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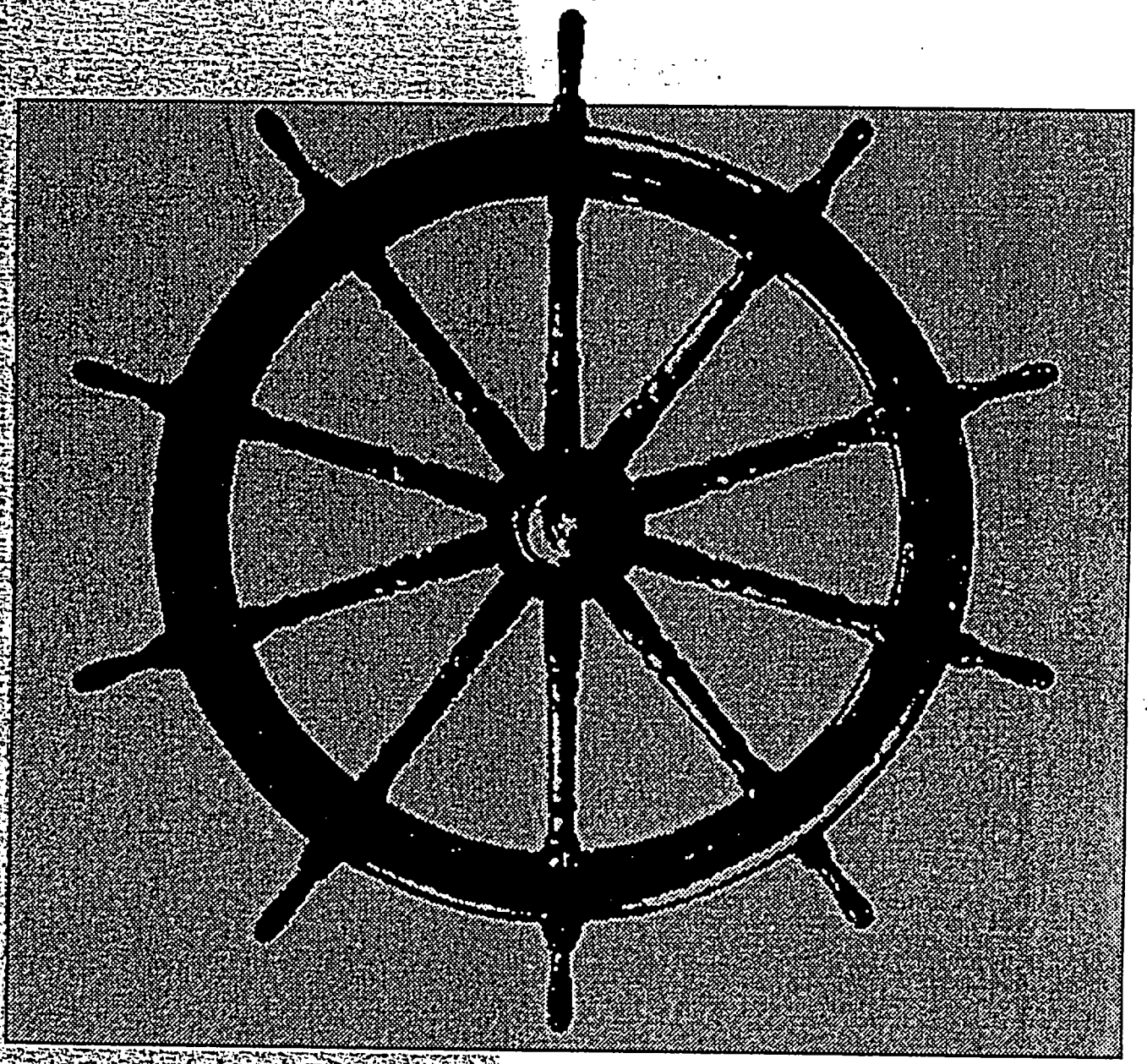
Comprehensive Plan
for the
City of Two Rivers



Prepared for the City of Two Rivers
City Council and Plan Commission
by
Mid-America Planning Services, Inc.
Madison, Wisconsin

COMPREHENSIVE PLAN

FOR THE

CITY OF TWO RIVERS

1987

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This Comprehensive Plan was adopted by the Two Rivers City Council on February 1, 1988.

Two Rivers
POPULATION 13,354
TWO RIVERS
LAKE MICHIGAN
CIRCLE TOUR
42
ROAD TO
Point Beach
STATE FOREST
1/4 MILE
RIVERS
PARK

SUMMARY

The Comprehensive Plan is a policy statement about the future development of the City of Two Rivers. The Plan represents long range objectives to strive towards and is flexible to permit revision as conditions and needs change. The Plan serves as a framework within which responsible decisions on future development can be made.

As part of the Comprehensive Plan, a series of goals and objectives were developed. These covered all aspects of the community. The following is a summarization of the goals and objectives:

- to create a balanced pattern of related urban land uses;
- to stop the current decrease in population and create a growth in population;
- to preserve and develop high quality housing of various types and densities in appropriate areas to satisfy demands for housing;
- to preserve, improve and develop appropriate commercial facilities serve the community and to increase sales and earnings;
- to improve existing industrial areas and promote new industrial growth consistent and compatible with adjacent uses;
- to maintain a policy of providing a wide variety of local parks and recreation facilities to serve the entire community;
- to maintain an adequate system of public buildings in the City; and
- to assure the interested participation by the public in implementing the Comprehensive Plan.

The City of Two Rivers has experienced declines in both economic strength and population since the early 1980's. The decline in economic strength was caused primarily by the loss of manufacturing companies in the early 1980's. The City's heavy reliance on this economic sector intensified the impact of the losses.

The City has worked to diversify its economy into other sectors such as tourism. The expansion of tourism as a secondary economic base could be accelerated by the construction of a Visitors Center, the promotion of the River Walkway System and other tourist attractions and the continued support of the City government.

However, the City cannot ignore the manufacturing sector of its economy. The City must continue to promote the existing industrial park and search for a new industrial park site. Because of existing land use and soil restrictions within the City, the new industrial park site will probably be outside the current City limits and annexation of the property will be required.

The City must continue contact between industry, the public and the area governments in order to accelerate communication and economic growth. Also, the City should continue to provide financial assistance to businesses from its revolving economic development funds.

The City's population has decreased and aged in the 1980's. The population has decreased 2.54% since 1970 and the median age has risen from 28.8 years to 30.8 years. A major cause of the decline appears to be out-migration of young adults due to poor economic prospects and a corresponding lack of in-migration.

Several methods of expanding the population exist. These include annexation, development of economic opportunities particularly for young adults, and changing zoning regulations to allow housing with accessory apartments for the elderly.

The City should consider the annexation of the Woodland Beach area within the next five years. The City also needs to be continually updated on the need for more housing, particularly for the elderly. One method of reducing the need for new separate elderly housing units could be an amendment to the zoning regulations to permit accessory apartments for the elderly in single family homes.

Development within the City of Two Rivers is somewhat constrained by the environment. The environmental constraints include flooding, wetlands, poor soils and climate. The existence of preservation areas and nuclear power plants are also constraints.

The City should avoid development along the East and West Twin Rivers as well as along the shore of Lake Michigan due to possible flooding and the wetlands. Development should also be avoided in the areas with poor soils. The restraints should not effect development greatly if proper planning is used.

In order to eliminate destruction of the area's natural resources, the City should include in the subdivision ordinance a requirement that prohibits the filling of wetlands within the City limits and requires the identification and delineation of all wetlands within a subdivision plat. The City should also require new construction to be placed a minimum of two feet above the current 100 year floodplain level.

Land use change in the City has been relatively slow. The majority of the growth has occurred in the northwest section of the City and along Columbus Street. The City needs to find more land for both industrial and residential development. Also, more land should be found for a new park to serve the residential development on the northeast side.

The City needs to amend the zoning ordinance to permit newly created uses such as "Bed and Breakfast hotels", to preserve areas designated as Historic Preservation Districts and to meet the changing needs of the Waterfront Commercial District.

The City should develop a policy to extend the necessary utilities to the first desirable subdivision proposed in the north-northeast section of the City. The policy should include consideration of the possibility of crossing the East Twin River if necessary.

The City needs to form a Redevelopment Authority to consider methods of redeveloping the downtown and obsolete industrial properties. The establishment of a Business Improvement District in the downtown should be included for consideration. The City should also continue recycling and obtaining new Wisconsin Development funds for housing, public facilities and economic development.

Three state highways and two county highways pass through the City of Two Rivers. Also, five bridges cross the Twin Rivers within the City limits. Traffic has increased on the main arterials within the City since 1972, but decreased on the local streets, indicating a rise in the number of cars passing through the City.

Traffic flow is generally good and can be continued at this level if the City assures that all marinas are placed below the lift bridge at 22nd Street and if Woodland Drive is extended north to CTH VV.

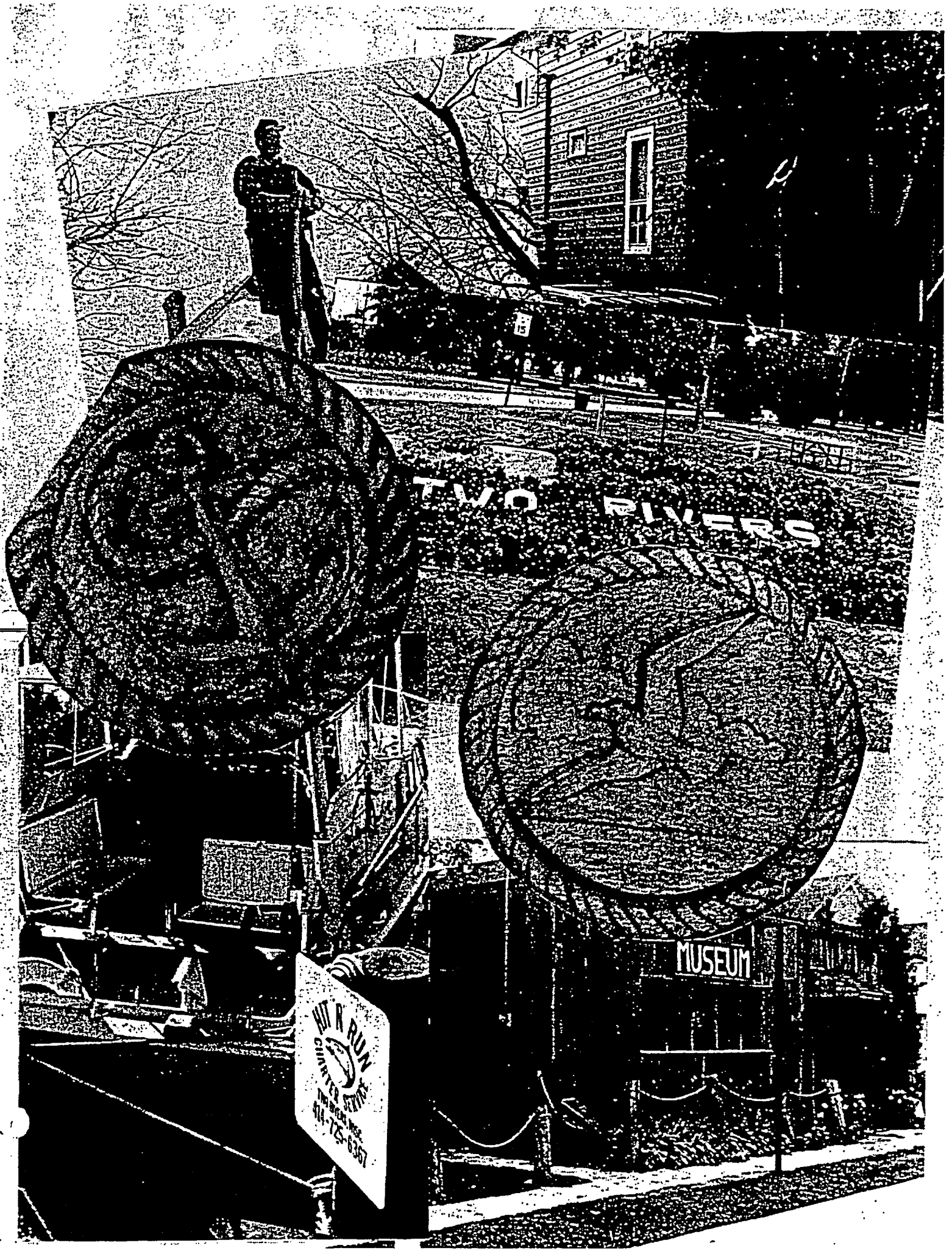
The City should meet with both County and State representatives to discuss designating Woodland Drive an urban street, upgrading Viceroy Road between CTH VV and CTH O to a minor arterial and constructing of a bridge across the West Twin River at Woodland Drive. The construction of the bridge should be placed on either the Federal Aided Secondary System or the City's Urban System Plan. Also, the City needs to include intersection improvements in the Five-year Capital Improvements Program.

The City has an excellent park and recreation program and all public facilities are in very good condition. The City needs to maintain and modernize the park system by refurbishing facilities at Neshotah Park as well as some of the other parks, extending the River Walkway System and locating a historical marker in Harbor Park. Also, a new park should be considered on the northern side of the City to serve the existing and expected residential development in the area.

The public facilities need little improvement except for the City Hall and the Library. A feasibility study should be conducted to determine the need for a new Library and City Hall. Consideration should be given to possibly combining the two projects. Also, with the development of an industrial park along STH 310, the City should consider the construction of a supplementary fire station to serve the area.

The City's housing stock is old with approximately 57% of the units built prior to 1950. Repair and/or replacement will be required soon on many of these units. However, most residents felt their neighborhoods were good or excellent places to live.

The City needs to continue using existing housing funds and seeking new sources of housing funding. Single family residential development should be encouraged on the City's northwest side with seasonal housing restricted to the non-historical waterfront areas. Also, accessory apartments for family members should be allowed as a conditional use in order to increase housing for the elderly.


TWO RIVERS
MUSEUM
HIT 'N' RUN
CHARTER SERVICE
414-755-6367

PLANNING ELEMENTS

As part of the Comprehensive Plan for the City of Two Rivers, the Consultant developed a Planning Elements Report for the City. This is a follow-up to the earlier Background Report issued in April of 1987. The Development Factors Map was used as a base for the planning decisions in the Planning Elements Report. The Development Factors Map illustrates the major constraints existing in the City and its surrounding extra-territorial area.

The Planning Elements Report contains background information for each system, the related policies and objectives, and a series of recommendations. The Planning Elements Report also contains a land use plan, a traffic plan and a public facilities plan.

In the Land Use Plan, the Selected Concept Plan has been refined into alternative future land use plans. Consideration was given to proposed development trends and a targeted growth factor. The land use plans utilized two different target populations - for the years 2000 and 2010. These populations will be attained, probably not in the year estimated, but the City will be prepared to handle that growth irregardless of the year attained. Maps are included of both existing land use and future development patterns illustrating the Land Use Plan. Plans and maps were done for the City and its extra-territorial area.

In the Traffic Plan, the Consultant prepared alternative traffic plans including major new streets, street functions, and changes needed to existing streets and needed new alignments.

In the Public Facilities Plan, the Consultant prepared a public facilities plan which included parks and other City facilities.

Also as part of the Comprehensive Plan for the City of Two Rivers, three concept plans were developed. A concept plan is a generalized map illustrating various development options available to the community. The various development options attempt to meet the community's general needs as well as the major goals and objectives set by the community.

