
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<th>Team 5</th>
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<tr>
<td>No recommendations provided</td>
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</table>
CITY OF MUSCATINE, IOWA COMPREHENSIVE PLAN
Appendix A: Public Participation

Team 6
No recommendations provided

Team 7
Strategy 1:
Use the strong points/attractions of surrounding communities to attract and retain people
Strategy 2:
Muscatine in the Middle-
Strategy 3:
Highlight historic ties to the community

Team 8
Strategy 1:
Promote Muscatine in the Middle- in Quad Cities and Iowa newspapers and trade journals: Muscatine- “a nice place to live- 35 minutes from Iowa City and the Quad Cities.

BUSINESS DEVELOPMENT & ECONOMIC STABILITY
(Summary of all Team issues)

Each team was asked to identify the 5 most critical issues facing the city with respect to business development and economic stability. The results from all eight teams were posted on the wall and presented to the Charrette participants. Each participant was given five stickers which they were to place next to the items they felt were most important. The items with the most stickers/votes were determined to be the most pressing issues. The tables below highlight the result of each team’s issues as well as the ranking of the issues. Each team was asked to discuss the eight highest ranking issues and provide strategy recommendations for implementing or improving the current/future conditions.

Team 1
Team 1’s top five issues facing the city of Muscatine
1. Highways- 38 and 22 – 4 lanes
2. Downtown- revitalization, infrastructure (Ranked #1—26 votes)
3. Housing- affordable, near urban develop., co-op of city, county, and state
4. Land Use Issues- Ag. vs. develop., redevelopment of older sector
5. Safe Water Issues- well fields, ground water (septic system)

Team 2
Team 2’s top five issues facing the city of Muscatine
1. Labor pool ( Ranked #6—12 votes)
2. Education ( Ranked #9—10 votes)
### City of Muscatine, Iowa Comprehensive Plan

**Appendix A: Public Participation**

<table>
<thead>
<tr>
<th>3. Housing</th>
<th>(Ranked #2—17 votes)</th>
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</thead>
<tbody>
<tr>
<td>4. Business Recruitment and Retention</td>
<td>(Ranked #7—11 votes)</td>
</tr>
<tr>
<td>5. Cultural, Appearance, and Recreation</td>
<td>(Ranked #4—15 votes)</td>
</tr>
</tbody>
</table>

#### Team 3

Team 3’s top five issues facing the city of Muscatine

1. Retail – Development, Retention
2. Retention of existing industry, retain headquarters, industrial park, new 61 route
3. Downtown revitalization, renovation
4. Quality housing - all ranges
5. Cultural Arts Development – programs, facilities

#### Team 4

Team 4’s top five issues facing the city of Muscatine

1. Build unique & diverse retail base
2. Revitalize downtown – unique and appealing area
3. Attract high-tech and light industries
4. Improve public transportation
5. Environmental issues, preserve and protect open spaces

#### Team 5

Team 5’s top five issues facing the city of Muscatine

1. Available labor force
2. Public and private cooperation
3. Community appearance and pride
4. Transportation access to city
5. Available and affordable housing

#### Team 6

Team 6’s top five issues facing the city of Muscatine

1. Housing
2. Retail
3. Education
4. Community involvement
5. **Community appearance and safety** | (Ranked #5—14 votes)
 TEAM 7

Team 7’s top five issues facing the city of Muscatine

1. Positive focus
2. Competition
3. Population and Growth
4. Quality of Life
5. **Transportation**  
   (Ranked #3—16 votes)

 TEAM 8

Team 8’s top five issues facing the city of Muscatine

1. Industrial park development between highways 61 & 38, utilize infrastructure
2. Foster repackaging of data, take advantage of digital assets.
3. Encourage industrial retention
4. **Cultural – entertainment**  
   (Ranked #8—10 votes)
5. Model improvements based upon the South West Rock Island assets, improve route 92 for better transportation circulation to/from the Quad Cities.

