

Bay City Master Plan

Bay City, Michigan

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Prepared with the
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FOREWORD

The findings and recommendations presented in this Master Plan are the culmination of a planning process that began in early 1999 with three community visioning workshops. In the workshops, residents and community leaders identified the issues they felt were likely to affect quality of life in Bay City. The following principal themes emerged from the workshops:

- **Recognize** and build upon the City's strengths, i.e., the open spaces along the river, strong neighborhoods, and ethnic diversity.
- **Continue** to work toward making Downtown attractive to residents and investors by encouraging mixed uses, offering redevelopment incentives, addressing parking issues, emphasizing historic characteristics, and improving architectural and physical design.
- **Improve** pedestrian accessibility and linkages throughout the City, connecting neighborhoods with recreational amenities and improving pedestrian accessibility Downtown.
- **Create** distinctive entrance ways into the City.
- **Improve** the City's road corridors through sign and streetscape improvements, diversion of heavy traffic out of neighborhoods, upgraded street lighting, traffic signal timing, and use of traffic calming measures.
- **Promote** more mixed use development Downtown and in neighborhoods, consistent with traditional town planning principles.
- **Identify** suitable sites for expanded cultural facilities, including the library and farmers market.

The Importance of Neighborhoods

As the planning process unfolded in 1999, one theme rose above the rest: the importance of the City's neighborhoods. This Master Plan is based on the principle that neighborhoods are the essential building blocks with which strong communities are built and thrive. The importance of this principle is evident in Bay City, which has traditionally had strong, lively, and diverse neighborhoods. This Master Plan reaffirms the manner in which Bay City's neighborhoods were originally developed, with housing, parks, and schools located within walking distance of shops, municipal services, and employment.

Critical Issues

Appropriately, maintaining the integrity of the City's neighborhoods and the quality of the housing stock are the top two concerns identified in the "Critical Issues" Master Plan chapter. Other critical issues identified in the plan are:

- **Expand** the commercial sector.
- **Redevelop** underutilized and vacant industrial sites.
- **Maintain** the City's infrastructure.
- **Maintain** a fiscally sound City government.
- **Maintain** the City's strength as an employment center.

- **Continue** redevelopment of the riverfront.
- **Continue** to address environmental contamination and pursue remediation.
- **Support** and build the City's cultural and social institutions and resources.
- **Develop** a multi-faceted transportation system.

Planned Land Use

The chapters that follow present information and analyses related to the critical issues and other concerns. The Master Plan culminates with two chapters dealing with Planned Land Use and Urban Design. The Planned Land Use chapter contains a map that illustrates recommended patterns of land use, accompanied by text that describes the transitions planned in neighborhood commercial areas, along the river, and elsewhere.

Implementation of the plan will require zoning amendments, review of engineering standards, and possible changes in some City policies. Foremost, successful implementation will require a greater sensitivity to the traditional principles of design that provided the basic framework upon which the City was built. Toward this end, the final chapter titled "Urban Design" is a primer on the applicability of traditional neighborhood design in Bay City.

DEMOGRAPHIC ANALYSIS

Population Trends

The population of Bay City peaked in 1960, when the city had 53,604 residents, approximately 8,000 more residents than at the beginning of the century. Since the growth experienced in the 1950's, the city's population has declined continually, with the greatest decrease occurring in the 1970's. The loss of population in Bay City during this period reflects a larger national trend of people migrating out of urban areas into suburban and exurban areas. The loss of population in Bay City during the 1960's and 1970's can be mainly attributed to residents migrating to suburban and exurban communities in Bay County (see Table 1). The county population was still increasing during this period despite the declining population in Bay City. However, beginning in the 1980's, there was a regional loss in population, where the population of the entire County declined at approximately the same rate as Bay City.

Table 1. Total Population, Bay City, Michigan, 1950-2003

Year	Bay City			Bay County		
	Total	Numerical Change	Percent Change	Total	Numerical Change	Percent Change
1950	52,523	–	–	88,461	–	–
1960	53,604	1,081	2.06%	107,042	18,581	21.0%
1970	49,449	(4,155)	(7.75%)	117,339	10,297	9.6%
1980	41,593	(7,856)	(15.69%)	119,881	2,542	2.2%
1990	38,936	(2,657)	(6.39%)	111,723	(8,126)	(6.8%)
1998 (est.)	35,809	(3,127)	(8.03%)	110,470	(1,253)	(1.1%)
2003 (proj.)	34,145	(1,664)	(4.65%)	N/A	N/A	N/A

Sources: U.S. Census
National Decision Systems

The rate of population decline is leveling off for the city and the county (see Table 2). Bay City and surrounding communities all experienced a decline in population during the 1980's. However, three of the surrounding communities saw their population recover and grow during the 1990's, with a fourth community, Bangor Township, experiencing a negligible decline. Bay County as a whole saw a slight decline in population during the 1990's. If Bay City is excluded from the Bay County figure, it would show a slight increase in population during this period.

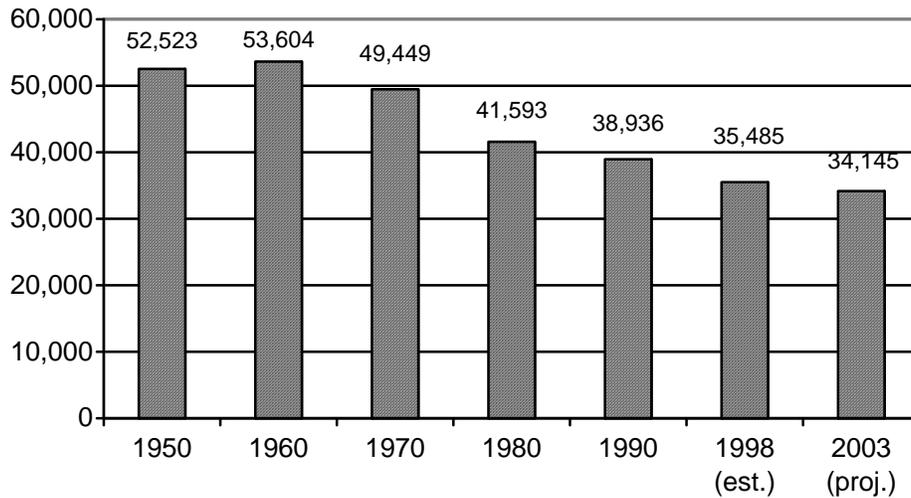
Table 2. Population Trends of Selected Municipalities, 1980 to 1998 Bay County, Michigan

	1980	1990	1998 (est.)	1990-1998 Percentage Change	1980-1998 Percentage Change
Bay City	41,593	38,936	35,809	(8.0%)	(13.9%)
Monitor Township	10,143	9,512	9,926	4.4%	(2.1%)
Bangor Township	17,494	16,028	15,960	(0.4%)	(8.8%)
Frankenlust Township	2,525	2,281	2,499	9.5%	(1.0%)
Portsmouth Township	4,291	3,918	3,996	2.0%	(6.9%)
Bay County	119,881	111,723	110,470	(1.1%)	(7.8%)

Sources: U.S. Census
National Decision Systems, 1998

In the last two decades, Bay City has experienced the largest population decline among the communities in the county and it is lagging behind neighboring communities in recovering its population (see Table 2). However, Figure 1, which charts the population of Bay City from 1950 to the present and projected to the year 2003, shows the population remaining relatively steady in the coming years.

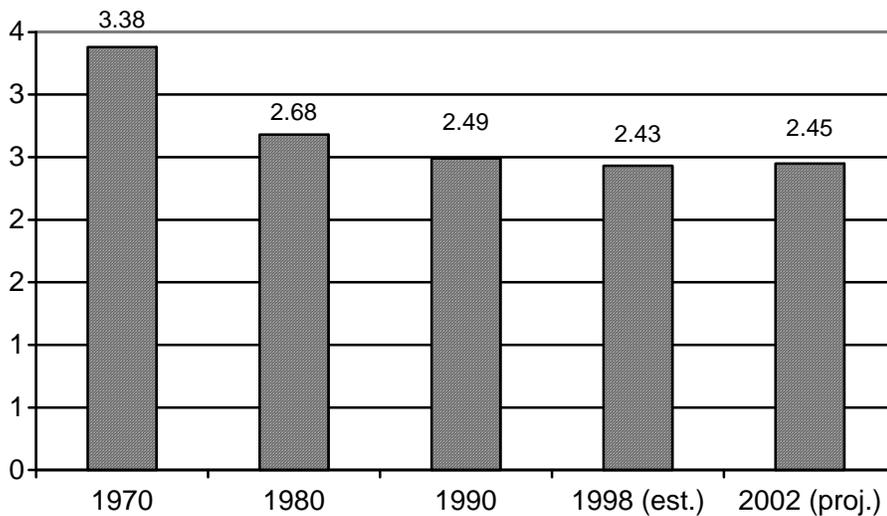
Figure 1. Total Population Bay City, 1950-2003



Sources: U.S. Census
National Decision Systems

The average household size has also leveled, after declining almost one full person per household since 1970. The 1998 estimate of 2.45 persons per household is indicative of the mature families residing in the city.

Figure 2. Average Household Size, 1970-2003



Sources: U.S. Census
National Decision Systems

Demographic Trends

Age and school enrollment data reveal the following key demographic trends (see Tables 3, 4, and 5 and Figure 3):

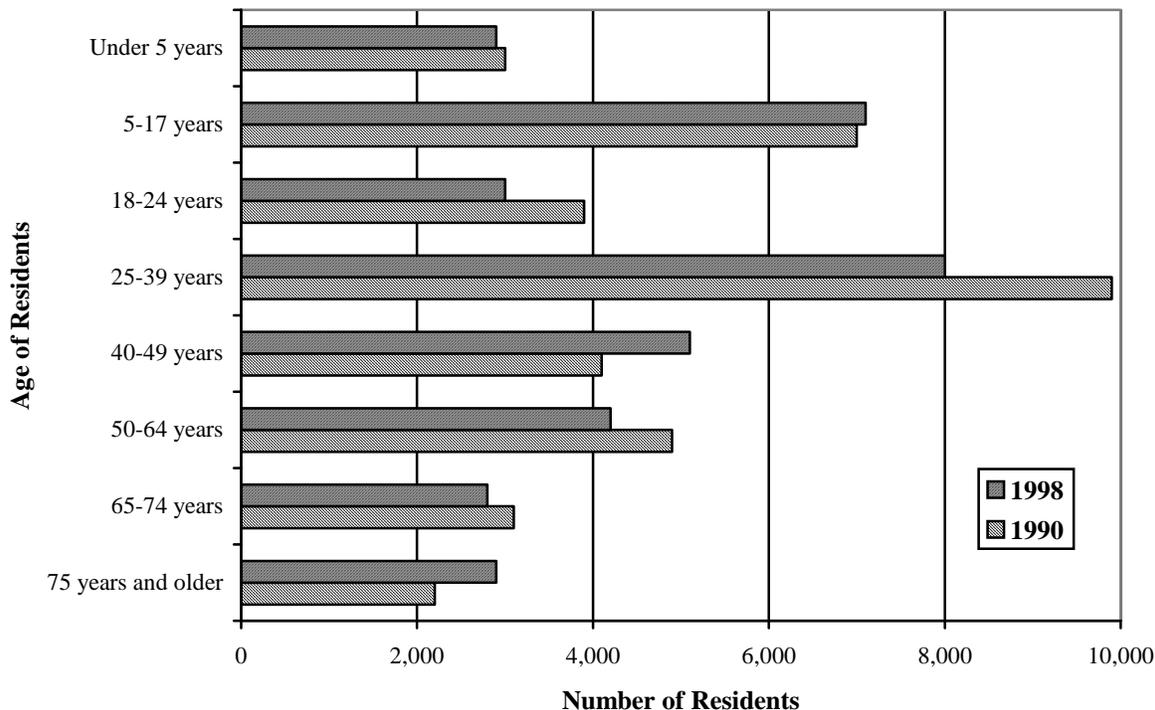
- Despite an overall decline in population, there has been a substantial increase in the segment of the population between the ages of 40 and 49. An increase was also registered in the 5 to 17 age group, but school enrollment data suggest that most of this increase can be attributed to children of high school and middle school age. Together, these data suggest the presence of more mature families in the city.
- The only other age group that increased between 1990 and 1998 are persons 75 years or older. This is indicative of an aging population and longer life expectancy. This segment of the population should continue to grow in the future.
- The largest decrease was in the 18 to 24 and 25 to 39 age groups. The fact that the city is losing persons in the family formation phase of development is reiterated by the decline in the 5 years and under age group.
- The second largest decrease was in the 65 to 74 age group.

Table 3. Age Structure Bay City, Michigan

	1990		1998 (est.)		Change	
	Number	Percent	Number	Percent	Number	Percent
Under 5 years	3,070	7.88%	2,743	7.66%	(327)	(10.6%)
5 - 17 years	7,157	18.38%	7,215	20.15%	58	0.8%
18 - 24 years	3,908	10.04%	2,836	7.92%	(1,072)	(27.4%)
25 - 39 years	9,824	25.23%	7,946	22.19%	(1,878)	(19.1%)
40 - 49 years	4,247	10.91%	5,274	14.73%	1,027	24.2%
50 - 64 years	4,742	12.18%	4,386	12.25%	(356)	(7.5%)
65 - 74 years	3,451	8.86%	2,631	7.35%	(820)	(23.8%)
75 years and older	2,537	6.52%	2,778	7.76%	241	9.5%
TOTAL	38,936		35,809		(3,127)	(8.03%)

Source: 1990 U.S. Census
National Decision Systems, 1998

Figure 3. Population Age Structure



The age structure of Bay County, excluding the population of Bay City (Table 4), reveals similar trends. The population growth was limited to persons 40 years and older, whereas all age groups below 40 saw a decline in numbers. However, the rate of decline of young adults in the rest of the county was not as steep as that of the city. The decline in the past decade of young adults in the county, excluding Bay City, can mainly be explained by the aging of the baby boom generation, but the rapid rate of decline in Bay City suggests that a significant number of young adults are migrating out of the city.

Of all the demographic trends, the decline of persons between the ages 18 and 39 has the most significant impact on the city. This age group is particularly important for its contribution to the economy and to the social life of the city. The restoration of this segment of the population is critical in maintaining Bay City as a vibrant community.

With respect to race, 92.5% of Bay City's population is white, 2.9% is African-American, 0.5% is Asian or Pacific Islander, and 4.1% of the residents are other races, based on 1998 estimates by Urban Decision Systems. By comparison, 96% of Bay County's population is white, 1.2% is African-American, 0.5% is Asian or Pacific Islander, and 2.9% of the residents are other races.

The 1998 estimates revealed that 47.8% of the City's population is male and 52.2% is female. By comparison, 48.4% of the County's population is male and 51.6% is female.

National Decision Systems 1998 estimates indicate that 29% of the households with children in Bay City have a single female head, compared to 20% for the County as a whole. By comparison, 1998 U. S. Census estimates for the nation indicate that 17.8% of the households with children are headed by a single female. These findings are important because single parent households typically are more reliant on public services (such as public transit) and have less disposable income to spend on house repairs and renovation and property improvements. The availability of more affordable housing, the public services, and employment within a relatively short distance are among the reasons that a greater proportion of such households locate in the City, rather than in more outlying parts of the County.

Table 4. Age Structure Bay County Excluding Bay City, Michigan

	1990		1998 (est.)		Change	
	Number	Percent	Number	Percent	Number	Percent
Under 5 years	4,847	6.7%	4,758	6.4%	(89)	(1.8%)
5-17 years	14,345	19.7%	13,984	18.7%	(361)	(2.5%)
18-24 years	6,712	9.2%	6,664	8.9%	(48)	(0.7%)
25-39 years	16,565	22.8%	15,032	20.1%	(1,533)	(9.3%)
40-49 years	10,761	14.8%	11,407	15.3%	646	6.0%
50-64 years	10,618	14.6%	12,405	16.6%	1,787	16.8%
65-74 years	5,393	7.4%	5,654	7.6%	261	4.8%
75 years and older	3,546	3.5%	4,844	6.5	1,298	36.6%
TOTAL	72,787		74,661			2.6%

Sources: 1990 U.S. Census
National Decision Systems, 1998

School Enrollment

The public school enrollment data (Table 5) show very little change year to year with the exception of the 1996-97 school year. The relatively large increase in public school enrollment during that year is mainly attributed to a transfer of students from local Catholic schools to public schools due to a substantial tuition increase at Catholic schools that year. In fact, the combined private and public school enrollment during that school year shows a slight decline of 0.4 percent (Table 6).

There was a very small annual decline of less than one percent in public and private school enrollment over the past five years. Thus, school enrollment has been relatively steady although there has been a slight decrease each year. According to the school district's projections, total

public school enrollment will continue to decline at an approximate rate of one percent per year for the next five years. The demographic data also support this projection, as it shows a growing number of mature families with children at the end or beyond their school years and a decline of young families with children entering their school years. This is reflected in the school enrollment data showing declines in the kindergarten to fifth grade student population and an increase in the ninth to twelfth grade student population over the past seven years.

Table 5. School Enrollment Bay City Public Schools

School Year	Grades K-5		Grades 6-8		Grades 9-12	
	Number	Percent Change	Number	Percent Change	Number	Percent Change
1992-93	4,759	–	2,355	–	3,266	--
1993-94	4,630	(2.7%)	2,365	0.4%	3,276	0.3%
1994-95	4,621	(0.2%)	2,343	(0.9%)	3,272	(0.1%)
1995-96	4,632	0.2%	2,411	2.9%	3,202	(2.1%)
1996-97	4,752	3.6%	2,439	1.2%	3,341	4.3%
1997-98	4,686	(2.0%)	2,416	(0.9%)	3,407	2.0%
1998-99	4,598	(1.9%)	2,341	(3.1%)	3,399	(0.2%)
Change	(161)	(3.4%)	(14)	(0.6%)	133	4.1%

Source: Bay-Arenac Intermediate School District

Table 6. Total Public and Non-Public School Enrollment Bay City, Michigan

School Year	Public Schools		Non-Public Schools		Total Enrollment	
	Number	Percent Change	Number	Percent Change	Number	Percent Change
1993-94	10,271	–	2,711	–	12,982	--
1994-95	10,236	(0.3%)	2,651	(2.2%)	12,887	(0.7%)
1995-96	10,245	0.1%	2,638	(0.5%)	12,883	0.0%
1996-97	10,532	2.8%	2,303	(12.7%)	12,835	(0.4%)
1997-98	10,509	(0.2%)	2,311	0.3%	12,820	(0.1%)
Change	238	2.3%	(400)	(14.8%)	(162)	(1.2%)

Source: Bay City Public Schools

Contributing to the decline in school enrollment is the Schools of Choice program, which has been in effect the past four years. According to the Bay City Schools, 271 students were lost in this period to neighboring school districts through this option.

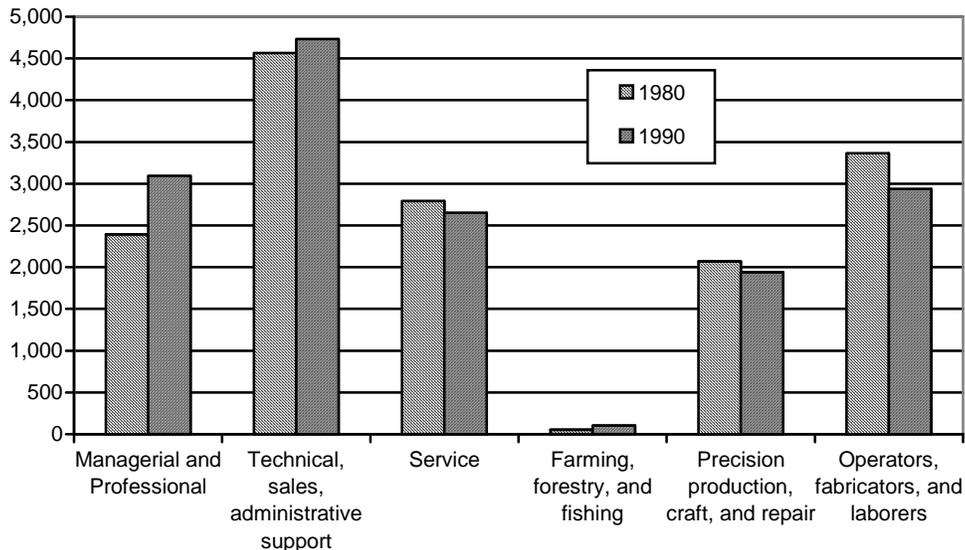
Labor Force

Labor force data from 1980 and 1990 suggests a transition within the labor force from traditional "blue collar" occupations to "white collar" occupations (see Figure 4). The group that had the largest increase is managerial and professional occupations, which, within ten years, went from comprising 15.7 percent of the labor force to 20.0 percent. The largest decline was seen among operators, fabricators, and laborers, which went from 22.1 percent to 19.0 percent of the labor force.

This shift in the labor force follows a national pattern of a transition from a manufacturing to a service economy. In Bay City, this trend has been positive, since the shift in the labor force has been accompanied by an increase in household income (see Table 7).

The median household income increased from \$21,380 in 1989 to \$27,412 in 1998, which represents a 28 percent increase in nine years. This increase outpaces the national average. One reason for the substantial increase in household income is the transition of the labor force, resulting in an increase in higher paying managerial and professional occupations, and decrease in lower paying operator, fabricator, and laborer positions.

Figure 4. Composition of Labor Force Bay City, Michigan



The second reason for the increase in household income is the aging of the population. Since 1990, the number of persons 40 years or older has increased while the number of persons between 18 and 39 has decreased substantially. Therefore, the number of persons in their prime

wage earning years has increased proportionally to the number of persons who would be filling lower paying entry-level positions.

The increase in income has been experienced at all income levels, although the greatest gains were for households with incomes of \$50,000 or more. The rise in income contributes to economic activity in the city and also suggests that there is a market for higher-end housing in the city.

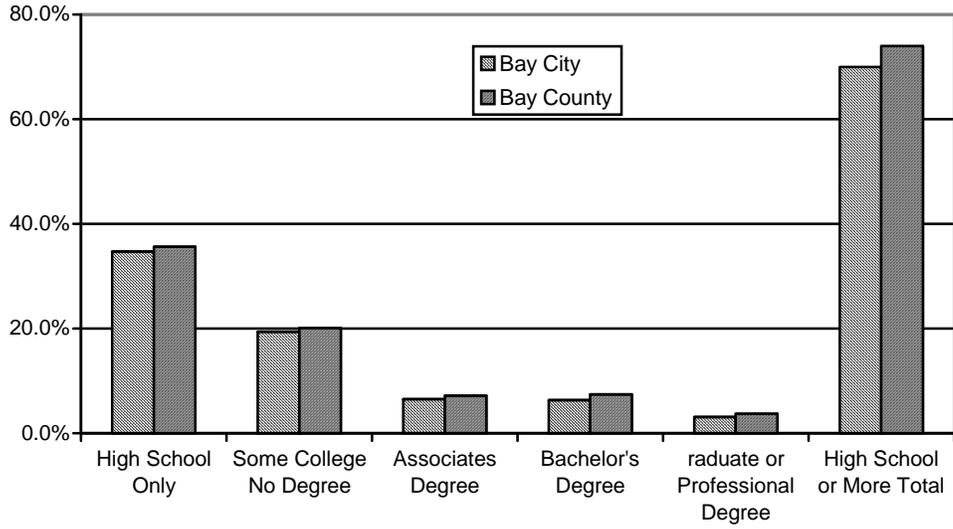
Despite the overall gains, there is still a disproportionate number of households with incomes of less than \$15,000. This group still comprises the largest income group, at 29 percent of all households.

Table 7. Annual Household Income Bay City, Michigan

	1989		1998 (est.)	
	Number	Percent	Number	Percent
Less than \$15,000	5,904	38.08%	4,376	29.02%
\$15,000 - \$24,999	2,835	18.29%	2,701	17.91%
\$25,000 - \$34,999	2,329	15.02%	1,923	12.75%
\$35,000 - \$49,999	2,463	15.89%	2,224	14.75%
\$50,000 - \$74,999	1,509	9.73%	2,374	15.74%
\$75,000 - \$99,999	330	2.13%	876	5.81%
\$100,000 or more	132	0.85%	608	4.03%
Median Household Income	\$27,412		\$21,380	

Source: 1990 U.S. Census
National Decision Systems, 1998

Figure 5. Educational Attainment (Age 25 yrs. and older)



EXISTING LAND USE SURVEY AND ANALYSIS

The existing land use survey reveals land use patterns and trends in the City. The survey begins by defining appropriate categories of land use. A field survey is then completed, and the information is then mapped and measured to determine the amount of land in each category.

The existing land use survey for this Master Plan was completed in September 1998. The results of the survey are illustrated on Map 1, Existing Land Use, and Table 8. Existing land use was mapped and acreages were accurately computed using ArcView software.

Land Use Categories

The following categories were established for the existing land use survey in Bay City.

- **Residential Uses**

Single Family Residential Uses: This category includes all single-family homes.

Two-Family Residential Uses: This category includes all two-family homes or duplex units.

Multiple-Family Residential Uses: Multiple-family residential uses include any buildings with three (3) or more dwelling units.

- **Commercial Uses**

Commercial Uses: The Commercial classification includes general and local commercial uses. General commercial uses serve a regional population. These uses tend to be located along major thoroughfares. Local commercial uses are commercial activities that primarily serve nearby residents, including retail and personal service businesses located on minor thoroughfares serving specific neighborhoods. Professional office uses have been included in this designation.

Central Business District: This land use designation includes the diverse land uses found in the downtown district.

Office Uses: This category includes buildings that house administrative services and office functions of corporations and small businesses including law firms, accounting firms, or business service firms.

- **Industrial Uses**

Light Industrial Uses: The light industrial classification includes light manufacturing, assembly, processing and distribution uses.

Heavy Industrial Uses: Heavy industrial includes manufacturing and assembly operations, material production and processing, and other industrial uses that produce noise, dust, vibration and other impacts that are typically incompatible with less intense land uses.

- **Institutional Uses**

Public/Institutional Uses: This land use category includes schools, churches, fire and police stations, City and county offices, wastewater treatment plants, municipal landfills, cemeteries, and utilities.

Parks/Open Space: Public parks and open space, whether used for passive or active recreation, are included in this land use category.

- **Miscellaneous Uses**

Mixed Uses: This category includes parcels that are occupied by more than one land use. For example, a corner store with retail on the ground floor and residential apartments above is classified as a mixed use

Vacant: This category includes parcels that are not occupied by structures or uses.

Existing Land Use Trends

Single-family and two-family residential land use has increased by 26 acres, or 1.2%, since 1964. This is true for multiple-family as well, increasing from 26 to 135 acres from 1964 to 1998. Commercial uses occupied only 182 acres in 1964, whereas today about twice as much acreage is used for commercial. Much of this commercial growth has occurred along Wilder Road. Industrial land use acreage has increased from 566 acres to 836 acres. The amount of institutional land use within the City has increased to 769 acres.

Table 8. Existing Land Use Parcel Count and Total Acreage

Existing Land Use	1998 Parcel Count	Total Acreage (% of Total)	
		1998	1964
Single Family Residential	11,151	2,001 (28.1%)	2,112 (32.5%) (single + two family)
Two Family Residential	912	137 (1.9%)	
Multiple Family Residential	563	135 (1.9%)	26 (0.4%)
Commercial	632	301 (4.2%)	182 (2.8%) (includes CBD and office)
Office	25	12 (0.16%)	
Central Business District	273	101 (1.4%)	
Mixed Use	45	7(0.10%)	
Light Industrial	69	71 (1.0%)	566 (8.7%) (light and heavy)
Heavy Industrial	218	765 (10.8%)	---
Institutional	113	769 (10.8%)	241 (3.7%)
Parks and Open Space	106	227 (3.2%)	144 (2.2 %)
Vacant	593	423 (5.9%)	880 (13.5%)
Manufactured Home Park	2	27 (0.39%)	---
Roads and Railroad Rights-of- Way	---	1,483 (20.8%)	1,490 (22.9%)
River		637 (9.0%)	600 (9.2%)
TOTALS	15,102	7,119 acres	6,503 acres

The 1964 Master Plan was the source for 1964 land use data. Approximately 448 acres have been annexed into the City since 1964. Aside from annexation, the minor differences between 1964 and 1998 acreage figures are due to different methods of measuring and computing acreage. 1964 acreage figures were determined by hand using a planimeter, and 1998 figures were determined by computer.

Map 1. Existing Land Use

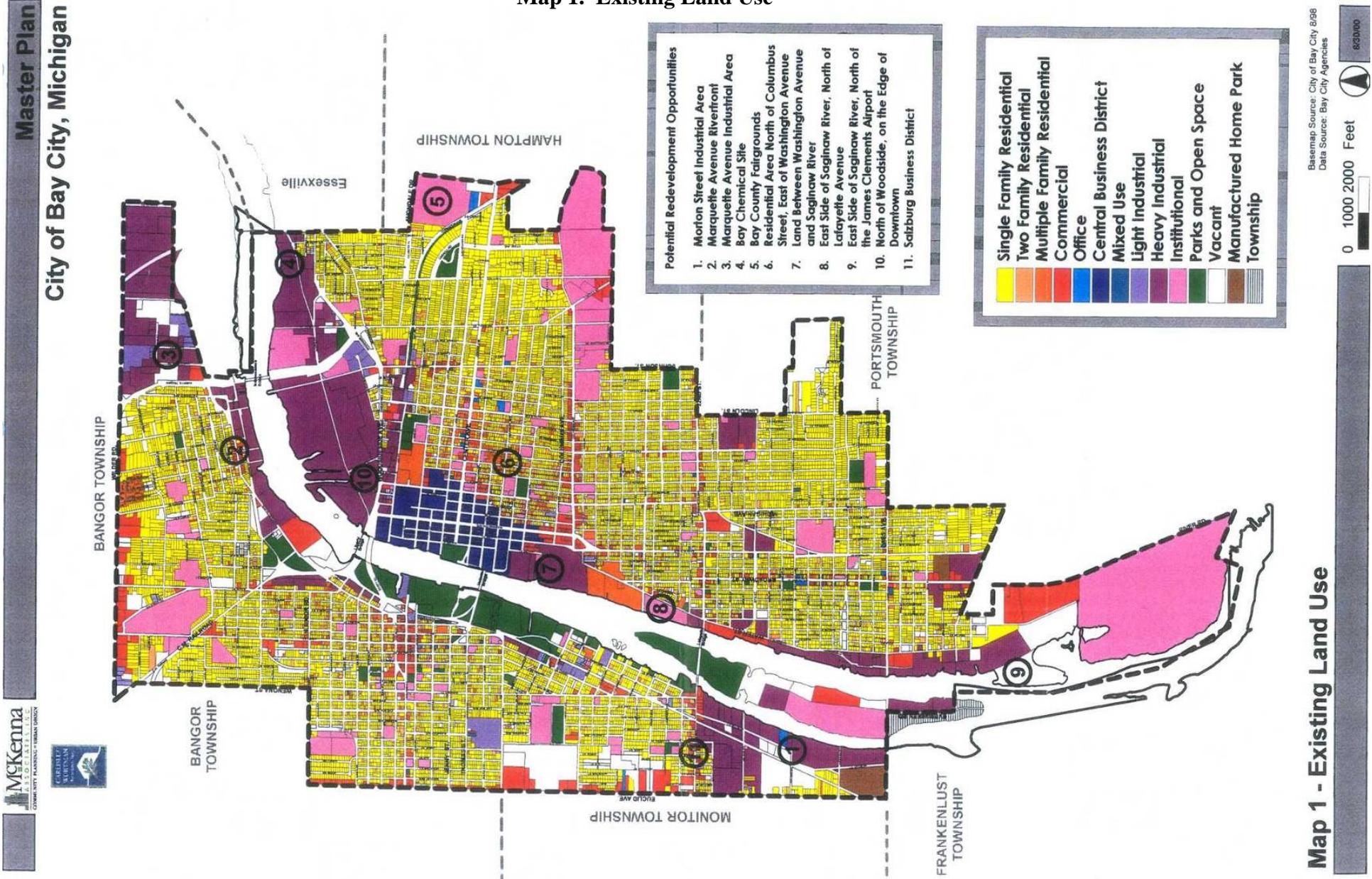
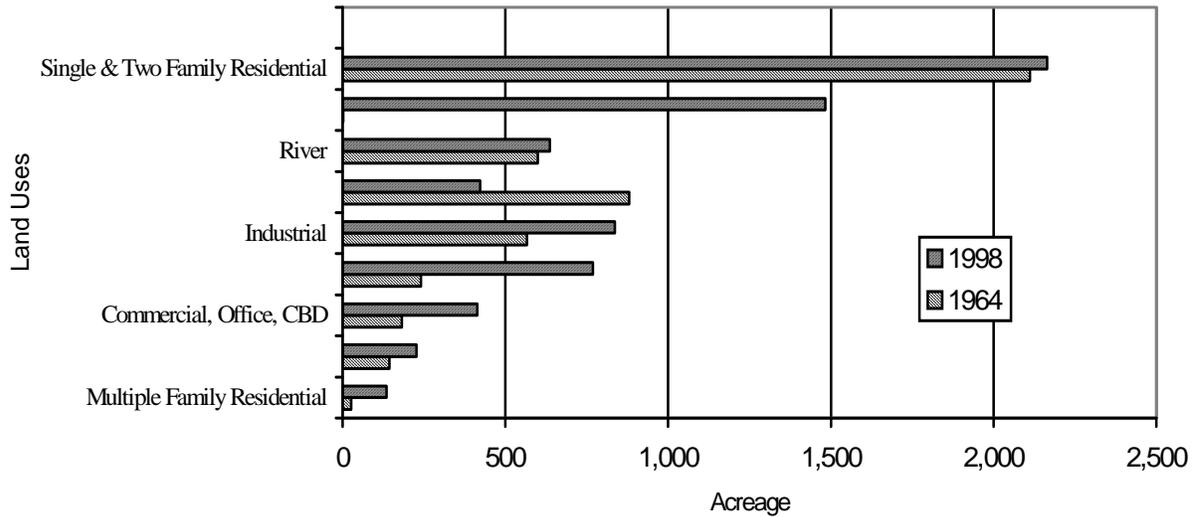


Figure 6. Existing Land Use



Sources: 1964 Master Planning Commission
1998 Land Use Survey by Carlisle/Wortman

The City has seen a substantial increase in park and open space lands since 1964. Today, 227 acres are used for parks and open space, compared with only 144 acres in 1964. Vacant land use has decreased from 880 acres to 423 acres.

Residential Uses

Residential land use occupies 2,300 acres, or 32.3% of the land in Bay City. There are approximately 11,550 single family parcels, occupying 2,001 acres (28.1 %) of land. Two-family residential uses account for 912 parcels with 137 acres (1.9%) of land, while multiple-family accounts for 563 parcels on 135 acres (1.9%) of land.

The type and condition of housing varies significantly within the City. The oldest neighborhoods are located in the central portions of the City. These areas are generally characterized by small lots and the oldest housing, some of which is in need of improvements. About 65% of Bay City's housing stock was constructed prior to 1920.

Some of the older residential areas contain large well-maintained elegant homes on larger lots along tree-lined streets. Many large distinctive homes with historic significance can be found along Center Avenue, Midland Street and McKinley Avenue. Newer residential areas have developed to the east and south, on the fringes of the City.

Two-family residential uses, which typically are in converted single family homes, are scattered throughout the City, but there are concentrations in neighborhoods near the downtown and in neighborhoods closest to the river.

Most multiple-family uses are near the downtown, along the riverfront and in the Midland Street area. Many single-family homes have been converted to multiple-family uses throughout the City. High rise residential buildings, such as Smith Manor, Maloney Manor, and Pine Towers, house elderly and disabled residents.

There are two manufactured home parks in the City. West Shore Estates, a ISO-unit park, is located on the northeast corner of Euclid and Hotchkiss Streets in the southwest corner of the City. Bay Side Village, a 40-unit park, is located in the east side of Broadway, in the south end.

Commercial Uses

Commercial land uses range from neighborhood commercial districts that serve a small population to regional shopping districts that draw from adjacent communities and serve Bay City residents as well. Commercial corridors in the City include Center Avenue, Midland Street, Wilder Road, Euclid Avenue, and Lafayette Avenue. Altogether, commercial, office, and Central Business District uses occupy 414 acres of land, or 5.8% of the total.

Most of the national chain stores are located along Wilder Road, which is the City's newest commercial district, and on Euclid Avenue. Commercial uses that are more local in nature or are tourist-oriented are located in the downtown and on neighborhood commercial corridors.

Industrial Uses

Industrial land accounts for 836 acres, or 11.8 percent of the City's land area. Most industry is considered "heavy industrial" in character, although light industrial uses are scattered among the heavy industrial operations, primarily along the waterfront. Little or no screening is present to buffer the older industrial uses from other less-intensive residential and commercial uses located nearby.

Institutional Uses

Public parks and open space and institutional uses are scattered throughout the City. Uses such as schools, parks and churches help define the neighborhoods that they serve. Parks and open spaces uses occupy 227 acres, or 3.2% of the total. The institutional land use category, which accounts for 769 acres (10.8% of the total) includes utilities, electrical substations, a closed municipal landfill, and a wastewater treatment plant. City and County-owned buildings are included in this category and can be found at various locations, including downtown.

Vacant Areas

Only 423 acres of vacant land (5.9% of the total) remain in the City. These are mainly empty lots in residential areas, many of which have been sold in recent years for infill housing. A few larger vacant parcels located along the waterfront were formerly used for industrial or commercial purposes. Many of the vacant industrial parcels are brownfield sites.

Redevelopment Opportunities

The analysis of existing land use revealed locations where land is underutilized, in most cases because of closure of obsolete industrial facilities. In other locations, the land use analysis found incompatibilities between adjoining land uses. These circumstances present opportunities for redevelopment to make more beneficial use of the land, eliminate land use incompatibilities, increase the tax base, and achieve other development goals of the City. A few of the most prominent redevelopment opportunities that were identified during the existing land use analysis are described on the following pages.

- **Morton Street Industrial Area.** The industrial area located between Euclid Avenue and the Saginaw River, in the southwest corner of the City, presents a good industrial redevelopment opportunity. Although some viable industrial concerns operate in this area, there are several vacant or partially-occupied industrial sites and buildings. The presence of Monitor Sugar on the west side of Euclid Avenue compels continued industrial use in this part of the City. Development of a certified industrial park should be considered. Although this area enjoys relatively easy access to the I-75 freeway, access to the east side could be substantially improved by constructing a bridge aligned with Hotchkiss and Cass Streets.

New industrial parks in the Morton Street Industrial Area and elsewhere in the City must incorporate the design features found in new industrial parks elsewhere in the region. Such features include paved streets, street lighting, sidewalks, buried utility lines, proper screening and landscaping, and uniform signage.