A number of general needs have been identified by the City of Two Rivers. One group is related mainly to the City's economic problems. The City needs to increase the number of jobs available and to diversify the type of industry locating in the community. Another need is to expand both the number of tourists visiting the City and the facilities available to them.

Another area of needs is related to the land or lack of land surrounding the City. Much of the area has poor soils for development. As a result, little land is available for residential or industrial

development. Also, the City is restricted from expanding in several areas. The existence of the Woodland Dunes Preservation Area to the southwest, Point Beach State Forest to the northeast, and Lake Michigan to the south makes growth in these directions impossible.

The City's location on the shore of Lake Michigan creates several development factors. The City's weather is greatly affected by the lake, therefore being much cooler than the surrounding communities in the summer. The City has also been hurt by the rising lake levels and resulting accelerated coastal erosion. The high lake levels have covered much of the City's beaches and threatened parking lots, streets and homes.

A final set of needs is caused by the East and West Twin Rivers. The City has only a limited number of bridges crossing the rivers and all are located within one-half square mile. The limited number of bridges constricts traffic and points out the need for a new bridge.

In May of 1987, the City Plan Commission was presented with three alternative concept plans. After examining the advantages and disadvantages of each of the concept plans, the Plan Commission selected the following concept plan.

In the Selected Concept Plan, all new industrial development is located to the west along STH 310 and Woodland Drive. To assist traffic flow, Woodland Drive would be extended to the north and a new bridge would be constructed. This allows for the linking of CTH VV and STH 310.

An area of limited commercial development has been located at the intersection of STH 42 and CTH VV due to new residential development and the location of an institution nearby. The commercial development should occur as the additional development planned for begins in the area

Another commercial development area is located at the intersection of Woodland Drive and STH 310 due to the industrial development there. A third commercial development area is located at the intersection of STH 147 and CTH VV due to adjacent residential development.

New residential development has been located on both sides of CTH VV west of the intersection of CTH VV and STH 147. Other areas of residential development have been located between STH 147 and the East Twin River, on the east side of the East Twin River, and at the intersection of CTH VV and STH 42. A final area of residential development has been located east of STH 42 and has been reserved for multi-family residential development.

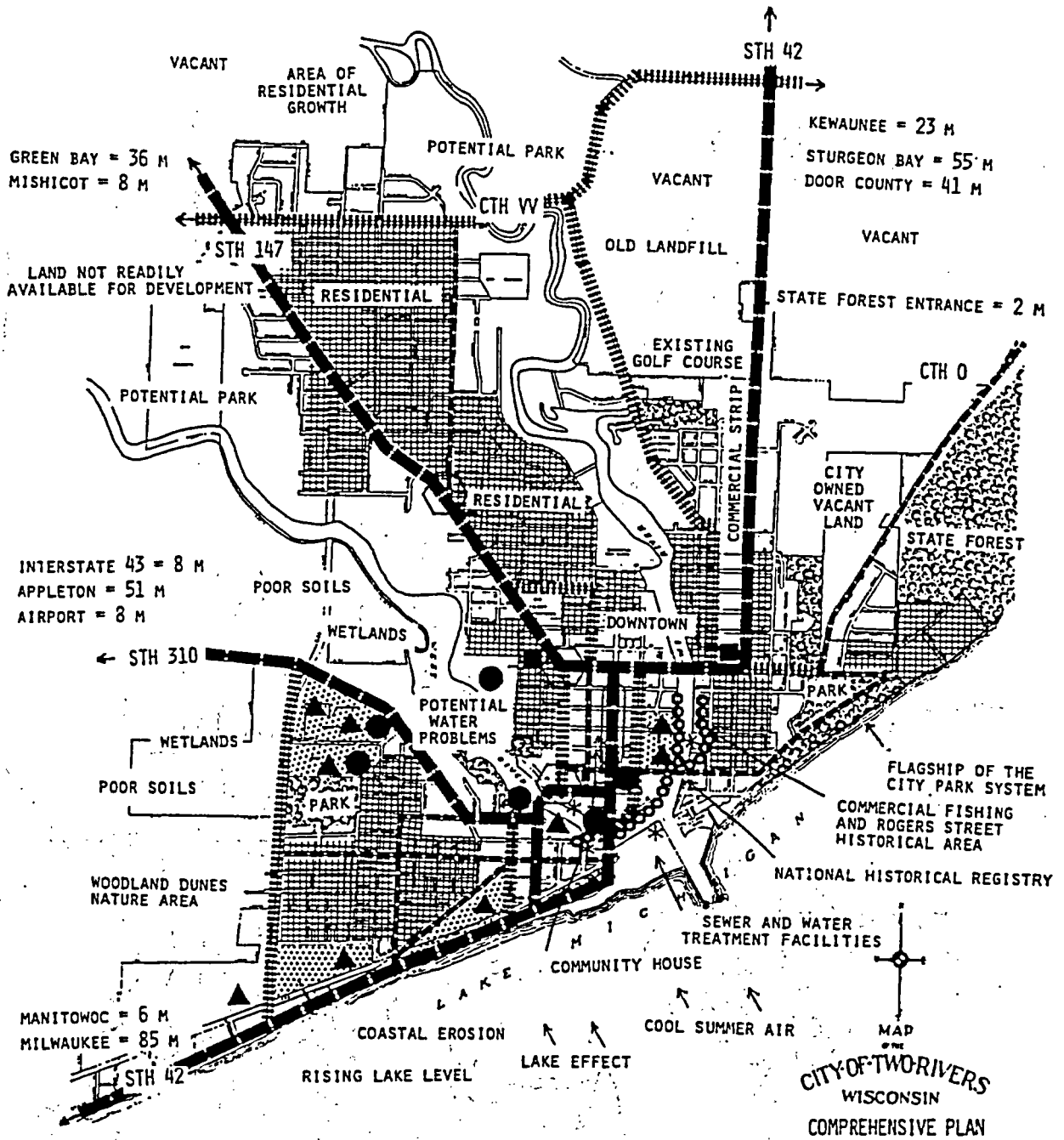
An institution of some type is located east of STH 42 near the intersection of STH 42 and CTH VV.

A new park has been placed along the east side of the East Twin River just north of CTH VV. The park will serve the new residential development nearby. The existing golf course is expanded and linked to the new park. The expanded golf course will serve area residents as well as be a drawing point for tourists.

A trail has been located along the abandoned railroad tracks. The trail will connect to the River Walkway which has been extended.

In the following charts, each chapter of the Background Report is broken down into three sections. The first section contains a background summary of the chapter. The second section contains the related policies and objectives. The third section contains recommendations to enable the City to attain its stated objectives.

DEVELOPMENT FACTORS MAP



POPULATION PROJECTIONS

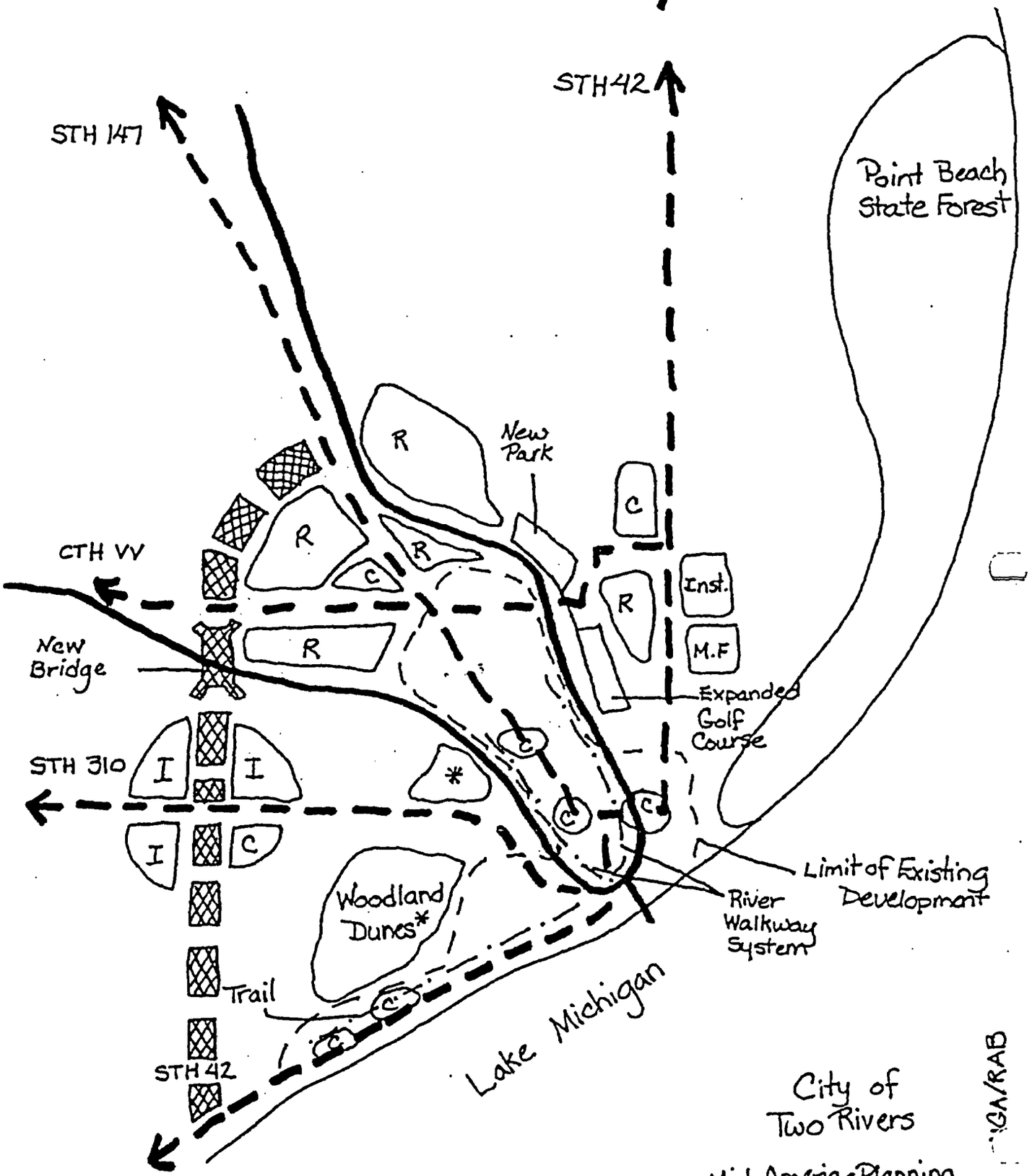
	STATE	4.7% *
1990	13,518	14,119
1995	13,649	14,783
2000	13,529	15,478
2005	13,484	16,205
2010	13,272	16,967

*BASE POPULATION 13,485 - 1985
PERCENTAGE OVER 5 YEARS

LEGEND

- RESIDENTIAL
- PRESENT INDUSTRIAL ZONE
- PARKS, FOREST PRESERVES
- PRIVATE MARINAS
- POTENTIAL RIVER WALKWAY
- NEIGHBORHOOD SHOPPING AREA
- MAJOR EMPLOYERS
- PROBLEM INTERSECTIONS
- PRIMARY ARTERIAL
- SECONDARY ARTERIAL
- COLLECTOR
- COMMERCIAL
- POTENTIAL DEVELOPMENT AREAS (AREAS SUSCEPTIBLE TO HIGH WATER DAMAGE)

Selected Concept Plan



City of Two Rivers

Mid-America Planning Services, Inc. 1987

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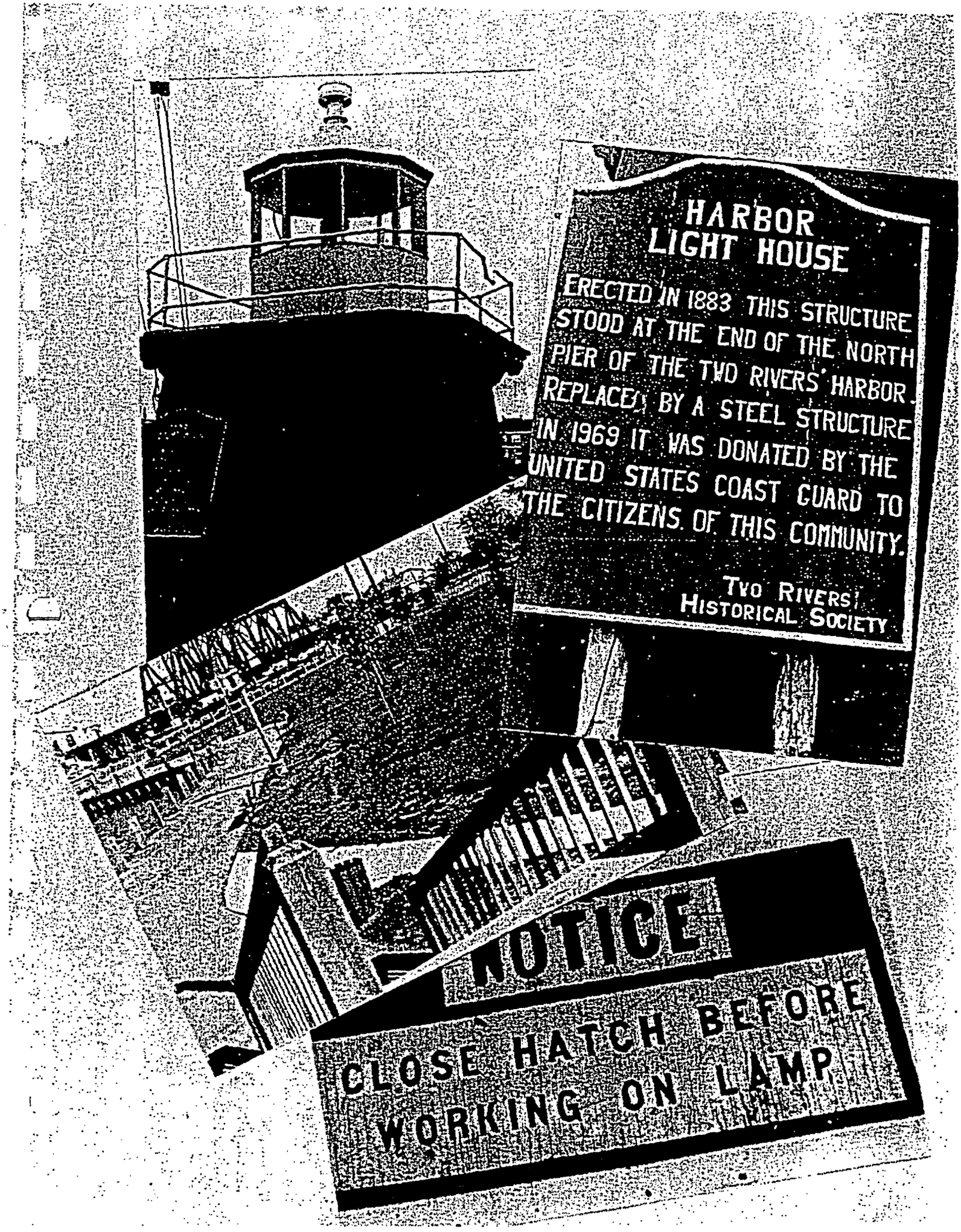

HARBOR
LIGHT HOUSE
ERECTED IN 1883 THIS STRUCTURE
STOOD AT THE END OF THE NORTH
PIER OF THE TWO RIVERS HARBOR.
REPLACED BY A STEEL STRUCTURE
IN 1969 IT WAS DONATED BY THE
UNITED STATES COAST GUARD TO
THE CITIZENS OF THIS COMMUNITY.
TWO RIVERS
HISTORICAL SOCIETY
NOTICE
CLOSE HATCH BEFORE
WORKING ON LAMP

ECONOMIC

BACKGROUND SUMMARY

The main employment sector in Two Rivers is manufacturing. It currently employs 40% of the labor force. However, it has been decreasing in importance during the 1980's. The service sector has experienced the greatest amount of growth.