STAKEHOLDER INTERVIEWS

Stakeholder interviews were conducted with thirteen individuals:

- Randy Hill, Director of Public Works
- Ray Childs, City Engineer
- Steve Boka, Building & Zoning Administrator
- Larry Wolf, Director of Parks & Recreation
- J. Johnson, City Administrator
- Joe Cline, Council Member
- Anne Lesnet, Council Member
- Bill Trent, Council Member
- Karen Sotecto, Director of Muscatine Development Corporation
- Jane Daufeldt, Director of Muscatine Chamber of Commerce
- John Sayles, Planning Consultant, Stanley Consultants
- Mark Roby, Publisher Muscatine Journal and
- Tom Miller, Hon Industries
The following is a brief summary of the main issues mentioned by the individuals during the interviews. The comments have been divided into categories as follows:

Downtown Revitalization

- The downtown has started to turn around and measures need to be implemented to sustain the turn around.
- Preservation of historic structures needs to be an important element of the downtown revitalization.
- There are a number of bars downtown and care must be taken that the number, location and quality do not negatively affect the downtown redevelopment.
- Redevelop upper floors of downtown buildings for apartments.
- Provide more off-street parking.
- Generally clean up the downtown with emphasis on the alleys.
- Provide public restrooms downtown.
- Provide people gathering spaces such as a plaza in order to conduct events.
- Redo downtown streetscape.
- Consider more code flexibility for rehabilitating buildings downtown.
- Develop a theme and focus for downtown.
- Lack of investment by building owners.

Housing and Neighborhood Stabilization

- Subdivisions are being developed outside the city and the city needs to annex land into the city for future residential development.
- Most of the housing stock is over 50 years old and it has been neglected.
- Maintenance of owner occupied elderly housing is a problem.
- Need more homes and apartments for people of all income and age levels.
- Consider incentives to stimulate residential growth within the city and to encourage the upgrade of older homes.
Demolition of housing that has deteriorated to the point that rehabilitation is not cost effective.

Increase the supply of housing in the $80,000 - $120,000 range.

**Transportation**

- Rebuild the intersection of Highways 38 and 61.
- Develop a trail system for walkers, joggers and bicycles.
- Widen Highway 38 to four lanes from Highway 61 to I-80.
- Provide an east-west collector.
- Raise Mississippi Street approximately two feet to get a better view of the river.
- Prepare a sidewalk plan to identify sidewalks that need to be rebuilt and where new ones need to be constructed.

**Recreational and Cultural**

- Investigate options for financing recreation and cultural enrichment. (i.e. endowment fund, trust funds, grants, fund raisers, etc.)
- Replace the existing city pool with a water park.
- Intensify park maintenance and prepare plans to renovate the parks.
- Off-street parking in the parks is minimal and needs to be increased.
- A greenspace plan needs to be prepared.
- Complete the riverfront redevelopment
- Provide more leisure services.
- Need cultural and arts center facility.

**Community Appearance**

- The general appearance of the city needs upgraded.
- Improve appearance through beautification including better sign standards, landscaping and streetscape.
Appendix A: Public Participation

- A lack of interest of the general community in city beautification.
- Improve the bridge entrances to the city by maintenance and landscaping.
- Create gateways at the entrances to Muscatine to improve first impressions.
- Develop better design standards for new building construction.

Economic Development

- Plan for the development of the Business Highway 61 – Highway 61 Bypass area south of the city.
- City needs business and industrial development to improve tax base.
- Key employers in Muscatine need to be retained and worked with so that they do not relocate part or all of their operations.
- Attract more major employers.
- Develop new industrial/business parks, perhaps to the north.
- Address the deterioration of the Muscatine Mall.
- Lack of retail choices.
- Loss of corporate headquarters of major employers.
- Build on biotechnology research, which is being emphasized in this area.

Infrastructure & City Services

- Vulnerability to flash flooding.
- Stormwater detention/retention standards.
- Separate storm and sanitary sewers in one third of the city.
- Extending water by Muscatine Power and Water needs to be coordinated with other city services.
- Loss of machine and equipment tax may cause the city to reevaluate levels of service.
- Approach the State of Iowa for relief on the machine and equipment tax.
• Existing infrastructure needs rehabilitated and rebuilt.

• City services and facilities will need to be extended if the city annexes new areas.

• Fire protection outside the city is provided by the Wilton Fire District, which has a long response time.