- **Marquette Avenue Riverfront.** Riverfront redevelopment opportunities exist along Marquette Avenue, between the Liberty and Independence bridges. In the past, neighboring residents have experienced adverse impacts (particularly truck traffic) from the industrial uses along Marquette, so any new development must be sensitive to the proximity of the nearby residential neighborhood. Redevelopment of this area would benefit from being undertaken within the context of a larger comprehensive neighborhood plan. A mixed use neighborhood center could be located along Marquette Avenue, within the Banks Area Business District. The neighborhood plan for this area must consider the need for uses other than industrial, including retail, office, higher density residential, and civic spaces.
- **Marquette Avenue Industrial Area (east of Scott Street and South of Wilder Road).** Much of the underutilized industrial land in the northeast corner of the City is City-owned. Because of the presence of surrounding industrial uses, continued industrial development would be appropriate. This area presents another opportunity for development of a certified industrial park. Some wetlands mitigation may be required.
- **Bay Chemical Site.** The vacated Bay Chemical site, north of Woodside on the Saginaw River, in the northeast corner of the City, is an appropriate location for industrial redevelopment. Possible contamination on the site needs to be addressed. This site may be able to accommodate stone docks if they are relocated from their existing location, south of the Veterans Memorial Bridge.

- **Bay County Fairgrounds.** The Bay County Fairgrounds, which are only partially used through much of the year, could be relocated to a more rural site in the County. The Fairgrounds site would then be available for new residential development of the same quality that is found in the adjacent neighborhood to the west. New, high quality housing is needed in the City to accommodate residents who must currently look to the suburbs for new housing. There are other development options that should be considered for the Fairgrounds, including a water park, mixed use/mixed residential density traditional neighborhood development, a new school, etc.
- **Residential Area North of Columbus Street and East of Washington Avenue.** The residential area located south of downtown is in transition, with conversion of single family homes to multiple family or duplex. The conversion of single family homes to multiple family suggests that a need exists for higher density, affordable housing in the center of the City. However, since World War II there has been a disproportionate number of single family home conversions, contributing to the degradation of the housing stock and perception of blight. Continued housing rehabilitation is essential, although redevelopment to allow new residential development is worth considering in the long term.
- **Land between Washington Avenue and the Saginaw River, South of Ninth Street.** In the mid-1990's, the development of the EP A Center of Ecological Research and Training was anticipated on land south of Ninth Street, along the river. The cancellation of this project presents new opportunities for redevelopment, provided that the Bay Aggregates and Bay City Light and Power are relocated. Redevelopment to create a new neighborhood, designed in accordance with the principles of traditional neighborhood design, should be considered. The prominent location of this site also makes it suitable for entertainment, specialty commercial, and entertainment uses having an educational focus (such as an aquarium, fine arts center, or science center).
- **East Side of the Saginaw River, North of Lafayette Avenue.** Continued redevelopment of the river front is warranted, based on the success of Breakers Cove and Rexer/Jablonski Park. Relocation of the City's DPW yard will be required to reclaim the river front for residential and public use. The businesses along Salzburg and Columbus Avenues will benefit from additional residents within their market areas.
- **East Side of the Saginaw River, North of the James Clements Airport.** Underutilized land immediately north of the James Clements Airport presents the opportunity for redevelopment to accommodate a business and industrial park or mixed use development. There are concerns about wetland and floodplain boundaries and possible contamination that must be resolved. Development of facilities to accommodate seaplanes has also been discussed and deserves further consideration.
- **North of Woodside, on the Edge of Downtown.** Hirschfield's Scrap yard and the heavy industrial uses north of Woodside on the edge of Downtown are not appropriate uses at a major entry to the Downtown and at the terminus of Washington Avenue. Ideally, these uses should be replaced with less intensive residential, public, and commercial uses. Alternative uses for the site include boat storage, repair, and sales; or light industrial (for example, a

heavily-landscaped industrial park). In the meantime, improved screening with a brick wall and landscaping is needed along Woodside.

- **Salzburg Business District.** Infrastructure improvements, including street reconstruction, new sidewalks, street trees, public parking, and lighting, are needed to facilitate redevelopment of the Salzburg Business District.

ECONOMIC AND MARKET ANALYSIS

Regional Overview

Michigan

The U.S. economy, after a decade of continued growth, is in its longest peacetime period of expansion. Continued growth for more than 80% of manufacturing industries and all of the major service sectors is expected in the year 2000.

Leading this growth is the information technology sector, which includes hardware manufacturers (computers and peripherals, printed circuit boards, radio and television equipment, semiconductors, and telecommunications equipment) and information processing (information retrieval, data processing, computing services).

Business investments in new equipment and structures remained strong in 1999. Businesses are under pressure to keep prices down in order to stay competitive, so businesses have been purchasing new equipment, particularly computer related equipment, to achieve greater efficiency. Productivity in Michigan, as measured by the change in output generated per worker per hour worked, increased by 4.3% in the fourth quarter of 1998, and by 4.0% in the first quarter of 1999.

Michigan has been economically strong for several years and continues to experience growth, low unemployment and expanding production. Following several boom years, Michigan's economic indicators are leveling off but remain positive. Michigan's unemployment rate was 3.7% in November 1999.

Michigan continues to move toward a service based economy. Over 75% of the employment in the state was in service producing sectors in July of 1998. Between July of 1997 and 1998, employment in goods producing industries contracted by 3.7% while employment in service producing industries expanded by 2.3%. The greatest increase during this time period in average weekly hours and

earnings was for department store workers (8.1 % and 9.2%, respectively). The greatest decline in average weekly hours and earnings was for motor vehicle and equipment workers (-10.8% and 7.0%, respectively) and workers in the durable goods sector (-5.1 % and -6.5%).

Michigan industries are taking advantage of the strong economy to become more efficient. Many Michigan companies in the automotive industry have restructured with the intention of improving productivity and ability to compete in the new world market. According to the Bureau of Labor Statistics, overall output per hour in the nonfarm business sector has increased every quarter since the third quarter of 1995.

Bay County and the Tri-County Region

Current and leading economic indicators for the Tri-County region (Bay, Midland, and Saginaw counties) are positive. The region can expect no short-term change in direction in the area's economy, however, the pace of growth may slow down somewhat.

Like the state overall, Bay County is moving from manufacturing to a service base. In 1984, durable goods manufacturing accounted for the largest share of the employment earnings, at 25.2%. Ten years later, in 1994, services accounted for the largest share at 22.4%, while durable goods accounted for only 18.1 %.

According to the economic report for Midland/Bay/Saginaw counties, hourly factory earnings are higher in the Tri-County region than in any other market in Michigan except for Flint. High earnings help to drive spending and overall prosperity in the region, but also make the area less competitive in attracting new manufacturing jobs.

Bay County still has a strong agricultural base. Between 1978 and 1992, Bay County lost only about 1.5% of its acreage in farm production. In 1994-95, 40,000 acres in Bay County were committed to growing dry beans and 25,100 to sugar beets, second only to Huron and Tuscola Counties. Although during the same time period, the number of farms declined by 32%, indicating that farms have increased in size.

Bay City's Economic Function as a Component of the Region

ill the Tri -County region, Saginaw County accounts for about half of the labor force, followed by Bay County with 28%, and Midland County with 21% (Table 9). In January 1999, the unemployment rate for the region was 5.2%; Bay County's unemployment rate was 6.1 %. Data from the Michigan Department of Career Development for September 1999 indicated that unemployment rates had dropped to 3.7% in Bay County and 4.9% in Bay City.

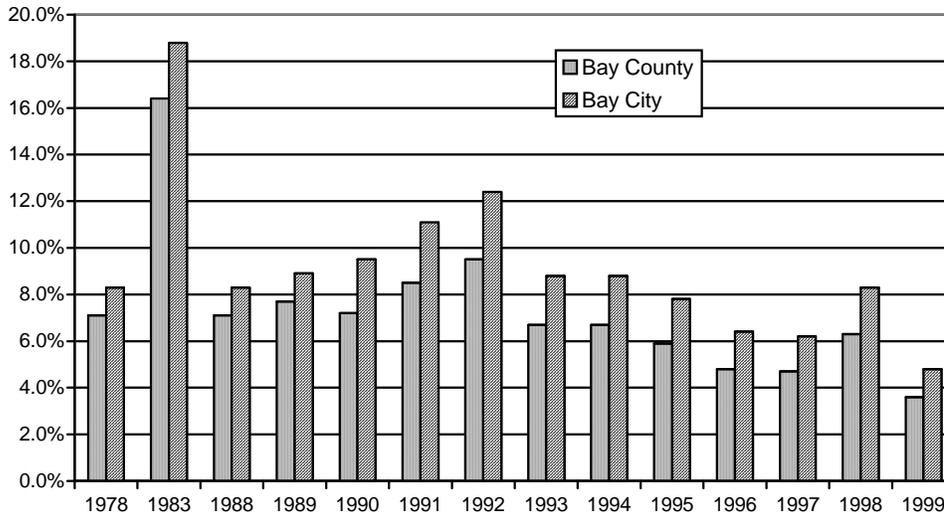
Table 9. Tri-County Labor Force Statistics January 1999

	Total Labor Force		Employment		Unemployment		Unemployment Rate
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	
Saginaw-Bay-Midland	198,900		188,500		10,325		5.2%
Bay County	56,600	28.0%	52,175	27.7%	3,400	32.9%	6.1%
Midland County	42,425	21.3%	40,725	21.6%	1,725	16.7%	4.0%
Saginaw County	100,850	50.7%	95,650	50.7%	5,200	50.4%	5.2%

Source: Michigan Jobs Commission/Employment Service Agency

The City's unemployment rate has closely followed the pattern of the Bay County overall over the past twenty years (Figure 7).

Figure 7. Unemployment Rate Bay City and County, July 1978-1999



Source: Michigan Jobs Commission/Employment Service Agency

Bay City accounts for a substantial portion of the employment in the County. Twenty-two of the County's largest 50 employers are located within the limits of Bay City (Table 10). These 22 employers account for 51 % of the jobs of the County's top 50 employers. The County's top 10 employers employ 10,102 people, and 59% of these jobs are in Bay City.

Table 10. Fifty Principal Employers Bay County, 1998

	Employees within Bay City	Employees outside of Bay City
Bay Health Systems	2,383	
Dow Corning Corp.		1,560
General Motors Powertrain	1,490	
Bay City Public Schools	1,276	
Monitor Sugar Company		740
Meijer, Inc.		678
Consumers Energy		565
Delta College		556
Bay County	555	
City of Bay City	434	
Bay-Arenac Intermediate School District		400
Heartland Home Health Care	365	

ECONOMIC AND MARKET ANALYSIS

	Employees within Bay City	Employees outside of Bay City
Bangor Township Schools		350
AP Parts/Northern Tube Division		340
S.C. Johnson Wax	60	300
Euclid Industries		272
Essexville-Hampton Schools		255
Wal-Mart		235
Bay City Times	195	
Carriage House		183
Thomson Bay Co.	176	
Carquest Bay City	175	
Sears, Roebuck and Co.		170
Mutual Savings Bank	167	
R.W.C. Inc.	167	
Bay-Arenac Community Mental Health		162
F.P. Horak Company	122	30
Bay Valley Resort Hotel		150
Newcor, Inc.	150	
U.S. Post Office - Bay City	149	
Target, Inc.		140
Bay Shores Nursing Care		135
Kroger Co.		130
Northern Concrete Pipe	125	
J.C. Penney Co., Inc.		120
K-Mart Corporation		120
Bay County Family Independence Agency		108
Chemical Bank Bay Area	105	
Bay Metro Transit	103	
Dow Chemical Company		100
First of America Bank	96	
Thelen Auto Group		96
Metro Fabricating		92
Lutheran Child and Family Services		90
Bay Cast, Inc.	90	
Dan's Bay City IGA	90	
Kessel Food Market		90
Magline		90

	Employees within Bay City	Employees outside of Bay City
Werth Engineering		90
Subtotal	8,473	8,347
Percent of Total (16,820)	50.4%	49.6%

Source: Bay Area Chamber of Commerce

Employment

Although Bay City is usually associated with manufacturing, in the last decade the region has become more oriented toward the service industry. In 1997, 72% of the Tri-County region's employment was related to a service producing industry. This is similar to the 1997 figures for the state overall where 74% of the jobs were in the service industries. Most of the proportional difference was due to a larger percentage of government workers in the state overall and a larger percentage of construction workers in the Tri-County region.

The Michigan Employment Security Commission has forecasted average employment growth of 2,471 new jobs annually for the Tri-County region for the period of 1994-2005 (Table 12). An additional 4,089 jobs are expected to open annually as replacement for existing jobs.

Table 11. Employment by Sector (in thousands), Saginaw-Bay-Midland MSA, 1997

	Total Employment	Goods Producing		Service Producing	
		Manufacturing	Construction/ Mining	Private	Government
Michigan	4,333.0	963.0	160.0	2,561.0	649.0
Percent	100.0%	22.2%	3.7%	59.1%	15.0%
Saginaw-Bay- Midland MSA	174.3	39.1	8.3	104.7	22.3
Percent	100.0%	22.4%	4.8%	60.1%	12.8%

Source: Michigan Jobs Commission

Table 12. Occupational Employment Forecasts Bay-Midland-Saginaw MSA, 1994-2005

Occupations	Employment		% Increase	Average Annual Openings		
	1994	2005		Total	Growth	Replacement
Total, all occupations	181,260	208,540	15.0%	6,560	2,471	4,089
Executive, administrative, and managerial	17,820	20,790	16.7%	645	270	375
Professional specialty	23,490	29,590	26.0%	1,001	543	458
Technicians and related support	7,250	8,690	19.9%	271	131	140
Marketing and sales	19,160	23,110	20.6%	926	360	566
Administrative support occupations, including clerical	28,190	30,290	7.4%	749	190	559
Service	30,150	37,140	23.2%	1,415	634	781
Agriculture, forestry, fishing and related	4,460	4,880	9.4%	130	43	87
Precision production, craft, and repair	23,290	24,660	5.9%	611	126	485
Operators, fabricators, and laborers	27,440	29,370	7.0%	811	174	637

Source: Michigan Employment Security Commission

If current trends continue, Bay County will account for just under one-third of this annual increase, or about 800 jobs annually. New job growth is expected to be dominated by professional specialty occupations (26% increase), service occupations (23% increase), and marketing and sales occupations (21 % increase).

Manufacturing/Office Sector

Bay County has only one certified industrial park. The Valley Technology Center industrial park located in Monitor Township totals 176 acres with 127 acres available (in 1997). According to the Bay Economic Development Corporation, the park is expected to be fully occupied within the next several years based on the amount of interest and the number of businesses with purchase options in the park.

Some large scale manufacturers have located in the new industrial park instead of the City, although the City's industrial areas continue to attract new manufacturing-based employers. The associated business services, centralization, transportation infrastructure and proximate workforce available in the City still makes it an attractive choice for many businesses.

The manufacturers that have not located in the City did so for the most part because parcels large enough for their needs were not readily available in the City. It is a positive that the area can serve the locational needs of different businesses; the Valley Technology Center complements the offerings in the City. However, the City must continue to be responsive to the needs of businesses considering locating in the City.

Due to employment and industrial trends, fewer industrial users will be relocating to the region and some may leave the region. Because industrial users require more area in modern facilities, the overall acreage committed to industrial users may remain steady, but the number of industrial facilities may decrease in the City.

Potential industrial development sites in the City offer distinction that is not available in the outlying areas. Businesses locating in the City also have the advantage of a ready infrastructure, services and employment base. Nevertheless, competition cannot be ignored. Suburban industrial parks offer large sites and adequate utilities on attractive sites close to I-75.

- The City should continue to work with businesses considering relocation to find suitable sites or buildings with the potential for expansion or retrofitting.
- The City should actively pursue the assemblage and clearing of obsolete and underutilized sites and buildings for new and expanding industrial users.
- The City should identify a site for an industrial park and pursue certified industrial park status for it.
- Recruitment and retention of office or institutional users (hospital, university, etc.) should take on equal importance as manufacturing users.

Retail/Service Market Area

Bay City is a significant retail center for the region, contributing approximately 10% of the retail sales for the Tri-County region. On a per capita basis, in 1995 Bay City's retail sales amounted to almost \$27,000 annually (Table 13).

It is noteworthy that automotive sales in Bay City accounted for 41 % of all retail sales, but in the Tri-County region, automotive sales accounted for only 25% of all retail sales. Bay City accounted for approximately 17% of the region's automotive sales, compared to 10% of the food and eating and drinking places sales, 5% of the general merchandise, furniture, appliances and furnishings, and about 9% of the drug sales.

Table 13. Estimated Retail Sales by Store Group Bay City, Michigan and Region, 1995

	Saginaw/ Bay City/Midland		Bay City	
	Sales (1,000 \$'s)	Percent of Total Sales	Sales (1,000 \$'s)	Percent of Total Sales
Food	\$500,647	12.6%	\$54,129	12.7%
Eating & Drinking Places	\$387,482	9.7%	\$39,138	9.2%

	Saginaw/ Bay City/Midland		Bay City	
General Mdse.	\$711,198	17.8%	\$42,785	10.0%
Furniture/Furnish./Appliances	\$265,492	6.7%	\$14,416	3.4%
Automotive	\$1,009,842	25.3%	\$175,508	41.2%
Drug	\$137,454	3.4%	\$12,893	3.0%
Total Retail Sales	\$3,985,475		\$425,907	
Number of Households (in thousands)	150.0		15.8	
Total Retail Sales per Household	\$26,570		\$26,956	

Source: Sales and Marketing Management, 1995

The data suggest that in 1995, significant numbers of buyers came from outside of the City to buy and service automobiles. Proportionally fewer buyers came to the City for purchase of general merchandise, furniture, appliances and furnishing, drugs and food, and to patronize eating and drinking places.

The spending potential for City residents in total is just under the retail sales for the City (Table 14). Thus, although some buyers are coming into the City to buy certain items, almost as many City residents are spending outside of the City.

Table 14. 1998 Retail Sales Potential Bay City, Michigan

Category	Sales Potential (in \$1,000,000's)	Percent of Total Sales
Food Stores	\$53	12.7%
Eating and Drinking Places	\$36	8.6%
General Merchandise	\$85	20.4%
Furniture/Furnishings/Appliance	\$11	2.6%
Automotive Dealers and Supplies	\$111	26.6%
Automotive and Home Supplies	\$6	1.4%
Drug & Proprietary Stores	\$12	2.9%
Apparel and Accessory Stores	\$16	3.8%
Gasoline Service Stations	\$29	7.0%
Hardware, Lumber & Garden	\$30	7.2%
Total Retail Sales Potential	\$417	
Estimated Number of Households	16,543	
Retail Sales per Household	\$25,207	

Source: National Decision Systems

The Master Plan's demographic analysis indicates that the City's population is forecasted to decrease. This decreasing population will limit the retail expansion potential for the City. Changing shopping habits may further reduce retail development opportunities. Internet shopping is chipping away at sales of stores that sell commodity goods, such as books, electronics, music, apparel, and computer goods. Internet sales have been expanding at a rate that far exceeds all expectations. The eventual impact on conventional retail stores could be huge, resulting in vacant, obsolete commercial buildings. There is evidence that consumer interest in large scale commercial business is weakening. It has been predicted that 15% to 20% of regional malls will be nonfunctional in the next decade.¹

The challenge in such an environment is to maintain the competitiveness of and expand the target markets for existing retail districts. One approach to maintain competitiveness is to allow mixed use development at a higher density in well-planned urban neighborhoods, providing an alternative to automobile-oriented subdivisions that have served as the model for the past fifty years. Experience across the country indicates that there is a pent-up demand for compact, mixed use developments, often referred to as traditional neighborhood development (TND). In such developments, residential development is typically allowed on upper floors above commercial and office uses and a variety of housing types are permitted within each neighborhood.

TND benefits developers, residents, and the City in a variety of ways. For the developer, higher density lowers the per unit housing cost. The mix of housing types allows the developer to reach a broader market. Developers are allowed to incorporate commercial uses in areas where such uses may not be otherwise permitted. TND appeals to homeowners who wish to be less auto-dependent and live in an environment having the character and style of a traditional neighborhood.

Investment in traditional neighborhood development is one of the fastest growing segments of the real estate industry. Cumulative investment in such development in the United States rose to \$2.1 billion at the end of 1997.²

¹ Emerging Trends in Real Estate 1999, PricewaterhouseCoopers and Lend Lease Real Estate Investments, New York, p.6.

² New Urban News, February 1999, Ithaca, NY, p. 1.

The following is a description of existing commercial districts in the City along with recommendations to improve the districts.

Business District	Types of Businesses	Economic Status	Concerns	Opportunities
Downtown Center	<ul style="list-style-type: none"> • retail/office core • antique/entertainment district • government center • office/light industrial 	<ul style="list-style-type: none"> • historically the main shopping district in the region • now recognized for specialty commercial and entertainment 	<ul style="list-style-type: none"> • lack of continuous street level retail in some areas • retail competition from suburban areas • dwindling retail spending potential from City residents • vacant parcels and buildings • lacks population to support 24-hour street life 	<ul style="list-style-type: none"> • creation of a government center for the downtown • new public uses should be located downtown • continuation of pedestrian oriented building and street designs • retail specialty niche for tourists and downtown workers • convert surface parking into parking structures • infill development on vacant parcels and surface parking lots • housing developed on upper stories • new housing, such as townhouses
Euclid Avenue	<ul style="list-style-type: none"> • fast food restaurants • auto sales and service • banks and offices • drug stores 	<ul style="list-style-type: none"> • major community commercial district 	<ul style="list-style-type: none"> • vehicle access and circulation within commercial sites is often restricted • several commercial sites lack landscaping and site amenities • commercial uses are not inviting to pedestrians from nearby residential areas • suffers from "strip commercial" characteristics 	<ul style="list-style-type: none"> • more carefully develop vacant and underused parcels upgrade appearance of the corridor • landscaping/site improvements on existing and future developments • provide safer and more inviting pedestrian access for nearby residents to reduce traffic congestion and open new markets for retailers • replace aging buildings with new mixed use, multi-storied buildings located at the sidewalk's edge • shared parking and vehicular circulation at the rear of lots • wide sidewalks on Euclid with street trees, benches, and appropriate lighting

ECONOMIC AND MARKET ANALYSIS

Business District	Types of Businesses	Economic Status	Concerns	Opportunities
Johnson Street Business District	<ul style="list-style-type: none"> • local serving retail • professional office • specialty retail 	<ul style="list-style-type: none"> • neighborhood commercial district 	<ul style="list-style-type: none"> • some non-complimentary retail uses • lack of cohesive retail character 	<ul style="list-style-type: none"> • intimate pedestrian scale, distinctive architecture and streetscape is an asset • opportunity for more specialty retailers • unified vision for the district could create regional draw
Columbus Avenue Business District	<ul style="list-style-type: none"> • eating/drinking places • personal services • convenience commercial 	<ul style="list-style-type: none"> • neighborhood commercial district 	<ul style="list-style-type: none"> • inconsistent building designs and setbacks result in a lack of identity for the district • fast moving traffic and deep setbacks limit visibility for passers-by • vacant buildings and lack of pedestrians may cause the area to feel unsafe 	<ul style="list-style-type: none"> • streetscape improvements, building upgrades and traffic management should focus on improving safety and aesthetics
Garfield Avenue (M-84) Business District	<ul style="list-style-type: none"> • limited, drive-by commercial 	<ul style="list-style-type: none"> • neighborhood commercial district 	<ul style="list-style-type: none"> • spotty and intense commercial uses appear to have had a negative impact on residences • commercial zoning throughout the corridor undermines the residential base 	<ul style="list-style-type: none"> • the corridor can continue to benefit from the pass-by regional traffic • new commercial uses should be developed with a sensitivity to the neighboring residences • commercial zoning should be limited to targeted areas along the corridor
Broadway Avenue	<ul style="list-style-type: none"> • destination-oriented, specialized retailers • eating and drinking places 	<ul style="list-style-type: none"> • neighborhood commercial district 	<ul style="list-style-type: none"> • some of the district's businesses are marginal • the current destination-oriented retailers do not complement the eating and drinking places • fast-moving traffic detracts from pedestrian scale 	<ul style="list-style-type: none"> • work toward enhancing the retail mix • area is easily accessed on a regional route • traffic calming measures, such as angled parking, could promote pedestrian traffic • district has a unique character and potential for interesting storefronts • excessive curb-to-curb pavement is an impediment to shoppers

ECONOMIC AND MARKET ANALYSIS

Business District	Types of Businesses	Economic Status	Concerns	Opportunities
Wilder Road	<ul style="list-style-type: none"> • fast food restaurants • shopping centers • "big box" retailers 	<ul style="list-style-type: none"> • recognized as the main commercial district in the region 	<ul style="list-style-type: none"> • "big box" retailers could become obsolete and eventually become vacant • corridor lacks distinct character, dominated by national chains 	<ul style="list-style-type: none"> • requiring continued high quality of building, site and landscaping design will contribute to the competitiveness of the retailers and their future success • opportunities to attract large scale retailers to the City • continue to connect adjacent parking lots to improve vehicular circulation
Midland Street	<ul style="list-style-type: none"> • entertainment destination • eating and drinking places • specialty retail 	<ul style="list-style-type: none"> • recognized community entertainment and restaurant district 	<ul style="list-style-type: none"> • vacant sites and buildings • lack of daytime activity 	<ul style="list-style-type: none"> • expanded retail mix and hours of operation could make the district a full-time destination (not just an evening destination)
Kosciuszko Ave./ Lafayette Ave.	<ul style="list-style-type: none"> • specialty retail (e.g., religious goods, meat markets) • hardware • local commercial (grocery, pharmacy) • eating and drinking places • service businesses • banks 	<ul style="list-style-type: none"> • serves surrounding neighborhood as well as customers from a larger area attracted to specialty shops • consists of three sub- districts: Lafayette Bridge to Garfield; Garfield to Michigan; Michigan to Farragut 	<ul style="list-style-type: none"> • potential impact from Meijers opening in Hampton • wide streets are not pedestrian-friendly • potential loss of on-street parking if traffic volumes increase 	<ul style="list-style-type: none"> • opportunities to emphasize ethnic heritage, especially around St. Stanislaus • increase in traffic could generate additional customers • need to improve streetscape and pedestrian ways
Salzburg Ave.	<ul style="list-style-type: none"> • neighborhood retail (hardware, grocery, pharmacy) • eating and drinking places • convenience stores 	<ul style="list-style-type: none"> • serves surrounding neighborhood primarily • parts of the district appear to be in decline 	<ul style="list-style-type: none"> • prominent commercial vacancies • integrity of district is broken up by incompatible industrial and residential uses • wide street is not pedestrian-friendly 	<ul style="list-style-type: none"> • opportunities to emphasize ethnic heritage • larger buildings offer mixed use opportunities • possible link to Riverwalk/Railtrail system and Middlegrounds/Bigelow Park • located on state trunkline

ECONOMIC AND MARKET ANALYSIS

Business District	Types of Businesses	Economic Status	Concerns	Opportunities
Banks	<ul style="list-style-type: none"> • pharmacy, specialty retail • service businesses (body shops, appliance repair) • dance and gymnastics academy 	<ul style="list-style-type: none"> • once functioned as a very strong neighborhood business district, but this role has weakened • strong neighborhood loyalty to remaining businesses 	<ul style="list-style-type: none"> • former hardware store space now used for storage • traffic disrupted for two years by closure of Marquette viaduct • adverse impact from dust from adjacent aggregate facility • body shops are not compatible with neighborhood retail 	<ul style="list-style-type: none"> • strong neighborhood identity to build upon • growing employment in the Marquette Industrial Center and in Bangor Township offers expanding customer base • district offers good transition between industrial and residential areas • proposed extension of Railtrail adjacent to the district offers opportunity to develop new businesses (i.e., cycle shops, refreshments)

Economic Base Analysis

The City's tax base is split approximately as follows: 75% residential, 20% commercial, and 5% industrial/utilities (Figure 8). Over the past five years the tax base has grown by 5.4% to 8.5% per year (Figure 9). The residential tax base has grown by a greater amount since 1993-94 than the nonresidential tax base. However, the pace of non-residential growth, particularly commercial growth, is increasing, with an increase of \$7.8 million for commercial property in 1997-98.

Figure 8. State Equalized Value of Real Property

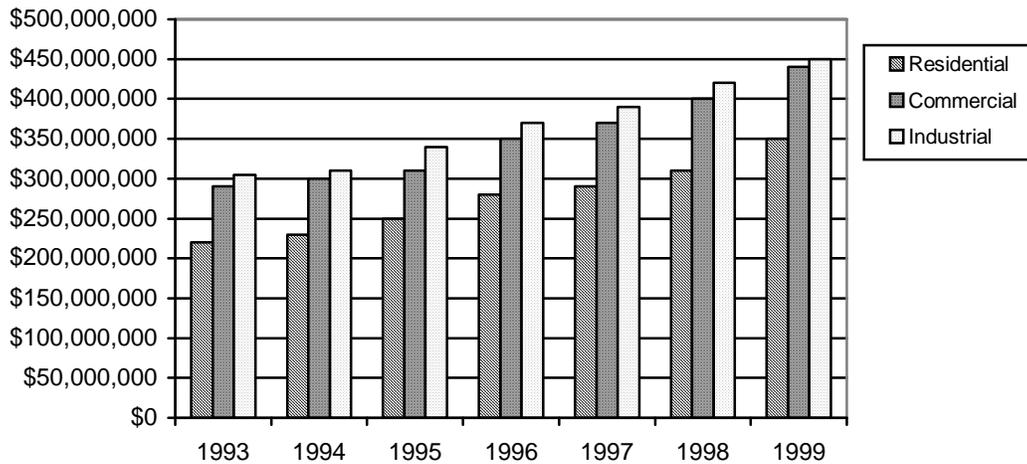
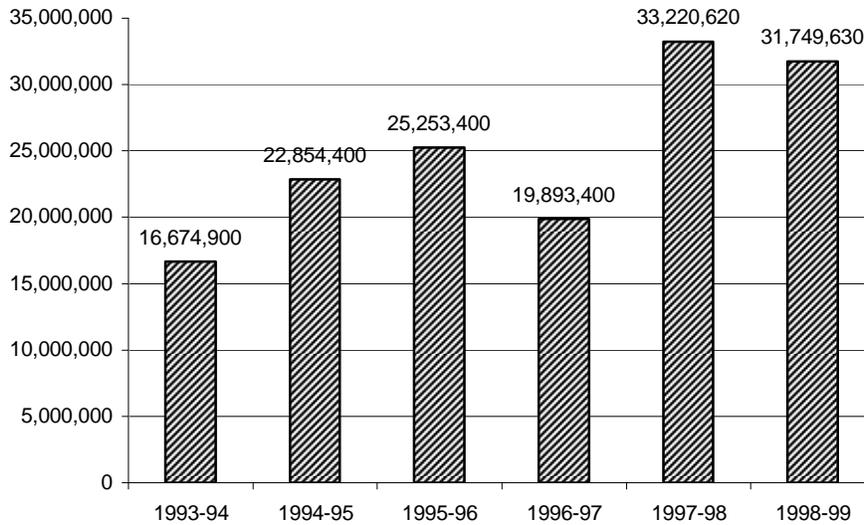


Figure 9. Annual Increase in Real Property Value



Source: Bay City Assessor

Economic Development Strategies

Following is a summary of recommended economic development strategies:

1. Continue efforts to retain existing businesses and to seek new manufacturers, but seek a new base of institutional, technical, and office users.
2. Cooperate with adjacent communities to reduce duplication of infrastructure, identify regional goals, and combine planning for shared commercial corridors.
3. Develop the infrastructure needed for an information-based economy and take other measures necessary to position Bay City businesses to be competitive in the world of e-commerce.
4. Promote workforce development to provide employees with the skills and education needed by the information economy.
5. Work toward enhancing the City's potential as a regional entertainment and tourist area.
6. Redevelop obsolete and underutilized industrial sites and buildings, including redevelopment of brownfield sites.
7. Develop one or more certified industrial parks so the City is in a position to readily accommodate new users.
8. Look for opportunities to redevelop obsolete industrial buildings and sites, including brownfield sites, where industrial is no longer appropriate. These areas may provide the opportunity to accommodate people's desire for well-planned mixed use environments, where they can live and work in the same neighborhood.
9. Bolster existing retail districts, recognizing that business retention will be as important as new retail development since large population gains are not expected.
10. Accommodate "big box" retailers and other contemporary forms of retail business. This probably can be accomplished best along Wilder Road and Euclid Avenue, although downtown locations should also be considered.
11. Seek improvements to neighborhood commercial districts so they are integrated into the fabric of the neighborhoods, are pedestrian-friendly and well-landscaped, and compliment the surrounding architecture and scale of buildings. Such districts can and should enhance the appeal of the City's residential areas
12. Encourage the use of downtown office space. There is a strong market for office in traditional cities.
13. Continue to work with businesses considering relocation to find suitable buildings and

sites with the potential for expansion or retrofitting.

14. Pursue the assembly of land and removal of obsolete buildings to accommodate new and expanding industries.
15. Recruit and retain know ledge-based and service businesses that are expected to be the growth engines in the developing information economy.
16. Develop seasonal recreation and tourism opportunities in Bay City. In particular, develop and market the riverfront marina, tourism, recreational, and leisure opportunities.
17. Grow Bay City's hotel and conference center business, which could be a major mid--Michigan economic asset.
18. Market Bay City as a seasonal residential location for Michigan residents who spend the cold weather months in southern United States.

In order for Bay City to remain an important commercial center in the face of increasing commercial development in adjacent communities the following steps should be taken:

1. Cultivate an attractive environment that highlights the historical character of downtown.
2. Preserve and renovate historical buildings.
3. Invest in the streetscape to enhance the shopping experience and historic quality of downtown
4. Develop offices and residential units on vacant parcels and in the underutilized upper floors of multi-story buildings to increase downtown employment, residents, and market size and to contribute to the creation of a 24-hour downtown.
5. Cluster compatible businesses that support one another in creating a destination for shoppers.
6. Encourage specialty commercial uses that do not compete directly with suburban "big box" retailers
7. Cultivate mixed uses that support each other
8. Develop more housing downtown
9. Encourage business owners to establish competitive business practices, such as longer and uniform hours of business.
10. Stage events downtown that increase public awareness of downtown businesses
11. Redevelop surface parking lots to fill in missing storefronts
12. Replace surface parking lots with parking structures having ground-level commercial space.
13. Consider financial incentives to encourage national retailers to locate downtown

The Bay City Downtown Plan, which was completed in 1994, sets forth a detailed economic development strategy which includes these and other objectives.

On a broader scale, a concerted effort is needed to position Bay City to compete in the new "information economy" that emphasizes professional and service-oriented employment. Actions

that to be considered include:

1. Plan and zone an adequate amount of land for office, research, and commercial use.
2. Promote continued development of a modern telecommunications infrastructure in the City.
3. Make certain that the Bay City public schools and other educational institutions offer exceptional educational opportunities, with up-to-date curricula and lifelong educational opportunities
4. Develop a strong workforce/education/workplace linkage
5. Educate Bay City businesses about global competition, fast cycle logistics, and useful applications of new technology.

ENVIRONMENTAL REVIEW

In urban communities with a history of industrial land use, environmental contamination is a serious concern, often impeding redevelopment and reuse of property consistent with the Master Plan.

Sources of pollution, particularly water pollution, may be point or non-point in nature. Point source pollution is discharged from a pipe, ditch, channel, above-or below ground storage tank, concentrated animal feeding operation, floating craft, or other discernable, specific source. The principal sources of point source pollution are industry and municipal waster treatment plants. Thermal water pollution is a point source pollutant, resulting principally from use of water for cooling in industry and electric power generation. Non-point source pollution does not result from discharge at a specific, single location, but generally results from stormwater runoff (from rain or snow melt), precipitation, atmospheric deposition, or percolation into the ground. Non-point source pollution in urban environments is normally associated with water runoff from streets, yards and construction sites.

Bay City has a number of environmental concerns and challenges, including soil and groundwater quality, the quality of surface waters, particularly the Saginaw River, reuse of contaminated (brownfield) sites, and protection of wetlands and riparian properties. It is a challenge to achieve an appropriate balance between environmental protection and economic development.

Brownfield Redevelopment

Brownfields are sites where current use, reuse or redevelopment efforts are hampered or hindered by real or perceived contamination. The City has identified nineteen (19) brownfields which are considered to be of highest priority due to level of contamination or redevelopment potential. Another 11 brownfield sites and several leaking underground storage tanks (LUSTs) exist in the City (see Table 15 and Map 2).

Most brownfield sites are on riverfront property formerly occupied by industry. These sites are strategically important because of the high value that waterfront property has for redevelopment.

Table 15. Brownfield Sites

Brownfield Map Number	Common Name	Address	Status in March, 2000
1	Brownhoist	201 Saginaw St.	Remediation Pending
2	Bay City D.P.W.	800 Water St.	Remediation Completed (1997)
3	Bay City Boring	409 E. Mundy	Assessment

ENVIRONMENTAL REVIEW

Brownfield Map Number	Common Name	Address	Status in March, 2000
			Completed (1997)
4	Weld-Rite Property	223 Water St.	Remediation Completed (1996)
5	Consumers Energy	50 Ninth St.	Not Started
6	Former Sears Automotive Building	75 Ninth St.	Not Started
7	Magline and Labadie Paint Shop Parcels	240 Water St. / 241 Saginaw St.	Assessment Completed (1998)
8	Fletcher Gas Station	1127 Center Ave.	Remediation Pending
9	State tax-reverted property	851 Water St. @ 18th Street	Remediation In Progress
10	Saginaw Marine Terminal	751 Harrison	Not Started
11	Westshore Mobile Estates	3201 S. Euclid	Not Started
12	Alkali Flats Property	50 Harrison St.	No Access
13	Al's Gas Station	1790 Kosciuszko	No Access
14	American Hoist/Newcor	2945 N. Water St.	No Access
15	Bay Chemical Property	2999 N. Water	No Access
17	Saginaw Paint Store	271 Vermont	Remediation Pending
18	Madison Ave. Social Security Office and Former Gas Stations	1001-1091 N. Madison	CMI Application Submitted
19	Dow Chemical	1200 N. Water St.	No Access
20	Morton Parcels	201 333 Morton St.	Assessment Completed (1998)
21	Auto	905 Salzburg	Assessment Completed (1998)
22	GL Limited (Labadie Paint)	244 Saginaw St.	Not Started
23	Hotel/Conference Center Site	621 N. Water St.	Assessment Completed (1997)
24	Hotel/Conference Center Site	600 616 N. Water St.	Assessment Completed (1997)
25	Auto Enthusiast	1123 Saginaw St.	Assessment Completed (1996)
26	Bankruptcy Court	109 First St.	Assessment

Brownfield Map Number	Common Name	Address	Status in March, 2000
			Completed (1996)
27	Tae Kwan Doe	201 First St.	Remediation Completed (1999)
28	Marcan	800 Woodside Ave.	Remediation Completed (1999)
29	Belinda Street Parcel	2905 N. Water St.	Assessment Completed (1996)
30	Marquette Industrial Park	421 Marquette Ave.	Assessment Completed (1996)
31	United City Coal Mine	207 N. Union St.	Remediation Completed (1997)

Note: It was determined that Site 16, the All Auto Parts site, is outside of the City, so it was deleted from this table. Source: Bay City Environmental Services Division

The Bay City Environmental Services Division has secured site assessment and remediation funds from the Michigan Department of Environmental Quality, Environmental Assistance Division, for many of the 30 brownfield sites that are eligible for such funding. These efforts have led to the remediation of sites and redevelopment of waterfront parcels. The 30 brownfield sites are eligible for cleanup and/or site assessment funds from the Michigan Department of Environmental Quality through its Environmental Assistance Division.