The region still has a high rate of unemployment with a January 1987 rate of 11.8%. This is nearly 4 percentage points higher than the State rate of 8.0%.

Farming has been decreasing in importance since 1980. The number of farms dropped 16.2% between 1980 and 1986. Many of the farms are being consolidated.

The main weakness in the region's economy is its lack of diversification. An overdependence on manufacturing and on only a few firms has made the economy vulnerable.

The community-wide survey indicated that the majority of the people felt the City should have another industrial park, and that a large majority indicated the City should assist local businesses to grow and expand.

The community-wide survey indicated that by far the major reason for shopping in Two Rivers was convenience. The community-wide survey also indicated that many people shop in Two Rivers, but probably spend more of their money outside of Two Rivers than in the City of Two R s.

POLICIES & OBJECTIVES

To maintain industry as the City's economic base, and put major emphasis on industry in the Economic Development Program:

- By continuing to communicate with industry on a regular basis;
- By developing a comprehensive marketing plan for the Industrial Park;
- By seeking new industries with diverse markets for Two Rivers, utilizing, among other approaches, the promotional folder that has been developed and targeting efforts at specific "markets";
- By encouraging low cost maintenance of the undeveloped property in the Industrial Park to provide as positive an appearance as possible; and
- By investigating development of incubator/venture capital projects.

To provide an adequate framework for the future expansion of commercial development in Two Rivers:

- By designating certain prime areas for commercial use, particularly along strategic sections of major arterial highway corridors; and
- By encouraging the clustering and coordinated development of compatible and mutually beneficial commercial uses.

To preserve, improve, and develop appropriate commercial facilities serving the inhabitants and providing increased sales and earnings:

RECOMMENDATIONS

The City must diversify its economic base. This can be done by:

- Seeking new industrial start-ups and relocations;
- Assisting existing industry to expand;
- Assisting with financing relocations, start-ups and expansions;
- Providing new industrial park lands;
- Providing business incubator opportunities;
- Developing tourism;
- Promoting development of major institutions and service businesses;
- Working with developers to redevelop land and create new uses;
- Increasing County involvement in economic development;
- Strengthening and rebuilding the downtown; and
- Assisting small businesses to survive and then grow.

Implementation Outlook

The City is currently in an excellent financial situation as it is nearly out of debt and most major infrastructure improvements are in place. For those that could be needed in the future, the City should be in the position to afford them. In this era of rapidly changing events, the City should make certain that both it and its utilities operate with a cash reserve so that it can respond quickly to requests for improvement. The City should also continue its five-year capital expenditure plan, updating it annually.

BACKGROUND SUMMARY

The community-wide survey indicated that there is a need for more stores, particularly clothing stores.

The need for economic development and the need to develop tourism were two of the top three needs cited in a City Council staff work session in September of 1985. At a public hearing in March of 1987, economic development and need for tourism were identified as the two major needs.

Interviews of various City officials were conducted in March and April of 1987 and a need for a new industrial park, diversification of the economic base, and the development of a secondary economy, possibly tourism, were three of the four top needs.

The economy of Two Rivers took a downward turn in the 1980's due primarily to the removal of production lines by two manufacturers in Two Rivers. The impact was particularly devastating because of the City's undiversified economy.

The City's downtown has declined significantly in the amount of retail sales in the last 10-15 years. The City maintains two strong neighborhood commercial areas, one at the west end of 22nd Street and the other near the east end of 22nd Street. The downtown area currently serves as a city-wide service center.

Tourism has definitely started to develop as a second industry in Two Rivers. The expansion of the sport

POLICIES & OBJECTIVES

-By consolidating and expanding the existing commercial centers and discouraging these commercial facilities from moving to the fringe;
- By discouraging unsightly, unsafe, and marginal commercial highway development;
- By developing and adopting a downtown economic development plan; and
- By encouraging existing businesses to continually monitor and change to accommodate the retail market.

To establish a specific program of economic development in Two Rivers, and maintain a Two Rivers Economic Development Program, with the City government as the policy and program leader:

- By providing information concerning this program to all industries, interested individuals and groups, so that they are aware of the proposals and course of action;
- By continuing the present role of the Business and Industrial Development Committee in addressing broad economic activities;
- By continuing to regularly update the program's goals and objectives;
- By continuing the use of industrial revenue bonding and explore other types of corporate funding sources such as subordinate debentures, sinking bond funds, commercial paper, City revenue, etc.;
- By working with the "Two Rivers Tomorrow" organization to assist its efforts to plan and carry out central city development activities;

RECOMMENDATIONS

Industrial Base:

- Try to move industrial land away from residential and other areas upon which it would have a detrimental effect. If a vacant or under-utilized adequate industrial building becomes available promote its reuse such as the City did for Eggers Plywood Company;
- Remove or cause to be removed obsolete industrial buildings, such as the City did with the Mirro complex;
- The City should work with industries and school systems to insure that the labor supply provides the technical skills required by today's and tomorrow's industries;
- Maintain City off-street parking for downtown industry as long as that industry continues to exist or the parking is needed in the quantity provided;
- Construct a new industrial park on STH 310 west of the Woodland Dunes on land near the intersection of Woodland Drive and STH 310; and
- Extend City utilities to the proposed industrial park.

Tourism Base:

- Utilize tourism as a secondary economic base, but this must be well diversified;
- Promote more generic traffic/business direction signs such as the new one on Memorial Drive;
- Construct a Visitors Center either on Main Street at the River Walkway, Lakeside Park, City Hall site or Picnic Hill. At the Visitors Center, feature the

BACKGROUND SUMMARY

fishing, marinas, motels, and restaurants are all evidence of the increase in tourism.

The Rogers Street Fishing Village has been developing with a recent acquistion of land and a building.

Industrial jobs in Two Rivers are becoming more technical. Although this is not true of all jobs, it is true of many of the new jobs. As the economic base continues to diversify into plastics and other areas, the labor supply will be required to have greater technical skills.

Economic development is already a priority in the City. This is evidenced by:

- Creation of two TIF Districts;
- City development of an industrial park;
- City obtaining two major economic development grants;
- City creating a Business and Industrial Development Committee;
- City preparing a Comprehensive Plan;
- City developing a position of Economic Development Coordinator;
- City participation in the Wisconsin Public Service Corporation Industrial Building Program;
- City participation in the Chamber of Commerce and Lakeshore Development Bureau economic develment efforts; and
- City supporting a downtown plan and downtown development.

POLICIES & OBJECTIVES

-By continuing cooperative efforts toward economic development with Lakeshore Development Bureau and Chamber of Commerce; and
- By encouraging businesses to work with Network, Score, Ace and other types of assistance provided by active and retired business people.

To improve existing industrial development compatible to adjacent uses:

- By providing land for new construction and expansion to existing industries;
- By reusing vacant or under-utilized industrial buildings;
- By removing obsolete industrial buildings;
- By improving highway access to existing industrial areas; and
- By maintaining off-street parking and loading facilities.

To promote new industrial development in the designated Industrial Park areas:

- By defining large areas of open land suitable for industrial use;
- By providing new industial areas with good access to main transportation facilities; and
- By servicing new industrial areas with all public utilities and any other community facilities that are necessary.

To search for a secondary economic base, and

RECOMMENDATIONS

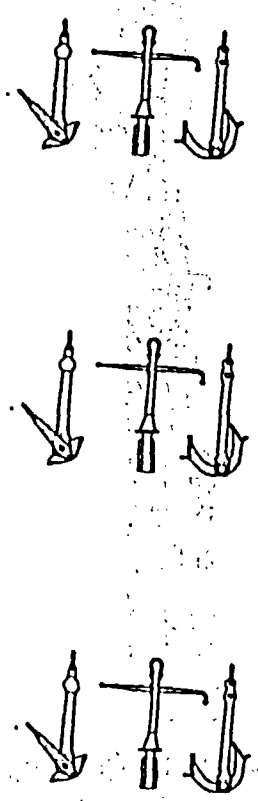
following:

- good feelings about Two Rivers;
- sport fishing;
- commercial fishing;
- marinas;
- historical aspects of Two Rivers including the ice cream sundae;
- charter fishing services and their locations;
- Woodland Dunes;
- buried forest;
- Fish Derby;
- Snow Festival;
- Two Rivers restaurants;
- Two Rivers motels;
- Industrial Development efforts;
- Business and Industrial Development Committee activities;
- Chamber of Commerce; and
- Wisconsin's Eastcoast and the Lakeshore Development Bureau.

- Promote the continued development of Rogers Street. The Museum should continue its expansion, particularly off-street parking. The Museum should coordinate its activities with Woodland Dunes and the Manitowoc Maritime Museum. The City should provide decorative street lighting in the Rogers Street area;
- Keep the Harbor lands available for principally tourism and tourism-related businesses with the slight possibility of utilizing the area for industrial business; and

BACKGROUND SUMMARY

Areawide economic development exists in Manitowoc County. Currently, it is being undertaken by the Chamber of Commerce and the Lakeshore Development Bureau.



POLICIES & OBJECTIVES

supplement the main economic base of industry with other suitable businesses within five years:

- By encouraging suitable institutions to locate in Two Rivers. College Hill may provide a good location for some types of institutions;
- By encouraging development of the tourist industry, including:
  - development of Rogers Street Fishing Village as a tourist attraction;
  - promotion of family-related activities in conjunction with Lake Michigan sport fishing to encourage greater tourist spending;
  - establishment of sleigh, cross-country ski, and bicycle trails through the City to points of interest in conjunction with the establishment of a trail between the City and Point Beach State Forest;
  - continue production of and involvement in a modest flyer to direct tourists to points of interest in the City;
  - encourage year-round tourism, including swimming, skiing, snowmobiling, etc.; and
  - encourage the creation of additional campsites at Point Beach State Forest (continuing effort-shower facility completed in 1987).

To provide for some industrial use of the harbor and, at a minimum, insure the continued use of the harbor as it is, and investigate the possibility of harbor use expansion when appropriate:

RECOMMENDATIONS

- Businesses that are traditionally non-tourist oriented must become more tourist oriented. All businesses play some part in the tourism business.

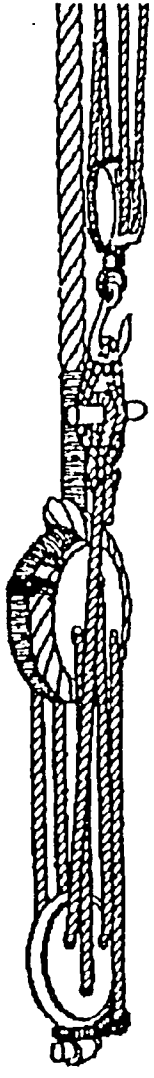
Commercial Base:

- The two strong neighborhood centers on and near 22nd Street should expand as the market indicates. Expansion of these centers should be permitted as the market dictates;
- The downtown should be permitted to expand between 22nd Street, Lakeshore Park, Adams Street, and Jefferson Street as the market would dictate;
- Commercial development on Memorial Drive and Lincoln Avenue should be permitted as infill and in areas currently zoned commercial;
- The only new entirely commercial areas proposed are those at the corner of Mishicot Road and 45th Street and at Woodland Drive and STH 310;
- Encourage additional tourist-oriented businesses and service business;
- The retail sector needs additional retail stores, particularly in the downtown area; and
- Implement the Downtown Development Plan.

General Recommendations:

As convenience is the most important reason for shopping in Two Rivers, the City should support any item that would make it more convenient to shop. The retailers should also consider changes that would

BACKGROUND SUMMARY



POLICIES & OBJECTIVES

-By encouraging suitable use of the C. Reise Coal Company property (purchased and partially developed by Edith Anderson as of 1986);
- By monitoring the status of the Coast Guard Station to insure its continued operation (current reconstruction of the Coast Guard Station); and
- By trying to promote expanded harbor use through letters, calls, etc. at the appropriate time in the future (continuing effort).

To improve the quality of the City's labor supply:

- By continuing to encourage the school system's programs that are tailored to the needs of local industries (continuing effort);
- By working with local interests to relate the programs at Lakeshore Technical College to the needs of local businesses and industries (continuing effort); and
- By encouraging the school system to continue to assess the needs of young people regarding their job seeking and job attainment skills as they may pertain to Two Rivers industries (continuing effort).

To cause future economic development:

- By increasing employment opportunities;
- By increasing local investment opportunities;
- By increasing income within the district;
- By encouraging the most efficient use of energy in the development of all economic projects;
- By improving the area's port and harbor facilities;

RECOMMENDATIONS

make it more convenient for people to shop, such as expanded hours.

The City should support renewal of the downtown, expansion of the fringe of the downtown and expansion of the major shopping centers, particularly if it involves more retail stores, including clothing stores, which are the most needed.

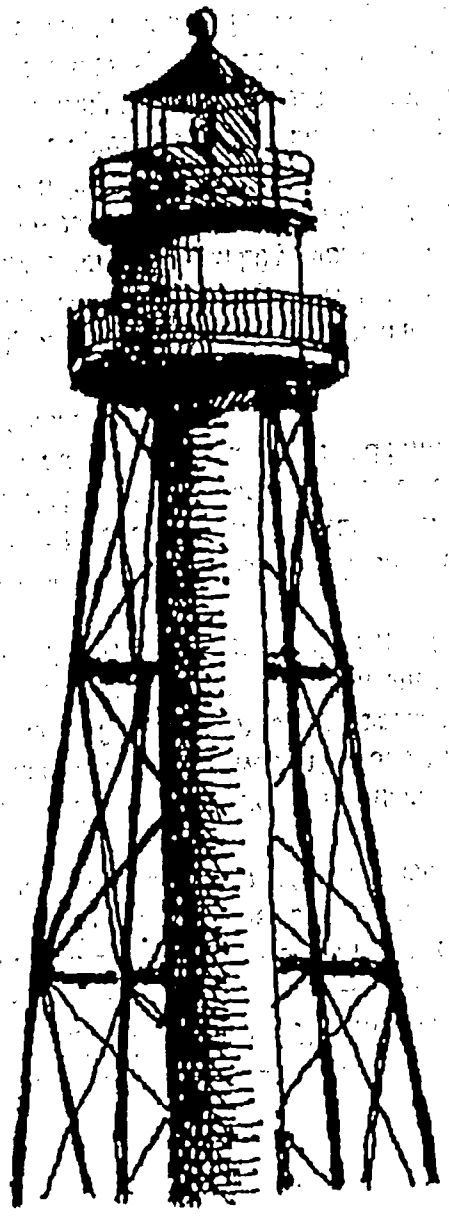
Rogers Street is an important community asset and the City should continue to support it. In order to come close to reaching its potential, Rogers Street must have considerably more off-street parking.