The Brownfield Redevelopment Initiative is another tool that can be utilized to seek funds for identification and remediation of brownfield contamination. In 1998, the City of Bay City, under authority of the Brownfield Redevelopment Financing Act, Public Act 381 of 1996, created a City-wide Brownfield Redevelopment Authority that oversees a tax increment financing district. Under the jurisdiction of the Authority, remediation and/or site assessment funds can be generated within the brownfield district. The brownfield district provides financial incentives for redevelopment of brownfields through Single Business Tax Credits and loans to developers of these sites.

Amendments to Part 201 of the Natural Resources and Environmental Protection Act (NREPA) in 1995 changed the nature of owner liability of contaminated properties and created less stringent clean-up standards for reuse of these properties. These changes, together with Brownfield Redevelopment Authority legislation, have had a significant impact on brownfield redevelopment in Michigan. The City of Bay City will utilize the Brownfield Redevelopment Authority as a redevelopment mechanism for blighted, underutilized, and abandoned industrial property.

Soil Contamination

One of the most common forms of soil contamination in older urban areas, including Bay City, are leaking underground storage tanks, or LUSTs. In 1998, the MDEQ documented 66 sites in the City that contain one or more leaking underground storage tanks. In addition, the MDEQ lists a total of 62 LUST sites that have been "closed" or remediated.

Leaking underground storage tanks are a major source of soil and groundwater contamination, hindering redevelopment efforts. Various sources of funding for assessments and remediation of LUST sites are available. The Environmental Coordinator must continue to secure funds to identify and remediate LUST sites to reduce continued environmental contamination and encourage redevelopment.

Saginaw River Water Quality

A majority of the industrial land in the City is located within 1/2 mile of the Saginaw River. These intensive land uses along the river cause significant impacts to water quality and visual character of the river. As these industrial parcels are converted to other uses, environmental and visual quality should improve. New types of developments will be increasingly easy to attract as riverfront properties are remediated and the threat of environmental contamination is eliminated.

Another threat to water quality in the Saginaw River watershed is the discharge of contaminated wastewater from combined sewer overflow structures (CSOs) into the river system. According to the MDEQ Surface Quality Division, \$88 million has been spent to date to eliminate these sources of river contamination within the watershed through the removal of combined sewer overflow mechanisms. There are no longer any CSOs in the City of Bay City, although a combined sanitary and stormwater system still exists. However, other communities located in the watershed must still remove CSO mechanisms to further improve water quality.

The design of new developments affects water quality. Impervious surfaces cause accelerated storm water runoff volume, which contributes to downstream flooding, stream warming, and transport of non-point source pollution (for example, from oil, anti-freeze, heavy metals and salt) into surface waters. To minimize such impacts, developers and their design professionals must be encouraged consider ways to reduce excessive impervious surfaces, for example, by providing only the minimum number of parking spaces needed and by avoiding unnecessarily wide drive aisles. Landscaping can be designed to minimize irrigation requirements and water consumption by carefully selecting plant species and reducing lawn area. Mixed use development can lessen negative impact on water quality by facilitating pedestrian rather than automobile travel.

Floodplains and Wetlands

Floodplains and wetlands are important elements of the Saginaw Valley ecosystem. Wetlands function as retention basins for flood water, filters for storm water, and habitat for wildlife. Today very few pockets of wetland remain (see Map 3). Most wetlands were filled, channeled or drained in conjunction with urban growth and agriculture. Wetlands in the City are located in the south end along the river and in various pockets near Euclid Ave., Wilder Rd. and Marquette St.

Part 303 of Michigan Public Act 450 of 1994, as amended, requires a permit from the Michigan Department of Environmental Quality for dredging, filling and other activities in regulated wetlands. Because of the environmental sensitivity of these lands, and because of these regulations, development in wetland areas is discouraged.

The 100-year floodplain identified by the Federal Emergency Management Agency (FEMA) is the area in which there is a one percent chance in any year of a flood occurring. The floodplain areas of the City are associated with the Saginaw River and encompass large areas in the northeast and southern portions of the City (see Map 4).

Development in floodplains increases flooding danger by diminishing the carrying capacity of the floodplain. Consequently, development in the floodplain is restricted, particularly in the portion of the floodplain identified as the floodway. The floodway consists of the river or stream and overbank areas capable of carrying a flood discharge. In the portions of the floodplain that are less important with respect to carrying capacity, development is sometimes permitted if it is elevated above expected flood levels. In Michigan, the Land Division Act prohibits residential development within the floodplain, and further prohibits any alterations to the floodplain that would affect the floodplain carrying capacity.

Floodplains affect development, particularly new residential development, near the river. The development of the James Clements Airport may be affected by floodplains, since much of the land was dyked and reclaimed from the Saginaw River. Floodplains and wetlands may affect development of the Marquette industrial area. In Veterans Memorial Park, property that is in the floodplain has been successfully used for recreational purposes.

Air Quality

Air quality is serious environmental concern in Bay City, like in many other auto-dependent urban areas with a strong industrial base. There are two aspects of air quality that are relevant to this plan. First, there is an aesthetic concern. The presence of persistent smoke and odors affects planning and development, regardless whether the pollutants are at a level that pose a threat to health. For example, there are locations in Bay City where it would be impractical to plan for new residential development because of the impact of nearby industry on air quality.

The second relevant aspect of air quality involves compliance with the Federal Clean Air Act. There are certain air pollutants from industry and production that have been the primary focus of regulatory control under the Act. These include suspended particulates, sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, and hydrocarbons. Under the Act, the Environmental Protection Agency established national air quality standards for criteria pollutants. Each state is required to classify every area in it as either an attainment area or an unattainment area.

Unattainment areas are subject to more stringent requirements and lower emission threshold than areas that meet the Federal standards. Existing sources of pollution are required to use, at minimum, a reasonably available control technology to limit emissions. New major sources and modifications introduced into unattainment areas are subject to stringent preconstruction review, under which the industries must demonstrate, in part, that they will use the lowest achievable

emission rate. Clearly, unattainment with air quality standards retards industrial growth and redevelopment and puts the region at a competitive disadvantage when trying to attract new industries. Also, unattainment areas are subject to loss of Federal highway funds if progress is not made toward correcting the deficiency.

It is important for the City, through its Environmental Services Division, to continue to work toward improving air quality. Progress can be made by 1) monitoring air quality, identifying pollutants, and preparing and implementing mitigation plans, 2) working with industry to be certain that the most effective air pollution control technology is being used, and 3) encouraging mixed use development that reduces dependence on the automobile.

Recommendations

The information presented in this chapter yields the following recommendations related to the environment:

- Channel development and redevelopment onto underutilized or abandoned parcels.
- Preserve high-quality habitat such as shoreline wetlands.
- Restore and enhance environmental functions damaged by prior site activities.
- Minimize storm water runoff by using infiltration devices and permeable pavements.
- In new developments and redevelopment's, detain runoff with open natural drainage systems, when feasible.
- Design stormwater retention ponds when required for maximum habitat value. Landscaping should benefit indigenous urban wildlife.
- Use reclaimed water and integrated pest management on public lands.
- Continue to maintain and replace the urban forest with disease and pest-resistant native species.

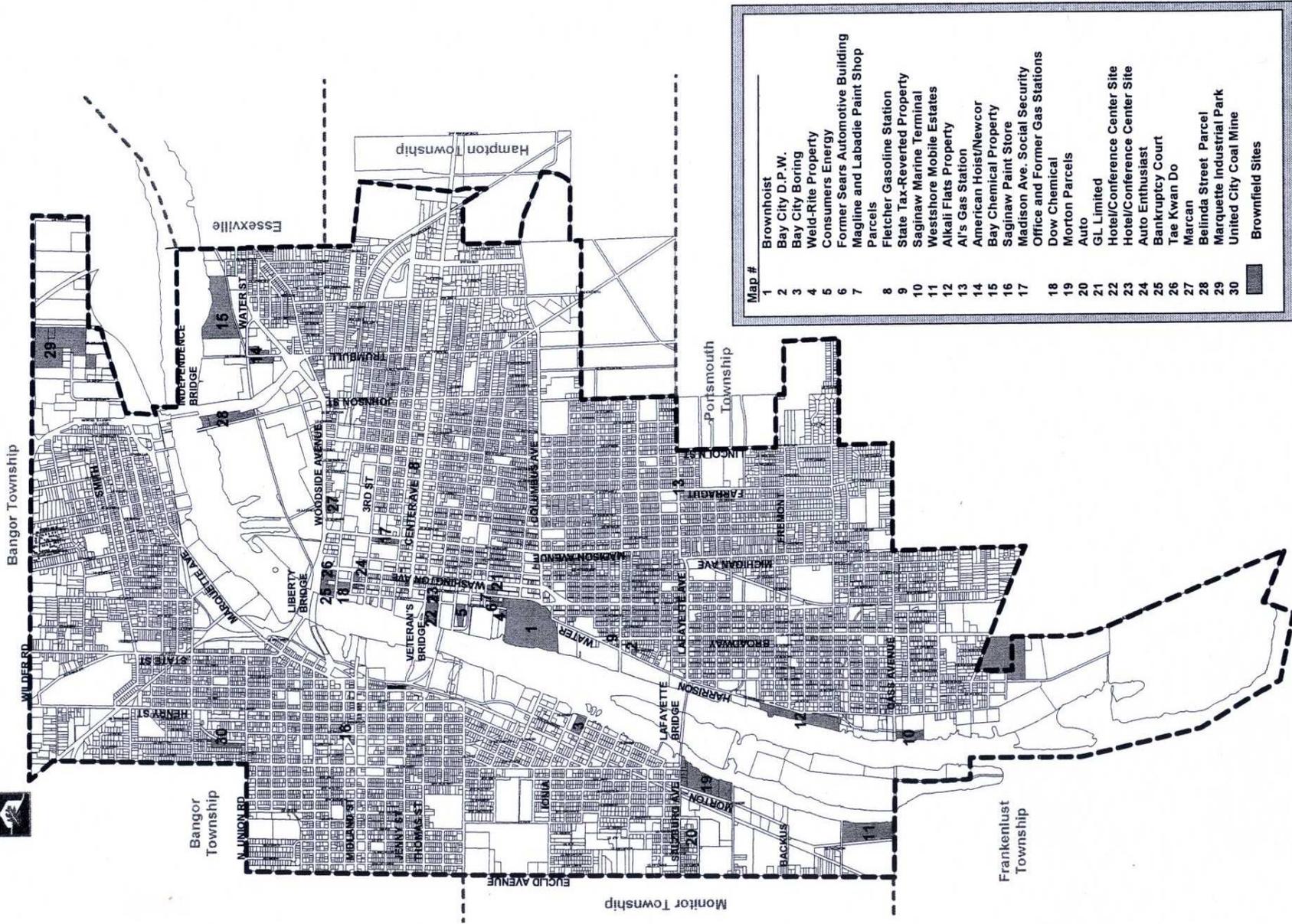
Map 1. Brownfield Sites

City of Bay City, Michigan

Master Plan



CONSULTING ENGINEERS
ARCHITECTS
COMMUNITY PLANNERS & PUBLIC RELATIONS

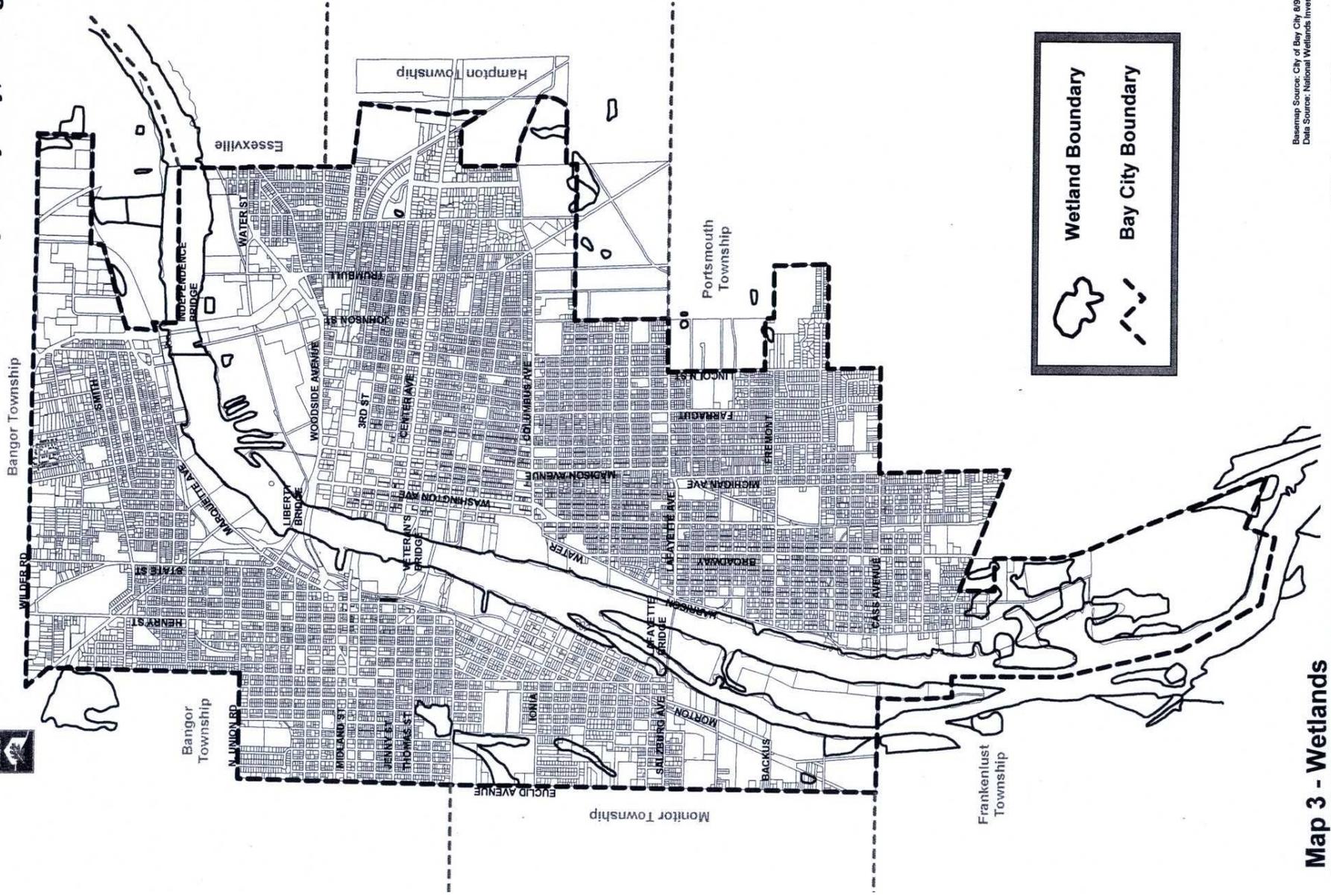


BaseMap Source: City of Bay City, 1998
Data Source: Bay City Parks and Recreation Plan

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Map 2 - Brownfield Sites

Map 2. Wetlands.



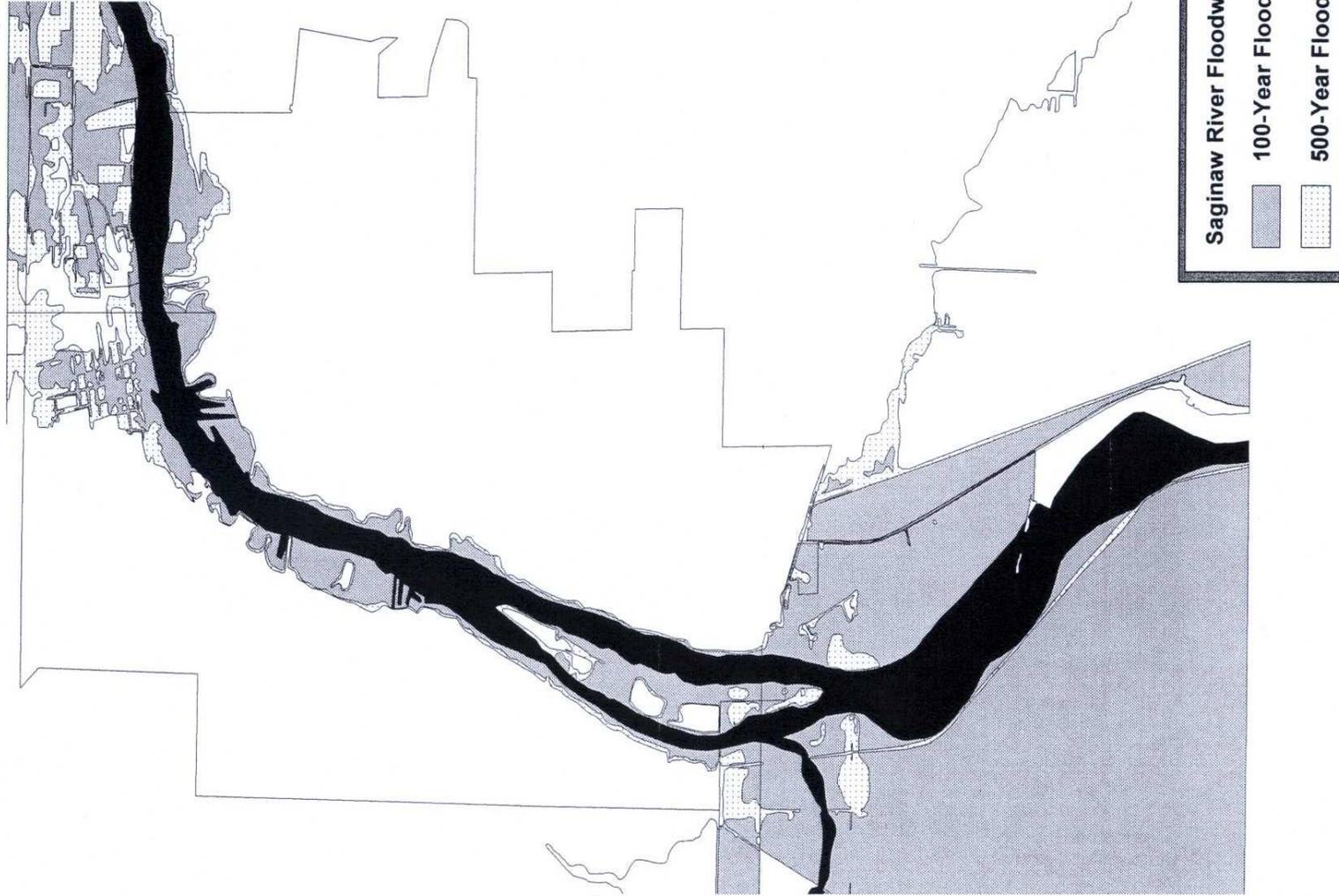
BaseMap Source: City of Bay City 6/96
Data Source: National Wetlands Inventory



Map 3 - Wetlands



Map 3. Floodplan



Basemap Source: City of Bay City, 2008
Data Source: Federal Emergency Management Agency



Map 4 - Floodplains

TRANSPORTATION

Introduction

Bay City's transportation system serves many functions, not the least of which is the efficient movement of people and goods throughout the community. Components of the modern multimodal transportation system include roads, mass transit, air, rail, water and pedestrian facilities.

Transportation systems have a direct effect on the local economy, environmental quality, energy use and land development. Transportation facilities define current and future land use development patterns and past transportation related decisions have undoubtedly altered the urban landscape of Bay City. Properly designed road and transportation facilities increase efficiency, safety, the wise use of land resources, and contribute to the economic stability and quality of life of its users.

Conventional transportation planning is focused on principally providing for motor vehicle use, often to the exclusion of all other modes. This is evident in the lack of transportation choices available today. Eighty years ago, one could travel from Downtown Bay City to Detroit by automobile, electric railway, passenger train, or steamer. Today, only automobiles and busses remain. Since the transportation system is so heavily focused on motor vehicle use, the majority of this chapter is devoted to motor vehicle related issues.

Existing Road System

Interstate- 75/ U.S. 23 is the major north-south controlled-access highway in the area, located approximately two miles west of the city. U.S. 10, also a controlled-access highway, provides east-west access to and from Bay City.

The road system within Bay City is a grid pattern of north-south and east-west streets. Principal arterials through the city include M-13, M-15, M-25 and M-84. Each of these routes is under the jurisdiction of the Michigan Department of Transportation (MDOT). M -13 provides north-south access through the city along Euclid Avenue to the west and Broadway Avenue to the south. M -15 (Tuscola Road) provides access into the heart of the city from points south of Bay City such as

Frankenmuth in Saginaw County. M-15 joins M-25 at Center Avenue in Bay City. M-25 provides east-west access from Interstate- 75 east of Bay City along Jenny Street and Thomas Street. Finally, M-84 provides access into the Downtown area from points southwest of the City along Salzburg Avenue and Garfield Avenue.

Map 5 indicates the classification of major roadways in the Bay City area according to the National Functional Classification System. Principal arterials, minor arterials and urban collectors are identified. Roadways within this classification system are also referred to as

federal-aid roads and are eligible for federal funding of improvements.

The highway and local road network of Bay City is bisected by the Saginaw River. Principal arterials cross the river at four drawbridges that include the Independence Bridge, Liberty Bridge, Veterans Bridge (M-25) and the Lafayette Bridge (M-84) as one progresses upriver from north to south.

Level of service is a qualitative measure used to describe the operational conditions of a transportation facility or service from the perspective of a particular set of users (drivers, in this case). Levels of service range from A through F. At level of service A, operating conditions are at their best and characterized by a smooth and efficient flow of traffic with few interruptions. At the other extreme, level of service F indicates that a roadway is operating at higher traffic volumes than it was designed to accommodate. Under such conditions traffic flow is significantly slowed or stopped and motorists experience numerous interruptions and delays. At the mid-range, traffic flows at level of service C are stable and considered acceptable in urban areas.

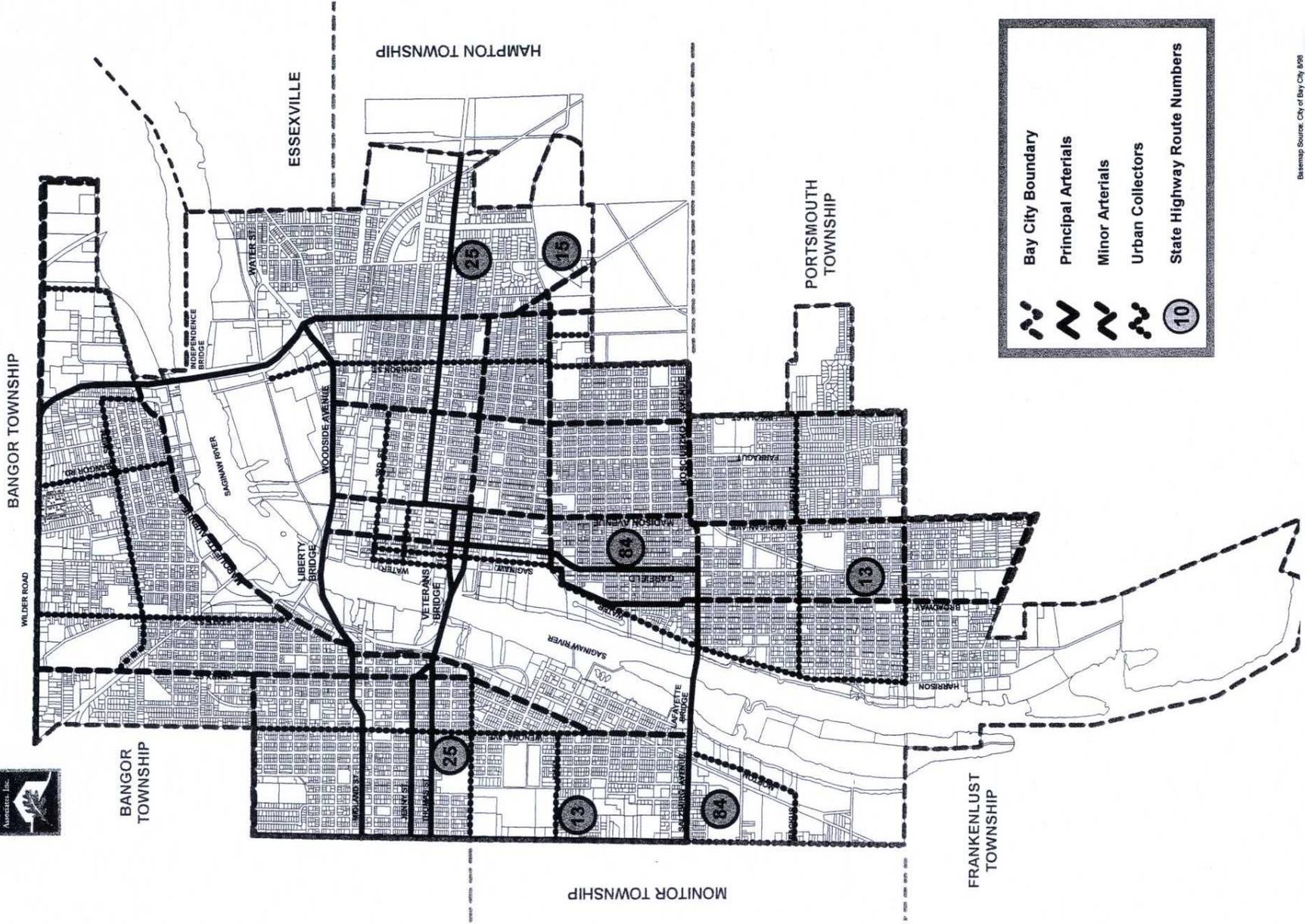
Most roads in Downtown Bay City function at a level of service C or better due to relatively low traffic volumes on many Downtown streets. No areas operating at levels of service E or F have been identified.

Average annual daily traffic (AADT) volumes for motor vehicles along the principal arterials, minor arterials, and urban collectors through Bay City are presented on Map 6. Some of the highest volumes in Bay City are recorded at the four bridges, with the highest volumes at the Veterans Bridge. An analysis of traffic circulation patterns conducted by McKenna Associates in 1993 indicated that a substantial amount of traffic by-passes the core of the Downtown area on M-25, which provides east-west access via the Veterans Bridge and Center Avenue. The Lafayette Bridge functions at the lowest level-of-service of the four bridges, occasionally dropping to level of service E, while the other bridges normally function at C or D.

Map 4. National Functional Road Classification Map

City of Bay City, Michigan

Mykenna
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COMMUNITY PLANNING & URBAN DESIGN



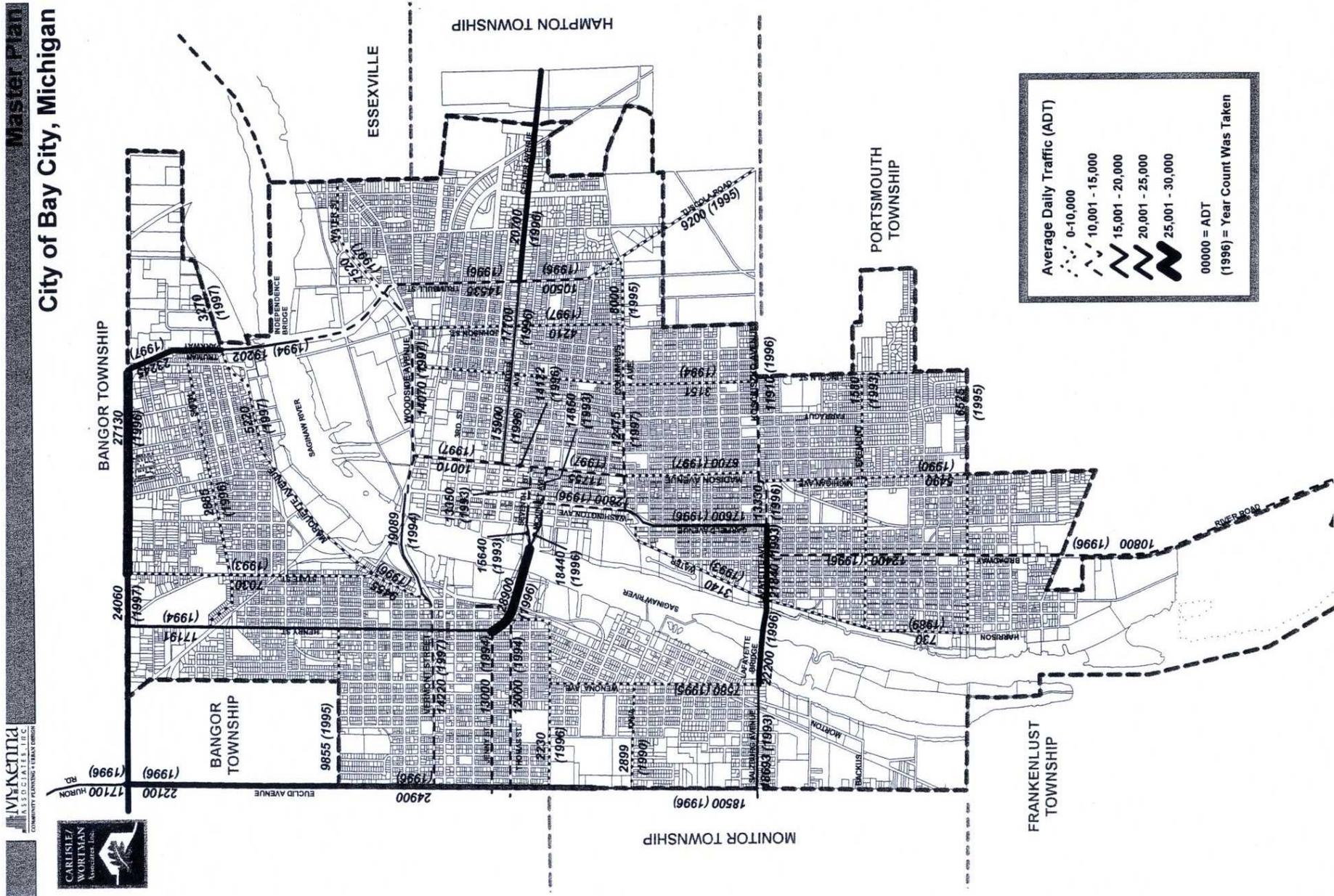
	Bay City Boundary
	Principal Arterials
	Minor Arterials
	Urban Collectors
	State Highway Route Numbers

Basemap Source: City of Bay City 9/98
MUCI: Municipal Information
Data Source: Planning Standards Planning Section, 1998

Map 5 - National Functional Road Classification Map



Map 5. Average Daily Traffic



BaseMap Source: City of Bay City, 1998
 Data Source: Bay County Transportation Planning 10/97



City of Bay City, Michigan

Vivkenina
 COMMUNITY PLANNING & TRANSPORTATION



Local Street System

The local street pattern in Bay City is a grid system of north-south and east-west cross streets. Bay City was formed when five villages consolidated. As development continued through the years, street rights-of way on the east side of the City developed differently from those west of the Saginaw River. Generally, rights-of-way are 50 feet wide on the east side and 66 feet wide on the west side. Wider rights-of-way (80 to 100 feet) exist on main thoroughfares such as Washington Avenue, Center Avenue, and on certain residential streets, such as Fourth and Fifth Streets.

To accommodate motor vehicle traffic many streets in Bay City have been over-built with wide lanes and wide curb to curb pavement. As a result of decreasing traffic volumes, many Downtown and neighborhood streets in Bay City are wider than they need to be to carry current traffic volumes. These conditions result in increased speeds.

In Downtown Bay City, a one-way street pattern was put in place over 30 years ago to accommodate higher motor vehicle traffic volumes that were generated at one time by commercial and industrial land uses (see Table 16). Downtown merchants and property owners have requested that one-way streets be converted back to two-way streets. In 1996, Water Street from First to Seventh Street was converted to two-way movement, and, in October 1998, Saginaw Street from Second to Sixth Street was converted to two-way movement. The trend to convert more one-way streets, in an effort to slow motor vehicle traffic and potentially increase business opportunities, should continue with possible conversions of Jefferson Street and Adams Street.

Table 16. One-Way Streets, Bay City, Michigan

One-way Street	Beginning Cross Street	Ending Cross Street
Adams Street	Third Street	Columbus Avenue
Jefferson Street	Fifth Avenue	Columbus Avenue
McKinley Avenue	N. Water Street	N. Monroe Street
Seventh Street	N. Water Street	N. Madison Avenue
Fourth Street	Washington Avenue	Adams Street
S. Water Street	Lafayette Avenue	24 th Street
Webster Street	Lafayette Avenue	24 th Street
Thomas Street	S. Euclid Avenue	S. Henry Street
Jenny Street	S. Euclid Avenue	S. Henry Street

Source: Bay City Police Department 1998

Marquette Avenue is scheduled to undergo reconstruction in 2000 between State Street and Hart

Street in the vicinity of Defoe Park west of the Saginaw River. One of the primary reasons behind this project is to relieve some of the congestion problems along Wilder Road at the northernmost boundary of Bay City. Wilder Road has experienced increased motor vehicle traffic in recent years due in part to commercial development. Numerous access points for area businesses, compounded by some of the highest traffic volumes in Bay City (AADT of 24,000 to 27,000 vehicles), has resulted in a reduction in the level of service in the area. The Marquette Avenue project is intended to relieve some of this congestion.

The Marquette Avenue project will include four drive lanes and several turn-around areas. The project will maintain an at-grade railroad crossing along Marquette Avenue and provide for safe pedestrian movement at the Railtrail crossing. The turn-around areas are necessary to accommodate vehicles that may be delayed by Central Michigan Railway trains crossing Marquette Avenue. The slow progress of the trains (sometimes as long as 45 minutes) results in delays along Marquette Avenue. Further alterations to existing road configurations along Marquette Avenue near State Street may be required to improve traffic flow to and from the Midland Street area.

A 1,000 foot section of Saginaw and Water Streets, south of Downtown at the existing western terminus of Columbus Avenue, is proposed for reconstruction. The Saginaw Street-Water Street Connector Project is intended to provide for a smoother flow of car and truck traffic.

Bay City has an established truck route system (see Map 7). Truck traffic influences traffic flow, particularly when there are frequent stops and turns related to numerous curb cuts. These conditions diminish pedestrian and driver safety. Truck routes should be re-evaluated periodically and amended, if necessary, in response to changing land use and traffic patterns.

Capacity Deficiencies

The Bay City Area Transportation Study (BCATS) Year 2020 Transportation Plan (draft 1998) estimates the rate of increase in the number of vehicles on local roadways between the years 1996 and 2020 will exceed the rate of population growth in the Bay City area. Bay City is experiencing congestion problems in some areas such as along Trumbull Avenue.

The growth of automobile use is attributable to a number of factors, including an increase in the number of workers per household, inexpensive fuel, job growth in surrounding townships, decreased use of public transit, and increases in the amount of personal and recreational driving.

Computer models administered by MDOT were used to help prepare forecasts for BCATS. These models have deficiencies that must be considered when using the results in planning. Foremost, the models approximate transportation systems as if they were self-contained and closed, failing to take under consideration the complex internal and external forces at work. There is an inherent bias in

the models toward expanding the road system to increase capacity. The models focus on motor vehicle volumes and streets and intersections, giving insufficient attention to other modes of transportation. Consequently, the models consistently project the need for more motor vehicle

capacity on roads.

The modeling results should be considered the first step in transportation planning; solutions other than road widening should be given equal consideration. Other viable solutions include Intelligent Transportation Systems (ITS) management, distribution of the traffic over a broader network of streets, varying work schedules to reduce peak traffic flow, and changes in land use.

Although Bay City does not face severe congestion problems, the BCATS Transportation Plan has identified areas where capacity deficiencies may exist in the future based on the modeling process described above (see Tables 17 through 19). Motor vehicle count data from the base year 1995 were projected in the year 2020.

Table 17. Capacity Deficiencies On Roads Under Bay City Jurisdiction

1995 Capacity Deficiencies	2020 Capacity Deficiencies
Trumbull from Center to Nebobish	State from Marquette to Smith
N. Water/Borton from Woodside to McEwan	Kosciuszko from Madison to Farragut
Washington from Woodside to Center	Midland from Wenona to Vermont
Madison from Columbus to McKinley	Henry from Fisher to Midland

Source: BCATS Year 2020 Transportation Plan (draft 1998)

Table 18. Capacity Deficiencies On Roads Under MDOT Jurisdiction

1995 Capacity Deficiencies	2020 Capacity Deficiencies
M13/M84 from Euclid to Broadway	M-84 from Three Mile to Saginaw Co. line
M13 from Lafayette to S. of Fremont	

Source: BCATS Year 2020 Transportation Plan (draft 1998)

Map 7. Vehicle Collision Map

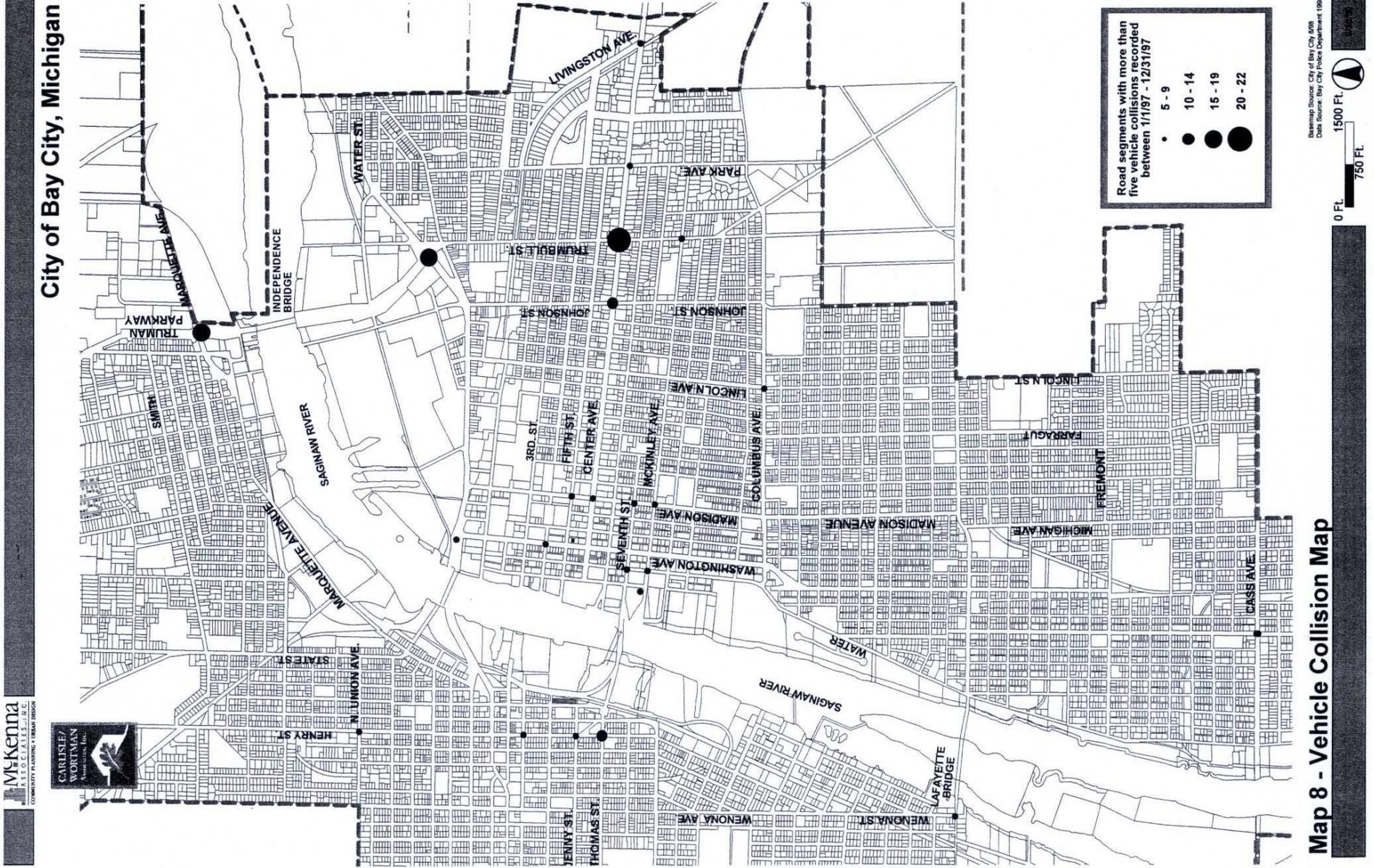


Table 19. Capacity Deficiencies On Roads Under Bay County Road Commission Jurisdiction

1995 Capacity Deficiencies	2020 Capacity Deficiencies
None identified	Wilder from Euclid to East Mall Drive

Source: BCATS Year 2020 Transportation Plan (draft 1998)

Collision Data

Recent traffic collision data for Bay City was obtained from the Bay City Police Department for the period between January 1,1997 and December 31,1997 (see Map 8). Not all collision information has been mapped. Road segments which recorded five or more collisions over the one-year period were mapped to identify potential problem areas. Available collision data were recorded byroad and nearest cross street location, so the data do not distinguish intersection from non-intersection locations.

The collision data indicate that the most troublesome locations are located on the east side of Bay City, particularly along several segments of Trumbull Street near Center Avenue and Woodside Avenue. A high number of collisions has also been recorded near the Marquette Avenue intersection with Trumbull Parkway. Trumbull Street functions as a bypass through Bay City between M -15 to the south and Wilder Road to the north. Approximately 14,000 to 20,000 motor vehicles travel this section of Trumbull Street each day. As previously discussed, the area along Wilder Road has experienced commercial growth and changes in land use patterns and widening of the road to increase motor vehicle flow and speed.

Another problem area on the east side of Bay City is along Center Avenue near North Johnson Street. This area also experiences relatively high AADT volumes in the range of 15,000 to 20,000 vehicles per day. Center Avenue (M-25) is a major route to Downtown Bay City from Hampton Township and points to the east.

On the west side of Bay City the data indicate a high number of collision locations along Henry Street, particularly in the vicinity of Thomas Street.

The data also indicate some problems on one or both sides of the Saginaw River on approach to the four drawbridges. These areas have already been noted as being locations that are experiencing high traffic volumes and lower levels of service relative to most other locations in Bay City.

Public Transit System

The Bay Metro Transit Authority (BMTA) provides public transit services in Bay County. However, fixed route bus transportation is concentrated in the urbanized area of Bay City. Eleven

bus routes originate from Bay Metro Authority's Central Station located in Downtown Bay City at 1124 Washington Avenue (see Map 9). Bus routes originating from the Downtown and destined for points west of the Saginaw River cross primarily at the Liberty Bridge and to a lesser extent at the Lafayette Bridge to points southwest of the City. The BMTA is publicly-owned and provides bus service throughout Bay County.

The BCATS Year 2020 Transportation Plan states that in FY 1996 the BMTA operated a fleet of 45 busses and 9 vans in fixed route and demand response service. The BMTA is continuing to update its fleet of vehicles. Fixed route service is provided 6:00 am to 6:00 pm weekdays and 8:00 am to 6:00 pm on Saturdays. The BMTA is working with transit providers in Saginaw and Arenac counties to provide service between these areas and Bay City.

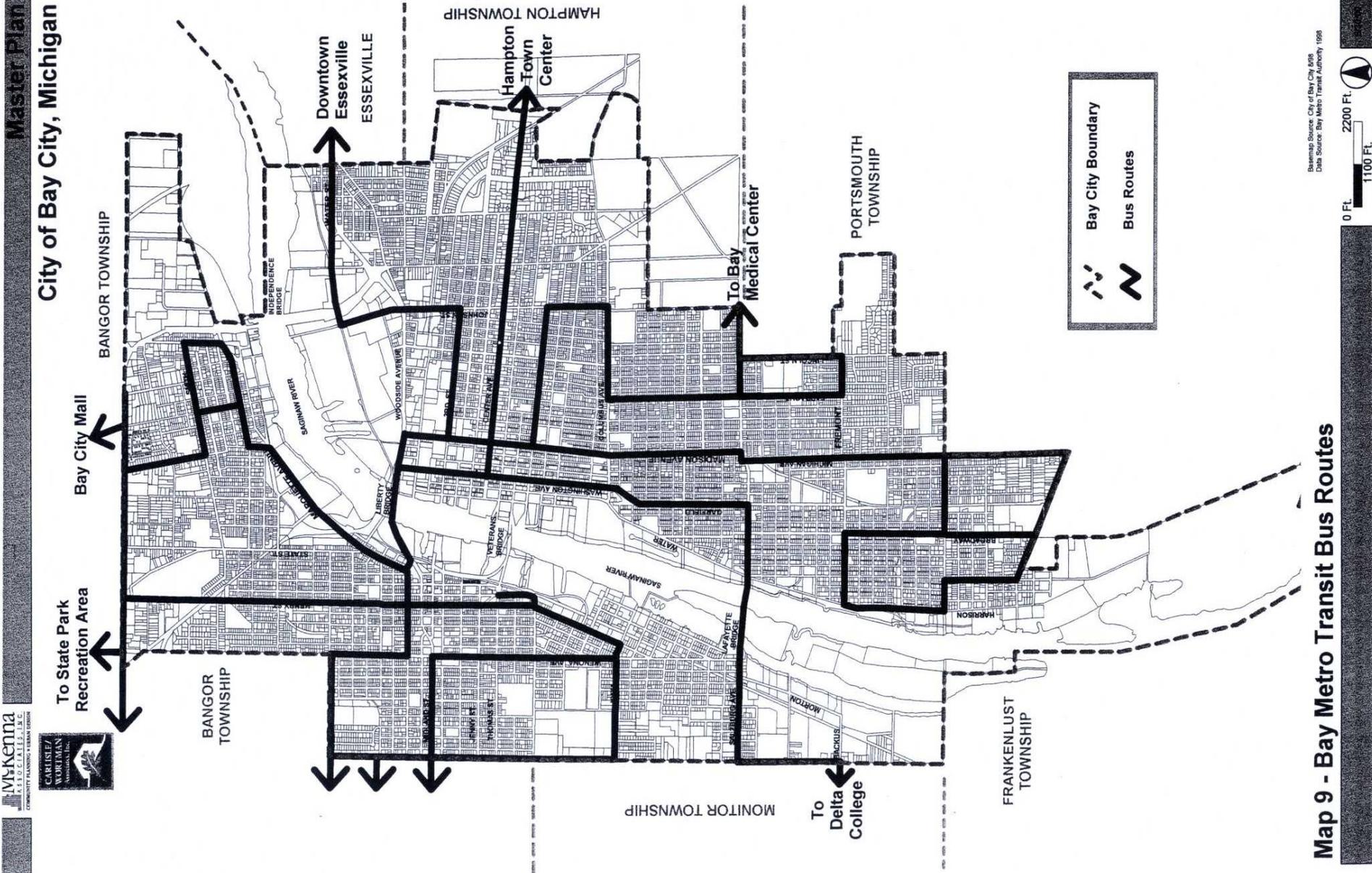
Information obtained from the BMTA indicates that there has been a 30% decrease in overall bus ridership system-wide during the ten year period from 1989 to 1998 (see Table 20). This is consistent with decreases in ridership experienced nationwide. Ridership may have stabilized somewhat during the past few years. The decline in bus ridership may reflect overall growth of personal vehicle use, population dispersal into the suburbs, inadequate bus scheduling and service, and lack of regional transportation services (to accommodate workers commuting from one county to another). Census data from 1990 for Bay City indicated that less than 2% of the City's workforce used any form of public transit including bus transportation. More than 92% of the workforce traveled to work via car, truck, or van, and most (82.3%) of these individuals drove alone, while 9.9% carpooled.

Table 20. BMTA Bus Ridership, Bay City, Michigan

Year	Ridership Totals
1989	833,000
1990	703,000
1991	712,000
1992	618,000
1993	645,000
1994	626,000
1995	640,000
1996	570,000
1997	565,000
1998	582,000

Source: Bay Metropolitan Transportation Authority 1998

Map 8. Bay Metro Transit Bus Routes



Air Transportation System

The Bay City area is served by the James Clements Airport located near the southern boundary of the city between the Saginaw River on the west and River Road (M-13) on the east. The airport is city owned and provides limited passenger and cargo service. Large-scale, regularly-scheduled passenger service is provided by airports outside the immediate Bay City area including MBS Airport (formerly Tri-City Airport), which is located in Saginaw County, about 15 minutes from Bay City, Bishop International Airport in Flint, and airports in the metropolitan Detroit area.

The James Clements Airport also serves as a facility for sea plane use. Several sea planes are based at the airport. Alongside the airport almost 10,000 linear feet of the Saginaw River can be utilized by sea planes as runways to provide north-south and east-west takeoffs and landings. Future development of the airport may include a sea plane tie-down area to accommodate more of this use as demand increases. Opportunities provided by the airport for sea plane use may play a role in future economic development potential of surrounding areas.

Bay City is proceeding with a five-year redevelopment plan that includes reconstruction and expansion of the airport's two runways and taxiways. Other planned improvements to the facility include new fencing, a new drainage system and hangar relocation. Some land acquisition and annexation by the City may be necessary to ensure the safety of runway approach areas and to control future development of runway protection zones from incompatible land uses. The upgrading of the airport may have direct implications on the type of land use patterns that need to be planned around the facility in order to avoid incompatible adjacent uses.

Rail Transportation System

Three rail lines provide freight service to the Bay City area. The Lake State Railroad operates two trains daily through Bay City and the Central Michigan Railway operates one daily train. Bay City also is the southern terminus of the Detroit and Mackinaw Railroad. The Central Michigan Railway serves Monitor Sugar which is a major food processor in the area. Coal units and freight move through the area Central Michigan and Lake State rail lines. Central Michigan Railway operates west of the Saginaw River while the other rail lines operate on the east side of the City.

Following a nationwide trend in recent decades, there has been considerable abandonment of rail lines as the shipment of goods has shifted to other modes of transportation, particularly trucking. Consequently, railroads have consolidated their systems and rail networks to remain competitive. Abandoned rail lines have been converted to trail networks in many communities including Bay City. The City plans to convert more abandoned lines into trails in future years under their Railtrail program.

At present there is no passenger rail service north of Flint. If rail passenger service becomes viable again in the region, reinstatement of passenger service to the area should be pursued, with connections to other modes of transportation within City limits.

Trail Systems

Bay City has a designated bicycle route system, but it is not well maintained and signed. However, the City continues to develop its popular trail system for pedestrian and bicycle use.

The present Railtrail/Riverwalk system includes 2.37 miles of the Bay City Riverwalk along the west side of the Saginaw River and 2.27 miles of the Bay-Hampton Railtrail on the easternmost side of the City. Two additional sections of Rail trail are proposed, the 3.41-mile Bay-Portsmouth Railtrail Extension in the south part of the City and the 0.88-mile Bay City Railtrail Extension near Woodside Avenue in the northern part of the City. Also proposed is 1.9 miles of the East Side Bay City Riverwalk along the Saginaw River. The Railtrail/Riverwalk system is an 11-foot wide pathway constructed of asphalt or concrete which accommodates all types of non-motorized users. Bay City's Railtrail/Riverwalk system will eventually be a nine-mile, pedestrian-oriented system through Bay City, Hampton Township, Portsmouth Township, and along both sides of the Saginaw River.

To encourage wider use of bicycle transportation, the City needs to continue developing the trail system, install bicycle lockers and bicycle racks at key destinations, and consider the needs of bicyclists when streets are reconstructed and streetscape plans are implemented. Installation of bicycle carriers on busses would also promote greater use of bicycles as a viable mode of transportation.

Water Transportation System

Bay City is an important inland port, receiving numerous freighters and ships each year. The BCATS 2020 Transportation Plan describes the Saginaw River as one of Michigan's most important commercial harbors, ranked fifth among Michigan ports in value of commodities shipped. There are 28 terminals along the river in Saginaw and Bay Counties. The Saginaw River is also used extensively for recreational boating and fishing with several marinas located along the riverfront in Bay City.

The four drawbridges that span the Saginaw River in Bay City may be raised and lowered numerous times throughout the day to accommodate commercial shipping during peak periods. Under federal law, freighters may traverse the river under the bridges at any time. The road corridors approaching each of the bridges function as major arterials through Bay City, so raising the drawbridges results in disruption to the flow of motor vehicle traffic. Recreational vessels, such as sailboats, are allowed to pass under the bridges at assigned times during the day.

Contemporary Transportation Issues³

In recent years, an increasing amount of attention has been given to the broader impacts of the transportation system on quality of life. There is a growing realization that transportation is not solely an engineering issue. Decisions involving roads and other facets of transportation have social, cultural, and economic implications for the City.

In the past several decades, development of the transportation system has focused chiefly on accommodating motor vehicle travel. As a consequence, roads have been designed to carry more and faster cars and trucks, while the road right-of-way has become less hospitable for pedestrian and bicyclists. The standard response to traffic congestion has been to widen roads, even though studies have shown that trying to keep pace with congestion by simply expanding the streets is usually unsuccessful. Widened roads typically attract more traffic, resulting in more congestion.

Many communities are seeking transportation alternatives that consider the other users of the street network so as to improve quality of life, create more appealing communities, and foster successful business activity along road corridors. Studies have shown that many such alternatives, such as narrower streets, results in safer streets, with fewer and less serious accidents.

Traffic calming actions have been identified to further improve conditions for pedestrians and bicyclists. These actions include speed humps and speed tables, chicanes, offset intersections, narrowing streets, pinch points in streets, narrower pavement widths, medians, traffic circles, and streetscaping. Traffic calming techniques would be appropriate on some Bay City streets to reduce traffic speeds, improve safety, especially for pedestrians and bicyclists, and reduce cut-through traffic in neighborhoods.

With the introduction of new transportation ideas, a new vocabulary of transportation-related terms has been created. The new nomenclature is necessary give proper consideration to the multiple functions of street rights-of-way. The new transportation nomenclature is outlined in Appendix A. It would be worthwhile incorporating the new terms into the City's engineering standards and design practices.

Many of the contemporary, innovative transportation ideas have originated in the field of planning, even though development of the transportation system has historically been the province of engineers. In order to assure that the transportation system develops in the manner described in this Plan, giving proper attention to the needs of pedestrians, bicyclists, and other users of the road right-of-way, it is important that the Planning Commission and Planning Department be involved in the decision-making involving roads.

The appropriate degree of planners' involvement will vary depending on the size and scope of the project. By way of example, plan review by the Planning Commission and Planning Department would be appropriate for proposals to re-design a streetscape, re-route existing streets, locate new streets, widen or narrow existing streets, or eliminate on-street parking. Planner review would probably not be necessary for road and sidewalk reconstruction and other such routine tasks. Nevertheless, the Planning Department should be notified in advance because such work sometimes provides an opportunity to correct longstanding deficiencies. The Planning Department should also be involved in drafting new standards affecting road and sidewalk widths, parking dimensions, intersection corner radii, street light design, and other transportation-related facilities.

³ See Appendix A for a more in-depth discussion of contemporary transportation issues.

Recommendations to Improve the Transportation System

1. Allow increased density and mixed land use⁴

Justification

- Reduces dependence on motor vehicles.
- Results in shorter trip lengths.
- Encourages walking, cycling, and use of public transit.

Actions Needed

- Concentrate energies on redevelopment and infill.
- Allow development at a density that would support public transit services.
- Develop a wide range of housing types.

2. Support walking as a viable mode of transportation.

Justification

- The pedestrian mode is already part of every trip.
- Promotes a healthy lifestyle.
- Non-polluting.
- Requires little space and public infrastructure.
- Reduces the need for more parking in Downtown.
- Low cost, low maintenance.
- Makes transportation services accessible to the full spectrum of users.

Actions Needed

- Improve the quality of the pedestrian environment (pedestrian amenities, slower motor vehicle speeds, seating, shade, etc.).
- Bring origins and destinations closer together by allowing an increase in density and mixed land use.
- Provide adequately wide, barrier-free, interconnected network of sidewalks and pathways.
- Provide protection from inclement weather (shade trees, wind breaks, arcades, awnings or shades).
- Provide adequate, pedestrian-scale lighting.

3. Promote cycling as a viable mode of transportation.

Justification

- Healthy.
- Non-polluting.
- Requires little space and public infrastructure.

⁴ In the context of this plan, "mixed use" generally means a variety of housing types, retail, office, open space, and public uses in a walkable environment. The range of uses and specific design standards will vary depending on the conditions and characteristics of each mixed use area, and in consideration of the need for compatibility between proposed and existing uses.

- Requires little parking space.
- Low cost, low maintenance.
- Makes transportation services accessible to the full spectrum of users.

Actions Needed

- Construction of bicycle lanes, routes, and paths.
- Traffic calmed streets.
- Modify traffic management techniques, currently oriented toward accommodating motor vehicles, to achieve safe conditions for bicyclists (turn restrictions, closures, etc.).
- Provide secure storage facilities at public transit facilities to promote "bike and ride". Provide secure storage facilities elsewhere.
- Allow bicycles on public transit.

4. Promote public transit.

Justification

- Reduces automobile use.
- Less polluting than individual motor vehicle use.
- Reduces the need for Downtown parking.
- Makes transportation services accessible to the full spectrum of users.

Actions Needed

- Provide economic incentives (employer provided passes, tax incentives).
- Provide free shuttle service in Downtown and on Midland Street.
- Accommodate public transit in street and urban design plans.

5. Reduce automobile dependence.

Justification

- Health, social, and environmental benefits.
- Makes transportation services accessible to the full spectrum of users.

Actions Needed

- Design new developments and redevelopment to promote non-vehicular modes of transportation.
- Promote measures which reduce automobile use [Transportation Demand Management (TDM), shared parking, creative land use planning, etc.] with incentives (e.g., lower parking requirements).
- Discourage sprawl outside of the City.

6. Promote intermodal transportation opportunities.⁵

Justification

- Combines passenger and goods movement.
- Increased convenience.
- Efficient use of transportation funds.
- Makes transportation services accessible to the full spectrum of users.

Actions Needed

- Provide multimodal stations and facilities, such as Park & Ride lots.
- Provide transfer points (quick, easy, and weather protected).

7. Use new technologies to achieve transportation goals

Justification

- Flexibility.
- Reduced automobile use.

Actions Needed

- Promote telecommuting.
- Promote efficient transit scheduling.
- Promote pollution control and detection/testing (noise and air).
- Promote Intelligent Transportation Systems (ITS) management to make better use of the existing road network.

8. Maximize the utilization of the existing road infrastructure to avoid e it.

Justification

- Encourages walking, cycling, transit.
- Reduces automobile dependency
- Tax revenues result from increased density.
- Encourages Transportation Demand Management (flex-time, ride-sharing, etc.).

Actions Needed

- Recognize that streets are multi-use facilities (recognize the needs of all users including: pedestrians, bicyclists, children; motor vehicles; adjacent residents, business owners, and others).
- Promote ways to flatten peaks in motor vehicle use.
- Promote public transit use.
- Promote traffic calming.

⁵ An intermodal transportation system is one that facilitates transfer from one mode of transportation to another. For example, a "Park & Ride" lot that accommodates commuters who use busses facilitates the transfer from motor vehicle travel to bus travel. Installation of bicycle lockers at key destination facilitates transfer from pedestrian travel to bicycle travel. Cities with well-developed intermodal transportation systems provide for transfer to and from several modes of transportation, including pedestrian, bicycle, motor vehicle, public transit, air, and rail.

- Remove/reuse surplus motor vehicle infrastructure. For example, reduce the width of streets that no longer carry high traffic volumes.

9. Institute traffic calming measures.

Justification

- Reduces the negative effects of motor vehicle use.
- Makes transportation services accessible to the full spectrum of users .

Actions Needed

- Have the Planning Commission adopt traffic calming policies.
- Design streets for appropriate speeds. For example, residential streets should be designed to carry low volumes of traffic at low speeds.
- Keep all streets as narrow as possible and never more than four travel lanes wide.
- Discontinue the use of continuous center turn lanes when other alternatives are available.
- Avoid using traffic signals, stop signs, and other traffic control devices except where absolutely necessary. Use such devices to achieve steady, safe motor vehicle traffic progression. Periodically reevaluate the need for traffic signals and stop signs and remove those that are no longer necessary.

10. Adopt and apply appropriate urban street design standards.

Justification

- Promotes pedestrian safety, traffic calming, and walkable neighborhoods.

Actions Needed

- Adopt and apply appropriate street design standards to address the divergent needs of pedestrians, bicyclists, transit, and motor vehicles and to take into account the street's relationships to adjacent and future land uses.
- For guidance, make use of published standards, such as those contained in Traditional Neighborhood Development Street Design Guidelines, a 1997 publication of the Institute of Transportation Engineers (ITE).
- Evaluate existing street engineering design standards. Replace standards that are outdated or that fail to the needs of all of the users of the road right-of-way.

11. Promote cooperation and leadership to implement objectives

Justification

- Creates a balanced transportation system.

Actions Needed

- Promote lateral lines of communications between City departments (planning, engineering, transit, utilities, etc.).

- Develop mechanisms for coordinating and integrating innovations in multi-jurisdictional situations.
- Inform public about transportation issues and alternatives.
- The Planning Commission, with the assistance of the Planning Division, will review and offer recommendations on plans for construction and reconstruction projects for new and existing streets, sidewalks, trails, and other public ways, consistent with the Municipal
- Planning Act, Michigan Public Act 285 of 1931, as amended.
- Develop checks to ensure day-to-day decisions are compatible with the Master Plan and
- Zoning Ordinance.

HOUSING AND NEIGHBORHOOD ANALYSIS

Introduction

The neighborhood is the most important and essential element of a City. This chapter of the Plan examines Bay City's neighborhoods, describes their characteristics, assesses how well they function, and measures their general health.

This chapter focuses primarily on housing, which occupies 28.1 % of the total area and accounts for 86% of all parcels in the City. The quality of housing is a measure of neighborhood health. Consequently, this chapter looks at a variety housing concerns, including age, quality and the impact of conversion of single family dwellings.

Traditional Neighborhoods

Since their establishment in the early part of the last century, Bay City's neighborhoods have been dominated by single family homes. The City of Bay City was incorporated in 1865. In 1905, it was combined with the City of West Bay City to create the present corporate boundaries. The individuality of each neighborhood results from the early ethnic settlement patterns of the last century. Lumber mill workers, fishermen, and shipbuilders congregated in areas where their neighbors spoke the same language and shared religious and social customs.

In recent times, neighborhoods have been improved by Citizens District Councils, which have played an important role in formulating neighborhood projects and advising the City on the allocation of Federal Community Development Block Grant funds. The Citizens District Councils were established under Michigan Public Act 344 of 1945 to serve as advisory bodies to the City Commission on various neighborhood issues.

Over the years many, but not all, of the City's neighborhoods have remained intact. Urban renewal projects, such as the Marquette Industrial Center, Independence Bridge, and the Baytown Housing Project, replaced much of the Patterson/Belinda neighborhood and the First Ward, and severed the original grid street pattern. The remaining neighborhoods are complemented by an attractive Downtown, diverse shopping districts, the Saginaw River, and the City's park system. The neighborhoods are Bay City's source of strength and identity.

Housing Features

Neighborhood character is affected by general design and various specific physical components. The physical components can be cohesive or divisive. For example, a public square is likely to bring residents together socially. A multi-lane thoroughfare is likely to divide a neighborhood.

Single-family housing is the predominant land use component in most Bay City neighborhoods. However, traditional neighborhoods in Bay City also contain commercial, industrial and civic facilities. Corner stores, churches and schools are located in residential areas. Neighborhood character is also influenced by lot size, density and building setbacks for residential structures.

Predominant building design features such as the number of stories, roof pitch, building materials, and architecture play a major role in defining a neighborhood's character.

Housing Characteristics

A diverse housing stock is available within the City, ranging from manufactured housing units and small, bungalow style homes to larger, historic homes. As is typical of built-out urban communities, housing construction now is infrequent. In fact, the U.S. Census reveals that from 1980 to 1990 there was an increase of only 104 additional dwelling units. This figure includes single-family and multiple-family structures and represents the net change in total dwelling units, accounting for demolition, new construction and conversions. Because Bay City has limited vacant land area, future residential expansion will be in the form of infill development, redevelopment, and development of the few vacant parcels in the fringe areas of the City.

It is evident from U. S. Census data that Bay City has an aging housing stock for which greater management will be necessary to ensure its proper upkeep and maintenance (see Table 21 and Figure 8). In 1990 almost 56% of Bay City's housing stock was constructed before 1939. Only 2.9% of the housing units were built after 1980. In comparison to Michigan as whole, Bay City's housing is much older. With respect to maintenance, houses in poor condition are not concentrated in anyone neighborhood according to the Bay City Department of Redevelopment and Housing, but are scattered throughout the City.

Because of the age of housing and new housing opportunities are limited, efforts must be focused on preserving the existing housing stock through code enforcement, restoration, renovation, and maintenance, to ensure that quality housing is available for future Bay City residents.

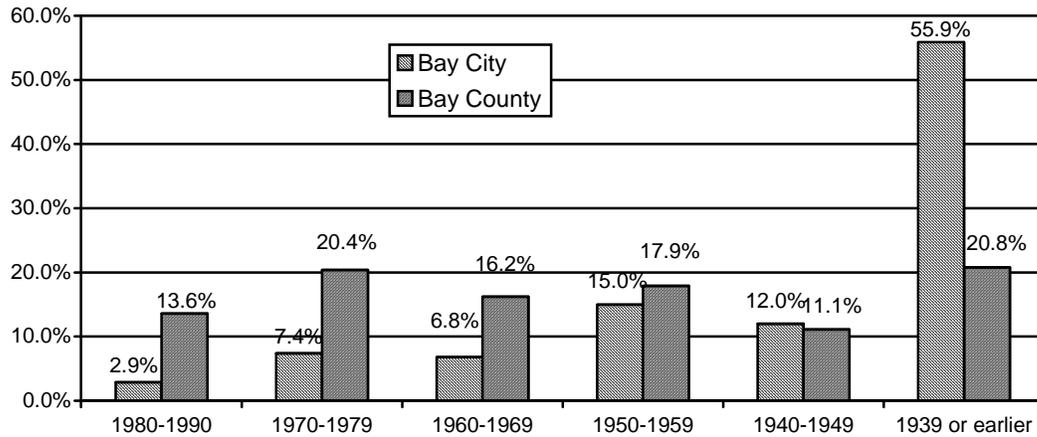
According to the 1990 Census, 84.3% of homeowners in Bay City estimated the value of their homes to be below \$50,000 (see Table 22). This is consistent with a community that has limited new housing, an older housing stock, and competition from neighboring suburban markets. Also, some homeowners report lower housing values on the Census due to fear of higher taxes.

Table 21. Age of Housing

Year Structure Built	Bay City		State of Michigan	
	No.	Percent	No.	Percent
1980 to 1989	470	2.9	522,034	13.6
1970 to 1979	1,213	7.4	785,613	20.4
1960 to 1969	1,109	6.8	622,650	16.2
1950 to 1959	2,453	15.0	688,994	17.9
1940 to 1949	1,967	12.0	428,845	11.1
1939 or earlier	9,160	55.9	799,790	20.8
Total Housing Units	16,372	100.0	3,847,926	100.0

Source: 1990 U.S. Census

Figure 10. Age of Housing



U.S. Census

Source:

U S. Census data is out of date and does not accurately reflect today's real estate market. Data provided in 1999 by the Bay City Assessor's office reveals that the average state equalized value of single family residential structures was \$27,084, which amounts to an average market value of \$54,168. Data compiled by the Realtor Association of Bay County indicates that the average list⁶ price of housing in the City between January and October 1998 was between \$65,000 and \$75,000.6 Sixty-three percent (63%) of housing units in the City have two to three bedrooms, representing a strong single-family residential presence, which is consistent with State averages (see Table 23).

⁶ This average is based on the list price of 229 homes on the market, excluding four homes listed between \$200,000 and \$999,000.

Housing in Bay City is predominantly owner-occupied (62.3%), although the number of owner-occupied housing units decreased by 158 units between 1990 and 1998 (see Figure 9 and Table 24). During the same period the number of renter-occupied units increased by 410 units. The data reveal a pattern of change from owner-occupied to renter-occupied.

The data also reveal a pattern of single-family to duplex or to multiple-family conversions and new multiple-family development in the 1990's. Between 1990 and 1998 the number of single-family units decreased by 246 units, so that single-family attached or detached units comprised 69.5% of the housing units in 1998 (see Table 25). During the same eight year period, the number of multiple family units increased by 498, so the multiple-family units comprised 30.5% of the housing units in 1998.

Table 22. Value of Owner-Occupied Units, 1990

Value Ranges	Bay City		State of Michigan	
	Number of Housing Units	Percent	Number of Housing Units	Percent
Less than \$50,000	7,854	84.3	737,217	38.5
\$50,000 to \$99,999	1,330	14.3	814,496	42.5
\$100,000 to \$149,999	98	1.1	219,195	11.4
\$150,000 to \$199,999	26	0.3	79,313	4.1
\$200,000 to \$299,999	12	0.1	45,953	2.3
\$300,000 or more	1	0.01	19,969	1.0
Total Dwelling Units	9,321	100.0	1,916,143	100.0
Median (Dollars)	\$32,600	-	\$60,600	-

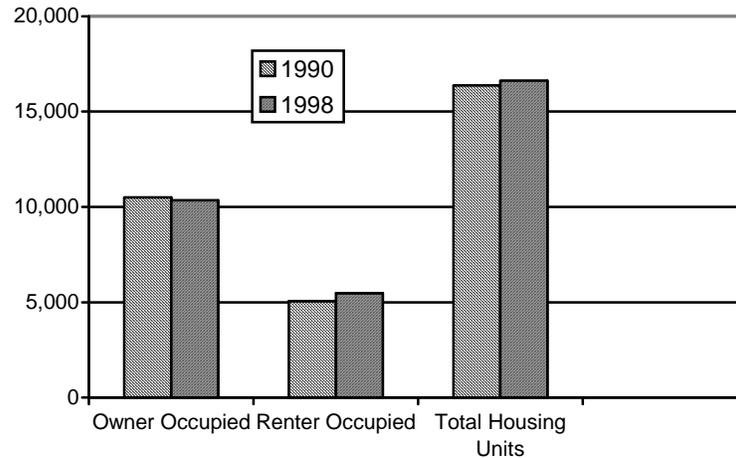
Source: 1990 U.S. Census

Table 23. Number of Bedrooms per Dwelling Unit, 1990

Bedrooms	Bay City		State of Michigan
	No.	Percent	Percent
No bedroom	210	1.3	1.3
1 bedroom	2,570	15.7	10.8
2 bedrooms	4,569	27.9	29.7
3 bedrooms	5,748	35.1	42.6
4 bedrooms	2,802	17.1	12.9
5 or more bedrooms	473	2.9	2.6
Total Dwelling Units	16,372	100.0	100.0

Source: 1990 U.S. Census

Figure 11. Owner-Occupied vs. Renter-Occupied Housing Units



Source: 1990 U.S. Census, 1998 Bay City Building Division

Table 24. Owner-Occupied vs. Renter-Occupied Housing Units

	1990	Percent	1998	Percent	Change 1990-1998
Total Housing Units	16,372	100.0	16,624	100.0	+252 units
Owner-Occupied	10,506	64.2	10,348	62.3	-158 units
Renter-Occupied	5,064	30.9	5,474	32.9	+410 units
Vacant	802	4.9	802 *	4.8	-

Sources: 1990 U.S. Census, 1998 Bay City Building Department

* The number of vacant residential units for 1998 was unavailable, so this analysis assumes no change in vacancy. For purposes of this analysis, it is further assumed that half of the 802 vacant units are owner-occupied and half are renter occupied. This issue must be reevaluated when the 2000 Census data become available.

Table 25. Types of Residential Structures

Types of Residential Structure	1990	1998	Change
1-Unit Detached and Attached	11,797	11,551	(246)
2 to 4 Units	2,810	2,902	+92
5 to 9 Units	451	393	(58)
10 or more Units	930	1,394	+464
Manufactured Housing, Trailers, etc.	384	384	Not available
Totals	16,372	16,624	252

Sources: 1990 U.S. Census, 1998 Bay City Building Department.

Bay City's housing is an asset to the community, but presents challenges for community leaders and Bay City residents. Issues of housing maintenance are being addressed. Several programs, some of which have used Community Development Block Grant funds, are being used to

rehabilitate housing, improve neighborhood conditions, and continue the upkeep of the City's housing stock. For example, the CDBG- funded housing rehabilitation program provides deferred payment loans and annual amortizing loans to low and moderate income households for housing rehabilitation. Approximately 50 homes a year are rehabilitated through this program. The City also supports the

Bay Area Housing Development Corporation program that provides for housing purchase and rehabilitation for low and moderate income residents.

With over 50% of the current housing stock constructed prior to 1939, today's challenge for the community is preservation, restoration, and maintenance. The quality and condition of housing is integral to improved quality of life for Bay City residents, which also affects neighborhood well-being. Continued efforts should be focused on providing for housing improvements, proper upkeep, and increasing home ownership opportunities in the City.

Neighborhood Analysis

The following section provides a statistical analysis of Bay City's neighborhoods. For the purposes of this analysis the City has been divided into ten neighborhoods (see Map 10).

Northwest Neighborhood

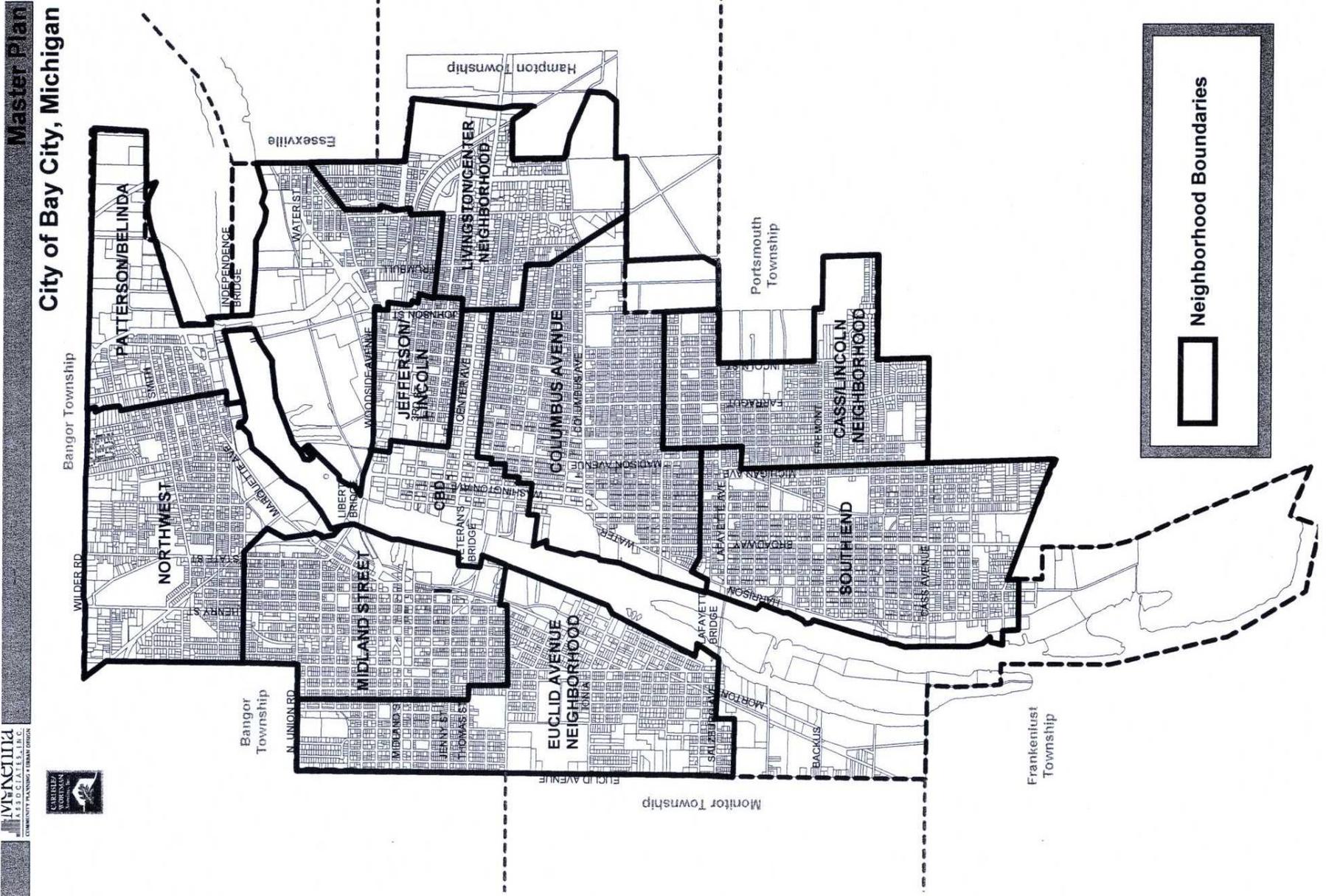
The Northwest neighborhood is bordered by Wilder Road on the north, Wenona and the City limits on the west, Hart Street and the river on the south and Sophia on the east.

The Northwest neighborhood contains 1,314 single-family structures, of which 117 (8.9%) are renter-occupied. With the commercial growth along Wilder Road, this neighborhood has perhaps experienced the most growth of any neighborhood in the City. This area of the City is characterized by single-family, commercial and institutional land uses. Besides the Wilder Road commercial corridor, major non-residential land uses include Lindsay Elementary and Trombley Schools, Visitation School and Church, Mt. Olive Lutheran Church and School, Trombley/Banks Park, Defoe Park and Little League Field, the Moose Lodge, the U. S. Army Reserve Center, St. Mary's Athletic Field, and Oak Ridge Cemetery.

Three major streets bisect this neighborhood; Henry Street, State Street, Marquette Avenue, and Smith Street, which carry 17, 191 Vehicle Trips per Day (VTD), 7,030 VTD, 5,220 VTD, and 2,885 VTD, respectively. Each of these thoroughfares presents a significant obstacle to pedestrian circulation, particularly Henry Street.