The City should continue its meetings with Manitowoc and the County on economic development issues. In addition to this, the City should encourage area expansion for economic development be assisted at a County level. Economic development at the County level can be stronger than either one of the two major cities can do on their own. It would also provide for economic development efforts to be funded on the County level where the costs are more related to the benefits. This effort should coordinate industrial development, business development, and tourism. Tourism being done on a bi-city level should be stepped-up to be done on a County level.

The City should work with the Chamber of Commerce in a concerted effort to strengthen the economic base. This should be part of the effort to coordinate economic development at the County level.

ECONOMIC

BACKGROUND SUMMARY



POLICIES & OBJECTIVES

- By encouraging the linkage and coordination of the various federal, state, local and private funding sources for economic development projects;
- By encouraging the revitalization of existing commercial, and industrial areas and the diversification of the economic base;
- By encouraging the preservation of existing manufacturing firms and promoting the addition of new industries, especially within distressed areas;
- By encouraging the maintenance and expansion of the tourism and recreation industry; and
- By encouraging the maintenance and improvement of the region's transportation network and telecommunications system.

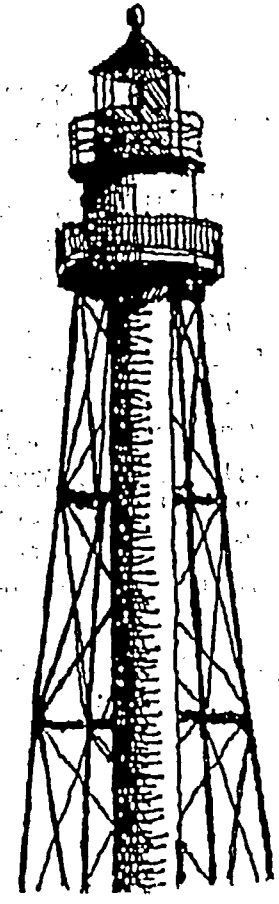
Industrial Objectives:

- Continue the City's partnership with local industry to maintain and expand the employment base;
- Work on both an area-wide basis and within the City to market industrial park land;
- Develop a new industrial park on STH 310, which will require the extension of utilities and the annexation of the land; and
- Annex Woodland Dunes to eliminate town islands.

RECOMMENDATIONS

The County can work at developing a newsletter for information and promotion purposes and a data base on vacant industrial land and buildings. This will help insure the strength of the economic base of the area.

The City should support the relicensing of the nuclear power plants located north of Two Rivers as long as they represent a good employment base for Two Rivers.



POPULATION

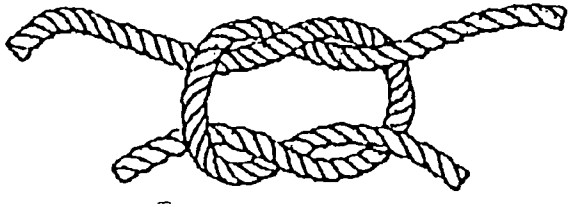
BACKGROUND SUMMARY

Latest population in Two Rivers is 13,208 (1986 estimate). This is a decrease of 1.1% from the 1980 population and a decrease of 2.54% since 1970.

The population is also aging. The median age increased by two years between 1970 and 1980, from 28.8 years to 30.8 years. Another indication of the aging was the decreasing school enrollments. Total enrollments have decreased 14.5% since 1980.

A major influence on the decrease in population appears to be out-migration. As young adults are the most likely to migrate, a decrease in those age groups would create a higher median age and fewer school age children.

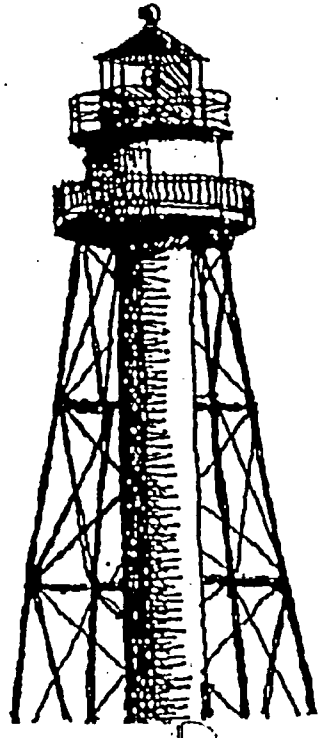
The City of Two Rivers has not grown in the last decade and a half and is projected by the State to lose population in the next 20 years. The two main factors are out-migration and lower fertility rates, out-migration being the largest factor. The problem is the out-migration group consists of the age group who would be having children. The loss of employment and the failure to replace those lost employment opportunities are the cause of the out-migration.



POLICIES & OBJECTIVES

To stop the current decrease in population and create a growth in population:

- By expanding employment opportunities within the City;
- By encouraging local schools to assist students in developing or assessing their skills as they relate to the Two Rivers job market; and
- By implementing the economic recommendations.

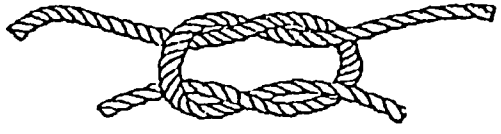


RECOMMENDATIONS

Although many factors determine population growth or decline, there are many actions by the City Council which could directly affect population increase. The City Council needs to implement the many economic recommendations that it has under its control. The City Council has the most influence over whether the State's projections of population loss will in fact become true. Efforts by the City Council can be largely responsible for turning the population decline around. The City needs to provide job opportunities, and then the population will grow.

The City must realize that it does have a sizable elderly population to care for, and therefore it should continue to:

- operate a good Senior Citizen Center;
- provide for opportunites for elderly housing by monitoring the waiting lists at the existing units;
- encourage that the units be provided by the private or non-profit providers;
- provide in the zoning ordinances for elderly apartments located within single family homes;
- insure the continued operation of the Hamilton Home with a possible expansion; and
- insure that State programs are available to help assist the elderly to remain in their own homes as long as possible.



POPULATION

BACKGROUND SUMMARY

POLICIES & OBJECTIVES

RECOMMENDATIONS

Projections based on growth in the 1960's.

1985 - 13,485
1990 - 14,119
1995 - 14,783
2000 - 15,478
2005 - 16,205
2010 - 16,967

The City should promote growth through annexation.

LAND USE

BACKGROUND SUMMARY

Two Rivers adopted a Land Use Plan in 1983.

The Consultant conducted a Land Use Survey in the Spring of 1987 that covered the City and its 3 mile extra-territorial area. The new survey updated the existing survey completed in 1982. Both surveys were done on a parcel-by-parcel basis.

Through the use of effective zoning, the City has eliminated a majority of the non-conforming or blighting land uses in the older sections of the community. The practice has protected the newer developments from being subjected to blighting influences.

Land use change has been slow in the City and surrounding areas. Little urban development has occurred outside the City limits.

The City of Two Rivers can be divided into four basic residential areas. The configuration of the East and West Twin Rivers divides the City into three sections, with what are called the "east" and "south" sides being about of equal size, and the "central" area being about twice the size of the other two areas combined. These neighborhoods are described as follows:

South Side:

The south side of Two Rivers is on the west side of the West Twin River. This neighborhood has public and parochial schools, two parks and a few neighborhood businesses, as well as being the location of

POLICIES & OBJECTIVES

To create a balanced pattern of related urban land uses:

- By ensuring that adjacent land uses are compatible with regard to such factors as smoke, noise, odor, traffic, activity and appearance.

To provide adequate amounts of land in a variety of sites suitable for each type of urban use, and allowing for anticipated change and growth based on economic forecasts:

- By utilizing land that is adequately drained and reasonably level for urban purposes;
- By providing adequate water supply and sanitary waste disposal to developed areas;
- By building on soils which have adequate bearing capacity and are suitable for excavation and site preparation;
- By restricting development in flood hazard areas; and
- By changing land use requirements as the economic base changes.

To utilize vacant land within Two Rivers to its maximum potential:

- By developing land adjacent to existing capital assets such as the developed infrastructure; and
- By reserving potentially scenic areas such as land along the waterways as public recreation areas.

RECOMMENDATIONS

Major Needs:

There are two major needs for additional land uses in the City and its immediate area. These are for industrial land and residential land. The industrial land is probably going to need to precede the residential land, as the industrial land development should create the need for the residential land development.

The City will need to annex additional land for the developments listed above, plus for growth on all fringes of the City. For growth to the west along STH 310, the City should annex Woodland Dunes and as much adjacent land as possible. For expansion along Memorial Drive, the City should annex Woodland Shores as far as the Manitowoc city limits.

Residential:

The City can also expect residential development within the existing limits to change. These changes will not be significant, but will be measurable. These changes could include:

- seasonal housing, particularly along the lake and the rivers. Housing costs are reasonable in Two Rivers relative to other locations along the eastern shore, and the City is becoming more and more desirable as a location for seasonal housing;
- bed and breakfast housing units; and
- accessory apartments within single family homes.

BACKGROUND SUMMARY

several Two Rivers employers, both large and small. Also located in this area are the sewage treatment plant, the water treatment plant, municipal garage, the power and light offices and a major electric substation. The per capita income is the lowest in Two Rivers. The housing conditions were also the poorest, but the City has invested many hundreds-of-thousands of dollars in housing rehabilitation in the past five years, which has made a considerable improvement to the area. The major arterials (STH 42, STH 310, and Columbus Street) serve the neighborhood without passing directly through it. The south side is susceptible to the "Lake Effect" of cool weather and fog.

East Side:

The east side is larger than the south side and is also different in many ways. It has a public school that is not centrally located, and much more retail business, including a major grocery store. The east side contains the major institutions of the nursing home, hospital, and the Coast Guard Station. This area is also subject to the "Lake Effect". The east side has three major parks, including Neshotah Park which is considered to be the finest on Wisconsin's east shore. STH 42 (Washington and 22nd Street to Lincoln Avenue) generally goes through the middle of the area.

There is an identified need for housing rehabilitation for approximately 100 homes, most of which are south of 22nd Street.

POLICIES & OBJECTIVES

To measure and monitor land use changes so that a distinct improvement can be seen:

- By assisting in the development plans for the reuse of the Mirro Properties;
- By working with industries as opportunities arise to modernize or convert vacant or energy inefficient facilities to other uses for efficient operation;
- By encouraging implementation of the adopted Land Use Plan for Two Rivers;
- By encouraging annexation to provide opportunities for various types of development; and
- By continuing to maintain a strong zoning ordinance, monitoring changes and enforcing the ordinance as in the past.

The intent of this report shall be to define residential development as follows:

-Single-family - in new areas it is intended to be single-family, owner occupied homes. In older areas of the City, this could include two family homes with one unit owner occupied. These are year-round residents of Two Rivers.

-Multi-family - in new areas, it is intended to be two or more families living in one structure, and most or all the families are renters. These are year-round residents of Two Rivers.

-Seasonal homes - in both new or established areas of the City, it is intended that these will be single units owned by individual families who do not occpy the units year-round. The units may be single-family

RECOMMENDATIONS

The residential expansion to the north and northwest will require that the City develop some prime agricultural land. From both a locational and utility extension standpoint, the City has no other choice.

The City needs to extend the utilities to the vacant land on the northwest or the vacant land to the north, including crossing the East Twin River if necessary.

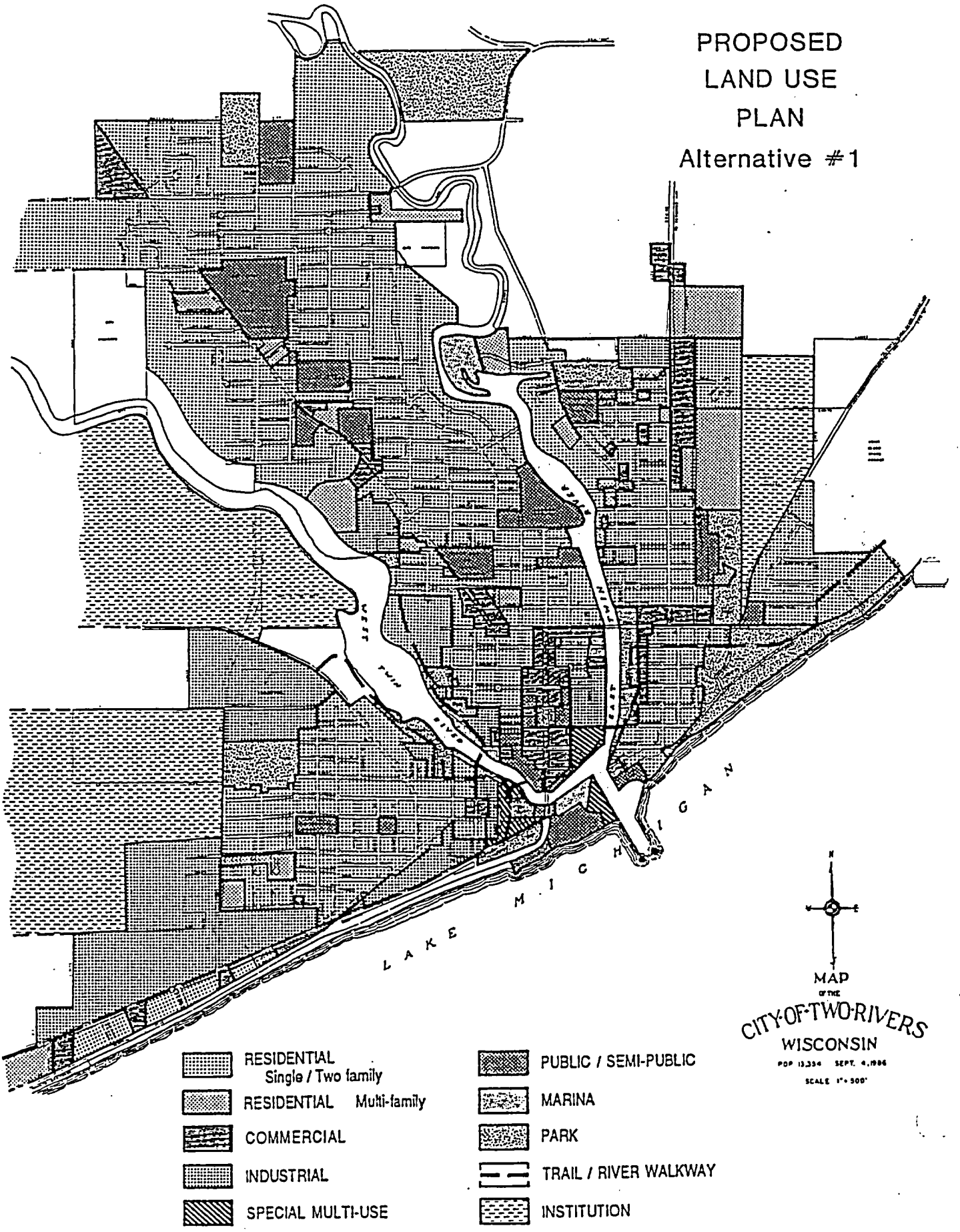
The City should provide for residential development in the area of the golf course, which should be expanded to 18 holes.

Multi-family development should be provided along Memorial Drive, in the residental expansion area to the northeast of the City, and the residential expansion area to the east of the East Twin River as currently planned.