Wilder Road and its adjoining commercial development have a growing impact on the perceived livability of the Northwest neighborhood. Traffic congestion on Wilder Road causes traffic back-ups on local neighborhood streets as vehicles attempt to cross or turn onto Wilder Road. The situation is particularly acute at the intersection of State and Wilder Roads, and to a lesser extent at the Joseph and Bangor intersections with Wilder Road.

Map 9. Neighborhood Boundaries



Map 10 - Neighborhood Boundaries

BaseMap Source: City of Bay City, 6/98
Data Source: Bay City Redevelopment and Housing



Table 26. Northwest Neighborhood Parcel Information

Total Neighborhood Parcels	1,606
Total Residential Structures	1,448
Total Single-Family Structures	1,314
Renter Occupied Single-Family Structures	117(8.9%)
Total Rental Structures (Single-Family, Two-Family, Multiple Family)	251 (17.3%)
Two-Family Rentals	42 structures (84 units)
Multiple- Family Rentals	92 structures (150 units)
Total Rental Units	351

The concept of a traditional neighborhood is best embodied within the area north of Marquette Avenue between Sophia and Henry Streets, where older single-family homes are within walking distance of the Marquette Avenue/Banks commercial area. The neighborhood also offers attractive tree lined streets, sidewalks and a traditional grid street/block layout (see Map 11).

Patterson-Belinda Neighborhood

This neighborhood is irregular in shape, encompassing land in the northeast corner of the City, north and south of the Saginaw River across Independence Bridge. It includes significant industrial areas situated on the riverfront and in the Marquette Industrial Center.

The Patterson/Belinda neighborhood contains 781 single-family structures, of which 90 (11.5%) are renter-occupied. This area of the City is best characterized by its prominent industrial land use, located both to the north and south of the Saginaw River. The Independence Bridge provides north south access across the River via the Harry S. Truman Parkway. Major non-residential land uses include the Marquette Industrial Center, S. C. Johnson, General Motors Powertrain, the Wastewater Treatment Plant, Hirschfield's Scrap Yard, Wirt Stone Dock, Gougeon Brothers, Fire Station #5, Banks-Trombley Park, Woodside Elementary School, Northeast Little League Field, and St. Joseph Athletic Field.

This neighborhood contains significant transportation corridors which divide the neighborhood as well as provide access to other parts of the City. These include the Saginaw River, Harry S. Truman Parkway, Woodside Avenue. The roads are major obstacles to pedestrian circulation due to their heavy traffic volumes and generous right-of-way widths. However, the Harry S. Truman Parkway also serves to separate incompatible land uses, with industrial on the east side and single-family residential to the west. Woodside Avenue also provides this same type of buffer on the south side of the Saginaw River.

Two sub-areas exist within the Patterson/Belinda neighborhood. The first is on the north side of the river, east of Sophia St. This area contains many homes from the early 1900s in close walking distance of the Marquette Business District. The second neighborhood sub-area is located on the south side of the river near Woodside Ave. A central focal point for this portion of the City is Woodside School and the Johnson St. Business District.

Table 27. Patterson/Belinda Neighborhood Parcel Information

Total Neighborhood Parcels	1,005
Total Residential Structures	833
Total Single-Family Structures	781
Renter Occupied Single-Family Structures	90 (11.5%)
Total Rental Structures (Single-Family, Two-Family, Multiple Family)	142 (17.0%)
Two-Family Rentals	44 structures (88 units)
Multiple- Family Rentals	8 structures (25 units)
Total Rental Units	203

Jefferson- Lincoln Neighborhood

The Jefferson-Lincoln neighborhood is located east of downtown Bay City and south of the Patterson-Belinda neighborhood. It is bordered by 5th Street on the south, Woodside on the north, and Madison on the west, and its eastern border is just east of Johnson.

The Jefferson/Lincoln neighborhood contains 250 single-family structures, of which 38 (15.2%) are renter-occupied. Many of the structures date back to the early part of the twentieth century. A variety

of land uses are found in this neighborhood, including industrial uses between Woodside and First Street, Maplewood Park, Maplewood Manor high-rise apartment building, Baytown Housing, Dolsen School, and St. Joseph Church.

The Johnson Street Business District is the neighborhood's main local shopping district providing neighborhood-oriented goods and services. The business area recently received extensive streetscape improvements which have enhanced the pedestrian shopping experience and complemented nearby traditional neighborhoods.

Woodside Avenue borders this neighborhood on the north. Heavy industrial uses are on the north with less intensive industrial uses to the south. Woodside is a heavily-traveled thoroughfare, carrying over 14,000 trips per day based on counts taken in 1997. Madison Avenue, a north-

south road that carries over 10,000 trips per day (1997 count), borders the neighborhood on the west, separating the neighborhood from the government and institutional uses to the west.

Table 28. Jefferson/Lincoln Neighborhood Parcel Information

Total Neighborhood Parcels	452
Total Residential Structures	339
Total Single-Family Structures	250
Renter Occupied Single-Family Structures	38 (15.2%)
Total Rental Structures (Single-Family, Two-Family, Multiple Family)	127 (37.5%)
Two-Family Rentals	61 structures (122 units)
Multiple- Family Rentals	28 structures (385 units)
Total Rental Units	545

Midland Street Neighborhood

The Midland Street neighborhood is located on the west side of the Saginaw River, south of the Northwest neighborhood. It is bounded on the north by Hart Street, the south by Fisher, the east by the Saginaw River and the west by Warner Street. A rail line runs parallel to the river on the east side of this neighborhood.

The Midland Street neighborhood contains 1,338 single-family structures, of which 166 (12.4%) are renter-occupied. This neighborhood is perhaps best known for its historic commercial and residential districts. The northern portion of Veteran's Memorial Park is within this neighborhood on the Saginaw River, providing ample recreational opportunities for residents. A smaller neighborhood park, Nate Doan Park, is in the north-central part of this neighborhood.

The Midland Street neighborhood contains many residential units which date back to the 1800's. Residential structures are in traditional grid pattern which serves the needs of the pedestrian and auto equally. The residential design, with minimal front setbacks, front porches and prominent windows encourages interaction along the street.

The Midland Street commercial area, which is part of an Historic District, is one of the State's finest examples of a historically restored commercial area. The area provides a thriving collection of shops, restaurants, entertainment and office uses and is a focal point for the neighborhood. The commercial district is within easy walking distance of residential areas to the north and south. Veteran's Park and the Liberty Harbor Marina also provide attractive riverfront open space. The Midland Street commercial area lacks a grocery store, so it does not fully address the daily needs of residents.

Other major land uses in this neighborhood include Sage Branch Library, Veteran's Memorial Park, Pershing Park, Nate Doan Park, Fire Station #4, St. Mary's Church and School, and the Bay City Public Schools Administration Building.

Table 29. Midland Street Neighborhood Parcel Information

Total Neighborhood Parcels	1,967
Total Residential Structures	1,646
Total Single-Family Structures	1,338
Renter Occupied Single-Family Structures	166 (12.4%)
Total Rental Structures (Single-Family, Two-Family, Multiple Family)	474 (28.8%)
Two-Family Rentals	177 structures (354 units)
Multiple- Family Rentals	131 structures (437 units)
Total Rental Units	957

The Midland Street neighborhood benefits from several prominent gateways. These include the Sage Library and Westminster Presbyterian Church on the west end of the commercial district; Veterans and Liberty Bridges on the approaches to the Midland Street neighborhood from downtown; and, the attractive transition from the Saginaw River to the built-up neighborhood via the Veterans Memorial Park open space.

This neighborhood is sharply divided by major east-west transportation corridors that carry regional traffic through the City. Major transportation corridors include N. Union Avenue (9,855 VTD in 1995), Vermont Street (14,220 VTD in 1997), Jenny Street (13,000 VTD in 1994), Thomas Street (12,000 VTD in 1994), and Henry Street, the only major north-south thoroughfare, with 17,191 VTD in 1994. The majority of these major streets funnel traffic from the west side of the Saginaw River across Veteran's Bridge (28,900 VTD in 1996) and Liberty Bridge (19,089 VTD in 1994) to the east side.

Ongoing concerns in the Midland Street neighborhood are continued preservation of significant historic structures, and alleviating land use conflicts where commercial and residential land uses abut along Vermont, Midland, and John Streets.

In 1997, the Midland Street CDC and ICANN Sector 70 community policing neighborhood committee prepared a Neighborhood Enhancement Handbook for the Midland Street CDC area. Meetings were held with residents to identify problems affecting the livability of the Midland Street neighborhood. Three principal goals emerged:

Minimize the debilitating effects of rental properties in the neighborhood.

Control the encroachment of Midland Street patrons and activities into residential areas.

Continue improvements to upgrade the overall appearance of the neighborhood.

These goals underscore two key characteristics of this neighborhood: a relatively high percentage of rental units and the on-going conflict between the Midland Street entertainment uses and the adjacent residential uses.

Columbus Avenue Neighborhood

This neighborhood is located south of downtown Bay City, north of the South End neighborhood and east of the Saginaw River. Its boundaries include 18th and 20th Streets to the south, Sixth St. and McKinley Avenue on the north, the Saginaw River to the west, and Johnson and Trumbull Streets to the east.

The Columbus Avenue neighborhood contains 2,021 single-family structures, of which 328 (16.2%) are renter-occupied. Centered on Columbus Avenue, a significant commercial corridor in the City,

this neighborhood is large in size and has the second highest concentration of rental structures (31.7%), trailing behind the Jefferson/Lincoln neighborhood where 37.5% of all structures rented. (Contributing to the high rental rate in the Jefferson/Lincoln neighborhood, however, are two large rental properties, Maplewood Manor and Baytown Housing.)

Major land uses in this neighborhood including the Columbus Avenue commercial corridor, Bay City Central High School and Athletic Field, Bay Health Systems, Birney Park, Bay County Farmers Market, YMCA, St. Boniface Church, Immanuel Lutheran Church and School, St. James Catholic Church and School, All Saints School, and Green Ridge, Corliss, St. Patrick's, and the Jewish Cemeteries. St. Stanislaus Church and School are adjacent by outside the boundaries of this neighborhood on the south.

The Bay Aggregates site is located on the east side of the Saginaw River, south of Veterans Memorial Bridge. As noted in the Land Use Plan chapter, the Master Plan proposes relocation of the aggregates operation, with relatively intensive mixed use development taking its place. Planned non-residential uses include hotel/conference facilities, entertainment uses, and retail commercial. Some residential development would be appropriate, with public open space being used to connect the various uses.

This neighborhood is traversed by various major streets including Columbus Avenue (12,475 Vehicle Trips per Day in 1997), Lincoln Street (3,151 VTD in 1994), Madison Avenue (6,700 VTD in 1997), Garfield Avenue (17,600 in 1996).

The Columbus Avenue neighborhood contains diverse block sizes and rights-of-way that are widest along the major thoroughfares mentioned above, and also along Farragut Street (see Map

11). The Columbus Avenue corridor serves as the focal point for this area and as a destination for shopping and other commercial services. Bay Health Systems, the largest employer in Bay County, is also a major destination for the region and contributes to traffic flow along Columbus Avenue.

This neighborhood is architecturally diverse, reflecting a wide cross-section of commercial and residential styles. This includes older turn of the century homes as well as more recent housing styles. Land use conflicts are an ongoing concern where commercial and residential land use abut along the Columbus Avenue corridor.

The Columbus Avenue neighborhood maintains a residential, commercial and institutional balance that provides a dynamic land use environment. Although the neighborhood as a whole is neatly divided by major streets with wide pavements, enclaves on either side of these streets are uniform and function as independent units. The high renter-occupied housing rates found in this neighborhood tend to attract a more transient population. These rental units are scattered throughout the neighborhood but are more concentrated on the west side of the neighborhood. Higher owner-occupied housing rates are found in the northeast and southeast portions of this neighborhood.

Table 30. Columbus Avenue Neighborhood Parcel Information

Total Neighborhood Parcels	2,782
Total Residential Structures	2,478
Total Single-Family Structures	2,021
Renter Occupied Single-Family Structures	328 (16.2%)
Total Rental Structures (Single-Family, Two-Family, Multiple Family)	785 (31.7%)
Two-Family Rentals	279 structures (558 units)
Multiple- Family Rentals	457 structures (1057 units)
Total Rental Units	1,943

South End Neighborhood

The South End neighborhood encompasses land bordered on the south by McGraw Avenue, the north by 20th Street, the west by the Saginaw River and the east by Michigan Avenue.

Table 31. South End Neighborhood Parcel Information

Total Neighborhood Parcels	2,430
Total Residential Structures	2,080
Total Single-Family Structures	1,925
Renter Occupied Single-Family Structures	171 (8.9%)
Total Rental Structures (Single-Family, Two-Family, Multiple Family)	326 (15.7%)
Two-Family Rentals	110 structures (220 units)
Multiple- Family Rentals	155 structures (384 units)
Total Rental Units	775

The South End neighborhood contains 1,925 single-family structures, of which 171 (8.9%) are renter-occupied. This neighborhood contains the fourth lowest rate of renter-occupied structures at 15.7%. Unlike other neighborhoods where a portion of the rentals are accounted for in large rental complexes, most of the rental units in the South End are within the fabric of the neighborhood.

Broadway Avenue, the major transportation corridor in this neighborhood, lacks a uniform land use pattern. A variety of uses are located along Broadway including commercial, parks, institutional, and single-family, two-family and multiple-family residential uses.

Lafayette Avenue is located on the north side of this neighborhood, which provides east/west access across the river via Lafayette Bridge. The two major north/south thoroughfares in this neighborhood are Broadway Avenue and Michigan Avenue with 12,400 VTD in 1996 and 5,490 VTD in 1990, respectively. Commercial and industrial land uses are located at the south end of Broadway Avenue, north and south of McGraw Avenue.

Major land uses in the South End neighborhood include MacGregor Elementary and Whittier Elementary Schools, Bay County Children and Senior Citizens Center, South Side Branch Library, Fire Station #2, and Roosevelt Park. Bigelow Park is also located to the west on Middlegrounds Island, across Lafayette Bridge. The James Clements Airport borders this neighborhood on the south. The potential for industrial and commercial growth around the airport is great; such growth would be likely to impact the South End neighborhood.

Block sizes in this neighborhood are fairly uniform in shape and smaller than the City average (see Map 11). These smaller block sizes with narrow collector streets are more conducive to pedestrian activity and face-to-face interaction. The relatively high rate of owner-occupancy would tend to support housing preservation efforts. This notwithstanding, the South End neighborhood contains widely scattered pockets of blight. These pockets can be accounted for by the age of the housing (particularly in the western portions of the neighborhood) along with

isolated cases of absentee owner neglect and owner-occupants with insufficient resources to undertake necessary renovations.

Euclid Avenue Neighborhood

The Euclid Avenue neighborhood is located west and south of the Midland Street neighborhood, bordered by North Union Road and Fisher Avenue on the north, Woodland and Salzburg Avenues on the south, Chilson Street and the Saginaw River on the east, and Euclid Avenue on the west.

This neighborhood contains 1,455 single-family structures, of which 102 (7.0%) are renter-occupied. This neighborhood contains the third lowest rate of rental housing at 13.9%.

Table 32. Euclid Avenue Neighborhood Parcel Information

Total Neighborhood Parcels	1,831
Total Residential Structures	1,572
Total Single-Family Structures	1,455
Renter Occupied Single-Family Structures	102 (7.0%)
Total Rental Structures (Single-Family, Two-Family, Multiple Family)	219 (13.9%)
Two-Family Rentals	98 structures (196 units)
Multiple-Family Rentals	19 structures (308 units)
Total Rental Units	606

Euclid Avenue, a commercial corridor and the City's western boundary, borders this neighborhood. Major transportation corridors that bisect this neighborhood include the following east/west routes: Salzburg Avenue (18,693 VTD in 1993), Thomas Street (12,000 VTD in 1994), and Jenny Street (13,000 VTD in 1994). These corridors, particularly Jenny and Thomas Streets, stratify this neighborhood.

Major land uses in this neighborhood include Handy Intermediate, McKinley, Kolb Elementary, and Riegel Elementary Schools; Bigelow Park which is located to the east on Middlegrounds Island via Lafayette Bridge; Kolb Athletic Field; Ramsey Park; Holy Trinity Church and School, and Zion Lutheran Church and School.

The Euclid Avenue neighborhood is physically divided by the Jenny/Thomas one-way streets. Residential uses to the north are focused around Handy School, and residential uses to the south are centered around Kolb School. Neighborhood improvement efforts must build on these relationships to the schools.

Cass/Lincoln Neighborhood

The boundaries of this neighborhood are generally 18th Street on the north, Cass Avenue on the south, Lincoln Avenue on the east, and Michigan Avenue on the west. It is bordered by the South End neighborhood on the west and the Columbus Avenue neighborhood on the north (see Map 10).

Table 33. Cass/Lincoln Neighborhood Parcel Information

Total Neighborhood Parcels	1,643
Total Residential Structures	1,567
Total Single-Family Structures	1,506
Renter Occupied Single-Family Structures	63 (4.2%)
Total Rental Structures (Single-Family, Two-Family, Multiple Family)	124 (7.9%)
Two-Family Rentals	51 structures (102 units)
Multiple- Family Rentals	10 structures (52 units)
Total Rental Units	217

The Cass/Lincoln neighborhood contains 1,506 single-family structures, of which 63 (4.2%) are renter-occupied. A total of 7.9% of all residential structures are renter-occupied in this neighborhood, which is the second lowest proportion among all neighborhoods. A high rate of owner-occupied housing (92.1 %) means that this study area will most likely retain a level of housing quality that exceeds other parts of the City.

This neighborhood contains some of the City's newest housing and remaining tracts of vacant land. Blocks are generally about four times longer than blocks in older parts of the City (see Map 11). This neighborhood is also reasonably unhindered by major transportation corridors, except for east/west Kosciuszko Avenue, which carries 11,910 Vehicle Trips per Day (1996).

Major uses in this neighborhood are St. Stanislaus Church and School, Lincoln Center, St. Hyacinth's Church, School and Athletic Field, and Hewitt Park. The Neighborhoods at Heritage development, a new development that is designed based on traditional planning principles, is located east of Lincoln Avenue, approximately a quarter of a mile north of Cass Avenue.

Livingston/Center Avenue Neighborhood

Center Avenue traverses this neighborhood which is bordered by the Patterson-Belinda neighborhood on the north and the Columbus Avenue neighborhood to the south. The Livingston/Center Avenue neighborhood contains 867 single- family structures, of which 28 (3.2%) are renter-occupied, the lowest percentage of rental units of any neighborhood.

Table 34. Livingston/Center Avenue Neighborhood Parcel Information

Total Neighborhood Parcels	942
Total Residential Structures	901
Total Single-Family Structures	867
Renter Occupied Single-Family Structures	28 (3.2%)
Total Rental Structures (Single-Family, Two-Family, Multiple Family)	62 (6.9%)
Two-Family Rentals	27 structures (54 units)
Multiple- Family Rentals	7 structures (35 units)
Total Rental Units	117

This neighborhood contains some of the most architecturally significant housing in the City. The Center Avenue Historic District contains every major architectural style from the mid-1800s to 1960. Relatively large lot sizes and attractive well-maintained residences, make this area one of the more desirable residential areas within the City. Some of these residences along Center Avenue have been converted to non-residential uses, including bed and breakfast establishments, offices and institutional uses.

The neighborhood is also enhanced by Carroll Park, one of the first parks developed in the City which includes attractive water features, mature trees, picnic areas and play areas. The park is linked to adjoining residential areas with tree-lined sidewalks, providing a traditional neighborhood setting and sense of community.

Center Avenue (M-25), between Livingston Avenue and Madison Avenue, is designated as a Historic Heritage Route by the Michigan Department of Transportation. An Historic Heritage Route is a state highway having outstanding historic buildings and resources along its length. According to MDOT, this stretch of Center Avenue contains 48 pre-1900 and 32 1900-1929 structures, which are also on the National Register as part of the Center Avenue Historic District.

Other major land uses in this neighborhood include Washington and Thomas Jefferson Schools, Trinity Episcopal, and First Presbyterian Churches, Bay County Fairgrounds, and Pine Ridge, Seaman, Hebrew, and Elm Lawn Cemeteries.

Functional Analysis of Neighborhoods

The analysis presented in the previous several pages provides a statistical and descriptive profile of the City's neighborhoods. For the purposes of this profile, neighborhood boundaries were based largely on past community development program needs, although such boundaries are not necessarily the best reflection of how the neighborhoods actually function today.

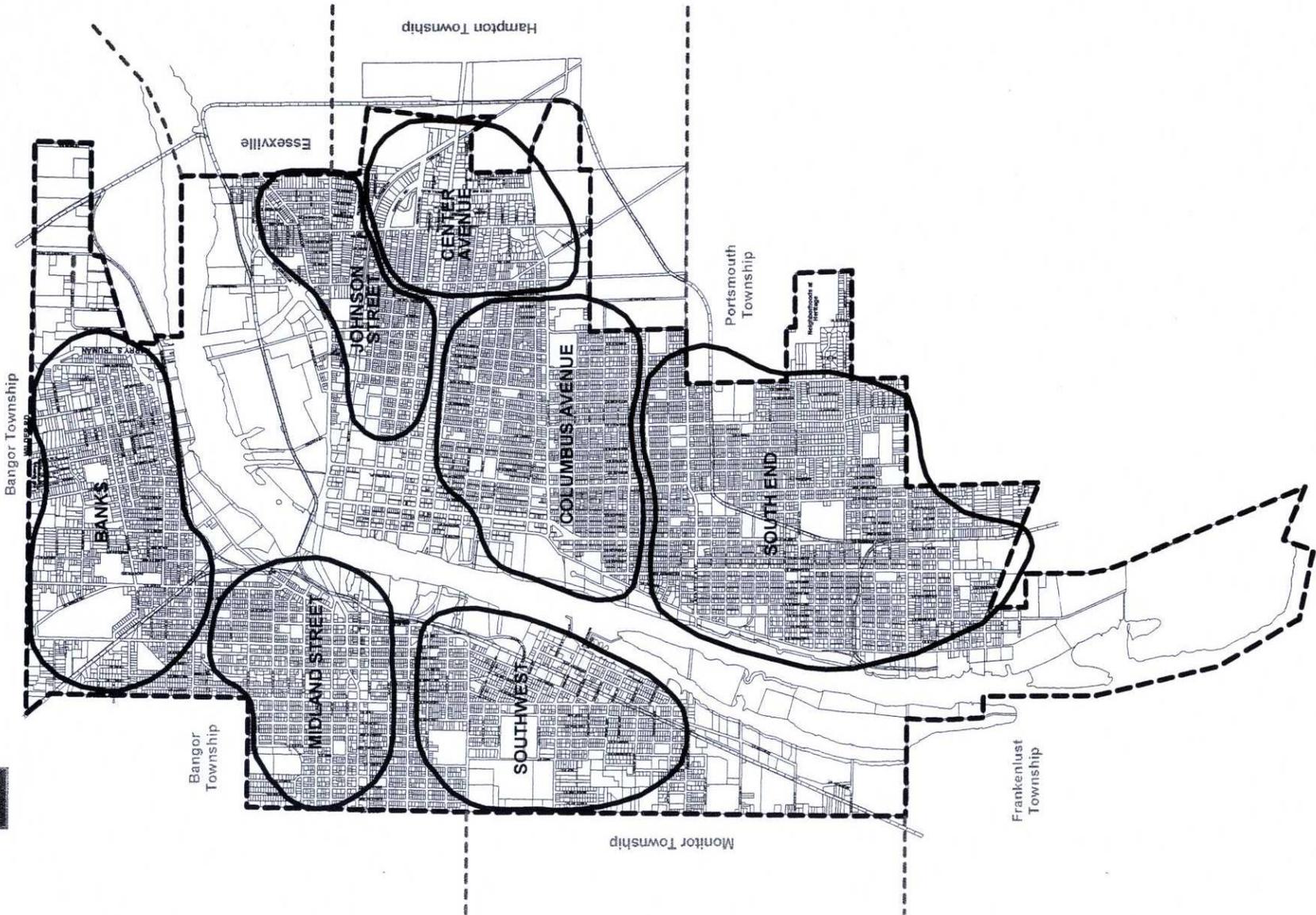
The multi-page chart that follows describes the functional characteristics of Bay City's

neighborhoods, based on such criteria as discernable center, commercial facilities, housing, public and quasi-public buildings and spaces, neighborhood schools, traffic and streets, and proximity to employment centers.

This functional analysis of neighborhoods will be particularly useful for the purpose of understanding the Land Use Plan and Map, which are based on a neighborhood and city composition that is more attuned to the functional aspects of the neighborhoods.

The portion of the chart dealing with Comments and Issues describes functional neighborhood boundaries which may be more useful for neighborhood planning purposes in the future. Map 11 graphically portrays these functional neighborhood boundaries.

Map 10. Functional Neighborhood Boundaries



Base Map Source: City of Bay City, Michigan 4/98
 Data Source: McKenna Associates, Inc., 6/00



Map 11-Functional Neighborhood Boundaries



HOUSING AND NEIGHBORHOOD ANALYSIS

	Discernable Center	Commercial Facilities
Northwest	The Banks area, along Marquette St., between Sophia and Henry, is a center of activity; Visitation Church and Linsday School are the "neighborhood centers" for many residents.	The Banks area has some local commercial, but the neighborhood would benefit from greater variety of neighborhood retail. Wilder Rd. serves the neighborhood with broader range of retail uses.
Patterson-Belinda	From a functional point-of-view, Patterson-Belinda consists of two separate neighborhoods, separated by the river. The residential area north of the river functions as part of the Northwest neighborhood, with the Banks area as the "center." The area south of the river has no distinct "neighborhood center," although Woodside Elementary School is a focus of activity.	The area north of the river is located close to the Banks area neighborhood commercial district. The area south of the river contains no commercial uses, although it is located near the Johnson Street commercial district to the west.
Jefferson-Lincoln	The Johnson Street business district is the center of attention in this neighborhood, although residents on the west side of the neighborhood may identify more closely with Downtown.	The Johnson Street business district is one of the most attractive local commercial districts in the City, offering a variety of goods and services. Downtown shopping is located within walking distance to the west. Residents travel to Wilder Road or Center Road for larger scale shopping needs.
Midland Street	The Midland Street commercial area, which is part of an Historic District, is the prominent center of this neighborhood.	The Midland Street commercial district provides a thriving collection of shops, restaurants, entertainment, and office uses. There is concern that many neighborhood businesses have been replaced by entertainment and restaurant uses, so the district caters less to needs of surrounding residents. Residents travel to Euclid Avenue or Wilder Road for larger scale shopping needs.
Columbus Avenue	The Columbus Avenue corridor is the recognized center of this neighborhood. Functionally, the neighborhood consists of three subareas: the area generally located west of Madison, the transition area between Madison and Lincoln, and the area west of Lincoln. The boundaries of this neighborhood encompass a huge area. Consequently, residents a few blocks north and south of Columbus Avenue don't have the same strong sense of neighborhood identity as residents living closer to Columbus.	The Columbus Street commercial district contains a variety of businesses that serve the day-to-day needs of residents. There are a number of vacant storefronts, so there is a need for new businesses to move in strengthen the district. Nearby commercial areas that also serve neighborhood residents are Downtown and on Center Avenue. The opportunity to develop specialty commercial exists on the waterfront.
South End	The Broadway Avenue corridor is recognized as the center of this neighborhood, although the Lafayette Avenue corridor is an activity node on the north. Functionally, South End and Cass/Lincoln generally operate as a single neighborhood. There is a strong sense of neighborhood identity in the South End.	The businesses along Broadway and Lafayette Avenues, and in the Lafayette Square commercial center serve the day-to-day needs of residents. The businesses along Broadway are spread over a long distance and don't function together as a strong neighborhood commercial district. It is likely that many residents travel outside of the City for larger scale shopping needs.
Cass/Lincoln	The Cass/Lincoln neighborhood functions together with the South End neighborhood. Its orientation is generally toward Broadway Avenue or Lafayette Square. At the north end of the neighborhood, though, Kosciusko Avenue and St. Stanislaus Church and School are foci of attention and neighborhood activity. St. Hyacinth Church and School	The businesses along Broadway and Lafayette Avenues, and in the Lafayette Square commercial center serve the day-to-day needs of residents. It is likely that many residents travel outside of the City for larger scale shopping needs.

HOUSING AND NEIGHBORHOOD ANALYSIS

	Discernable Center	Commercial Facilities
	are foci of attention in the south part of the neighborhood.	
Euclid Avenue	The Euclid Avenue neighborhood lacks a strong, discernable center to give the neighborhood its identity. In the south part of this neighborhood, the Salzburg Avenue commercial corridor is a weak activity center. Another weak mixed use district is located along Henry Street, in the northeast part of the neighborhood.	The Salzburg Avenue commercial area contains a few businesses that provide for day to day needs of nearby residents. However, commercial uses along Euclid Avenue serve the neighborhood residents with most of their retail and service needs. The Euclid Avenue corridor also contains a few larger scale commercial uses (auto dealers, nurseries) that serve the region.
Livingston/Center Avenue	The tree-lined Center Avenue with its many architecturally-significant structures, imparts this neighborhood with its image as a highly desirable residential neighborhood. However, Center Avenue, within the boundaries of this neighborhood, does not contain the diverse mixture of uses and activities that would allow it to be considered a discernable neighborhood center.	There are only a few businesses in this neighborhood, on Center Avenue near the City's east boundary. Residents are likely to patronize Johnson Street or Columbus Avenue businesses for convenience goods, and shop outside of the City for larger scale retail and service needs.

HOUSING AND NEIGHBORHOOD ANALYSIS

	Housing	Public and Quasi- Public Buildings and Spaces
Northwest	Housing is generally well- maintained. Conversion of single-family houses into multi-family units has been limited. The oldest housing is in the Banks area. The newest housing is attached condominiums (Bay Harbor). There is some scattered public housing.	Lindsay Elementary School and Visitation Church and School are prominent uses that contribute significantly to the neighborhood's identity. Oak Ridge Cemetery and the U. S. Army Reserve occupy large tracts of land but are not essential to the ongoing life of the neighborhood. Trombley-Banks Park, located adjacent to this neighborhood on the east, serves as Northwest's local park, along with recreation facilities at Lindsay School and Defoe Park.
Patterson-Belinda	Single family detached housing is predominant. There has been a moderate level of conversion of single- family houses into multi-family units, resulting in 11.5% of the single-family units being rented. There are pockets of older housing north of Woodside Lane.	The most prominent public uses on the north side of the river are the Trombley-Banks Park and adjacent Fire Station No. 5. Woodside Elementary School is an important focus of activity in the portion of this neighborhood located south of the river.
Jefferson-Lincoln	This neighborhood contains 250 single-family structures, many of which date back to the early part of the 20th century. There has been a substantial number of single- family conversions, resulting in 15.2% of the single-family houses being rented. Almost 38% of all units are rented, reflecting the presence of Baytown and Maplewood Manor.	St. Joseph Church, the oldest Catholic church in the City, is the most prominent quasi- public use in this neighborhood. Maplewood Park is an important public open space that provides a transition between the single- family areas on the east and south the multiple-family development and industrial uses to the west and north.
Midland Street	The Midland Street neighborhood contains many residential structures that date back to the 1800's, many of which have been renovated and restored. There is concern about the debilitating effects of rental units, many of which occupy single family houses that have been converted into multi-family units.	Several prominent public buildings are located in this neighborhood, including the Sage Branch Library, the Public School Administration Building, and Fire Station No. 4. There are several prominent churches, including St. Mary's Church and School, Messiah Lutheran, First Methodist, and Westminster Presbyterian. In addition, there are numerous park and recreation facilities, including Veteran's Park, Pershing Park, Nate Doan Park, and Liberty Harbor Marina.
Columbus Avenue	High rates of renter- occupied housing in this neighborhood tend to attract a more transient population. Almost 32% of all residential structures are rentals. The rental units are scattered throughout the neighborhood, but are more concentrated west of Madison Avenue. Many homes on the west side are in a deteriorated condition. There are two housing developments for elderly residents. Opportunities for new housing exist along the river.	Bay City Central High School and Bay Health Systems are the two most prominent uses in the corridor. St. Boniface Church, St. James Church and School, Immanuel Lutheran Church and School, and All Saints School are important focal points in the neighborhood. Several cemeteries occupy large tracts of land in the southeast corner of the neighborhood but are not essential to the ongoing life of the neighborhood.
South End	Owner-occupied, single- family detached housing is predominant in the South End. A few single-family conversions exist, primarily in the northerly part of the neighborhood. There are widely scattered pockets of deterioration, particularly in the western portion of the neighborhood where the older housing is located.	St. Stanislaus Church and School and St. Hyacinth Church and School are two prominent quasi-public uses that border this neighborhood, but contribute significantly to its identity and strength. Other important public uses include MacGregor and Whittier Schools, the Bay County Children and Senior Citizens Center, South Side Branch Library, and Fire Station No. 2. Roosevelt Park is an important open space located on Broadway Avenue.
Cass/Lincoln	Owner-occupied, single-family detached housing is predominant. This neighborhood has one of the highest rates of home- ownership (92.1	St. Stanislaus Church and School and St Hyacinth Church and School are two prominent quasi-public uses that contribute significantly to the

HOUSING AND NEIGHBORHOOD ANALYSIS

	Housing	Public and Quasi- Public Buildings and Spaces
	<p>%). Much of the housing was developed in the 1940's and 1950's. The last large remaining vacant piece of land in the City, located on the east side of the this neighborhood, is slated to be developed into traditional neighborhood development called Neighborhoods at Heritage.</p>	<p>neighborhood's identity and strength. Lincoln Center and Hewitt Park are also located in the Cass/Lincoln neighborhood.</p>
Euclid Avenue	<p>Housing in the Euclid Avenue neighborhood is solidly owner-occupied single-family detached. There have been few conversions of single-family houses into multi-family structures; only 7% of the single-family structures are renter-occupied. Riverwalk Meadows, a multiple-family development for seniors, is located in the neighborhood.</p>	<p>Schools are the most prominent public buildings in the Euclid Avenue neighborhood. These include Handy Elementary in the north part, Kolb Elementary in the center, and Riegel Elementary in the south. There are two prominent churches, Holy Trinity Church and School and Zion Lutheran Church and School. One of this neighborhoods assets is its many parks and recreation facilities, including Bigelow Park (on the Middlegrounds), Ramsey Park, Kolb Field, and the Community Center in Veteran's Park.</p>
Livingston/Center Avenue	<p>The Livingston/Center Avenue neighborhood is solidly owner-occupied, single family detached. Homes are generally well-maintained. The residents take great pride in their homes and this is reflected in the investments made for renovations and improvements. Every major architectural style from the mid- 1800s to 1960 is represented on Center Avenue and in adjoining residential areas. A few of the residential structures on Center Avenue have been converted to non-residential uses, including bed and breakfast establishments, offices, and institutional uses.</p>	<p>One of the most prominent public properties in the Livingston/Center Avenue neighborhood is the County Fairgrounds, which contributes nothing to the neighborhood's image and standards of quality. North of Center Avenue, the residential area is graced by the presence of Carroll Park, one of the first parks developed in the City. Its attractive water features, mature trees, and picnic and play areas, enhance the residential environment. South of Center Avenue, Washington and Thomas Jefferson Elementary Schools are key neighborhood assets, located within the fabric of the residential neighborhood. Trinity Episcopal Church and First Presbyterian Church are prominent quasi-public uses. There are several cemeteries in the southeast part of this neighborhood that occupy large tracts of land but are not essential to the ongoing life of the neighborhood.</p>

HOUSING AND NEIGHBORHOOD ANALYSIS

	Neighborhood Schools	Traffic and Streets
Northwest	Lindsay Elementary School is ideally located at the center of the neighborhood a major neighborhood asset.	A traditional grid street pattern distributes the traffic fairly well, but three heavily traveled streets, Henry, State and Marquette, segment the neighborhood. Traffic congestion on Wilder Road causes traffic back-ups on neighborhood streets.
Patterson-Belinda	North of the river, Lindsay Elementary School serves as the neighborhood school for Patterson-Belinda residents. On the south side of the river, Woodside Elementary School serves this purpose.	This neighborhood contains major transportation corridors that divide the neighborhood, including Harry S. Truman Parkway, Trumbull Avenue, and Woodside Avenue. The Parkway and Trumbull also function as buffers between the residential and industrial uses.
Jefferson-Lincoln	Dolsen School no longer serves as a neighborhood elementary school, since it is now used for special education, so this neighborhood lacks an elementary school.	Relatively low-volume local streets provide access within this neighborhood. Two heavily traveled corridors, Woodside Avenue and Madison Avenue, border the neighborhood on the north and west, respectively.
Midland Street	There are no neighborhood elementary schools in the Midland Street neighborhood. Elementary students attend Lindsay School to the north or Kolb School to the south.	Neighborhood streets are in a traditional grid pattern, which generally provides for uniform dispersal of traffic. However, Midland Street is segmented by heavily traveled thoroughfares carrying through traffic. These thoroughfares include E. N. Union Ave., Vermont St., Jenny St., Thomas St., Henry St., and Marquette Ave.
Columbus Avenue	Washington School is the sole elementary school in the Columbus Ave. neighborhood. It is likely that students in the southerly part of the neighborhood attend MacGregor School in the South End.	The grid pattern of streets distributes traffic evenly within the neighborhood, but there are major thoroughfares that segment the neighborhood, including Columbus Avenue itself, Garfield Avenue, Madison Avenue, and Lincoln Street. These thoroughfares have wide rights-of-way and pavements. As roads have been improved through the years to accommodate vehicular travel, the needs of pedestrians have not always been given proper consideration.
South End	The South End benefits from two elementary schools, MacGregor and Whittier. MacGregor is particularly- well located within the fabric of the surrounding residential environment.	The grid pattern of streets distributes traffic evenly within the neighborhood. Broadway and Lafayette Avenues are the most heavily traveled thoroughfares in the neighborhood.
Cass/Lincoln	The Cass/Lincoln neighborhood benefits from two elementary schools, MacGregor and Whittier, located in the adjacent South End neighborhood.	The grid pattern of streets distributes traffic evenly within the neighborhood. Kosciusko Avenue is the most heavily traveled thoroughfare. Michigan Avenue and Lincoln Street are two north-south collector streets.
Euclid Avenue	One of the Euclid Avenue neighborhood's strongest assets is Kolb Elementary School, located in the center of the neighborhood. Riegel Elementary serves the south part of the neighborhood. Handy Middle School is somewhat disconnected from the Euclid neighborhood, in part because it is on a peninsula that does not relate closely with the rest of the neighborhood.	Traffic within the Euclid Avenue neighborhood is dispersed uniformly on the grid pattern of interconnected streets. On the edges, the heavily traveled Euclid and Salzburg Avenues establish sharp southern and western boundaries. Two other heavily traveled thoroughfares, Jenny and Thomas Streets segment the neighborhood so that the northerly part does not really function as part of the overall neighborhood.

HOUSING AND NEIGHBORHOOD ANALYSIS

	Neighborhood Schools	Traffic and Streets
Livingston/Center Avenue	Washington and Thomas Jefferson Elementary Schools are key neighborhood assets, located within the fabric of the residential neighborhood south of Center Avenue. Children living north of Center Avenue must travel outside the neighborhood, most likely to Woodside Elementary.	Although Center Avenue is a high-image corridor, it is also a state trunkline that carries a lot of traffic, including heavy truck traffic. The volume of traffic and the noise associated with it can be quite disruptive at times, particularly for residential uses fronting on Center Avenue. Trumbull and Park Avenues carry moderate levels of north-south traffic through the neighborhood.

HOUSING AND NEIGHBORHOOD ANALYSIS

	Proximity to Employment Centers	Comments and Issues
Northwest	Adjacent employment centers include the Wilder Road commercial district and industrial areas to the south and west.	In terms of functional boundaries, the Northwest neighborhood and north part of Patterson-Belinda function as a single unit. There is a strong sense of identity among residents, and a high degree of citizen involvement. A major concern is the spillover impact of the Wilder Road commercial corridor. The neighborhood would benefit from continued efforts to strengthen the Banks area multi-use district.
Patterson-Belinda	The industrial uses within the Patterson-Belinda neighborhood are some of the largest employers in the City.	For the purposes of planning for the residential portions of this neighborhood, it would be logical to separately consider the areas north and south of the river, because of the way that these areas function. The use and potential redevelopment of the industrial areas are major concerns in the Patterson- Belinda neighborhood. The interface between industrial and residential uses requires continued evaluation, to alleviate impacts from the industrial uses on the residential areas.
Jefferson-Lincoln	The industrial uses within the adjacent Patterson-Belinda neighborhood and along Woodside Avenue are some of the largest employers in the City. To the west, Downtown businesses and governmental offices are also major employers.	For the purposes of neighborhood planning, it would make sense to consider the residential development within several blocks east and west of the Johnson Street commercial district as a single neighborhood. The use and potential redevelopment of the industrial area along Woodside and the adjacent industrial areas in Patterson-Belinda are major concerns.
Midland Street	Businesses on Midland Street and Euclid Avenue provide some employment opportunities within or near the neighborhood.	The Midland Street neighborhood contains a diversity of uses in a compact, walk able environment, making it one of the most interesting and complex neighborhoods in the City. There is a strong sense of neighborhood identity among residents. It will be important to monitor impacts of gradual changes occurring, including the transition of business uses and single-family housing conversions. Alleviating land use conflicts where commercial and residential uses abut is an ongoing concern. In terms of neighborhood function and planning, it would make sense to extend the boundaries of the Midland Street neighborhood to Euclid Avenue.
Columbus Avenue	Bay Health Systems is the largest employer in the City. Bay City Central is also a major employer. Businesses on Columbus Avenue provide additional employment opportunities in the neighborhood.	The proposed redevelopment of the riverfront provides a great opportunity to turn around the pattern of neglect in the western part of the Columbus Avenue neighborhood. Riverfront redevelopment would provide a strong anchor at the western end of the corridor, balancing the strength of the high school and medical center anchors at the other end of the corridor. Such development could be a catalyst for revitalization of the corridor, which could be assisted with streetscape improvements that restore the pedestrian environment.
South End	Businesses on Broadway and Lafayette Avenues provide additional	Broadway Avenue and the surrounding neighborhood would benefit

HOUSING AND NEIGHBORHOOD ANALYSIS

	Proximity to Employment Centers	Comments and Issues
	employment opportunities in the neighborhood. The marina uses, airport, and industrial uses on the west and south sides of this neighborhood are also major sources of employment.	from a more aggressive effort to develop it into a dynamic local business district, serving a broader range of residents' needs. The neighborhood would benefit from efforts to develop or redevelop land on and surrounding the airport. Such development could spur economic growth along Broadway Avenue.
Cass/Lincoln	A few employment opportunities exist with businesses on Kosciusko Avenue, but major employment centers are located beyond the boundaries of the Cass/Lincoln neighborhood.	For the purposes of long-term planning, it would be logical to consider Cass/Lincoln and South End as a single neighborhood, since they share many of the same issues. An opportunity for new mixed use development exists on the west side of Lincoln, in the northeast part of the neighborhood. Development of the neighborhoods at Heritage will possibly generate a positive spin-off effect.
Euclid Avenue	Employment centers near the Euclid Avenue neighborhood include the Euclid Avenue business district itself, the industrial district to the south in Bay City and Monitor Township, and to a lesser extent, the Salzburg Avenue business district.	For the purposes of future neighborhood planning, it would make sense to include the area north of Jenny Street as part of the Midland Street neighborhood. South of Thomas Street, the Euclid Avenue neighborhood is a very stable, secure residential environment. Its strongest assets are its Elementary Schools and parks and recreation facilities. In the long term, the neighborhood would benefit from a strong mixed use center of activity developed, which could give the neighborhood a stronger sense of identity. The impact of nearby industries to the south is an ongoing concern in this neighborhood.
Livingston/Center Avenue	There are no substantial employment centers located in the Livingston/Center Avenue neighborhood. Nearby employment centers include Downtown to the west, the industrial district to the north along the river, and the commercial uses to the east in Hampton Township.	The primary challenge in the Livingston/Center avenue neighborhood in the future will be to maintain its residential desirability, in spite of the heavy inhospitable traffic on Center Avenue, and faced with continuing proposals to convert some of the large single family homes for multiple-family or non-residential use.

Conclusion

In traditional Midwestern towns like Bay City the neighborhood is the most important building block of the city. The traditional towns that are thriving have generally been able to maintain strong neighborhoods. Bay City is fortunate in that it has always had strong neighborhoods, which have achieved their identity in part from relationships with mixed-use, intensively-developed corridors (such as Midland Street and Columbus Avenue), churches, schools, and the ethnicity of residents.

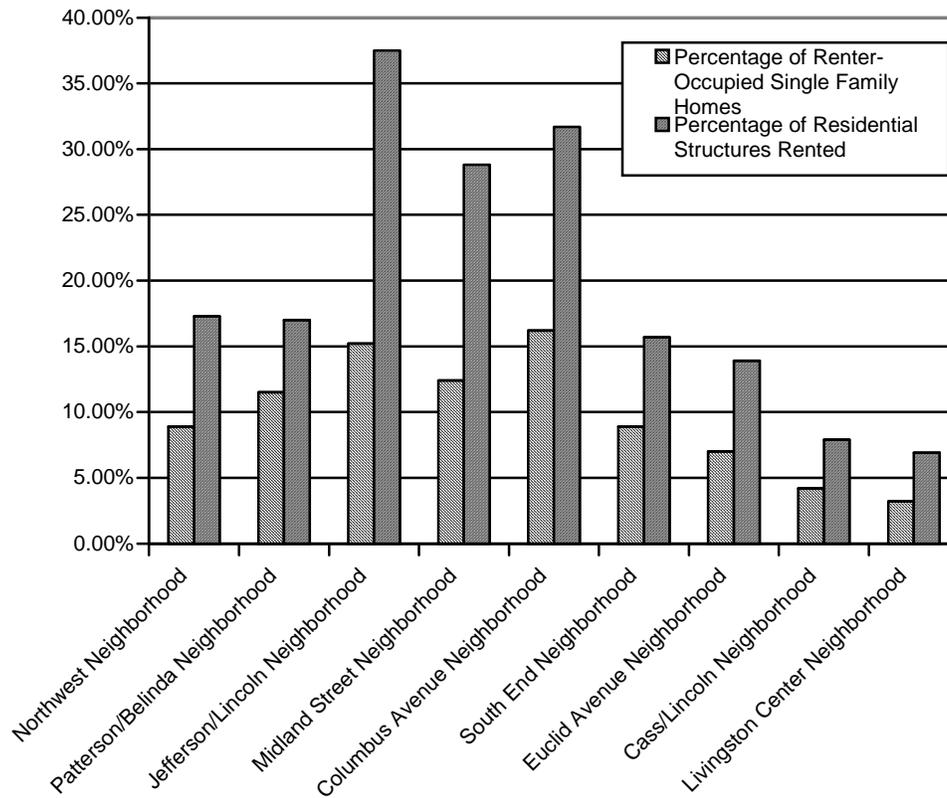
The analysis in this plan revealed that the stability of some neighborhoods is threatened. A major concern in some locations is the amount of rental housing, which is highest in the Jefferson/Lincoln neighborhood, Columbus Avenue neighborhood, and Midland Street neighborhood (see Figure 12). Rental housing is often associated with a transient population that lacks the long-term commitment and sense of neighborhood pride found among owner-occupants. The proportion of rental housing must be continually monitored by requiring registration and periodic inspections. Adoption of stringent new standards to discourage conversion of single family houses into two-family or multiple-family structures is recommended to halt inappropriate conversion of houses.

Regardless whether rental conversions take place, it will still be a challenge to maintain the quality of housing, because of its age. Constant vigilance will be required to stem deterioration. Code enforcement and housing rehabilitation programs will be two of the most useful tools in this effort.

Opportunities exist to strengthen some neighborhoods by focusing on building or reinforcing the urban core. The Zoning Ordinance must be revised to allow mixed use, provided that the uses adhere to specific guidelines so as to avoid land use conflict. Additional zoning revisions are needed to promote development at a human scale rather than at automobile scale.

Each neighborhood has many or all of the essential neighborhood building blocks, such as prominent civic uses, parks, neighborhood schools, etc., but often these elements do not relate to each other as well as possible. In some cases, pedestrian and visual linkages between uses should be enhanced. Relocation of certain uses might help in some neighborhoods so that key neighborhood elements are in proximity to each other. The strengths of each neighborhood should be recognized and nurtured through City policies and investment strategies.

Figure 12. Rental Housing in Each Neighborhood



Source: 1990 U.S. Census, 1998 Bay City Building Division

COMMUNITY FACILITIES

Community facilities are a concern of the Master Plan for two principal reasons: 1) adequate land must be set aside on the Future Land Use Map to accommodate community facilities, and 2) the Plan should note whether all community facilities that are needed to implement the Master Plan are in place. This chapter describes and sets forth recommendations for parks and recreation, police services, fire protection, municipal administration, libraries, schools, and health care.

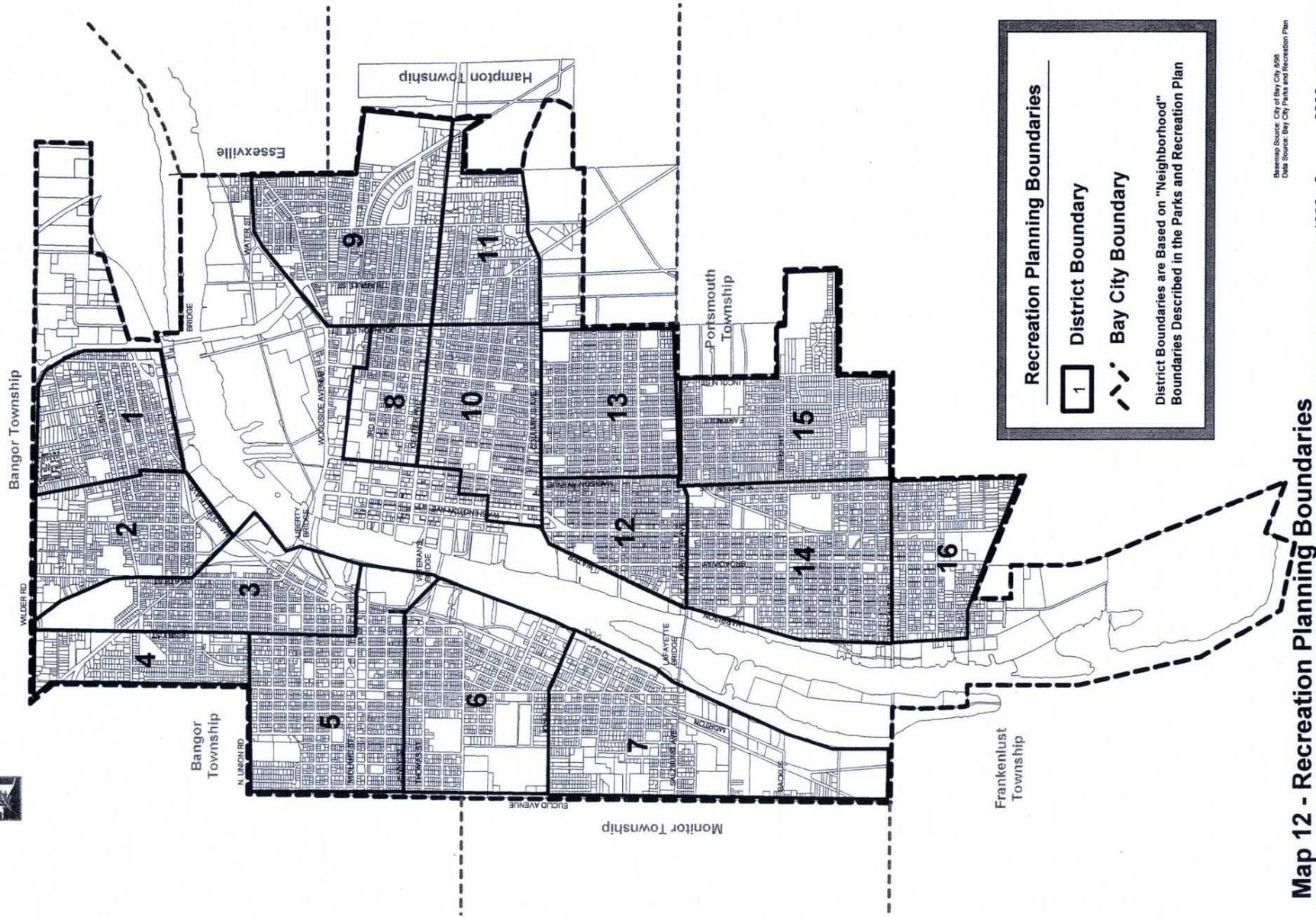
Parks and Recreation

The 1998 Park and Recreation Plan analyzed recreation needs on a broad level by dividing the City into four quadrants; the plan labeled each quadrant as a "community." A more detailed level of analysis was completed by dividing the City further into 16 "neighborhoods." To avoid confusion with use of the term "neighborhood" elsewhere in this plan, the Park and Recreation Plan's "neighborhoods" are called districts herein (see Map 12). An inventory of parks and recreation resources is provided on Map 13 and in Table 35. School sites with recreation facilities are identified in Table 36.

Bay City provides a broad variety of parks and recreation resources that address the needs of all segments of the population. Unlike many suburban communities, most neighborhoods in Bay City have tot lots and playgrounds, school playgrounds to serve the needs of children and young families, and sports fields and community-oriented parks. In recent years, the City has developed linear parks to accommodate the growing interest in bicycling and walking, and to take advantage of riverfront development opportunities. Some of the City's recreation facilities, such as those located along the riverfront in Wenonah Park and Veterans Memorial Park, serve residents from the entire region. Maintenance of these parks and recreation facilities is essential to sustain the health and appeal of City's neighborhoods.

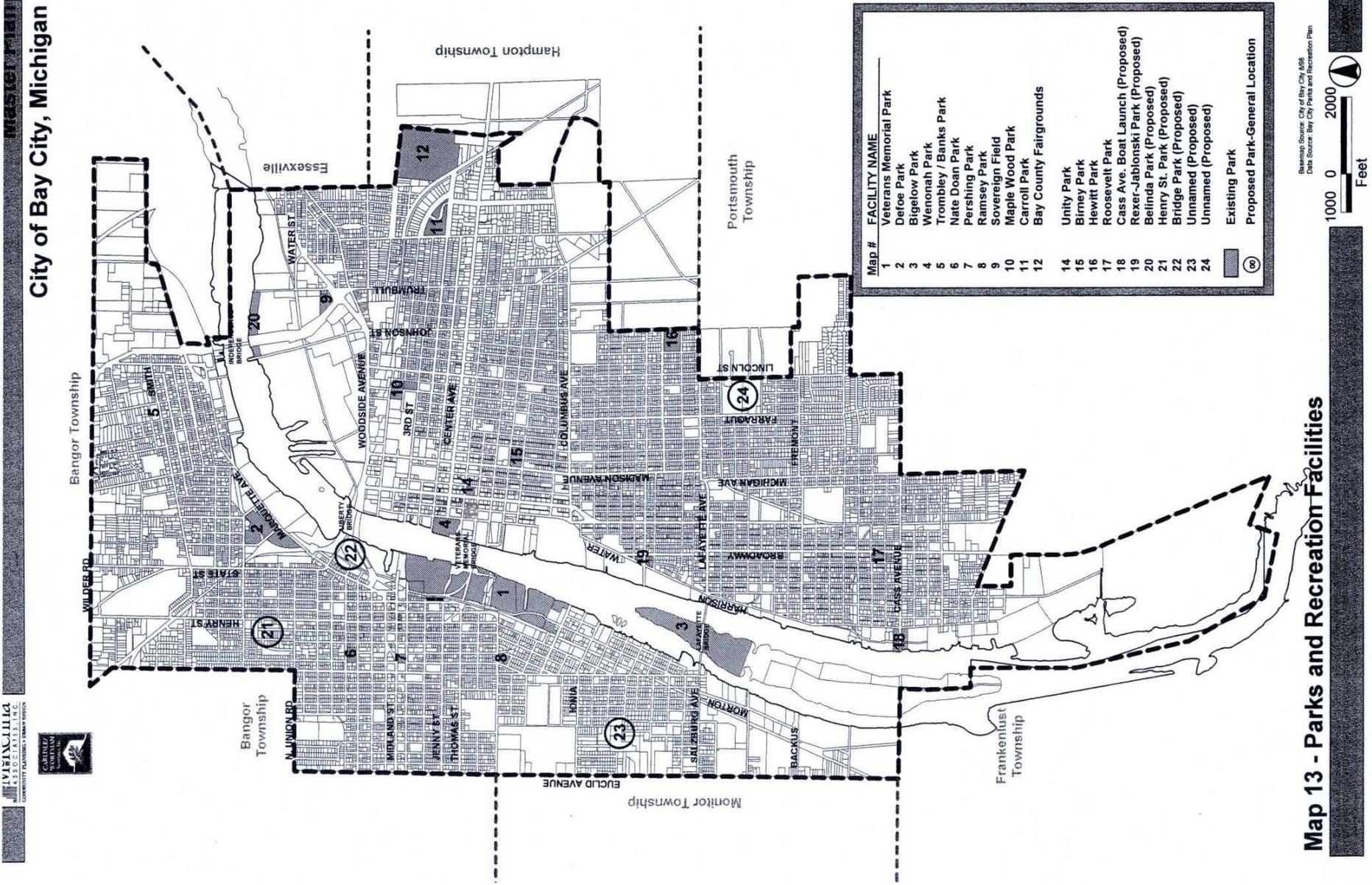
The Park and Recreation Master Plan identified a few deficiencies, based on planning boundaries on Map 12, including the following:

District 12 on the east side of the river, between Lafayette and Columbus Avenue, is in need of a play lot for toddlers and small children.



Map 12 - Recreation Planning Boundaries

Map 12. Parks and Recreation Facilities



Map 13 - Parks and Recreation Facilities

Six of the 16 districts do not have adequate neighborhood playground acreage for their population size.

Ten of the 16 districts do not possess adequate neighborhood parks acreage for their population size.

The north part (districts 1-4) and the southeast part of the City (districts 12-16) have slightly less than the recommended community playfield acreage.

All areas except the west side of the City are not served by adequate community park acreage.

The Park and Recreation Plan set forth an Action Program to address the deficiencies. The physical development section of the Action Program is of importance to the Master Plan, because the recommendations in the Action Program affect the Future Land Use Map.

The Park and Recreation Plan recommendations are presented here with reservation because they require further review and prioritization, giving consideration to the following concerns:

It is the City's intent to maximize use of existing parks and recreation facilities, by emphasizing a high level of maintenance, and redesign and updating of existing facilities, where necessary. If funding resources are tight, the priority will be placed on maintenance and updating existing facilities rather than acquisition of new facilities.

Proposals for new facilities must be thoroughly evaluated in light of the City's ability to fund the construction and ongoing maintenance of existing and proposed parks and recreation facilities.

Alternative methods of providing services need to be investigated, such as privatization and further coordination with the County and school district

Any proposals for new or refurbished parks and recreation facilities requires the input of residents.

Notwithstanding these concerns, the physical development recommendations from the Park and Recreation Plan include the following (please see Park and Recreation Plan for additional recommendations and details):

Bridge Park. Bridge Park is proposed on the north half of the former Surath Scrap Company property, on the west side of the river near Liberty Bridge. The park site is 6.5 acres in size and is proposed to have a nature area and nature trail.

New Park in District 7. Bay County is working on development of a wetlands park in the southwest part of the City.

New Park in District 12. The Plan proposes two parks in district 12 on the east side of the

river, between Lafayette and Columbus Avenue. Rexer/Jablonski Park, bounded by Broadway, Water Street, and 19th Street, is being developed. An additional seven acres has been identified for a riverfront park between vacated 13th and 18th Streets. Extension of the riverwalk is planned in this area, as well as shoreline improvements and a transient marina.

South End Riverfront Park. A two-acre site has been identified for a riverfront park in district 14 on the east side of the river, at the foot of Cass Avenue. Facilities proposed for this park include a small boat launch, pedestrian and bicycle access, and picnic and fishing areas.

Multiuse Facilities. The Plan calls for review of future public works projects to determine if recreation opportunities could be addressed as a part of the projects. For example, road projects provide the opportunity to provide for bicycle and pedestrian needs. It may be possible to develop a portion of the waste water treatment plant site for passive riverfront recreation use.

Further Development of Parks and Recreation Facilities. The Plan identified the need to expand Defoe Park, Veterans Memorial Park, Bigelow Park, and the Riverwalk.

Belinda Street Park. Development of the Belinda Street riverfront park will be financed as a result of an environmental impact settlement with General Motors.

The Park and Recreation Master Plan also identified numerous rehabilitation needs within existing parks, in the interest of modernizing and providing residents with high quality facilities.

Table 35. Public Parks and Recreation Areas

Public Parks and Recreation Facilities	Acres	Facilities
Trombley/Banks Park (Neighborhood)	0.5	Playground Equipment, Tennis Courts, Horseshoes, Basketball, Gazebo
Defoe Park (Community)	11.0	Playground Equipment, Picnic Area, Athletic Fields, Shelter
Nate Doan Park (Local)	6.4	Playground Equipment, Picnic Area
Pershing Park (Neighborhood)	1.5	Passive Recreation
Veterans Memorial Park (Community)	87.5	Playground Equipment, Picnic Areas, Athletic Fields, Ice Skating, Boat Launch. Marina Pier, Community Center
Ramsey Park (Neighborhood)	1.3	Playground Equipment, Picnic Areas, Athletic Fields, Open Play Area
Bigelow Park (Community)	90.0	Picnic Areas, Athletic Fields, Shelter
Roosevelt Park (Neighborhood)	2.8	Playground Equipment, Picnic Areas, Tennis Courts, Open Area
Hewitt Park (Local)	6.1	Playground Equipment, Athletic Fields, Ice Skating, Tennis Courts, 2 Pavilions, Picnic Facilities, Basketball Court, New Sidewalks
Bay County Market	0.5	Ice Skating, Hockey

COMMUNITY FACILITIES

(Local)		
Birney Park; (Local)	3.4	Playground Equipment, Athletic Fields, Open Play Area, Shelter
Wenonah Park (Local)	4.0	Picnic Areas, Open Area
Maplewood Park (Local)	9.7	Playground Equipment, Athletic Fields, Tennis Courts, Basketball, Open Play Area. Shelter
Carroll Park { Community)	13.7	Playground Equipment, Picnic Areas, Athletic Fields, Tennis Courts, Open Play Area. Shelter. Duck Pond
County Fairgrounds (Community)	40.3	Playground Equipment, Picnic Areas, Ice Skating, Open Play Area, Shelter, Fairgrounds Buildings
Unity Park (Neighborhood)	0.1	Small Passive Recreation Park
Belinda St. Boat Launch	0.1	Wetlands, Boat Launch, Fishing Dock
Railtrail (Community)	-60.0	Non-motorized Pathway, Approximately 10 Miles Long
Total Acres	357.8	

Source: Bay City Park and Recreation Plan, 1998, and Planning Commission and Planning Staff. 2000.

Table 36. Public School Sites with Recreation Facilities

School.	Acres	Facilities
Lindsay	8.5	Playground Equipment, Athletic Fields, Ice Skating, Shelter
Handy	8.0	Athletic Fields, Swimming Pool, Hockey
McKinley	2.0	Horseshoe Court, Hockey, Athletic Field
Kolb Middle	20.0	Playground Equipment, Athletic Fields, Shelter
Riegel	1.5	Playground Equipment, Athletic Field
MacGregor	16.0	Playground Equipment, Picnic Area, Athletic Fields, Hockey, Open Play Area
Bay City Central High	8.0	Athletic Fields, Shelter, Track, Stadium
Washington	2.5	Playground Equipment, Athletic Fields, Athletic Fields
Dolsen	0.8	Playground Equipment, Athletic Field

Source: Bay City Park and Recreation Plan, 1998.

Police Services

The primary provider of public safety services to Bay City residents is the Bay City Police Department. Operating on a 1998 budget of \$6.2 million, the department employs 84 sworn officers and 7 civilian employees. The Bay City Police Department maintains a fleet of approximately 30 cars for officers and detectives, which is regularly maintained and upgraded. The Police Department averages three minutes response time per call and is capable of handling the needs of new growth and development in the City. Additional police support is provided by the Michigan State Police and Bay County Sheriff. The State Police Post is located at 405 N. Euclid Avenue in Bangor Township.

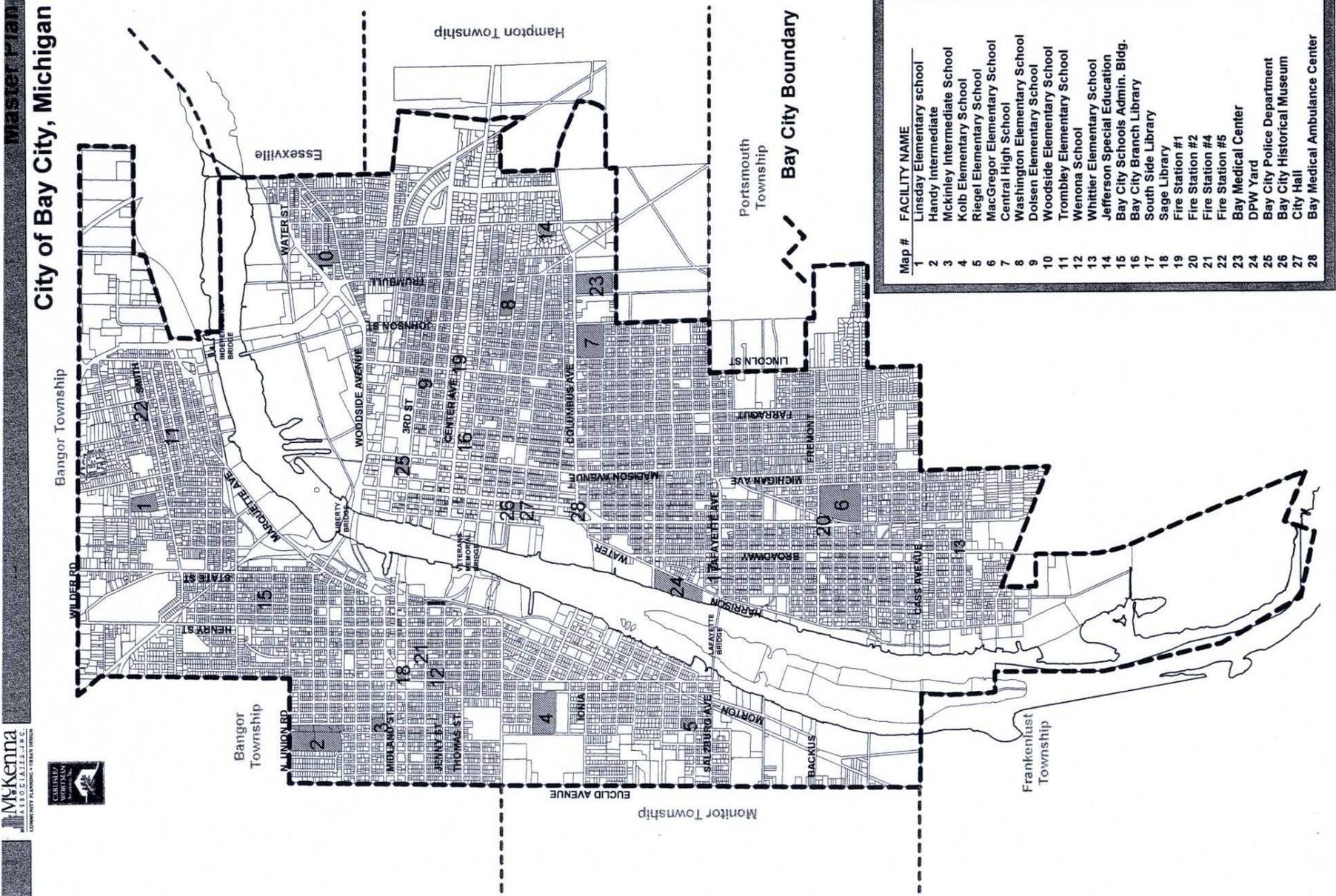
The Bay County Sheriff, Bay County Jail and Bay City Police Department share quarters at the

Bay County Law Enforcement Center, 501 Third St. (see Map 14). This building is inadequate for the current needs of these departments. A police facility feasibility study for was completed in 1999 by Ann Arbor Architects Collaborative, Inc., to evaluate the existing facility and make recommendations. The study indicated that the Police Department requires more space than they currently have. It further recommended consolidating police operations to increase efficiency for building and equipment maintenance. The study found that a new location was preferred, as it would be cost-prohibitive to renovate and expand the current facility. Ideally, a new police facility should be sited in a location that contributes to a planned civic center in the vicinity of the City Hall or with other governmental buildings in the downtown.

Fire Protection Services

The Fire Department has 54 full-time fire fighters to provide fire-protection services to the City. The Department operates on an annual budget of approximately \$4 million (1998). The Bay City Fire Department has four stations, all of which are in relatively good condition, having been regularly updated, especially within the last three years. Additional improvements are planned for all four stations, according to the Fire Chief.

Map 13. Community Facilities



Map 14 - Community Facilities



Baymap Source: City of Bay City, 4/08
Data Source: Bay City Parks and Recreation Plan



The Bay City Fire Department has undergone regular updates and improvements to its fire stations and equipment, consistent with the Department's capital improvement plan, which is regularly updated and revised to reflect the Department's changing needs.

There is no need to identify additional sites for new fire stations on the Future Land Use Map. If the need for new stations arises, response times for the fire department is the most significant locational consideration. The Saginaw River and its bridges that provide east/west access are features that increase fire response time.

Municipal Administration

The City Hall, at 301 Washington Avenue, is in excellent condition, having been renovated in the mid-1970s. City Hall houses 77 full- and part-time employees, who provide a variety of services, including: Fiscal Services, Building Code Enforcement, City Clerk, Development Services, Engineering and Public Infrastructure, Human Resources, Information Systems, City Manager, Planning and Zoning, Purchasing, and Treasurer. The building is being utilized by these departments efficiently with room for expanded functions.

It is imperative that the City Services Building at 800 S. Water St. be relocated to free up this valuable riverfront property for redevelopment. The impending redevelopment of the Bay Aggregates site makes the City Services site a strategic piece of land that is needed to maintain the continuity of greenbelt and mixed use pattern of development along the riverfront.

Library

The Bay County Library System operates the library system that serves the City and County. The Bay County Library System operates on a millage of 1.2 mills, countywide.

Three libraries are located in the City, the Bay City Branch at 708 Center Avenue, the South Side Branch at 311 Lafayette Avenue, and the Sage Branch at 100 E. Midland Street. These libraries average about 10,000 sq. ft. in size and are well-located to serve Bay City residents, as evidenced by some 300,000 visitors per year to the branches in Bay City.

According to the Bay County Library Director, the long-range plan for library facilities improvements recommends the following:

Expansion of the Sage Branch Library

Vacating the existing Bay City Branch (Central) library, which is too small, and constructing a new central library near downtown, perhaps as part of a larger civic center plan. The

Downtown Plan encouraged location of the library downtown, because it would draw people into the area.

Expansion of the South Side Branch Library.

Library improvements could be funded by a dedicated millage, which must be approved by voters, and which would allow issuance of bonds to finance the construction. The Bay City Branch building will be available for County, City, or other use once it is vacated.

Educational Facilities

The Bay City Public School system is the primary educational system for Bay City residents with a total of 20 facilities, 14 of which are located within the City. The area is also served by 10 private schools located in Bay City. It has 13 elementary schools, two middle schools, and two high schools (see Map 14).

The Bay City Public School system has experienced many changes over the last 30 years. During the late 1970s many schools were closed in an effort to economize and consolidate the district. Some schools were abandoned while others were sold to health care providers, day care providers and for private uses.

In the late 1990's, the School District contracted with URS Greiner Inc., to conduct an architectural facility evaluation. The purpose of this study was to determine if the existing educational facilities adequately serve the school age population. This was accomplished by analyzing the functional capacity of each school based on its current use. Then, a formula was employed to determine if current enrollment for each facility was excessive based on the following building standards:

Elementary Schools	100 to 120 square feet per Student
<i>Middle Schools</i>	<i>125 to 160 square feet per Student</i>
<i>High Schools</i>	<i>150 to 200 square feet per Student</i>

Based on the above standards, it was determined that Linsday and Woodside Elementary Schools and Central High School do not provide adequate space to accommodate students attending those facilities. The study also determined whether each school site was adequate in size for its type and current enrollment, based on the following standards:

Elementary Schools	10 acres plus one acre per 100 students
<i>Middle Schools</i>	<i>20 acres plus one acre per 100 students</i>
<i>High Schools</i>	<i>5 acres plus one acre per 100 students</i>

The study deemed the following schools to be deficient:

All but two of the eight Bay City Elementary Schools are located on inadequate size sites for their enrollment numbers.

Both Intermediate Schools and Central High School do not occupy parcels of adequate size for their type and current enrollments.

The study found that only two schools have an adequate parcel size. Based on the study's standards, Handy Middle School, with 1,414 students (February 1999 enrollment statistics) should occupy 34 acres, and Bay City Central High School, with 1,755 students should occupy 52 acres. To put this in perspective, a typical downtown City block covers only 1.5 acres.

The study's findings may indirectly promote relocation of schools to larger sites outside of the City, away from the neighborhoods where children live. Instead of being the center of attention and sources of neighborhood pride, suburban schools are often located beyond safe walking or bicycling distance for children. Students end up being bussed or driven to and from school.

Closure of schools in the City potentially affects recreation opportunities in City neighborhoods, too. Several public school sites provide recreational opportunities for Bay City residents. These sites often serve as vital neighborhood playground areas and also satisfy larger community recreational needs.

This Master Plan advocates the redevelopment and reuse of existing schools and the siting of new schools in areas that are already developed. Schools should be integrally connected to neighborhood blocks, streets, sidewalks, and paths to promote walking and bicycling to school. Buildings should be sympathetic in design and scale to their surroundings. If space is limited, multiple floors are a desirable option instead of relocation.

The City should maintain a dialogue with the School District so that the District takes into account the impact of their decisions on surrounding neighborhoods. When the School District achieves a better understanding of their physical development needs, hopefully with input from the City, it may be necessary to amend the Master Plan and Future Land Use Map to illustrate how new, expanded, or renovated schools will be integrated into the neighborhoods. Where school closure is anticipated, other beneficial uses such as day care operations, charter schools, health care and perhaps community or recreational centers should be considered, particularly on sites surrounded by residential development.

Health Care

The primary health care provider in the region is Bay Health System, a public, non-profit entity. Its major facility is Bay Medical Center, located at 1900 Columbus Avenue, at Mulholland Street. This facility is a full-service hospital and medical center with inpatient and outpatient care, along with emergency treatment. Bay Medical Center, the largest employer in the City, has a major impact on the surrounding neighborhood. In a positive sense, it creates a market for surrounding businesses and a demand for office and other commercial building space. However, it generates a substantial amount of traffic throughout the day. Various satellite clinics exist throughout the County.

The Allen Medical Building, located at 200 S. Wenona Avenue, is the largest facility of its type in the City. It contains three labs, a pharmacy, and three floors of doctor's offices and clinics.

Other small medical offices are located throughout the community.

The demographic information presented earlier in this plan revealed the presence of an aging population that will increase the need for assisted living and nursing facilities in the future.

HISTORIC RESOURCES

Bay City has become well known for its historic 19th and early 20th Century architecture. As lucrative industries such as lumbering, ship building and pre-cut housing thrived, significant examples of commercial, industrial and residential structures were constructed. Most architectural styles from the 1850's to the present are represented.

Historic Districts

Three districts in Bay City are listed in the National Register of Historic Places: the Center Avenue, Downtown, and Midland Street Historic Districts. Only the Midland Street Historic District is protected by an historic preservation overlay ordinance.

An historic district is a specifically and clearly defined concentration of historical buildings in an area recognized for its individuality. Designated historic districts have a common period of development of more than 50 years old, a cultural identification with early residents, business and industry, a prevalent architectural style and a limited geographical area. The three historic districts played a major role in the development of Bay City. The majority of buildings are architecturally significant, have historic and cultural importance, and are of recognized quality and structurally sound.

Downtown Historic District

The northwest section of the downtown, generally bordered by the Saginaw River, Monroe Street, Second Street and Sixth Street, is an area with significant historic commercial structures (see Map 15). This district contains some 100 historic structures, including the Bay County Court House and the Federal Building.

Center Avenue Historic District

The Center Avenue Historic District which is on the National Register of Historic Places encompasses a major portion of the Center Avenue corridor, from Madison Avenue to beyond Green Avenue/Carroll Boulevard. This district boasts large lots with elegant historic homes with ample setbacks. These structures reflect the wealth generated in the late 19th century logging era when the Center Avenue corridor developed. The district contains approximately 262 homes, of which 225 contribute to its historic integrity. Of the 37 homes that are non-contributing, 26 are only non-contributing due to post-1929 construction dates, rather than unsympathetic design.

In 1998, a proposal was considered to create a Center Avenue Historic Preservation Overlay District in the Zoning Ordinance to preserve the architectural integrity of historic buildings and maintain the scale and visual harmony of the historic district. The approximate boundaries of the Overlay District were Madison Avenue on the west, parcels fronting on the north side of Fifth Street on the north, Livingston Avenue on the east, and parcels fronting on the south side of

Sixth Street on the south. The City Commission did not approve the creation of the Overlay District.

Midland Street Historic District

The Midland Street Historic District is an eight block commercial area placed on the National Register of Historic Places in the 1970s. Centered on Midland Street, this district is regulated by an Historic Preservation Overlay District that provides an appointed 7-member Architectural Review Committee with design and architectural review authority over alterations, demolitions, repair and exterior modifications of structures within the district.