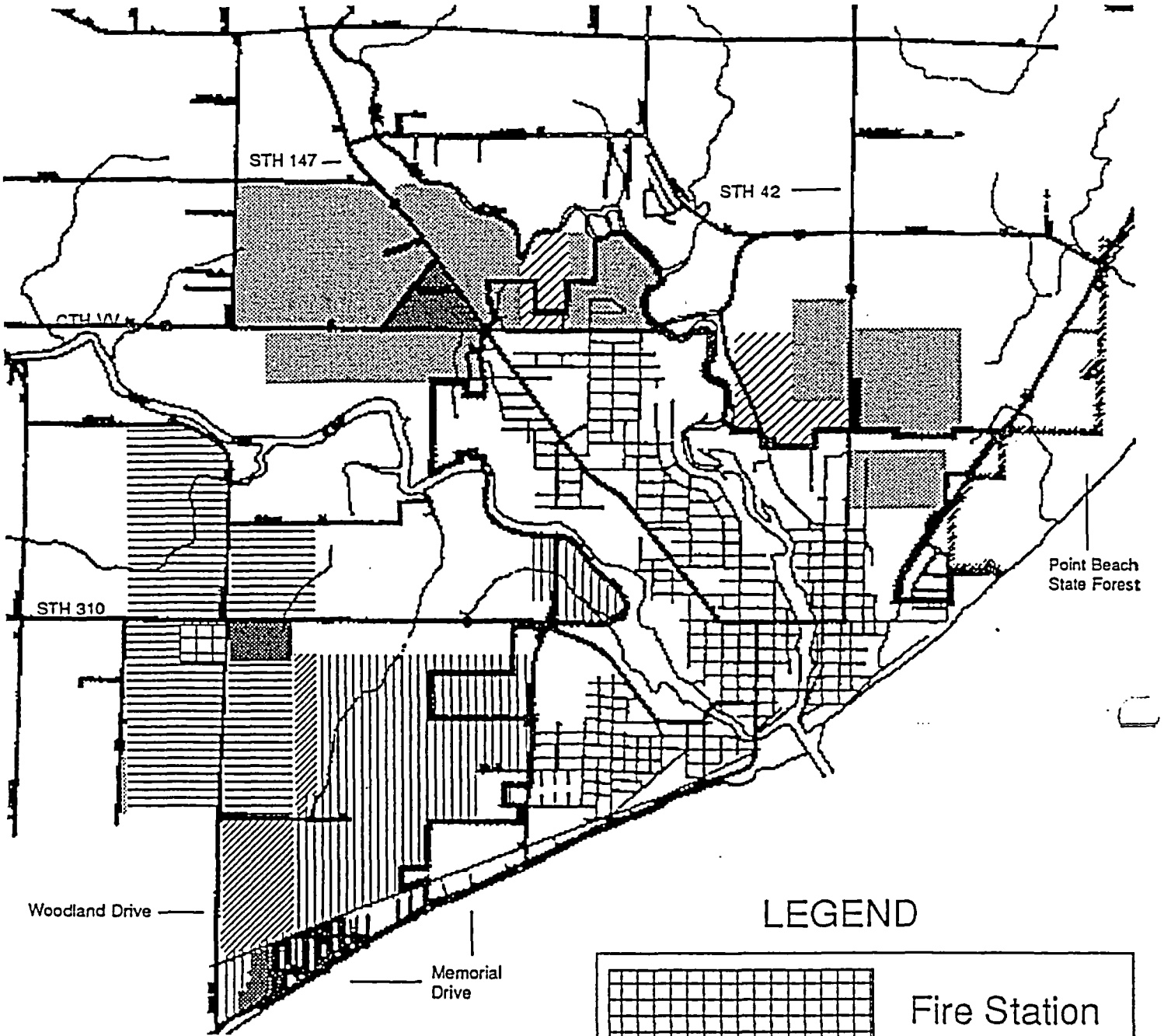
<u>Recommendations by Neighborhood</u>

South Side:

The area has adequate parks, arterials, and good traffic controls. Only a few houses remain in need of rehabilitation. The City should continue its recycling of housing rehabilitation funds in this area to maintain the quality of housing that has been achieved. The non-residential development should be continued and expanded where there is vacant land currently available.


PROPOSED
LAND USE
PLAN
Alternative #1
LAKE MICHIGAN
MAP
OF THE
CITY OF TWO RIVERS
WISCONSIN
RESIDENTIAL
Single / Two family
RESIDENTIAL Multi-family
COMMERCIAL
INDUSTRIAL
SPECIAL MULTI-USE
PUBLIC / SEMI-PUBLIC
MARINA
PARK
TRAIL / RIVER WALKWAY
INSTITUTION

PROPOSED
LAND USE
PLAN
Alternative #2
LAKE MICHIGAN
MAP
OF THE
CITY OF TWO RIVERS
WISCONSIN
RESIDENTIAL Single/two family
RESIDENTIAL Multi-family
COMMERCIAL
INDUSTRIAL
SPECIAL MULTI-USE
PUBLIC/SEMI-PUBLIC
MARINE
PARK
TRAIL
INSTITUTION



LEGEND

- Fire Station
- Park
- Commercial
- Institutional
- Residential
- Industrial

Extra-Territorial
Land Use Plan
Alternative 2

Base Map Prepared By:
Manitowoc County Planning
and Park Commision

BACKGROUND SUMMARY

This is also the area where most of the lower per capita income people live and the greater majority of the elderly. The area north of 22nd Street consists of both old and new homes. This is one of two areas in the City where new homes are being constructed. The east side contains the only National Historic District (French Side) in the City, contains the Rogers Street Fishing Village, and is the base of operation for the largest commercial fishing fleet on the Great Lakes.

Central Area:

The central area is located between the East and West Twin Rivers in an area generally south of 26th Street. This is the original core of Two Rivers and contains several major industries, the government center, the downtown area, and the second major grocery store-shopping area. The area contains two parochial grade schools and one of two major cemeteries. The major arterials are Washington Street, 22nd Street, Forest Avenue and Monroe Street which bisect the area. This is the smallest of the residential areas, but it is similar to the south portion of the east side in that it is the area of lower income and older homes and homes in need of housing rehabilitation. The area contains two small parks, a community center, and central park. It is also the location of the City's only fire station, the library, City Hall, and police department. This area is also subject to the "Lake Effect", but not as severely as portions of the east and south sides.

POLICIES & OBJECTIVES

or a multi-unit structure. Any renting of the unit would be on a weekly or monthly basis to people who do not live in Two Rivers.

RECOMMENDATIONS

East Side:

The east side has adequate parks and arterials, although there is a need to improve Neshotah Park. There is also a need for a specific program (in addition to the recycled funds) for rehabilitation of homes. The City needs to continue to apply to the WDF Program to obtain those funds. The commercial area on 22nd Street should be permitted to expand and the Rogers Street Fishing Village will need to expand through advertisement.

Central Area:

The central area could utilize additional park land and needs additional housing rehabilitation. The central area has two intersections that need improvements through the addition of traffic controls.

North Side:

The north side needs a new park, either City or County operated, to serve its existing and proposed growth. The north side needs very little housing rehabilitation and traffic arterials are good. However, the north side will need at least one traffic control device at Tannery Road and Mishicot Road or at a later date at Mishicot Road and CTH VV. As growth occurs to the northwest, there will be a need for an additional traffic control device at the intersection.

BACKGROUND SUMMARY

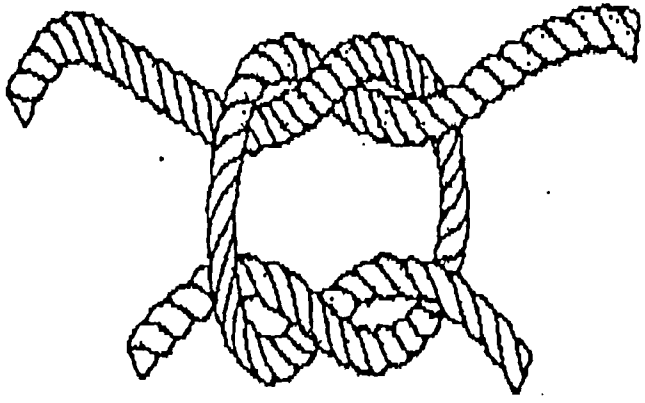
North Side:

The north side is the largest of the major residential areas. Although the City owns some land on the north side, there is no city park. There is a public elementary school and a middle school located in the middle of the area, and the area also contains the high school. The major arterials are Mishicot Road, Forest Avenue and CTH VV which generally serve the fringe of the area. Inbound traffic on Mishicot Road does not stop in the area, so that at high traffic times it can be difficult to enter that street, particularly from the east side of the neighborhood. The north side has the highest per capita income and the best housing conditions. It is least affected by the "Lake Effect". It contains the second of the City's two cemeteries.

Woodland Shores:

The City's newest neighborhood, which was recently annexed, has developed in a very unique way. Most of it developed starting in the 1920's on very small lots with a minimal amount of control or supervision from the town government. The addition of a water and sewer system about 10 years ago improved the area greatly. However, the area still has many very low income residents with houses in need of rehabilitation. The neighborhood contains no parks or schools, although there is a day-care center. Memorial Drive passes between the neighborhood and Lake Michigan. The area is subject to the "Lake Effect". The area has no retail and minimal employment in services and light manufacturi-

POLICIES & OBJECTIVES



RECOMMENDATIONS

Woodland Shores:

Woodland Shores, although a small neighborhood, needs a neighborhood park. There is also a need to rehabilitate many homes, with the possibility of demolition being required for a few homes. Traffic flow in the area is good, and no traffic control devices are anticipated. The City electrical utility should buy the basic power grid and become the electricity supplier for the area. The other services needed in the Woodland Shores area can be provided by existing City services including fire protection.

Commercial:

Commercial growth should be encouraged in Two Rivers. In the downtown, the growth should occur by redevelopment within the downtown and on its immediate fringe. The neighborhood commercial areas at Lincoln Avenue and 22nd Street, and at Forest Avenue and 22nd Street, should be strengthened as the market dictates. The City should permit commercial development of a neighborhood nature at the corner of Mishicot Road and CTH VV only when residential growth occurs in the area. Commercial development should be permitted at certain areas along Memorial Drive as indicated in previous City and Town plans. Lincoln Avenue strip commercial should continue to occur in accordance with the long standing plan adopted for the area.

BACKGROUND SUMMARY

Other Areas:

Most of the residential development is occurring in the northwest section of the City away from the "Lake Effect". A major problem is that the City is running out of available land.

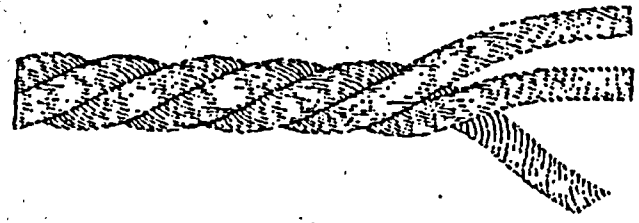
Commercial-retail business in Two Rivers is currently not a strong part of the land use or economic base.

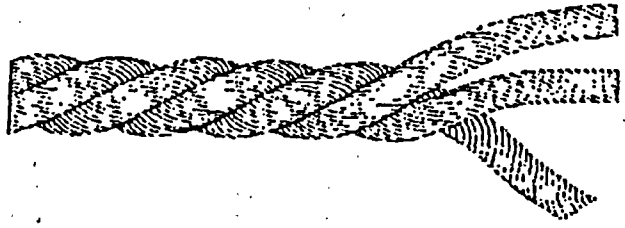
The City developed a new industrial park in 1980, which is rapidly filling up. The City has a lack of available industrial land.

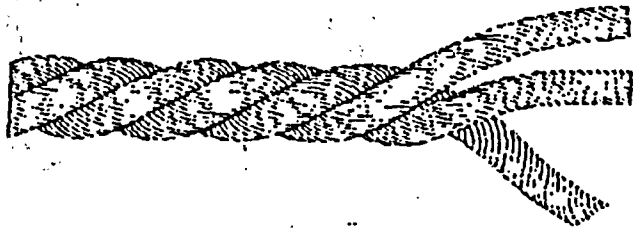
Environmental constraints within Two Rivers are not severe. However, the City should not develop any of its wetlands or flooding could become a more severe problem.

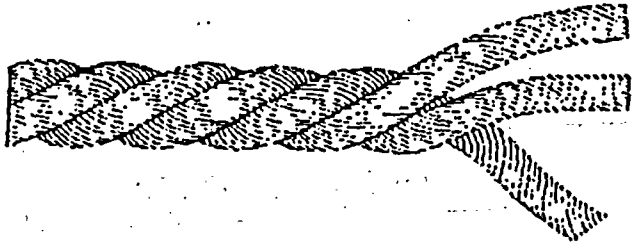
Much of the land use development will occur on soils not well suited to development. Therefore, development costs will be higher than might otherwise occur. Constraining growth to the west of the City is the Woodland Dunes Preservation Area which has soils limiting development and must be grown "around".

POLICIES & OBJECTIVES









RECOMMENDATIONS

Industrial:

The City needs to buy industrial land in the STH 310 and Woodland Drive area, annex it to the City, and extend the utilities to serve it. As a temporary backup to growth out STH 310, the City should investigate the feasibility of redeveloping the petroleum farm on the West Twin River.

The City should have 100 acres of industrial land in place and ready for use by the end of 1988. The City should work at diversifying the types of industries that would go into this area.

Downtown:

"Two Rivers Tomorrow" should construct the improvements as they have proposed. To completely attain the objectives of redeveloping the downtown, the City may need to create a Community Development Authority. As the City regains its economic base strength, it should help in the redevelopment of the downtown as a significant retail center. The City should require the development of a Business Improvement District (BID) for assessing downtown landowners for downtown improvements.

Institutional:

The City should utilize College Hill area for institutional lands or for commercial/recreational uses.

BACKGROUND SUMMARY

POLICIES & OBJECTIVES

RECOMMENDATIONS

Waterfront Commercial:

The current waterfront/commercial zoning designation should be divided into Marina Commercial and Waterfront Commercial. The Marina Commercial would be used for areas that are strictly operating as full fledged boating service facilities. The Waterfront Commercial would be used in areas that are more of a mixed land use and where the waterfront and existing marina facilities would be more restricted in use. No waterfront or marina commercial expansion should be permited north of 22nd Street on the East Twin River. Waterfront Commercial should not be permitted to destroy historically significant buildings.

Land Development:

Within the existing built-up area of Two Rivers there will be several redevelopment areas that will develop with new land use opportunities in the forseeable future. These appear to be:

- an area between 12th Street and Lakeshore Park;
- the balance of the undeveloped land at the Mirro Plant 1 site;
- vacant land at the Mirro Plant 4 site;
- petroleum storage area west of School Street;
- a portion of the Hamilton Plant south of 17th Street;
- Fox River Valley Railroad right-of-way;
- the hospital site; and
- vacant land adjacent to Seagull Marina.

BACKGROUND SUMMARY

POLICIES & OBJECTIVES

RECOMMENDATIONS

<u>These Areas Should Redevelop Into:</u>

Land west of Lakeshore Park - multi-family residential, light industry, retail/commercial, park entrance;
Mirro Plant 1 - retail, commercial;
Mirro Plant 4 - industry or waterfront commercial;
Petroleum Farm - industry or marina;
Hamilton site - seasonal or hotel/motel, residential or waterfront commercial;
Fox River Valley Railroad - pedestrian way and bike path; and
Hospital - nursing home or offices.

General Recommendations

The City must be aware that water damage from high Lake Michigan water levels can be caused by both wave action on the Lake Michigan shoreline and by the water backup on the Twin Rivers. This is a major potential problem that the City will hopefully not need to address. However, any future development near the floodplain should be done in such a way that if the water levels exceed the 100 year floodplain, a minimum of damage will be done. Also, any public improvements done within the floodplain should be done in a way that would be damage resistant from high water.

As people are Two Rivers' most important resource, the City should do a study to determine why peoples' attitudes have changed relative to their perception of their neighborhood as an excellent place to live.

ENVIRONMENTAL CONSTRAINTS

BACKGROUND SUMMARY

Two Rivers has six main environmental constraints: flooding, wetlands, poor soils, climate, preservation areas and nuclear power plants.

The flooding comes from the East and West Twin Rivers and Lake Michigan. Recent high lake levels increased the damages from flooding. Had one or both rivers flooded at this time there could have been significant problems.

The majority of the wetland areas are located in two preservation areas (Woodland Dunes and Point Beach State Forest) and along the rivers. Due to FEMA regulations and the existence of the preservation areas, the wetlands are protected.

Soils in the Two Rivers area are generally poorly drained and of low strength. Development in these areas must be planned carefully.

Both the climate and the nuclear power plants have only a small impact on growth within the City.

POLICIES & OBJECTIVES

To promote utilization of marginal land within the City to its maximum potential:

- By discouraging development within or near sensitive wetlands or within the floodplain; and
- By discouraging development in areas of extremely poor or inappropriate soils.

To increase awareness of the excellent climate and environment in the area:

- By promoting the positive aspects of the area's climate and environment.

RECOMMENDATIONS

Floodplain: The City should continue enforcing the Floodplain Ordinance and discourage any filling in or near the floodplain.

The City should establish a policy to discourage development at a level just above the floodplain due to recent high water levels.

Wetlands: The City should protect and preserve the wetlands, particularly those along the Twin Rivers and the others identified on the Wetlands Map as needing preservation.

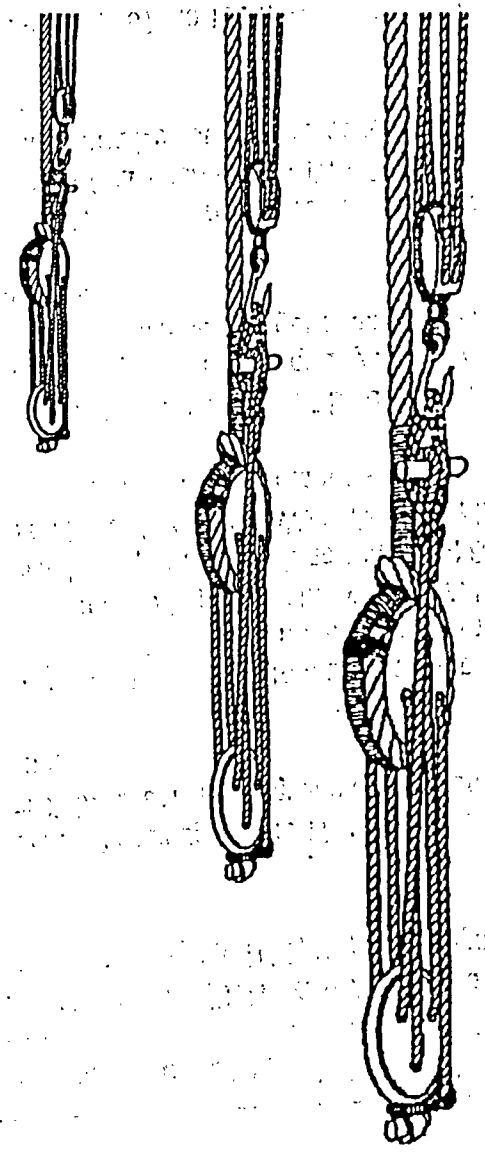
Soils: The City should guide development to the better soils as much as possible. It may be necessary to construct utilities and roads through very poor soils to reach better soils. The City should consider the quality of soils for each proposed development and review any mitigating measures that will be used to overcome any soil problem.

Climate: The City should direct most new single-family development away from the "Lake Effect". Second home and multi-family development oriented to benefit from the desirability of Lake Michigan should be permitted.

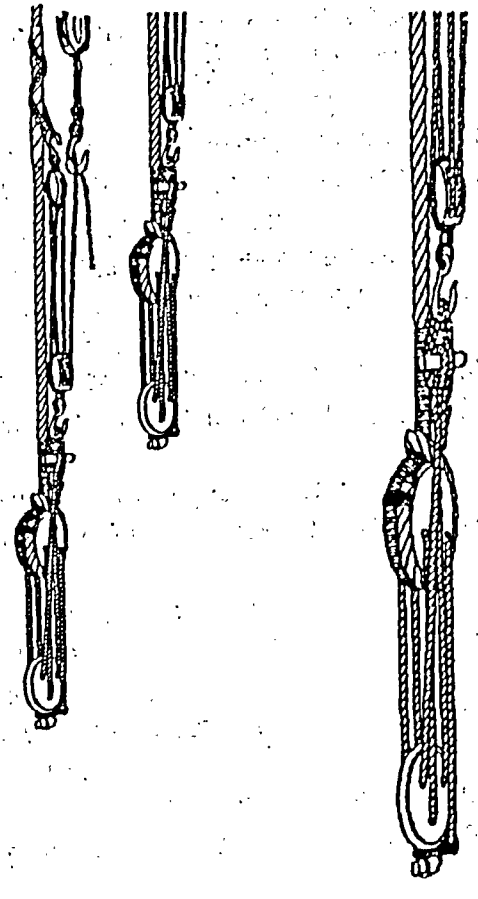
Preservation Areas: The City's French Side Historic District should be preserved. All existing historically significant structures should be preserved and any non-compatible uses prohibited.

ENVIRONMENTAL CONSTRAINTS

BACKGROUND SUMMARY

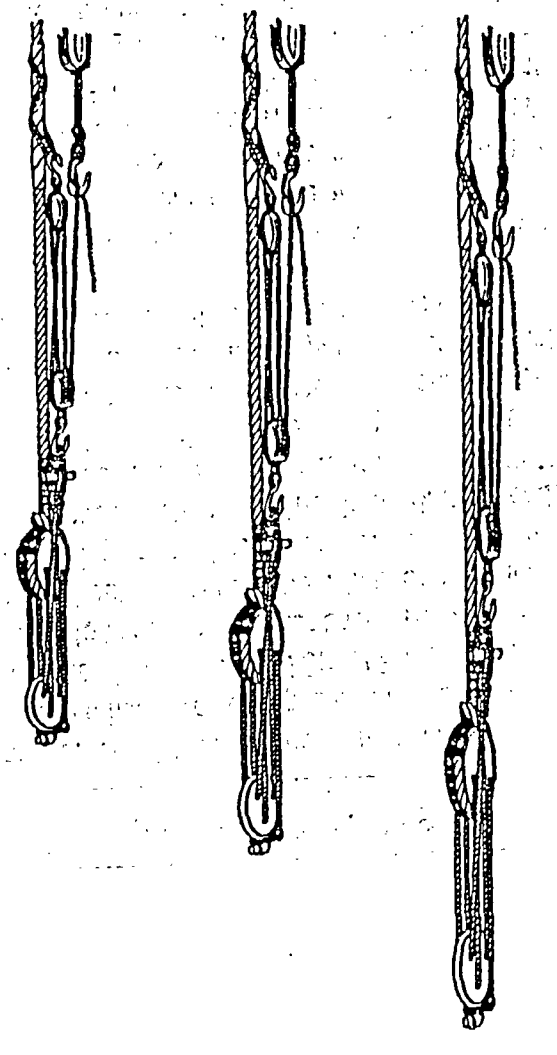


POLICIES & OBJECTIVES



RECOMMENDATIONS

Nuclear Power Plants: The City should review evacuation plans for adequacy and inform the public of procedures and conditions that can be expected in an emergency.



TRAFFIC

BACKGROUND SUMMARY

Three state highways (STH 42, 147, 310) and two county trunk highways (CTH 0, VV) go through the City.

The City has 3 lift bridges. The 17th Street Bridge on the East Twin River is the only one opening on a regular basis.

In the Two Rivers Planning Area, there are 4 bridges crossing the East Twin River, none more than 1.6 miles apart, and 3 bridges over the West Twin River with 4.25 miles separating the Madison Street Bridge from the bridge at Shoto. The West Twin River bisects the Two Rivers growth corridor to the west.

Roadways and traffic signals must be updated to maintain the City's current high quality transportation system and to solve problems generated by changing traffic patterns.

The Chicago-Northwestern Railroad is no longer a viable means of transportation in Two Rivers. Another operator or alternative uses should be found for the right-of-way.

Two Rivers, from 1972 to 1984, experienced an increase in traffic on main arterials, but a loss in traffic on local streets. This indicates that there are greater numbers of people traveling through Two Rivers now than before.

A survey by the Consultant identified the following as

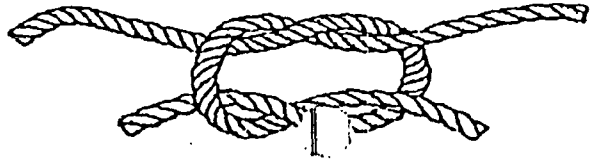
POLICIES & OBJECTIVES

To improve the efficiency of the major street network in the Planning Area:

- By reconstructing and/or adding traffic control aids to major intersections which have inadequate alignments;
- By separating local and through traffic wherever feasible; and
- By improving the major street system to carry projected traffic volumes.

To improve the transportation patterns and course of doing business in Two Rivers:

- By supporting the development of STH 29 or some east/west corridor connecting with Interstate Highway 43;
- By encouraging the Chamber of Commerce to continue to address mutual problems through its transportation committee;
- By insuring continuation of the railroad line between Manitowoc and downtown Two Rivers through maintenance by Chicago and Northwestern Railroad and usage by local companies;
- By pursuing removal of the stop signs on STH 310 and CTH B; and
- By promoting improvements to STH 310.

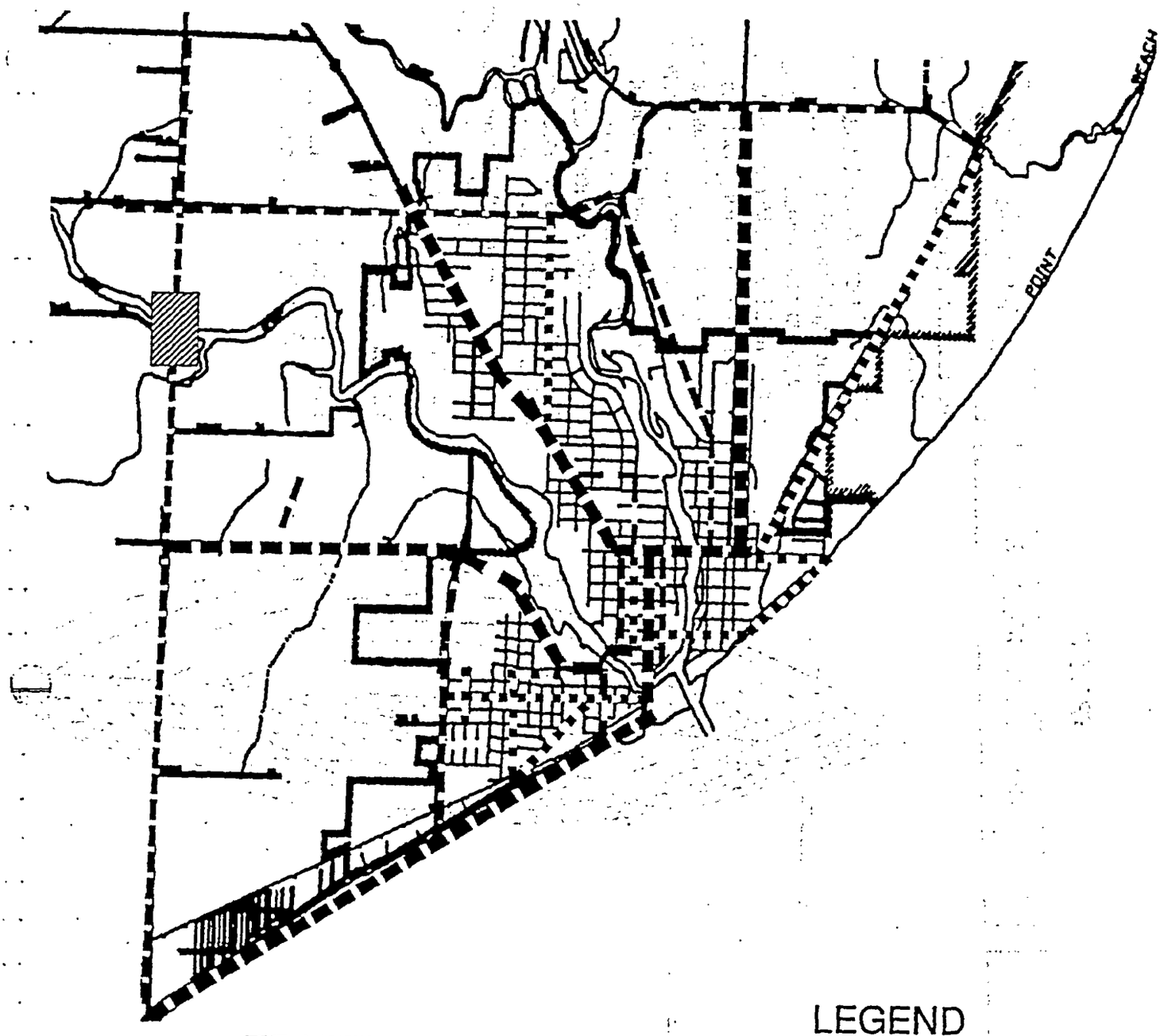


RECOMMENDATIONS

Bridges: The City should not permit zoning changes or make other policy changes that would require either the Madison or 22nd Street Bridges to be opened to boats on a regular basis. The 22nd Street Bridge should continue to be a lift bridge, but the 17th Street Bridge should be the only one opening on a regular basis. When the 22nd Street Bridge needs to be replaced, it should be replaced with a fixed bridge. The 17th Street Bridge will probably need to be replaced in the planning period and should be replaced with a fixed span bridge high enough to not restrict movement of commercial fishing boats.

Streets and Roads: Only one new major street will be required in the planning period and that is an extension of Woodland Drive across the West Twin River connecting with CTH VV. That alignment should be put on the Federal Aided Secondary System of the State Plan or as the City grows to the west, the alignment should be placed on the City's urban system. As development occurs between Manitowoc, Two Rivers and the northwest quadrant of the City, the road will become more and more important. The City should abandon its efforts to extend Columbus Street across the West Twin River to Parkway Boulevard. The Town Road between CTH 0 and CTH VV should be a minor arterial.

The City should pursue the policy of maintaining the railroad and, if it is abandoned, they should work to have it become a recreation trail maintained by the County and connected to the River Walk.