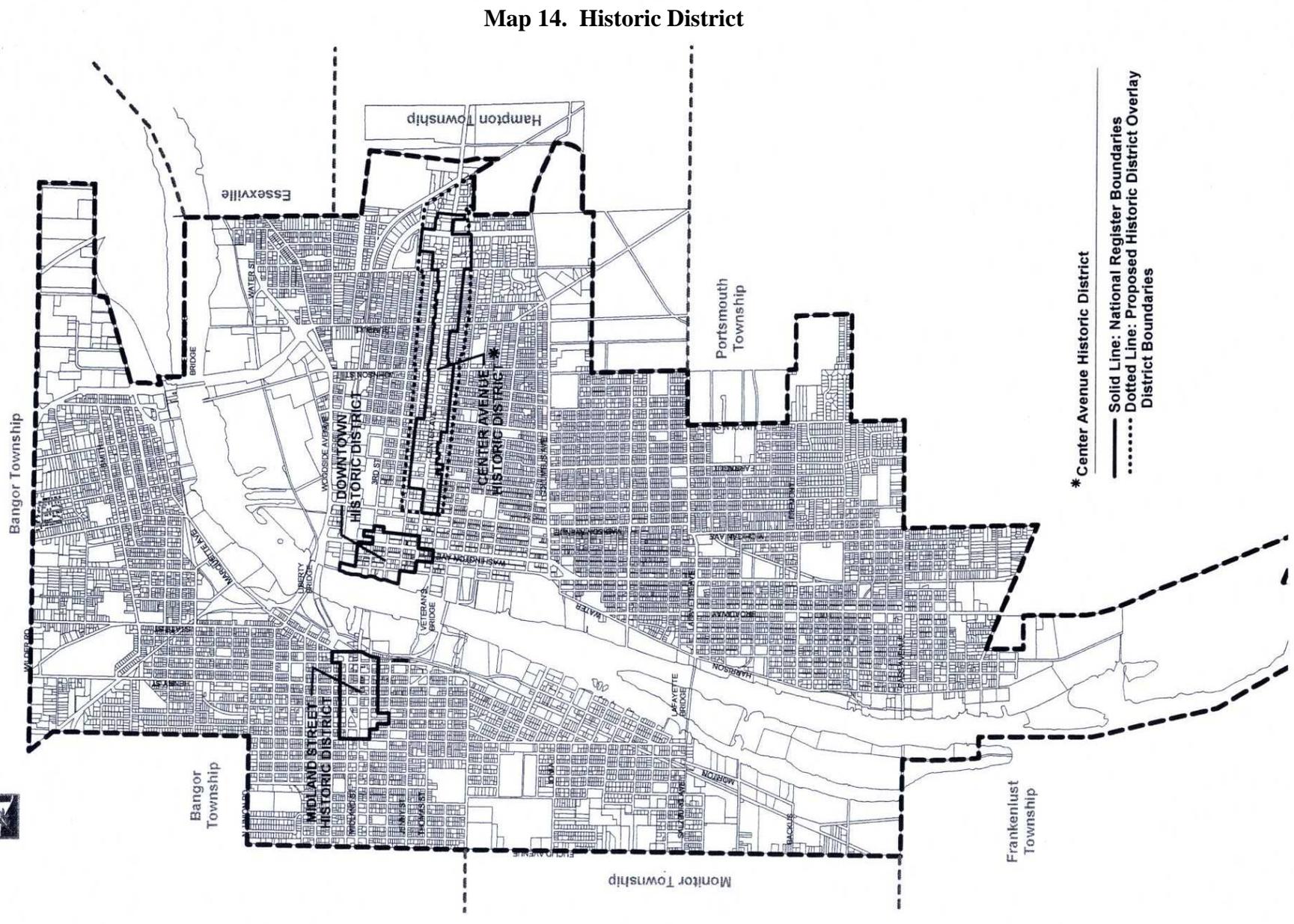
Various incentive programs are available to property owners in this district, including:

- Partial reimbursement for architectural design services when renovating or repairing historic structures, and

- Subsidized interest rates for rehabilitation loans.

In addition, Community Development Block Grant funds have been used for public projects within the District.

Aside from the financial incentives, aimed at facade improvements and building restoration, the Midland Street Historic District urban design project resulted in streetscape improvements, parking facilities, and new residential and commercial development. A strong relationship between the Midland Street Historic District and the riverfront has also been promoted.



Map 15 - Historic Districts

Map 14. Historic District

REGIONAL ANALYSIS

As the County seat and largest municipality in Bay County, Bay City has historically been the center of commerce, industry, government and culture of the region. Recent trends have somewhat altered this role. The suburbanization of adjacent townships has contributed to the diffusion of the population, commercial activity, and industrial development within the county. Although Bay City will remain a center of industry and commerce, its future will look different from its past, as a result of development outside of its boundaries.

Industry

Bay City is the industrial heart of Bay County. Industries located here because of the transportation infrastructure, i.e., the convergence of rail lines, the Saginaw River, the presence of James Clements Airport, and proximity to 1-75 and four other state highways.

The development of suburban industrial parks, such as the 176-acre Valley Technology Center in Monitor Township has attracted some industrial businesses away from the City. Bay City's industrial strength will also be challenged by a shift from a manufacturing-based to a service-based economy. Demographic data confirm a decline in traditional "blue collar" jobs and an increase in managerial and professional occupations. In fact, the years between the 1980 and 1990 Census saw a notable change as the "managerial and professional" category became the top occupational category, superseding "operators, fabricators, and laborers."

The future economic success of Bay City will depend on how the city positions itself in attracting professional and service-oriented jobs. Key considerations in preparing for the shifting economy include making sure enough land is designated for office and commercial use, making sure a strong communication infrastructure is in place, providing a strong educational system and a high quality of life for residents (e.g., providing good housing, municipal services, and recreation and entertainment opportunities).

Commerce

Remaining a center of commerce will be a greater challenge for Bay City because non-industrial businesses are more mobile since they are not dependent on a multi-modal transportation infrastructure as much as industrial businesses. For this reason it will be easier for adjacent communities to compete with Bay City for office and commercial businesses. As the population grew in surrounding townships, traditional retail and office businesses followed.

Bay City's role as the center for commerce has been affected by suburban competition. Shopping centers in Bangor and Hampton Townships, Saginaw County, and the City of Midland have changed regional shopping habits and business patterns. The development of big box retailers in nearby communities impacts the types of businesses that will succeed in Bay City's commercial districts. Businesses that compete directly with these large-scale retailers, such as office supply and furniture stores may struggle. However, specialty stores could thrive despite the presence of big box retailers.

Notwithstanding the competition from suburban businesses, downtown Bay City offers several attributes that contribute to the success of businesses located there. First, downtown Bay City is the only truly pedestrian-oriented commercial district in the area. The clustering of a variety of businesses within a compact area offers convenience for shoppers in a unique shopping experience. Clustering of compatible businesses that support each other can increase the district's appeal as a destination. This is seen along Midland Street, where the aggregation of eating and drinking establishments has made it a popular entertainment destination.

Contributing to the appeal of downtown businesses is the historical environment it offers. The vernacular brick buildings and storefronts create a unique shopping environment that is an antidote for the generic settings of suburban commercial centers. This has been identified as a positive feature of downtowns among shoppers in national surveys.

The mix of uses found in downtown Bay City is an important factor to its commercial success. Development of more office uses would bring in more workers downtown, and increase the number of potential business patrons. The proximity of nearby relatively densely-populated neighborhoods should be a positive influence on commercial activity. Developing more housing in the downtown itself would further increase the viability of commercial uses.

Looking beyond City boundaries, within Bay County, Wilder Road has become an important regional commercial district. The Bay City Mall, strip commercial, fast food restaurants, and big box retailers such as Wal-Mart, Meijer, and The Home Depot are located on both the City and Bangor Township sides of Wilder Road. Newer development on Wilder Road attracts many Bay City area residents that previously drove to Midland or Saginaw County shopping districts.

The Euclid Avenue corridor contains retail, automobile, and strip convenience commercial development within Bay City and Bangor and Monitor Townships.

The Center Avenue corridor is almost completely within Hampton Township, but a small portion of this commercial district is in the City. The Hampton Town Center may be redeveloped into an office and commercial center. Strip commercial, fast food restaurants, and a new Meijer store are located in this business district.

Bangor Township has established itself as a commercial destination. The Bangor Township Comprehensive Plan, 1990 2010, identifies 359.2 acres of existing commercial land use, and designates 663.7 acres for commercial land use. This represents a 84.8% increase in land available for commercial development.

Population

Bay City, like other urban centers, has experienced a population decline since the 1960's. As the demographic analysis noted, the entire county experienced a population decline during the past decade. The rate of decline is slowing, however.

There are encouraging signs of a turnaround, such as the Breakers Cove condominium development, the Water Street condominiums, Jennison Condominiums, the proposed apartment

complex at Euclid and Ionia Streets, and smaller housing renovation projects throughout the city. The success of the Jennison Condominiums in a renovated mid-rise building at Fifth and Water Streets bodes well for further development of upscale, higher density residential uses downtown. This is a sign of a nascent movement back to urban areas, as a certain segment of the population seeks a more traditional environment in which to live. will accommodate this movement. Continued development of new housing, designed according to traditional town planning principles, such as the Neighborhoods at Heritage on the City's east side, will help Bay City to capture a share of the regional growth.

Boundary Conditions

Coordinating land use along municipal boundaries is an important regional concern. Future land use designations along municipal boundaries show planned land uses of Bay City and adjacent communities are generally compatible.

The northern boundary of the city, mainly along Wilder Road, and the western boundary, mainly along Euclid Avenue, are designated primarily for commercial and industrial uses on both sides of the boundary. The southern and eastern boundaries, are primarily designated for single family residential with small pockets of commercial uses interspersed.

Potential areas of conflict exist in the southwest corner of the city, where a mobile home park district is bounded by an industrial district on the other side of Euclid Avenue, in Frankenlust Township, and on the north side. Also, at the northwest corner of the city, a single family residential district is located across from an area designated for industrial use on the Bangor Township side of Wenona Avenue. The Township's Future Land Use Map designates the land for industrial use even though

It is currently zoned for single family residential. Finally, there is a small industrial district on Lincoln Avenue between 24th and 28th Street that is surrounded on all sides by single family residential district, including the east side in Portsmouth Township.

The location of small-scale industrial use next to a residential district offers the advantage of residents being able to walk to work. When an industrial use is located next to a residential neighborhood, careful attention must be given to the site design to avoid potential nuisances caused by the industrial use. Truck traffic should be confined to major roads and away from residential streets; sufficient buffers and setbacks should be provided to reduce any noise or odor problems and to allow sufficient exposure to sunlight for adjacent houses; and the architecture and landscaping should be of sufficiently high quality.

Wilder Road

The commercial corridor developing along Wilder Road presents a challenge in regional coordination between Bay City, where the south half of the corridor is located, and Bangor Township, where the north half is located. Both communities have the appropriate land use objectives for the corridor (i.e., it is zoned and master planned for commercial use). The greater challenge lies in the design of the corridor. How it functions and the environment that is created

by the design of individual sites and the road right-of-way should be addressed.

A corridor plan should be undertaken jointly by the City and Township. The plan could tackle the specific elements that can contribute to the creation of a safe and attractive commercial corridor, such as traffic and site access, parking, signage, landscaping, streetscape improvements, and architectural design.

Euclid Avenue

Another opportunity for regional cooperation exists along the Euclid Avenue corridor. A corridor plan addressing the same issues mentioned for the Wilder Road corridor should be developed for Euclid Avenue jointly between Bay City and Bangor, Monitor, and Frankenlust Townships.

CRITICAL ISSUES

The master planning process initially involves information gathering and analysis. Demographic and economic trends were analyzed and existing land use was surveyed and mapped.

Community leaders were consulted and surveys were conducted to solicit information from the residents, primarily through the visioning workshops.

Out of this information gathering process certain critical issues emerge. These issues are the ones that were mentioned most often, or that were considered serious enough by community leaders to possibly affect the future viability or character of the City.

This chapter of the Master Plan identifies the strategic issues that came to the forefront in the first stages of the planning process. The issues are described and planning implications are noted. There is overlap between issues, as would be expected with an entity as complex as a city. Some of the issues fall outside of the main purpose of a Master Plan such as the fiscal soundness of the City -but how these issues are addressed will affect implementation of the Master Plan.

1. Maintain the Integrity of the City's Neighborhoods

Healthy neighborhoods are the essential building blocks with which strong communities are built and survive. Bay City's future depends largely on maintaining lively, growing, appealing neighborhoods, which residents find more appealing than the newer, sterile subdivisions in the suburbs. The demographic analysis observed the need to attract families and individuals with growing incomes to inhabit the City's neighborhoods, patronize neighborhood stores, and fill its schools.

A multi-faceted program will be necessary to maintain Bay City's neighborhoods:

- a. New private and public development should be designed to be compatible with the existing development, based on the principles of traditional design that resulted in the creation of the neighborhoods. New housing should follow existing block patterns and emulate the size and scale of surrounding structures. The design and exterior materials of new and renovated buildings should be compatible with existing buildings. The pattern of new roads should fit seamlessly with the grid pattern of existing roads, providing alternate routes to every destination.
- b. Each neighborhood should have a strong urban core, such as the Johnson Street and Columbus Avenue business districts. The urban core generally is a high intensity, mixed use district, with residential and commercial uses and at least one significant public space or building.
- c. The quality of public services and facilities should be maintained at an exceptional level, including good roads, street lights, signs, sidewalks, street trees, and parks and recreation

facilities.

d. Redevelopment should be permitted, or pursued, when appropriate. Rundown, obsolete, blighted buildings are a form of urban cancer that can destroy entire blocks if not addressed promptly.

e. Conversions of single family homes for two family and multiple family use should be controlled so as to prevent degradation of the housing stock. Conversion zoning standards should be considered.

f. The quality of neighborhood schools should be maintained. Young, upwardly-mobile families will be attracted to Bay City's neighborhoods by the presence of high-quality school facilities within walking distance.

g. "Maintaining traffic flow" should not be the overriding standard in street design, especially where it would result in inappropriate speeds and traffic volumes on streets through and around residential neighborhoods.

2. Maintain the Quality of the Housing Stock

Maintaining the quality of the housing stock will become increasingly difficult because of the age of the housing. Continuation of a multi-faceted housing program is important, including strong code enforcement, financial incentives to encourage renovation and construction of new housing to satisfy the needs of all segments of the population.

Equally as important as affordable housing is the need to provide housing alternatives for families who wish to step up to newer, higher quality housing. Infill housing must be designed to fit into the fabric of the existing neighborhoods, consistent with the traditional design principles that guided neighborhood development through most of the City's history.

3. Expand the Commercial Sector

There is a need to expand and improve the City's commercial sector for several reasons: 1) To expand the non-residential tax base and build a firmer financial base for the City, 2) To strengthen neighborhood commercial districts, 3) To maintain the downtown as a shopping destination and office center, 4) To provide employment opportunities for future generations, and 5) To promote ready access to goods and services.

Development of the neighborhood commercial districts is considered particularly important, so as to build sustainable neighborhoods, economic stability, and employment and entrepreneur opportunities. The following actions will assist in this effort:

- a. Develop a skilled workforce.
- b. Provide business assistance programs.
- c. Provide financing for upgrading existing buildings and to develop mixed use centers.
- d. Provide exceptional municipal infrastructure and services.
- e. Improve amenities in the pedestrian-oriented neighborhood core.
- f. Target municipal investments to support entrepreneurial activity.
- g. Encourage public/private partnerships.

Mixed use neighborhood commercial districts should be encouraged, with retail and office development on the first floor and residential and office space on upper floors. Design guidelines are needed to prevent disruptive, vehicle-oriented commercial uses that disregard the pedestrian emphasis and appropriate scale of neighborhood commercial development.

The design guidelines should address the following:

- a. Orientation of buildings toward the street (blank windowless walls facing the street should be avoided and the main entrance to businesses should face the street).
- b. Zero front setback to create a "street wall."
- c. Lighting standards to create uniform lighting that is not excessively bright or glaring.
- d. Appropriate and inappropriate colors, exterior building materials, and types and sizes of signs

4. Redevelop Underutilized and Vacant Industrial Sites

Many vacant and underutilized buildings and sites in the City were at one time associated with industrial development. Many of these buildings and sites are along the river, where other types of uses would be more appropriate.

Redevelopment of these sites is important for the following reasons: 1) To expand the non-residential tax base and build a firmer financial base for the City, 2) To position the City's industrial sector to be competitive, 3) To create employment opportunities for residents, and 4) To remove the negative image related to underutilized, obsolete, and deteriorating buildings.

To maintain industrial competitiveness, development of one or more certified industrial and research/office parks should be a short-term goal, such as in the Morton Street Local Development Finance Authority (LDFA) and the Marquette Street industrial district.

5. Maintain the City's Infrastructure

Continued infrastructure monitoring, reconstruction, and replacement will be necessary to maintain the quality of life and appeal of the City. Infrastructure improvements should be

carefully planned so that they do not adversely affect land use and neighborhood activity.

The costs of maintaining the aging infrastructure continue to escalate. Consequently, a Capital Improvements Program (CIP) will be a vital tool for the City administration to effectively address current needs and to accommodate growth. The CIP is a multi-year schedule of major permanent public physical improvements, such as roads, water and sewer lines, and park and recreation facilities. The schedule is based on immediacy of need and availability of financial resources. The CIP should be the basis for the capital improvements portion of each year's municipal budget.

6. Maintain a Fiscally Sound City Government

Bay City, like most other established cities in the Midwest, faces the challenge of maintaining a fiscally sound government, as expenditures to maintain an aging infrastructure escalate, but with restricted opportunities to raise new revenues due to property tax limitations and lack of land for new development. Given these circumstances, timely redevelopment of obsolete and underutilized buildings and sites takes on special significance.

7. Maintain the City's Strength as an Employment Center

The long-term viability of the City requires that it maintain its position as a regional employment center. Maintaining the employment base depends on retaining existing businesses and achieving industrial and commercial growth. It is important for the City to retain County, State, and Federal governmental functions in the City.

As the number of manufacturing jobs decreases, the labor force should be retrained to meet the needs of a service economy. The transition of the labor force has already begun, according to employment statistics that reveal an increasing proportion of the City's labor force in managerial, technical, and professional positions.

Downtown is the City's largest employment center, with over 3,000 employees, in part because of governmental functions located there. Maintaining a strong downtown with a mix of commercial, office, and residential uses, therefore, is important for the City to maintain its strength as a regional employment center.

8. Continue Redevelopment Of the Riverfront

The riverfront is one feature that sets Bay City apart from most nearby suburbs. At one time, the riverfront was valued as a location for industry and shipping. With the exception of some industrial parcels in the south end and northeast side, the riverfront's value in the future rests largely with residential, office, public open space and recreational uses, entertainment, and tourism.

9. Continue to Address Environmental Contamination and Pursue Remediation

Elimination of contamination to allow redevelopment of industrial sites is a necessity that will continue to command the administration's attention for years to come. Many of the City's important redevelopment goals depend initially on successful remediation of soil or water contamination. The City should continue to aggressively seek alternatives for adaptive re-use, and state and federal funding should be sought to address environmental issues.

10. Support and Build the City and its City's Cultural and Social Institutions and Resources

The City stands apart from suburbs because of the cultural and social institutions and resources that have historically been based in the City. These resources, which include libraries, museums, churches, and schools, provide the neighborhoods with their own distinct character and make the City a regional center. It is important to recognize the value that these institutions impart to the City, and to make sure that they remain located within City boundaries

11. Develop a Multi- Faceted Transportation System

Continued efforts to develop and upgrade all facets of the transportation system will be necessary to achieve other Master Plan goals. The transportation system need not be viewed solely from a functional perspective; it is also necessary to consider urban design impacts of decisions involving roads, railroads, and other parts of the transportation system, which may occupy up to 20 percent of the City's land area.

The following principles should be the basis upon which the transportation system is developed:

- a. New roads and reconstructed roads should be designed to match the appropriate level and type of traffic. Over-designed roads to accommodate more vehicles traveling at faster speeds should be avoided.
- b. The principles of good neighborhood design should be considered on an equal footing with engineering standards. Consequently, the road design process should be amended to bring the Planning Department into the design loop early on, when the opportunity exists to influence road design with sound urban design principles (see Transportation chapter).
- c. The urban design principles used to guide road design should also consider roadway aesthetics. Standards for street trees, uniform traffic control devices (e.g., road signs), burial of utility lines, and quality street lighting should be established for every road project.
- d. One-way streets should be eliminated, except where absolutely necessary, based on studies of road capacity. Neighborhoods and commercial areas function better with two-way streets.
- e. Traffic calming techniques should be implemented to achieve streets that are safer for

pedestrians and that are more in character with the types of resident oriented neighborhoods desired in Bay City.

f. Sidewalks are a necessity along both sides of every street in Bay City. The City should strive to continue development of trail systems for pedestrian and bicyclist use, to link neighborhoods, enhance linear parks, and satisfy recreational needs.

g. New roads should follow the grid pattern of the existing roads. Cul-de-sacs and gated private roads should be discouraged.

h. The City should continue to explore development opportunities at James Clements Airport, recognizing the potential economic growth opportunities associated with expanded air travel.

i. Transportation on the river is another mode of transportation that warrants consideration for its potential entertainment and tourism benefits.

GOALS, OBJECTIVES AND STRATEGIES

Governmental policy making should be based on goals and objectives which reflect the values of the community. Such goals and objectives are needed to guide decisions of public officials with respect to zoning and capital improvement decisions. Goals and objectives provide overall direction; strategies are also provided in this chapter as a means of achieving the goals and objectives. Together, the goals, objectives and strategies provide the foundation for the Master Plan and a framework for future implementation strategies.

Goal No. 1: Preserve Strengthen Neighborhoods

Objective A: Maintain a community of stable, diverse, and appealing neighborhoods.

Strategies:

1. Enforce the Zoning Ordinance and building codes and continue to work toward eliminating nonconforming uses and structures.
2. Continue and strengthen the programs for rehabilitation and renewal of neighborhood infrastructure and housing stock.
3. Apply historic preservation standards where appropriate.
4. Control conversion of single family homes to multiple family use, in part through new zoning standards.
5. Create incentives to cause re-conversion of multiple-family homes back into single-family use.
6. Maintain the quality of public services and facilities in each neighborhood, including good roads, street lights, signs, sidewalks, street trees, and parks and recreation facilities.
7. Promote the maintenance and development of neighborhood parks in accordance with the Community Facilities chapter of this Plan.
8. Promote infill development that is consistent with architecture and scale of adjacent land uses and promotes pedestrian activity.
9. Mitigate the negative effects to the pedestrian environment caused by auto-oriented land uses.

Objective B: Develop a strong center in each neighborhood.

- Strategies:**
1. Identify the elements needed for a strong mixed use, vibrant, urban center within each neighborhood
 2. Work with residents of each neighborhood on strategies to strengthen or build the urban center.

Objective C: Maintain the City's stock of quality, affordable housing.

- Strategies:**
1. Enforce the zoning, building and property maintenance codes.

2. Continue registration of rental housing.
3. Promote new housing by assembling land, securing financing, and providing design guidelines.

Objective D: Require any new developments to meet high standards of design with consideration given to the principles of traditional neighborhood design.

- Strategies:**
1. Revise the Zoning Ordinance, Subdivision Ordinance, and engineering standards to give priority to the principles of traditional neighborhood design.
 2. Encourage new construction that is compatible in scale and design with surrounding development.
 3. Require that block patterns in new residential developments follow block patterns in adjacent residential areas.
 4. Require that the new road patterns fit seamlessly with the grid pattern of existing streets.
 5. Layout new residential developments to accommodate public transit.
 6. Require that new construction be designed and sited to frame the public realm and contribute to the pedestrian scale, where applicable.
 7. Require that the space between the buildings be as carefully designed as the buildings themselves.
 8. Provide for a mix of housing types throughout the City.

Objective E: Require that new developments be designed to promote a safe community.

- Strategies:**
1. Employ signs and other design features to guide people to their destinations.
 2. Optimize visibility to and from spaces in a manner that supports informal surveillance of people and activities.
 3. Design developments to encourage informal gathering of people.
 4. Encourage citizens to assume responsibility and care for private property and the public realm.
 5. Maintain public spaces in their optimal physical condition and for their intended uses

Goal No. 2: Preserve Open Space and Natural Areas

Objective A: Conserve wetlands, floodplains, and other water retention areas.

- Strategies:**
1. Identify all wetlands, floodplains, and other water retention areas.
 2. Discourage development within wetlands, floodplains, and water retention areas, except where negative impacts from such development can

- be mitigated.
3. Coordinate with the Michigan Department of Environmental Quality on activities affecting the river, wetlands, and floodplains.
 4. Consider wetlands and floodplains as amenities to be integrated into developments where feasible.

Objective B: Establish a continuous greenbelt along the Saginaw River.

- Strategies:**
1. Expand the Riverwalk on both sides of the Saginaw River.
 2. Protect land which is important to the ecological integrity of the Saginaw River through zoning, voluntary agreements with land owners, donation of land to the City, or the purchase of land, easements, and/or development rights.

Goal No. 3: Maintain Quality Parks and Recreation Resources

Objective A: Provide a comprehensive system of recreational facilities, programs and resources to meet the needs of all population segments of the community.

- Strategies:**
1. Acquire and reserve, in advance, those land and water areas which are necessary and essential to meet existing and future recreation needs of the people.
 2. Seek funding for recreation, from private donations, grants, Federal and State assistance programs and local funding.
 3. Coordinate with Bay County to efficiently provide parks and recreation resources.
 4. Encourage the development of privately-owned commercial recreation opportunities where consistent with this Plan and the City's Park and Recreation Plan.
 5. Protect open space and recreation areas from conversion to other uses.
 6. Emphasize quality of facilities and programs rather than quantity.

Objective B: Preserve and enhance natural resources, including land, air, water, wildlife and vegetation.

- Strategies:**
1. Protect wildlife habitats by allowing them to be used only for activities which will not disturb or destroy the wildlife.
 2. Maximize recreation and open space use along the riverfront.

3. Link open spaces and natural areas with a network of continuous greenbelts throughout the City.
4. Continue to replace dead and diseased trees on City property, within road rights-of-way, and on other public lands.

Objective C: Coordinate development and use of all recreational facilities and programs to avoid waste, overlap and duplication.

- Strategies:**
1. Coordinate with the school district and County to achieve maximum use of public facilities for community recreation.
 2. Emphasize improved communication between the City departments involved in planning, constructing, and maintaining park and recreation facilities.
 3. Strive to minimize maintenance expense in park development and redevelopment design.

Goal No. 4: Maintain Quality Public Services

Objective A: Maintain and upgrade the infrastructure (water, sewers, roads, community facilities), public safety services, and other public facilities in a manner that is sensitive to the principles of this Plan.

- Strategies:**
1. Unify the vision of public entities involved in administration of the City's infrastructure.
 2. Continue systematic programs of infrastructure construction, maintenance, and renovation.
 3. Pursue grants to upgrade utility systems.
 4. Build a utility customer base outside of the City where it can be done in a manner that is consistent with this Plan.
 5. Involve the Planning staff in planning for public facilities to make certain that such facilities are properly designed and located in manner that is consistent with this Plan.
 6. Develop a comprehensive civic center plan centered around the City Hall.

Goal No. 5: Provide an Efficient and Safe Multi-modal Transportation Network

Objective A: Continue to evaluate the existing street system to identify problems with traffic congestion, traffic safety, roadway aesthetics, etc.

- Strategies:**
1. Coordinate transportation planning and road improvement proposals with surrounding communities.
 2. Advocate and promote the City's needs and interests with the Bay County Road Commission and Michigan Department of Transportation through the local Metropolitan Planning Organization, Bay City Area Transportation Study (BCATS).
 3. Coordinate new developments with Bay Metro Transit Authority.
 4. Consider zoning controls as a means of addressing certain transportation problems, such as access control along commercial corridors.

Objective B: Promote street design that meets professional standards, consistent with the principles of traditional neighborhood design and traffic calming standards.

- Strategies:**
1. Tie the City's transportation decisions to sound land use planning.
 2. Inform community and City leaders, including road engineers, about the impact of road design on neighborhood character and pedestrian safety and about the principles of traditional neighborhood design and traffic calming that have been accepted by the American Association of State Highway Transportation Officials (AASHTO) and the Institute of Transportation Engineers (ITE)
 3. Institute traffic calming techniques where appropriate.
 4. Resist efforts to reconstruct and widen roads to increase their capacity and speeds where such work would have a deleterious impact on residential neighborhoods.

Objective C: Develop a ground transportation system that incorporates many modes of travel.

- Strategies:**
1. Construct roads and streetscapes that provide an attractive and safe environment for pedestrians, bicyclists, and drivers.
 2. Maintain existing sidewalks and trails and continue to install new

sidewalks.

3. Require sidewalks on both sides of the street in all new developments, and install sidewalks in gaps between existing sidewalks.
4. Expand the Railtrail and riverwalk networks to link neighborhoods with parks and open spaces and other destinations.
5. Reinstate the bicycle route system. Re-stripe and install bike lane signs.
6. Advocate sidewalks, bike paths, public transit, and street systems that allow for safe, efficient travel throughout the City for pedestrians, bicyclists, public transit users, and drivers.
7. Give the pedestrian equal consideration to other modes within the shared public street right-of-way.

Objective D: Integrate modes of transportation to facilitate economic growth.

- Strategies:**
1. Expand development opportunities at James Clements Airport, including possible construction of a seaplane port.
 2. Develop transportation on the river, particularly for potential entertainment and tourism benefits.
 3. Promote continued railroad transportation to meet the needs of industry, and make improvements to ease conflicts caused by rail crossings over City streets.

Objective E: Promote a transportation system that reduces traffic congestion, vehicle miles of travel, and supports more efficient use of the land.

- Strategies:**
1. Balance travel capacity with managing travel demand.
 2. Promote mixed-use development to reduce the need for vehicle travel.
 3. Structure new development in a compact pattern to facilitate pedestrian, bicycle, and transit travel.
 4. Interconnect neighborhood streets, but control excessive cut-through traffic.
 5. Implement access management to coordinate driveways on major corridors.

Objective F: Consider plans for removing, relocating, and/or rebuilding railroad bridges, where appropriate.

- Strategies:**
1. Review current rail service and determine future rail service needs.
 2. Consider the role of rail services in land use, economic, and transportation planning.

Goal No. 6: Adhere to High Standards for Community Appearance .

Objective A: Plan, build, and maintain streets and sidewalks, emphasizing their importance as attractive and comfortable public spaces.

- Strategies:**
1. Design tree-lined streets and boulevards, with landscaped sidewalks, parkways, and medians.
 2. Connect adjoining neighborhoods and districts with streets that complement the distinctive character of each neighborhood
 3. Upgrade gateways into the City to create a positive first impression, using landscaping, artwork, monuments, distinctive paving, and signage.
 4. Expand the Downtown streetscape.

Objective B: Encourage different forms of housing in attractive, safe neighborhoods.

- Strategies:**
1. Design attached and multiple-family housing to include features typically associated with detached housing, such as private outdoor space and individual identity.
 2. Restore the visual prominence of the fronts of dwellings through the location of doors and windows, porches and balconies, architectural detailing, and landscaping.
 3. Promote application of classical design concepts, such as proportion and shape, patterns of buildings and yards, orientation of buildings to the street, and building materials and styles.

Objective C: Promote architectural design that reinforces the unique character of Bay City.

- Strategies:**
1. Require non-residential buildings to be designed and built in compliance with the land use goals and policies set forth in this Plan.
 2. Promote a high standard of architectural quality, interest, and character, with proper attention to pedestrian amenities and spaces.
 3. Require that buildings mirror the character of their surroundings and the community, rather than follow a corporate prototype design.
 4. Preserve and protect historic buildings and districts.
 5. Draft and adopt architectural design standards.
 6. Control light trespass (excessively intense lighting that causes off-site glare) throughout the City.

Objective D: Emphasize the need to thoughtfully apply design standards in a manner that enhances the community's image, identity, security and livability.

- Strategies:**
1. Emphasize the blending of design and materials in ways that reflect local heritage and harmony with the built environment.
 2. Consider including urban design guidelines in the zoning ordinance.
 3. Emphasize the need to maintain visual access to the Saginaw River when planning the arrangement of streets and other public riverfront spaces.
 4. Set a high standard of design with public infrastructure and building projects.

Goal No. 7: Employ Plans and Policies that contribute to the City's Economic Vitality

Objective A: Sustain the economic health of the community.

- Strategies:**
1. Foster economic developments that encourage private investment in the City.
 2. Promote a diverse and sustainable economy with a range of employment opportunities.
 3. Encourage and support existing and new local businesses.

Objective B: Maintain the City's role as a regional economic center.

- Strategies:**
1. Maintain a well-educated work force by emphasizing life-long Learning
 2. Strive to achieve a reputation for good schools, low crime rate, quality public spaces, balanced transportation system, and efficient city services.
 3. Diversify the economic base to adapt to the changing service-oriented economy.
 4. Redevelop underutilized commercial and industrial areas to strengthen and reinforce the City's economic and employment base.

Objective C: Strengthen and revitalize Downtown.

- Strategies:**
1. Identify the Downtown as the community's primary activity center for government, office, finance, culture, entertainment, and specialty retail uses.
 2. Revert one-way streets to two-way traffic to provide more convenient circulation while slowing traffic, making the Downtown more attractive to retail customers.
 3. Provide pedestrian and vehicular linkages that unify the retail core and integrate financial and governmental office uses into the core area.
 4. Locate parking facilities in proximity to destinations and improve the streetscape connections.
 5. Cluster compatible uses which provide convenient "one-stop shopping" opportunities
 6. Create exciting, inviting Downtown entrances at Center and Madison Avenues, Washington and Woodside Avenues, and Washington Avenue at 7th Street and McKinley Avenue (M-25) that provide a sense of arrival in Downtown Bay City. Use public open space areas to define the entrances.
 7. Conduct a cost-benefit analysis to determine the economic feasibility of constructing a mixed-use parking facility to address the future parking needs of Downtown and to free up surface parking lots for redevelopment.
 8. Limit the creation of new surface parking. Discourage further demolition of buildings for surface parking lots in the Downtown core.

9. Require site plan and building design review for all development and redevelopment, including parking lots.
10. Adopt a sign ordinance which ensures that signage in Downtown is compatible with the architectural styles and features of the area, and is scaled to reinforce the pedestrian nature of the Downtown environment.
11. Promote intensive office, commercial and residential developments Downtown.
12. Phase out uses which rely solely on auto trips, such as gas stations, car washes, storage facilities and drive-through establishments.
13. Orient buildings to the street and require that new construction respect the traditional character of the Downtown.
14. New buildings should not be developed with expanses of pavement or buffer areas along the street frontage as would be typical of a more suburban setting.
15. Promote residential use of vacant upper floors of Downtown buildings

Objective D: Maintain strong neighborhood commercial areas.

- Strategies:**
1. Strengthen the neighborhood commercial areas by encouraging vibrant mixed used development, including retail, office, service, and residential uses.
 2. Establish basic architectural review guidelines for new commercial establishments and major renovations, with emphasis on the principles of traditional neighborhood design.
 3. Reevaluate the requirements for site plan approval by the Planning Commission, particularly or proposals involving exterior renovation or substantial interior renovation of existing buildings or new commercial construction.

Objective E: Maintain the Euclid Avenue and Wilder Road commercial districts.

- Strategies:**
1. Coordinate improvement efforts with adjoining townships
 2. Adopt access control, building appearance, landscaping, and sign standards to upgrade the appeal of these two commercial corridors.

3. Consider establishment of a formal business organization to oversee and encourage public and private improvement along the two corridors.
4. Provide opportunities for mixed-use redevelopment, revitalization and economic growth for existing underutilized commercial areas.

Objective F: Maintain a strong industrial sector.

- Strategies:**
1. Redevelop underutilized and vacant industrial sites.
 2. Maximize industrial development opportunities by providing infrastructure needs and, possibly by developing one or more certified industrial parks in the City.
 3. Establish a formal dialogue with leaders of industry to identify and provide for the changing needs of industry.
 4. Remediate contamination related to existing or former industrial use.
 5. Provide opportunities for mixed-use redevelopment, revitalization and economic growth for existing underutilized industrial areas.

Objective G: Support cultural amenities.

- Strategies:**
1. Advocate high quality performing and visual arts facilities.
 2. Promote civic art that strengthens Bay City's sense of community and defines the public realm.
 3. Display local history in public places

LAND USE PLAN

Neighborhood Development

The Bay City Master Plan is based on the principle that neighborhoods are the essential building blocks with which strong communities are built and thrive. The importance of this principle is evident in Bay City, which has traditionally had strong, lively and diverse neighborhoods. The Master Plan reaffirms the manner in which Bay City's neighborhoods were originally developed, with housing, parks, and schools located within walking distance of shops, municipal services, and employment.

Each neighborhood must have a strong urban center a high intensity, mixed use district, with residential and commercial uses and at least one significant public space or building. These high intensity core areas generally encompass the neighborhood commercial areas labeled on the Land Use Plan map (Map 16), and which are designated "Mixed Use" to reflect their diversity. These neighborhood core areas have traditionally been dominated by commercial uses, but the Master Plan recommends a more intensive and diverse mixture of uses, possibly including multiple-story buildings with commercial at ground level and residential above. The "Mixed Use" areas occupy approximately 385 acres on the Land Use Plan map, or 5.4% of the total land area (see Table 37).

Neighborhoods need one or more prominent civic uses, such as churches, schools, a library, or a significant municipal building. Such uses give each neighborhood an identity and serve as gathering places. For example, St. Stanislaus Church and School serve this purpose in the neighborhood adjacent to Kosciusko Avenue. Bay City Central High School is a significant civic use in the neighborhood adjacent to Columbus Avenue. The Master Plan acknowledges the importance of such uses by specifically identifying them on the Land Use Plan map.

The appeal of Bay City's neighborhoods is derived in part from the numerous City parks and recreation areas, as noted in the Community Facilities chapter. Parks and open spaces occupy about 397 acres, or 5.5% of the total land area.

Zoning amendments will be necessary to allow the diverse land use pattern proposed by the Master Plan. The design and materials of new and renovated buildings should be compatible with existing buildings, so design standards will be needed. The pattern of new roads should fit seamlessly with the grid pattern of existing roads. More attention needs to be focused on accommodating pedestrians within each neighborhood. The convenience of the car and the opportunity to walk must be blended in the neighborhood environment. Overlay zoning is an approach that deserves consideration in these mixed use areas.

Residential Land Use

Although a mixture of housing is called for in the neighborhood core, the Land Use Plan map emphasizes maintaining the integrity of the areas designated Single Family. The implications of this policy are significant: the Master Plan recommends an end to conversion of single family homes into duplex and multiple family housing. Zoning amendments will be required to accomplish this objective. Continuation of the City's housing program will be necessary, including strong code enforcement and financial incentives to encourage renovation and construction of new housing.

Single family residential is the predominant land use on the Planned Land Use map, occupying 2,267 acres (31.5% of total). The Single & Two-Family category accounts for 82 acres (1.1 % of total), and multiple-family uses are planned on 61 acres (0.8% of total). Some additional housing could locate in the Mixed Use and Special Waterfront areas. The Master Plan also proposes Mixed Density areas, primarily along the river, where a mixture of housing types could be developed, in some instances with special amenities such as a marina. The Mixed Density areas occupy 183 acres (2.5% of total).