TRAFFIC PLAN

LEGEND

PRIMARY ARTERIAL

SECONDARY ARTERIAL

COLLECTOR

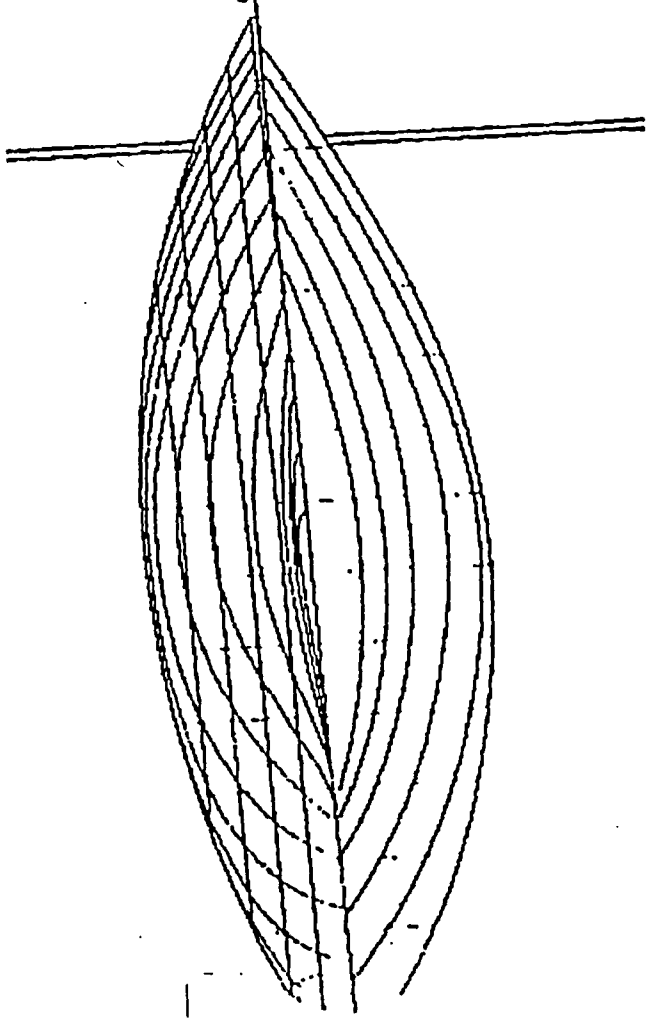
BRIDGE

Base Map Prepared By:
Manitowoc County Planning
and Park Commision

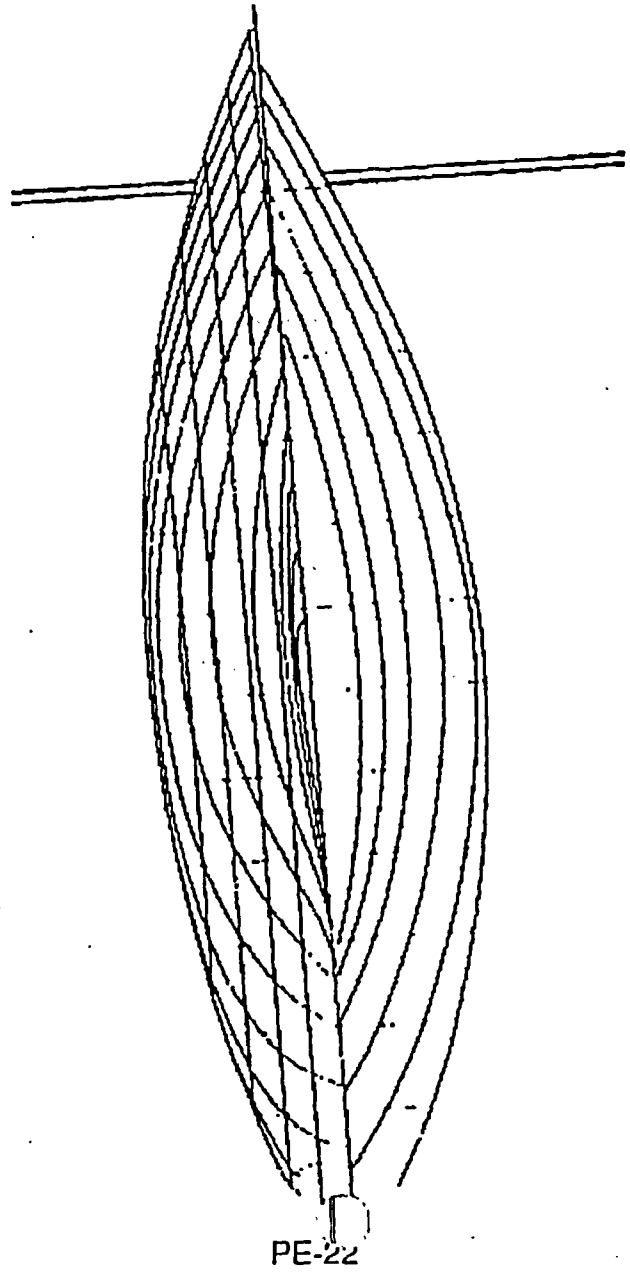
BACKGROUND SUMMARY

problem corners:

- 22nd St. & Forest Monroe St;
- Madison St. Bridge at Monroe St.;
- Columbus St. & Memorial Drive;
- Tannery Road & Mishicot Road; and
- 12th St. & Washington St.



POLICIES & OBJECTIVES



RECOMMENDATIONS

Intersections: The City should take the following actions:

-22nd St., Forest & Monroe Streets - Needs traffic control lights installed along with well marked (on the pavement & overhead signs) traffic lanes;
-Madison St. Bridge & Monroe Street - Improve lane signage and lane markings for traffic coming off the bridge. Enforce appropriate traffic lane use;
-Columbus St. & Memorial Drive - Monitor its use, no corrective action needed at this time;
-Tannery & Mishicot Roads - Will need traffic control lights as the traffic volumes increase and the waiting times on Tannery Road increase; and
-12th & Washington St. - Will probably become even more congested in the near future. Initial corrective action should be lane markings on the pavement and the addition of overhead signs.

Traffic Signals and Street Lights:

- Eliminate all overhead wiring not needed for use along STH 310, Mishicot Road and STH 42.

CITY PARKS AND FACILITIES

BACKGROUND SUMMARY

The community-wide survey indicated the need for more boat launch parking and that a user fee should be charged to the people launching boats.

The community-wide survey also indicated that people are very pleased with the recreation programs in the City, with the Senior Center scoring the highest marks. The people are still dissatisfied with the boat launch restrooms and fish cleaning facilities which should be partially resolved with the recent completion of Vets Park Boat Launch facility.

The City has an excellent park and recreation program. It is one of the City's saleable assets.

City Parks & Playgrounds:

Neshotah Park	50 Acres
Multi-facility community park	
Zander Park	22.55 Acres
Picnic & playground facilities; nature trails	
Walsh Field	17.5 Acres
Semi-pro baseball field	
Washington High School	14.3 Acres
Football; track & field facilities	
Washington Park	2.3 Acres
Baseball field; playground facilities	
Vets Park	4.8 Acres
Baseball field; playground facilities	
MaGee School Area	6.15 Acres
Baseball fields; playground facilities	

POLICIES & OBJECTIVES

To maintain the policy of providing a wide range of local park and recreation facilities to serve all age groups and all parts of Two Rivers:

- By maintaining and developing a variety of parks and recreation facilities throughout Two Rivers ranging from playgrounds and neighborhood parks to community-wide recreation facilities.

To take advantage of the scenic and recreational potential of the natural water courses in the Planning Area:

- By providing public access to the lake and waterways;
- By expanding river walkways; and
- By designating floodplains along water courses to be reserved as public open spaces.

To promote the further development of Woodland Dunes and Rogers Street Fishing Village area:

- By providing a larger and broader range of facilities;
- By providing adequate off-street parking facilities; and
- By working with the commercial fishermen to bring commercial fishing activities to the museum visitors.

To strengthen and expand commercial and sport

RECOMMENDATIONS

Parks and Recreation:

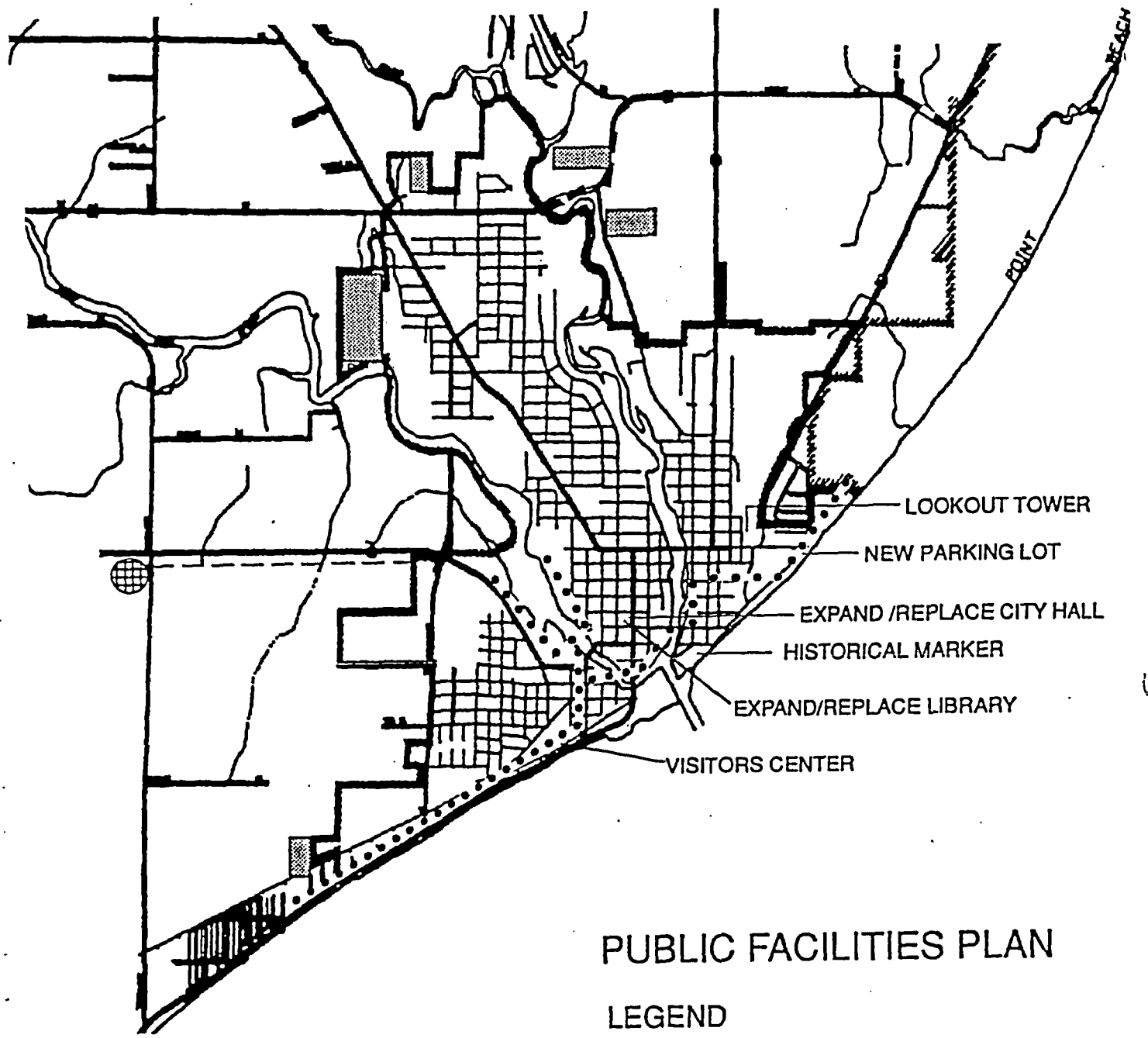
Neshotah Park - The City needs to construct more parking and the existing facilities need to be improved and updated. There is a need to remove brush in some areas and trim trees in the trail areas on the dunes. The City should also be consistent in its parking policy by not allowing parking on the grass sometimes and not at other times. The City should also control thru traffic on Zlatnick Drive on summer weekends. Neshotah Park should be improved, particularly the shelters and facilities for the elderly, civic, and fraternal organizations.

Boat Launch Site - The City should charge a user fee at its two boat launch sites. The system could be unattended and the police could enforce violations as parking violations.

Riverside Park - Needs a shelter and new climbing equipment to replace the boats.

Lakeshore Park - Needs a new entrance on the back side and should be the location of the Visitor's Center or should contain a significant artifact as a symbol of Two Rivers.

New northern park - The City needs to have a new park constructed in the northern section of the City, either in the old burrow pit, on the east side of the East Twin River, or on City-owned land on the West Twin River. The City should promote this to be a



PUBLIC FACILITIES PLAN

LEGEND

RIVER WALKWAY/TRAIL

POTENTIAL PARK

UTILITY EXTENSIONS

POTENTIAL FIRE STATION

Base Map Prepared By:
Manitowoc County Planning
and Park Commision

BACKGROUND SUMMARY

Riverside Park Baseball field; playground facilities; waterfront path	9 Acres
Central Park Bandstand; benches; fountains	67 Acres
Harbor Park Benches; trailer hook-ups	4 Acres
Lakeshore Park Basketball court; playground facilities	8 Acres
Case Park Baseball field; playground facilities	6 Acres
Vietnam Park Baseball fields	22.67 Acres
L.B. Clarke Park Baseball & soccer field; playground facilities	14 Acres
Koenig Park Baseball fields; basketball; volleyball; tetherball facilities	2.8 Acres
River Walkway Wooden walkway along riverfront	800 Feet
North Pier Fishing area	1 Acre
South Pier Fishing area	10 Acres

Vet's Park Boat Launch was reconstructed in 1987 to provide a major municipal boat launch facility.

The City owns and operates its own municipal electricity, water and sewer utilities. All are currently

POLICIES & OBJECTIVES

fishing facilities and opportunities to meet the demand:

- By developing the City of Two Rivers into the strongest sport fishing center on the western shoreline of Lake Michigan for lake-boat fishing and lakeshore fishing;
- By continuing the City's role as the leader in commercial fishing;
- By providing a balanced mix of public and private services and facilities;
- By controlling the sport fishing activity so that it does not become a source of visual pollution or a social detriment to the City of Two Rivers; and
- By insuring that the entrails from fishermen's catches are collected, transported, and disposed of in a safe and sanitary manner.

To continue to devote resources to maintain the quality of life in the City:

- By encouraging cultural activities through clubs and private organizations;
- By encouraging the maintenance of facilities, necessary public and recreational programs, etc;
- By encouraging beautification of areas coming into the City, including Memorial Drive, STH 310 and Lincoln Avenue; and
- By promoting scenic walkways along river frontage in downtown area to compliment Eggers' Walkway.

To make the City of Two Rivers the strongest sport

RECOMMENDATIONS

County Park to be constructed and maintained by the County.

New central area park - The City should develop a new neighborhood park for the central area if and when the oil tank farm is abandoned so that a park may be placed on a portion of that site.

River Walkway - The River Walkway needs to be continued on both sides of the West Twin River terminating at Woodland Dunes on the one side and City-owned property on the west side. The Walkway needs to be continued from its current eastern terminus across the West Twin River, through the Two Rivers Isthmus and up the East Twin River connecting with Rogers Street and then to Neshotah Park and Point Beach State Forest.

French Side Historic District - The City should develop a walking tour brochure for the French Side Historic District utilizing the parking in Neshotah Park or at Harbor Street and using East Street as its beginning and ending point. A historical marker for the French Side Historic District should be obtained and placed in Harbor Park near the intersection of East Street and Harbor Street.

Sport Fishing - The market potential for sport fishing activity has apparently not been reached. The economics that have gone with this boom are definitely good for the City of Two Rivers. However, the City must be careful in the rush to meet the immediate

BACKGROUND SUMMARY

condition.

The City streets are in excellent condition and need only maintenance.

Garbage collection is provided by the City at no extra cost.

Police and fire service are both adequate. Both departments require only yearly updating and replacement.

The City's educational facilities are very good. They include facilities for children as well as adults.