There is a need to provide housing alternatives for families who wish to step up to newer, higher quality housing. The Master Plan proposes to address this need with new housing in the area designated Special Waterfront District west of the City Hall; through redevelopment of the Bay County Fairgrounds; through development of a new single family neighborhood on a vacant parcel of land in the southeast part of the City; and, through Mixed Density development.

The Master Plan recognizes the need for a variety of housing types, including duplex and multiple family housing. Single and Two Family Residential is planned north and south of the Midland Street mixed use core area; adjacent to the Banks Area Business District; between Water Street and Saginaw River, north of Lafayette Avenue; adjacent to and north of the Columbus Avenue mixed use core area; along Broadway Street, south of Lafayette; and, adjacent to and south of the Lafayette Avenue mixed use core area, west of Broadway.

The Master Plan proposes to accommodate new multiple family residential development in the Mixed Use areas, in the Special Waterfront District, and downtown, where residential use of the upper floors of existing buildings is encouraged. A new Multiple Family Residential area is designated on the Land Use Map, on the north side of Ionia Street, west of Warner Street, on the City's west side. Most other areas designated Multiple Family Residential on the Land Use Plan

map are currently occupied by multiple family buildings. Altogether, the Multiple Family areas occupy 61 acres (0.8% of total).

Manufactured Housing is a fourth residential classification on the Land Use Plan map. The mobile home park in the southwest corner of the City is the only location with this designation, occupying 33 acres (0.5% of total).

The Waterfront

The Land Use Plan map designates the land on the east side of the Saginaw River, south of Veterans Memorial Bridge (i.e., "Bay Aggregates site") as "Special Waterfront District." This land use occupies approximately 46 acres (0.6% of total). The Master Plan anticipates relatively intensive mixed-use development in this district. Non-residential development that would be appropriate includes hotel/conference facilities, entertainment uses (but not including adult-oriented businesses), retail commercial (possibly including a big box retailer), and high-rise office. Some residential development is anticipated, consisting of primarily attached multiple family apartments or condominiums.

In August, 1999, the City was awarded a \$3,063,000 grant from the Clean Michigan Initiative to assist in the acquisition, relocation, and redevelopment of the Bay Aggregates site. It is estimated that the project will result in \$80 million of private and public sector investment in the City.

In early 2000, the City and Bangor Township entered into an agreement to allow Bay Aggregates to be relocated down river, in the Township. The agreement was drafted pursuant to Michigan Public Act 425 of 1984, which permits conditional transfer of land between adjoining municipalities, thereby avoiding the annexation process. Under the agreement, approximately 100 acres of land formerly occupied by Dow Chemical and Amoco will become a part of the City for 50 years. The property will be subject to City taxes and ordinances, while benefiting from City services, including police and fire protection. The Township will receive a portion of the tax revenue generated by the property.

The plan envisions public open space being used to connect the various uses in the district. Public roads and parking facilities will also be needed in the district. The Master Plan contemplates access to the area by vehicle, by boat, on foot (possibly via the Riverwalk), or by public transit.

Planned unit development zoning will probably be the preferred regulatory tool to permit development of the district in accordance with an overall development plan for the entire district. The Waterfront District needs to be designed so that it is integrated into the pattern of adjoining Downtown development, by careful transition of land use, continuation of the existing street patterns, and similar measures.

Redevelopment is planned elsewhere on riverfront land once used by industry. South of the Special Waterfront District, residential development and public open space is planned. On the west side of the river, land between Veteran Memorial Bridge and Lafayette Bridge is designated Park and Open Space. Even in areas where industry is planned to remain, the opportunity to reuse the riverfront is proposed. For example, the waterfront on the south side of the river, east and west of Independence Bridge, is designated Park and Open Space.

South of Lafayette Avenue, on the east side of the river and on the east side of the Middlegrounds, expansion of marina uses is anticipated. A public boat launch is proposed at the

foot of Cass Avenue. Marina development is also planned on the west side of the river, north and south of Liberty Bridge. The Master Plan clearly anticipates that boating will have an important role in the City's economy in the future. Marina uses occupy approximately 92 acres on the Land Use Plan map (1.3% of total).

Another riverfront area of special importance is located north of the James Clements Airport, in an area designated Mixed Use and Park and Open Space. The opportunity exists to develop a thriving district, based on traditional neighborhood design principles, where residents could live, work, shop, and recreate while reducing the need to drive. Uses contemplated in this area include various types of residential, office, parks and open space, light industrial, and possibly expansion of airport related uses.

Industrial Land Use

Industries will continue to have a very significant role in the local economy, occupying approximately 712 acres of land on the Land Use Plan (9.9% of total). Two principal industrial areas are designated on the plan:

On the west side of the river, south of Salzburg Avenue (Morton Street Industrial Area). The industrial area located between Euclid Avenue and the Saginaw River, in the southwest corner of the City, presents a good industrial redevelopment opportunity. Although some viable industrial concerns operate in this area, there are several vacant or partially-occupied industrial sites and buildings. Development of a certified industrial park should be considered. Accordingly, the Plan designates the land Light Industrial/Research.

North end, east and west of Independence Bridge. The Master Plan recognizes the continued presence of the General Motors operations on the south side of the river, west of Independence Bridge, which is designated General Industrial. Recognizing the predominant existing land use pattern, the Planned Land Use map designates adjacent land on the south side of Woodside as Light Industrial/Research (which could accommodate service-type uses in this area).

Several viable industries are located in the Marquette Avenue Industrial Area (east of Harry S. Truman Parkway and South of Wilder Road). However, there are several vacant or underutilized industrial parcels, some of which are owned by the City. Continued industrial development would be appropriate in this area, which is designated General Industrial. This area presents another opportunity for development of a certified industrial park.

General Industrial use is also planned for the area east of Independence Bridge, on the south side of the river. The vacated Bay Chemical site, north of Woodside on the Saginaw River, in the northeast corner of the City, is an appropriate location for industrial redevelopment. Possible contamination on the site needs to be addressed.

As noted previously, as a result of an agreement reached in early 2000 with Bangor Township, the Bay Aggregates relocation site has been added to the Land Use Map in the far northeast part of the City. This land is designated General Industrial.

On the Hirschfield site, the Mixed Use designation reflects the intent than, if the opportunity

presents itself, the City would support a change in use to a less intensive industrial use, or to mixed use development consisting of commercial; boat storage, repair and sales; public; residential; and/or open space and park use. Until such an opportunity exists, continuation of general industrial use is anticipated.

A few other scattered industrial sites are located throughout the City. Where continued industrial use is appropriate, these sites are designated Light Industrial/Research on the Land Use Plan map.

Commercial and Office Land Uses

Viable local commercial development is essential for the health of the City's neighborhoods, as noted previously. Ideally, every resident should be within a quarter mile a half mile at most of businesses that can provide for basic household needs. Accordingly, the Land Use Plan map calls for a diverse mixture of commercial and office uses in the neighborhood Mixed Use districts.

Scattered neighborhood Commercial uses are identified on the Land Use Plan map, outside of the Mixed Use areas. These areas are generally already occupied by neighborhood commercial uses. "Corner store" -type uses are important gathering places that contribute to the cohesion of a neighborhood; hence, these neighborhood commercial uses are identified on the Land Use Plan map.

On a larger scale, the Plan provides for growth in the two main regional commercial corridors, Euclid Avenue and Wilder Road. The Plan proposes "squaring up" the boundaries of the two districts to provide a more uniform separation from the adjacent residential land use, thereby helping to address land use incompatibilities.

On Euclid Avenue, the Plan allocates a minimum one-block depth to the commercial corridor to provide more adequate land area for landscaping and other site amenities that are currently lacking. Some commercial expansion is proposed, for example, between Fisher and Ionia Streets.

Some commercial expansion is also proposed on Wilder Road, resulting from development of a few vacant parcels, and redevelopment of incompatible residential uses. The Economic and Market Analysis chapter identifies specific improvements needed on Euclid Avenue and Wilder Road, and in other commercial districts. Altogether, 188 acres are designated Commercial on the Land Use Plan map (2.6% of total).

Commercial and office uses are also planned in the downtown, in accordance with the 1994 **Downtown Development and Urban Design Plan**. The Downtown Plan called for a variety of specialty shops, restaurants, entertainment uses, offices, governmental functions, and other attractions in a compact, high intensity urban environment. Most of the Downtown is designated Mixed Use on the Land Use Plan.

The Land Use Plan map designates Office development in one location, along Washington Avenue, south the City Hall. Office is considered an appropriate transition in this location,

between the intensive waterfront development to the west and the single family neighborhood to the east. 14 acres are designated "Office" on the Land Use Plan map (0.2% of total). The opportunity for other office development exists in the Mixed Use areas.

Institutional Land Use

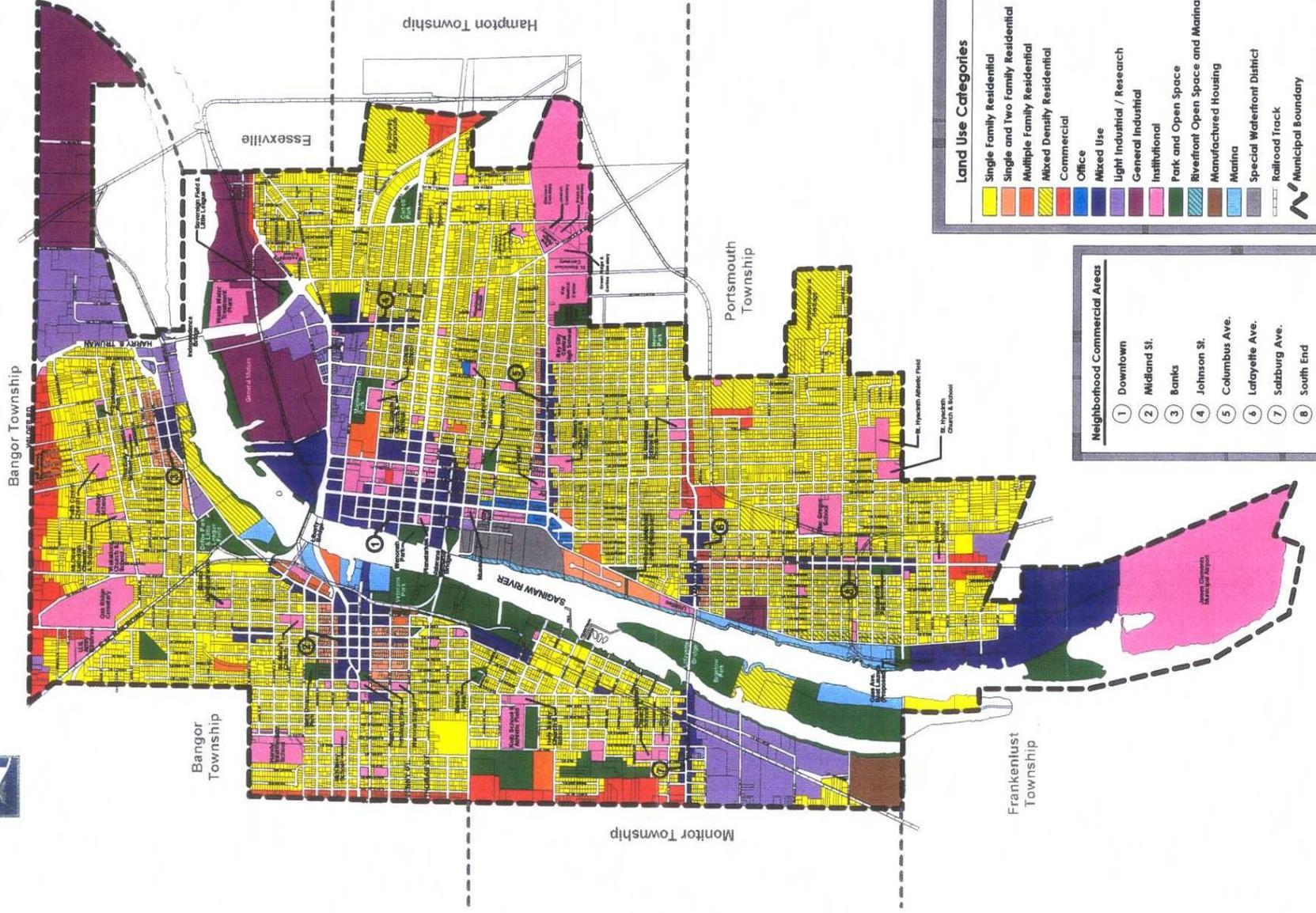
The Land Use Plan map identifies several Institutional land uses, including schools, churches, cemeteries, civic uses and buildings, the planetarium, YMCA, and others. This land use classification accounts for 690 acres on the Land Use Plan map, or about 9.6% of the total. The largest expanses of Institutional land are occupied by James Clements Airport and the cemeteries. In the Downtown, governmental uses occupy a substantial amount of land, contributing to Downtown's role as a center of civic life in the City and region. In the neighborhoods, schools and churches account for most of the Institutional land use.

Table 37. Planned Land Use

Planned Land Use	Total Acreage (% of Total)
Single Family Residential	2,267 (31.5%)
Single and Two Family Residential	82 (1.1%)
Multiple Family Residential	61 (0.8%)
Mixed Density Residential	183 (2.5%)
Manufactured Housing	33 (0.5%)
Commercial	188 (2.6%)
Office	14(0.2%)
Mixed Use	385 (5.4%)
Special Waterfront District	46 (0.6%)
Marina	92(1.3%)
Light Industrial/ Research	330 (4.6%)
General Industrial	382 (5.3%)
Institutional	690 (9.6%)
Parks and Open Space	397 (5.5%)
Roads and Railroad Rights-of-Way	1,406 (19.6%)
River	637 (8.9%)
Total	7,194 acres



Map 15. Land Use Plan



Map 16 - Land Use Plan

Base Map Source: City of Bay City, Michigan 4/98



6/30/00

URBAN DESIGN

Traditional Neighborhood Design

A recognition has developed among community leaders and planning professionals of the importance of preserving and enhancing the City's traditional neighborhoods. Traditional Neighborhood Design (TND), which is sometimes referred to as the New Urbanism, is a "rediscovery" of the design concepts and human values that originally determined the physical layout of Bay City. The practitioners of TND have developed an effective design vocabulary and principles to sustain traditional neighborhoods in a contemporary manner.⁸

The basic element of TND is the neighborhood, surrounded by districts, all of which are interconnected by corridors. The neighborhood contains a balanced mix of human activity, in which people live, play, attend church and school, and congregate together. A district is more specialized in land use and might include an entertainment district, industrial park, or downtown. As applied to the City of Bay City, the Midland Street commercial corridor represents a district while an adjacent residential zone is a neighborhood.

The principles of traditional neighborhood design were developed in the early and mid-20th century. Characteristics of traditional neighborhood design include homes on smaller lots with narrow front setbacks, connected walkways and paths for pedestrian movement and transportation, narrow streets, mixed uses such as small retail establishments with apartments above, tree-lined streets, central civic gathering spots such as churches or town centers, and a general focus on design on a smaller pedestrian scale, rather than on the scale of the automobile.

A zoning ordinance that gives preference to these concepts would serve to maintain the existing character of Bay City. The City is fortunate that many of the principles of TND are intact in its neighborhoods and commercial districts. These are strengths to be built upon.

⁸ The following sources of information were used in the preparation of this chapter: Andres Duany and Elizabeth Plater-Zyberk, *Towns and Town-Making Principles*, Boston: Harvard University Graduate School of Design, 1991; Calthorpe, Peter, *The Next American Metropolis*, New York: Princeton Architectural Press, 1993; Duany Plater-Zyberk, *The Lexicon of the New Urbanism- Draft Edition*, Miami: 1999.

Principles of Traditional Neighborhood Design

Traditional Neighborhood Design concepts include the following:

1. Neighborhoods are planned so that everyone is within walking distance of the center.
2. A variety of housing types, single family, duplexes, townhouses and multi-family and income levels are mixed throughout the neighborhood.
3. Neighborhood business districts provide the day-to-day goods and services that most people need.
4. The center of the neighborhood includes a strong core and gathering places for people of all ages.
5. Street rights-of-way are designed to accommodate a variety of modes of transportation, including foot traffic, public transit, and bicycles, and to accommodate streetscape improvements.
6. Traffic is calmed through such measures as narrow rights- of-way, street trees, and short turning radii.
7. Buildings are designed to spatially define streets and squares.
8. Squares and parks are located in the neighborhood and designed as specialized places for social activity and recreation.
9. Block length is limited to 300 to 500 feet, a scale that is comfortable for pedestrians yet allows good interconnections between streets.
10. Well-placed civic buildings (public buildings, libraries, community centers, museums, and churches) act as symbols of identity and provide places of purposeful assembly.
11. Residences, businesses and civic buildings are designed to encourage interaction with the street, with minimal setbacks from the street.
12. Porches, benches, and prominent windows are on the main street facade of buildings.
13. Neighborhoods and business districts are encouraged to convey a sense of arrival at their borders by the use of gateways, special pavement, landscaping, sculpture, lighting, or other devices.
14. Mixed uses within one building are encouraged (e.g. a shop on the first floor with an apartment on the second).
15. Businesses have their main entrances and display windows facing the street.

16. Commercial districts have continuous sidewalk frontages that are friendly to pedestrians
17. On-street parking, whether parallel or angled, is desirable for most streets.
18. Utility lines are either buried or located at the rear of properties, out of sight.
19. Where off-street parking is needed or provided, it is located at the side or rear of the building and is screened from view.
20. A hierarchy of connecting streets (often a grid) facilitates trip quality, efficiency and safety.

Benefits of Traditional Neighborhoods for the City of Bay City

Neighborhoods and commercial districts that adhere to the principles of Traditional Neighborhood Design offer the following advantages:

1. Because of the compact organization of land uses and spaces, infrastructure is minimized, automobile use and pollution is decreased, and public transit is made more viable. Trips may be dispersed throughout the network instead of being funneled onto primary streets.
2. By providing a full range of housing types and workplaces, all age groups and economic levels are accommodated. It is possible to live in the same neighborhood for a lifetime because of the range of housing opportunities.
3. By providing habitable public places, residents come to know each other and watch over their collective security.
4. By including most of the activities of daily life within walking distance, the elderly and the young gain independence of movement and the driving population (particularly parents) is relieved of much of the burden of chauffeuring.

Urban Design Guidelines 9

The following guidelines are recommended for rehabilitation, restoration, and new construction. The precise applicability of these general guidelines will vary based on the specific conditions on each parcel and with each project.

⁹ The primary source for these Urban Design Guidelines was the Downtown Development and Urban Design Plan, which was prepared in .1994 for the Downtown Development Authority for Bay City.

Exterior Building Materials

Traditional building materials, such as wood, concrete, masonry, stone, and brick, are preferred for all new construction, renovations, and additions. Durable materials should be selected, recognizing that buildings will exist for decades. In some cases modern composite and engineered materials that simulate traditional building materials may be substituted.

Where necessary, deteriorated architectural details should be replaced with materials that match the original material in composition, design, color, texture, and other visual qualities.

When existing buildings are substantially renovated, applied materials such as metal paneling, tile, and vinyl or fiberglass, should be removed and the building's original wall surface and detailing should be restored, provided that the underlying wall surface is in a condition that can be restored. The cornice and fascia should be restored to reemphasize the original design intent and to create a strong roof line.

Building Height, Bulk, and Form

New buildings should be compatible in height, size, and shape to surrounding buildings. The building mass of new, large buildings should be broken into increments that correspond to the scale and massing of existing buildings through the use of architectural detailing, setbacks and variable roof heights. Where renovation is proposed, the original roof shape should not be changed, unless existing structural conditions warrant the change.

Building Orientation and Entrance

Buildings should address the street and sidewalk with entrances, balconies, architectural features, and activities that help create a safe and pleasant walking environment. At least one major public entrance for every building and storefront should face the street. The main public entrance should not open directly onto a parking lot. Generally, no overhead doors or loading facilities should be permitted facing a street.

Entrance doors should have glass panels to maximize visibility of the store interior. The style of the front door should be consistent with the design character of the storefront.

Building Features

Buildings should be designed with varied architectural details to provide visual interest. Unarticulated blank walls and glass curtain walls should be avoided, especially in the vicinity of existing traditional buildings.

Windows

All buildings in commercial areas should have windows at eye level. Windows should cover at least thirty percent (30%) of the front facade. Ground-level storefronts should provide substantial window areas to share the building's interior activities with the street. In the vicinity of historic buildings, reflective glass should be prohibited in new construction and renovation, particularly on lower levels.

The shape and proportions of window openings in new buildings should be sympathetic in design to adjacent buildings.

Where buildings are being renovated, the proportions of the window openings and the rhythm of the window pattern should replicate the original facade. Original window and door openings, including window sash, glass, lintel, sills, molding, shutters, doors, pediments, hoods, steps, and hardware should be retained and repaired, where feasible. Window and door openings should never be covered over without compelling rationale.

Awnings

Awnings should be made from fabric or similar material, rather than metal, plastic, or rigid fiberglass. All awnings should be attached directly to the building. The shape of the awning should be selected with the goal of achieving continuity with awnings on adjacent buildings and achieving consistency with the building architecture.

Side and Rear Facade Design

Wherever a side or rear facade is visible from a street, or if parking is located at the side or rear of a building, the facade shall be designed to create a pleasing appearance, in accordance with the following design criteria:

1. Materials and architectural features similar to those present on the front of the building shall be used on the side or rear facade.
2. Dumpster and service areas shall be completely screened with landscaping, a fence or wall, or a combination thereof. Screening material should be similar to materials on the principal building.
3. Open areas shall be landscaped with lawn, ground cover, ornamental shrubs, and trees.

Residential Development

The minimum density of single family residential density in Downtown and the Waterfront District should be 7-10 units per acre. Elsewhere, the minimum density should be 4-6 units per acre. Townhouses should be developed at a minimum density of 18-30 dwelling units per acre.

The front door of single family homes, duplexes or townhouses should be visible from the street. Residential garages should be recessed at least five (5) feet behind the front facade or placed at the rear with access from an alley so as to reduce their visual impact on the street.

Mechanical Equipment

Heating, ventilating, and air conditioning equipment, other mechanical equipment, and antennas should be placed in an inconspicuous location or screened.

Color

Restraint should be exercised in the use of bright or garish colors. Bright colors should be used for accent only, not as a predominant element. No fluorescent colors should be used on buildings, banners, or signs.

Where renovation is proposed, ideally buildings should be repainted with historic paint colors and finishes typical of the period in which the building was constructed.

Signs

Restraint should be exercised in the use of signs.

In Downtown and along Midland Street, generally one (1) sign should be permitted per face of a building or storefront in commercial areas, plus each business should be permitted one (1) pedestrian-oriented blade sign (2-3 square feet in size) that projects over the sidewalk. Signs should be indirectly lit; flashing and moving signs are not appropriate. Sign materials that convey a low quality image, such as plastic panel signs, should not be permitted. Roof signs, pole signs, and billboards should not be permitted Downtown, and billboards should be regulated elsewhere in the City. Signs should not cover architectural details such as arches, transom windows, moldings, columns, capitals, sills, cornices and similar details. No more than three (3) compatible colors

should be used per sign, with generally one color for the background, one for lettering, and one for accent. More than three compatible colors may be used for graphics or symbols on signs.

The proliferation, size, and height of signs is also a concern outside of Downtown, particularly on commercial corridors where excessive signage impacts traffic safety and the aesthetic character. Although conflicts with historic building architecture may not be as important outside of Downtown, many of the same guidelines described above are applicable elsewhere in the City, although there are exceptions to the general guidelines that need to be addressed in the Zoning Ordinance.

Parking

All surface parking lots should be paved and striped. Planting islands should be installed where space allows. One deciduous tree should be planted per 1,500 square feet of parking surface area, with the goal of having seventy percent (70%) of the parking lot shaded when the trees reach maturity.

Planting islands should be used to segment parking lots, especially lots that are an acre or more in size, into smaller units.

Surface parking lots should be screened from the street with a three (3) foot high red or brown brick wall, with a continuous row of deciduous trees along the street. Screening can also be achieved with a hedge. Parking structures are recommended instead of surface lots.

Downtown surface parking should occupy no more than one third of the frontage of any block or extend farther than seventy-five (75) feet along any street.

Every parking lot in the Downtown and the Midland Street Business District should be required to post a sign at the entrance, based on a uniform design format, that indicates whether the lot is open to the public or private. If it is open to the public, the sign should also indicate whether it is

a long term or short-term lot and the parking rates. If the parking spaces can be leased, the sign should also provide the telephone number of the leasing agent.

Efforts should be made to provide first floor retail at street level in any new parking garages.

Lighting

Shielded, box-type, color-corrected lighting should be used for lighting of parking lots and loading and service areas. The heights of light fixtures should be adjusted to be compatible in scale with the areas being lit. For example, light poles over 20 feet in height are appropriate for parking lots and other vehicle maneuvering areas, but shorter lights are appropriate for pedestrian areas.

Floodlights, wall pack units, and other types of unshielded lights, and lights where the lens is visible outside of the light fixture should not be permitted, except where historical-style lighting is used.

Light fixtures should be located, aimed, and shielded to minimize light trespass beyond the boundaries of the site. Floodlights that project above the horizontal plane should be avoided.

Search lights, laser source lights, and other similar high-intensity lights should be allowed by special permit.

Service and Loading Areas

Service and loading areas should be located at the rear of the building, screened from view from the street. These areas should not be used for outside storage.

Landscaping

Street trees should be planted twenty (20) to thirty (30) feet on-center. Automatic irrigation is recommended for landscaped areas in commercial and industrial areas. Mature trees should be saved, if possible.

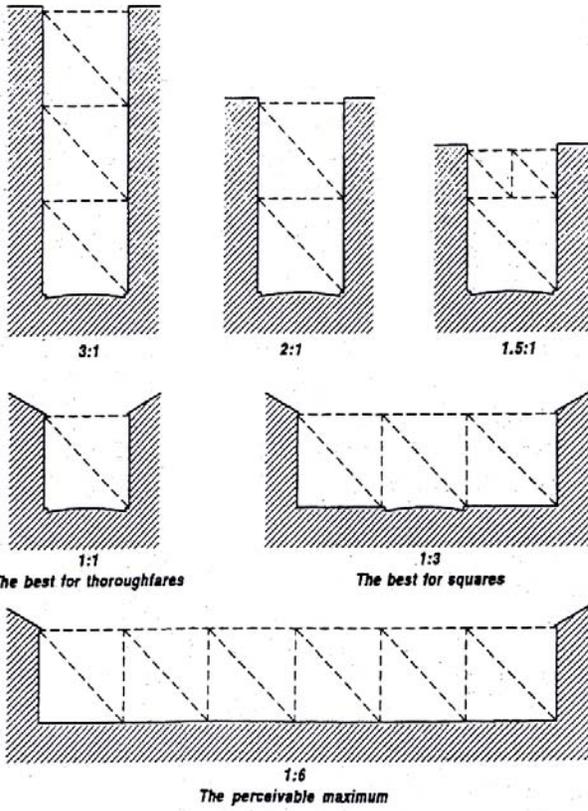
Spatial Definition

Buildings should be aligned in a disciplined manner to create spatial definition. Alignment occurs when building facades cooperate to delineate the public space, in the same way that walls form a room. If appendages such as porches, balconies, and bay windows do not obliterate the primary surface of the facade, they do not destroy alignment.

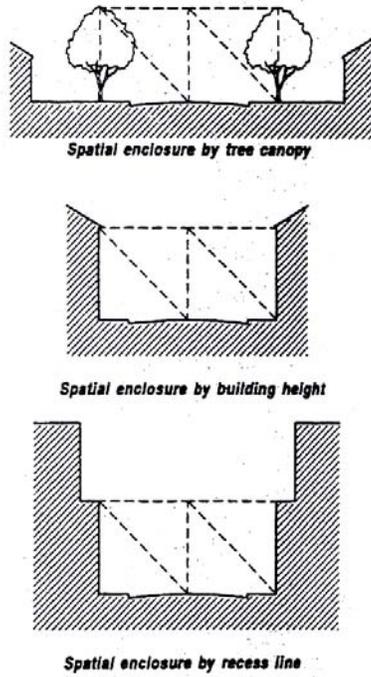
The height-to-width ratio of the space created by buildings creates spatial enclosure.¹³ The ratio of 1 increment of height to 6 of width is the absolute minimum to create a sense of spatial enclosure. The ratio of 1 to 3 is an preferred minimum. As a general rule, the tighter the ratio, the stronger the sense of place. In the absence of special definition by building facades, disciplined street tree planting is an alternative. Trees aligned for spatial enclosure are necessary on thoroughfares where the buildings have large front yards.

¹³ "Site, Community, and Urban Planning," Architectural Graphic Standards. 9th Edition, Gary Greenan, et al, p. 86.

Spatial Definition by Height-to-Width Ratio



Spatial Definition in Section



APPENDIX

CONTEMPORARY TRANSPORTATION ISSUES

Transportation professionals have very detailed standards for designing streets. Often these standards are interpreted and used in ways that emphasize motor vehicle use, while giving little consideration to pedestrians and cyclists, and ignoring the social, recreational, cultural, and historic functions of streets. As a result, our transportation system is almost totally focused on accommodations for motor vehicles. This motor vehicle emphasis can be seen on Thomas, Jenny and Henry Streets. Motor vehicle domination has been exacerbated by planning that emphasizes segregation of uses, e.g., parks for recreation, community centers for socializing, and streets exclusively for motor vehicles.

Street designs typically achieve minimum (least acceptable) standards for pedestrians, while maximizing vehicle-carrying capacity. Measures that improve the situation for motor vehicles often make streets less hospitable for pedestrians and bicyclists. Congestion relief strategies such as road widening (sidewalk narrowing) and signal timing often adversely affect pedestrian safety by increasing crossing distance, exposure to traffic, crossing delays, and vehicle speeds.¹⁰ Increasing motor vehicle traffic volumes and speeds degrades the pedestrian environment by increasing danger and/or by making walking inconvenient and unpleasant.

Current applications of street design standards usually emphasize motor vehicle use, neglecting other aspects of the environment in which the street is placed. This narrow focus often produces unacceptable impacts with respect to commercial, residential, educational, and pedestrian activity.

The alternative is to reduce the emphasis on the motor vehicle and consider the other users of the street network so as to improve quality of life for the residents and businesses adjacent to and affected by the roadway. An excellent example of this approach is Midland Street, where streetscaping, intersection narrowing and diagonal parking has improved pedestrian safety and slowed traffic. This type of improvement must become the rule rather than the exception.

There is currently an adequate street network within Bay City. Therefore, resources should not be concentrated almost solely on accommodating more or faster motor vehicles. Attention should be refocused on other modes of transportation.

¹⁰ Petting, Richard A., "Urban Pedestrian Safety: A Multidisciplinary Challenge," in Compendium of Technical Papers, Institute of Transportation Engineers, September, 1989.

Traffic Congestion

The typical response to traffic congestion is to modify the road system to increase motor vehicle capacity, through road widening, channelizing intersections, limiting access, eliminating bottlenecks, or expanding an interchange. Wilder Road is a good example where road design to increase capacity has been the primary congestion relief solution. However, studies have shown that trying to keep pace with congestion by expanding streets is usually unsuccessful. The increases in motor vehicle capacity often create a change in driver behavior, which increases motor vehicle use and ultimately increases congestion.

An analysis by the Surface Transportation Policy Program of the Texas Transportation Institute's annual report on metropolitan congestion shows that the most common congestion-fighting strategy, adding capacity, fails to ease congestion. The University of California documented the phenomenon of "induced traffic," where new roads actually encourage more driving and more automobile trips.¹¹

Further expansion of the road infrastructure to increase capacity will subtract from the amount of developable and taxable land in Bay City. The Master Plan visioning sessions revealed that residents desire a lively, interesting and enjoyable city in which to live, work and play. Continual widening of roads to provide fast conduits and large storage spaces for motor vehicles is in conflict with residents' desires.

Safety

Residential streets (less than 2,500 AADT) that are 24 feet wide are the safest according to a study by Swift and Associates and the City of Longmont, Colorado. Their analysis demonstrated that as street width increases collisions per mile per year increase exponentially. According to the study, 0.32 motor vehicle injury collisions can be anticipated per year per mile on a 24-foot-wide street, compared to 1.21 on a 36-wide street. In other words, by increasing the street width by 50% the collision rate increased roughly 400%.¹²

The same study found that narrower streets do not adversely affect fire protection services. As lanes are narrowed from 12 feet to 11 feet, speed typically does not decrease. When lanes are narrowed from 11 feet to 10 feet, a reduction in speed occurs without an increase in sideswiping collisions. Lane widths of 11 feet are reasonable in urban situations and for truck routes. Lane widths of 9 feet are ideal at low speeds.

¹¹ "Study Shows Adding New Lanes Fails to Ease Congestion," Community News and Views, p. 10.

¹² Dan Burden, Walkable Communities, 1997.

Traffic Calming

Excessive motor vehicle speeds and cut-through motor vehicle traffic are common complaints in many neighborhoods. Techniques to slow motor vehicle traffic and/or shift to more appropriate routes are available. These techniques are commonly referred to as "traffic calming" measures. The Institute of Transportation Engineers (ITE) defines traffic calming as ". . .the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users."¹³

Traffic calming concepts were first used in Germany, Holland, and Australia several decades ago. Over the past 20 years, an increasing number of cities throughout Europe, Australia, Japan and the United States have used a variety of measures to reduce the negative effects of automobiles.

Traffic calming is implemented with the goals of creating safe and attractive streets, reducing the negative effects of motor vehicles on the environment, and promoting pedestrian, bicycle, and transit use. In addition, traffic calming is intended to accommodate the preferences and needs of all the users of the road right-of-way, not only the drivers.

Traffic calming measures include: vertical changes in the street (e.g., speed humps, speed tables, raised intersections), lateral changes in the street (e.g., chicanes, offset intersections, lateral shifts), constrictions (e.g., narrowing streets, pinch points, islands), narrow pavement widths (e.g., medians, edge treatments), entrance features, traffic circles, and small corner radii and related streetscaping (e.g., surface textures, edge treatments and colors, landscaping, street trees and furniture). Because of the numerous alternatives, traffic calming can be successfully adapted to a variety of situations and settings.

The traffic calming goals can be achieved by focusing on the following objectives:

1. Achieving slower motor vehicle speeds.
2. Reducing collision frequency and severity.
3. Increasing the safety and perception of safety for non-motorized users of streets
4. Reducing the need for police enforcement
5. Enhancing the street environment (for example, through streetscaping).
6. Increasing access for all modes of transportation.
7. Reducing motor vehicle traffic cutting through neighborhoods.

¹³ 1997 Institute of Transportation Engineers International Conference Compendium.

The following principles will determine if proposed traffic calming measures will have the desired impact in a particular area:

1. Traffic calming must be community-based and supported
2. Through design, traffic calming must incorporate a degree of self-enforcement of motor vehicle speeds.
3. Driver behavior must be directly affected by the traffic calming measures.
4. Traffic calming must improve the safety of all street users, particularly children, the disabled, elderly, pedestrians, and bicyclists.

Additional principles and fundamental planning concepts related to traffic calming include:

1. Streets help determine the form and character of neighborhoods; street design should be considered a part of neighborhood design.
2. The most sensitive streets (i.e., residential streets) should be designed to carry low volumes of motor vehicles at low speeds and to function efficiently and safely, yet minimize the need for extensive regulation, traffic control devices, and enforcement.
3. The expected driver behavior should be readily apparent to drivers through a street's appearance and design in order to reduce non-local through traffic on residential streets.
4. Streets should be interconnected to reduce travel distance, promote the use of non-motorized modes of transportation, provide for provision of utilities and emergency services, and provide for more even dispersal of motor vehicles. Route modification techniques, such as street closures, diverters, and turn prohibitions, are discouraged.
5. Excessive street widths should be avoided, consistent with efforts to reduce street construction and maintenance costs, stormwater runoff, and environmental effects of street construction. Street widths provide guidance to drivers as to the type of behavior that is expected by them, the appropriate travel speeds, and the role of the street with respect to mobility and access.
6. Route modification, an attempt to change routing or traffic flow on a street network, is sometimes used in an attempt to reduce cut-through traffic in neighborhoods. Examples of route modification include one-way streets, diverters, closures, and turn prohibitions. Route modification and traffic calming are frequently confused, because both often share the common goal of preventing cut-through traffic. Route modification often transfers problems from one location to another, though, so it is strongly discouraged in the Bay City. In contrast, traffic calming is generally more successful, because it often alters driver behavior.
7. Streetscaping includes placing distinctive lighting, furniture, art, trees, and landscaping along streets and at intersections. Streetscaping can be done without traffic calming, but traffic calming is most successful when done in conjunction with streetscaping.
8. Traffic calming plans typically affect one or more streets and/or intersections, rather than a single street or intersection in isolation.

Even though traffic calming is primarily utilized on existing streets, traffic calming measures can also be employed in the construction of new streets.

A traffic calming approach to transportation planning must be adopted so that so that these considerations are addressed on street construction and reconstruction projects.

Nomenclature¹⁴

Conventional traffic engineering practice uses terms such as "collector" and "arterial," which denote only motor vehicle capacity. This approach ignores the multiple uses of thoroughfares and tends to create an environment inhospitable for pedestrians. New nomenclature is necessary to more adequately describe the combination of capacity and character, and to have the proper vocabulary to plan and develop the transportation infrastructure in the manner described in this Plan.

1. **Highway:** A long-distance, speed-movement thoroughfare that traverses open country. It should be relatively free of intersections, driveways and adjacent buildings (e.g., I-75, M-15).
2. **Boulevard:** A long-distance, medium speed connector that traverses an urban area. It is usually lined by parallel parking, wide sidewalks, and medians planted with trees.
3. **Avenue:** A short-distance, free-movement thoroughfare that traverses an urbanized area. Unlike a boulevard, its axis should be terminated by a civic building or monument (e.g., Center Avenue, which terminates at the Friendship Arch).
4. **Drive:** A thoroughfare along the boundary between an urbanized and a natural condition, usually along a waterfront or park. (e.g., JFK Drive).
5. **Street:** A local, low-speed local thoroughfare. A street is urban in character, with raised curbs, wide sidewalks, parallel parking, trees in planting areas. Street character varies, however, depending on the nature of the uses fronting on the street (e.g., Midland Street, residential streets).
6. **Road:** A local low-speed thoroughfare that tends to be rural in character without curbs or striped on-street parking (e.g., Old Au Sable State Road).
7. **Alley:** A narrow access route servicing the rear of buildings. Alleys provide for parking, loading, utilities, and trash removal service. Alleys have no sidewalks or landscaping (e.g., behind buildings in the Central Business District).
8. **Rear Lane:** A narrow access route behind buildings and houses. Lanes are rural in character, with a narrow pavement.
9. **Passage:** A very narrow, pedestrian-only connector between buildings. Passages provide shortcuts through long blocks or connect rear parking areas with street frontages.
10. **Path:** A pedestrian and bicycle connector, which is separated from vehicular traffic lanes (Railtrail).

The Planning Commission and Planning Department need to work with the City engineering staff to further develop and adopt a broader thoroughfare nomenclature, which must then become incorporated into the City's engineering standards and ingrained in engineering design practices.

¹⁴ "Thoroughfare Types," The Lexicon of New Urbanism, Duany-Plater-Zyberk & Company, 1999.