The City has a hospital, elderly housing and an ambulance service. The City Hall contains all City departments except for sections of the City Utilities. The building is currently used to capacity and will require several major repairs in the near future.

POLICIES & OBJECTIVES

- By providing a balanced mix of public and private services and facilities;
- By controlling the sport fishing activity so that it does not become a source of visual pollution or a social detriment to the City of Two Rivers; and
- By maintaining a minimum participation in the fish entrails collection and disposal process while promoting maximum participation by private interests.

To improve the distribution and quality of parks and recreation areas in the Two Rivers area and continue to devote resources to develop new parks and maintain the existing parks and open space areas:

- By ensuring that the various levels of parks and recreation are provided in approximately equal measure for all parts of the City;
- By using parks and open space as buffers between incompatible land uses, as delineators or constraints on urban development or as necessary complementary uses for other land development;
- By providing recreation facilities and programs to meet the needs of all age groups and persons of various financial means including particularly the elderly and indigent population;
- By encouraging the use of school/park combinations; and
- By encouraging and strengthening recreation programs in order to assure maximum use and enjoyment of the facilities provided.

RECOMMENDATIONS

boom that no long term damage is done to the City. The Lake Michigan Fishery has been noted for its significant changes in the last three decades, and its future is unknown. The growth should be accommodated within reason and in a way that will not be damaging to the City in the long run should this fishery disappear. An example of this would be the swing in the commercial fishing area, where the recession twenty years ago and then the ultimate growth to this day has been accommodated without significantly damaging any other aspect of the City.

Picnic Hill - Construct a look-out tower and upgrade the area to a tourist park with more and better facilities.

Ice Arena - The City should have an indoor ice arena for hockey and figure skating. Funds could be raised through a foundation or association.

Community Facilities:

Hospital - If the hospital ever ceases to operate in its existing building, the City should plan for its reuse either as a nursing home, offices, elderly apartments or any combination of these.

Utilities - All utilities are in good financial condition to support growth of the City:

- The water plant is currently operating at 25 percent capacity;

BACKGROUND SUMMARY

POLICIES & OBJECTIVES

programs in order to assure maximum use and enjoyment of the facilities provided.

To maintain an adequate system of public buildings in Two Rivers:

- By maintaining public buildings in an attractive condition so as to enhance the appearance of the community and promote civic pride; and
- By providing and maintaining adequate, conveniently located off-street parking for all public uses, wherever necessary.

RECOMMENDATIONS

- The sewer plant is currently operating at 65 percent capacity; and
- The electric utility is currently operating at only a small percentage of its capacity.

Library - The City needs a new or expanded library.

City Hall - The City should decide the future of the City Hall. Economically, and in some cases functionally, it would be advantageous to replace the City Hall. A new facility is unlikely to be as visible and impressive as the existing facility. However, the City could utilize the money to be saved with a new facility, and construct a new architectually striking City Hall in a very visible location.

Woodland Dunes - Although this is a privately owned nature preserve, the City should promote its use and "tie into" their programs and connect their trail system into the City's River Walkway.

Fire Station - The City should construct a new fire station at Woodland Drive and STH 310 when needed to support industrial development.

Solid Waste - The City needs to become more involved in solid waste recycling so that lesser amounts of material go to the reclamation or storage site. The City should promote the concept that the County be responsible for all solid waste programs and it utilize recycling methods as much as possible.

HOUSING

BACKGROUND SUMMARY

The housing stock in Two Rivers is old. Approximately 57 percent of the houses were built prior to 1950. Houses of this age will require repairs and/or replacement now or in the near future.

The number of substandard units is decreasing. However, the decrease is due to the housing rehabilitation projects instituted by the City since 1980.

Neighborhoods: Rental units are the most difficult rehabilitation projects as landlords cannot always afford to repay a loan. For the south side, 24 percent of the residents in 1979 felt that their neighborhood was an excellent place to live, whereas in 1987, 17 percent felt that way. In the east side, 34 percent in 1979 felt that their neighborhood was an excellent place to live, whereas in 1987 only 27 percent felt that way. For the central area, 34 percent felt that their neighborhood was an excellent place to live, whereas in 1987, 29 percent felt that way. For the northside, 62 percent felt their neighborhood was an excellent place to live in 1979, and in 1987, 57 percent felt that way. It is possible that the declines could be either signs of the economic times, the fact that residents are more conscious of the weather now than previously or they have higher expectations of what should constitute an excellent neighborhood.

POLICIES & OBJECTIVES

To preserve and enhance the residential character in areas of single-family housing in the Planning Area :

- By preventing the incursion of incompatible, non-residential uses into single-family residential neighborhoods;
- By providing, where feasible, a full range of community facilities on a neighborhood-by-neighborhood basis;
- By discouraging non-local traffic from passing through residential neighborhoods; and
- By continuing the housing rehabilitation program by both recycling funds and obtaining new money.

To promote the construction of multi-family housing in the appropriate sections of the Planning Area:

- By designating major areas suitable for the development of townhouses, garden apartments, and similar medium density residential uses in selected areas suitable for that purpose; and
- By evaluating the possible development of high density apartment developments in certain selected areas.

To preserve and develop high quality housing areas to satisfy the demand for an adequate amount of dwellings of various types and densities:

- By providing and developing conveniently located areas suitable for housing; and

RECOMMENDATIONS

To avoid deterioration in Two Rivers' aging housing stock, housing rehabilitation programs will need to continue. The City should seek additional new funds and continue the revolving loan program.

There is a documented need for another WDF Housing Rehabilitation program on the east side and some documented need in the central area of the City. New rehabilitation funds should be obtained for this area.

Although not yet documented, there is probably a need for low and moderate income Housing Rehabilitation in the newly annexed Woodland Shores. Documentation should be obtained and a WDF application prepared.

The City needs to work on developing a rental rehabilitation program that landlords can afford. Deferred loans would be the most satisfactory.

The City needs to promote the development of a new single-family residential subdivision in the northwest quadrant of the City. If land cannot be developed in the area of Mishicot Road and CTH VV, land north of the East Twin River should be opened.

There is a potential for seasonal homes in Two Rivers. New seasonal home developments should be promoted in areas along the waterfront, not in historic areas, areas unlikely to develop new non-residential uses, and in other areas of the City not likely to have

BACKGROUND SUMMARY

POLICIES & OBJECTIVES

- By modernizing and renewing deteriorating residential neighborhoods.

To expand housing opportunitites to meet the needs of increased labor supply demand, the trend toward fewer persons per household, and to provide greater housing opportunities, so that new employees can be recruited for industrial, commercial and professional expansion:

- By encouraging implementation of the adopted policy on the location of future multiple-family housing;
- By being alert to opportunities to open up College Hill for development; and
- By promoting the development of additional subdivisions and the redevelopment of existing areas where appropriate.

RECOMMENDATIONS

residential populations such as College Hill or golf course areas.

The City should modify its zoning ordinance to permit as conditional uses Bed & Breakfast services as an extension of the tourist industry. These are becoming more popular nationwide.

The City should modify its zoning ordinance to permit accessory apartments for family members only. This will provide for longer home occupancies by the elderly and free up existing single-family homes for occupancy by younger families.

The City should conduct a study for each of its neighborhoods, and meet with residents to prepare a detailed program of neighborhood improvement if necessary.

Coke
TWO RIVERS KIWANIS
FISH DERBY
HEADQUARTERS
DERBY
COHO SALMON
CHINOOK SALMON
RAINBOW TROUT
BROWN TROUT
LAKE TROUT
SUPER TOURNAMENT
VETS PARK
BOAT LAUNCH
SUPER
TOURNAMENT
1
2
3
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IMPLEMENTATION PLAN

As part of the Comprehensive Plan for the City of Two Rivers, the Consultant developed an Implementation Plan. This was a follow-up to the Planning Report and addressed some of the issues of implementing the Plan. Some recommendations are policy items that will apply only when related proposals are made. Other recommendations are "to do" items. This report concerns those "to do" items and includes a schedule of implementation activities and their costs if they can be determined.

Economic Implementation

1. Continue the programs that have been successful in attracting new industries to Two Rivers. The City should do this in the first year.

2. Have annual visits with existing industry, however brief they may be, to discuss their needs. This should be done by the City in the first year.

3. Work with other Wisconsin communities to change the state administrative rule which prevents repayment to the City of monies received from new WDF-Economic Development grants. This should be done by the City in the first year. Now that all small cities are eligible for economic development funds, the State does not need to have the money paid back to them for reissue.

4. Continue the financing programs the City has developed to assist with new industry start-ups and expansion. The City needs to do this in the first year.

5. Purchase new lands for industry along STH 310 as is currently being accomplished. The cost will be about $540,000. Extend the utilities to these lands on speculation if necessary. Do this in 1988 at a cost of about $1,427,000. Annex these lands to the City. Determine if the land should be resold or leased if the purchased land is an island. This should be done in 1988. Purchase other land if necessary to have the industrial park contiguous with the City. Any land purchased will ultimately be a good investment for the City as this area is a growth center. The first step in this process is to annex the Woodland Dunes land. The City should do this immediately.

6. The City should support the use of Manitowoc's industrial incubator building. It consists of 950,000 square feet in an old Mirro Aluminum facility. The City should inform Manitowoc of this policy.

7. Continue to support the Rogers Street Fishing Village development. This is important for the City's economic base.

8. Check with the owners on the unused land in the area of the tank farm as to their future plans. If they choose to sell or redevelop the land, ask if they would like the City's participation in helping them to do so. The City should do this in 1988.

9. Meet with the County Board representatives from the City of Two Rivers. Indicate the City's need of their assistance in increasing county involvement in economic development, and having the County develop a park on the northern fringe of Two Rivers. The City of Two Rivers should ask the City of Manitowoc to join them in the economic development effort. The County can take the lead from its efforts in locating the state prison in Manitowoc County. This should be done by the City in 1988.

10. The City should financially participate in the redevelopment of the downtown, but only if the downtown businessmen form a Business Improvement District (BID) and match any of the City's money when utilized for aesthetics or pedestrian improvement. The City should do this in 1988 with approximately $176,000.

11. The City should form a Redevelopment Authority which can help in rebuilding the downtown. This should be done by the City in 1988.

12. The City should again set up a meeting with local industries and the school system to ensure that the schools are providing the training necessary in today's industries. This should be done at least every two years as the skill requirements will change in this technical revolution. The City should do this in 1988.

13. The City should conduct a Use Survey of its downtown parking lots to determine if they are still providing the maximum service. The City should do this in 1988 or 1989.

14. The City needs to conduct a study on the feasibility of a Visitor's Center. The City first needs to determine the needs the center would fulfill and the support it would receive from the many organizations which could participate. A facility that would be used to support activity centered around the lake or educate people about lake activities could possibly be eligible for Coastal Management funds. Possibly the City could combine this facility with a new City Hall, although the Visitor's Center would function well as a stand-alone facility. The Visitor Center Feasibility Study should be done by the City in 1989 at a cost of about $10,000.

15. The City should put new decorative street lighting for French Side Historic District into its Five-Year Capital Improvement Program. This should be done in 1989 or 1990 by the City at a cost of about $40,000.

16. The City should permit annexation of vacant land only if the zoning conforms to the City's Comprehensive Plan. The City should also establish a policy concerning annexation of only a part of a parcel. This should be done immediately by the City.

17. The City should use either the area-wide Chamber of Commerce or set up a similar organization to promote projects just for the City of Two Rivers, such as an ice arena. The funds raised would be used to promote projects that would make Two Rivers an even better place to live, work and do business.

Population Implementation

1. Have the Community Development Director annually report to the Community Development Committee the status of the occupancy and waiting list(s) of the elderly housing units and family housing units in the City of Two Rivers. The City should start this in 1989.

2. Have the Plan Commission consider an amendment to the R-1 District of the Zoning Ordinance that would permit accessory apartments for the elderly if located within single-family homes. The City should do this in 1988.

3. With the recent annexation of Woodland Beach and other areas, the City should market the benefits of annexation to the City to adjacent Town residents. Annexation to the City is a marketable commodity and should be pursued. The City should start this immediately. To accommodate growth on the fringe of the City, the City may need to create an Agricultural Zoning District.

Environmental Implementation

1. The City should review establishing an ordinance regulating new construction to an elevation of two, three or more feet above the current floodplain requirements. This policy would not have to pertain to the rehabilitation of any existing development. The City should do this in 1988.

2. If the Department of Natural Resources regulations do not adequately protect area wetlands, the City should include in its subdivision regulations a requirement that any parcel that is subdivided and which includes wetlands, must identify any wetlands within the parcel boundaries and prohibit by code the filling of such wetlands. This could then apply to the extraterritorial area. This should be done by the City in 1988.

3. The City should adopt an Historic Preservation Ordinance. Then the City should review what, if any, parcels should be included under the ordinance. The ordinance needs to be in place if there is to be any

limited protection of historic structures or areas in the City. The City should do this in the future.

Land Use Implementation

1. The City should amend its zoning code to permit "Bed and Breakfast" housing. The provision should be adopted prior to any specific request. The City should do this in 1988.

2. The City should have a policy to extend the utilities to the first proposed desirable subdivision in the north-northeast corridor of the City, including crossing the East Twin River if necessary. The City should do this when additional residential land is needed.

3. The City should continue to apply annually for WDF Housing Rehabilitation funds as long as the statistical need and program marketability can be substantiated. This should be done by the City in 1988. This should cost $7,000 to $10,000.

4. Conduct a Housing and Neighborhood Needs Survey in the Woodland Shores area to determine the need for a Wisconsin Development Fund program. This should be done by the City immediately.

5. The City should form a Redevelopment Authority and have the tool available for commercial expansion in the downtown area. The Redevelopment Authority may also be needed for redevelopment of obsolete industrial lands. The City should do this in 1988.

6. The City should provide the technical expertise for establishing a Business Improvement District (BID) in the downtown area. This should be done by the City in 1988.

7. The Plan Commission should begin to prepare a proposal to divide the current Waterfront Commercial Zoning District into two districts. The City should do this in 1988.

8. The City should amend its Zoning Ordinance to prevent the mooring or docking of boats on the East Twin River upstream of the 22nd Street Bridge as that would require the opening of the 22nd Street Bridge. An exception could be included that would exempt boats going to a commercial repair facility.

Traffic Implementation

1. After the City annexes the new industrial park lands along STH 310, it should meet with County Planning and State Highway District Office representatives to designate Woodland Drive an urban street. The City should have the construction of a bridge across the West Twin River placed on the City's Urban System Plan. The City should also ask the

district to upgrade the road between CTH O and CTH VV into a minor arterial. The City should do this in 1989.

2. The City should place intersection improvements into its Five-Year Capital Improvements Program, leveraging their money with state highway funds where possible. The City should start this in the 1989 Five-Year Plan.

City Parks and Facilities Implementations

1. The City needs to build into its Five-Year Capital Improvements Program rehabilitation and modernization of Neshotah Park. The facilities in the park need to have the same high qualities as the location of the park itself. The City should continue the effort with the 1989 Five-Year Plan.

2. Other park improvements that should be made are the following;

   Riverside Park - new shelter and additional play equipment; $12,000;

   River Walkway - extend the Walkway System; $20,000 to $50,000;

   27th Street Boat Ramp - continue current use of this area; and

   Picnic Hill - improve the area with new facilities and construct lookout tower; $25,000.

   The City should start these improvements in 1989.

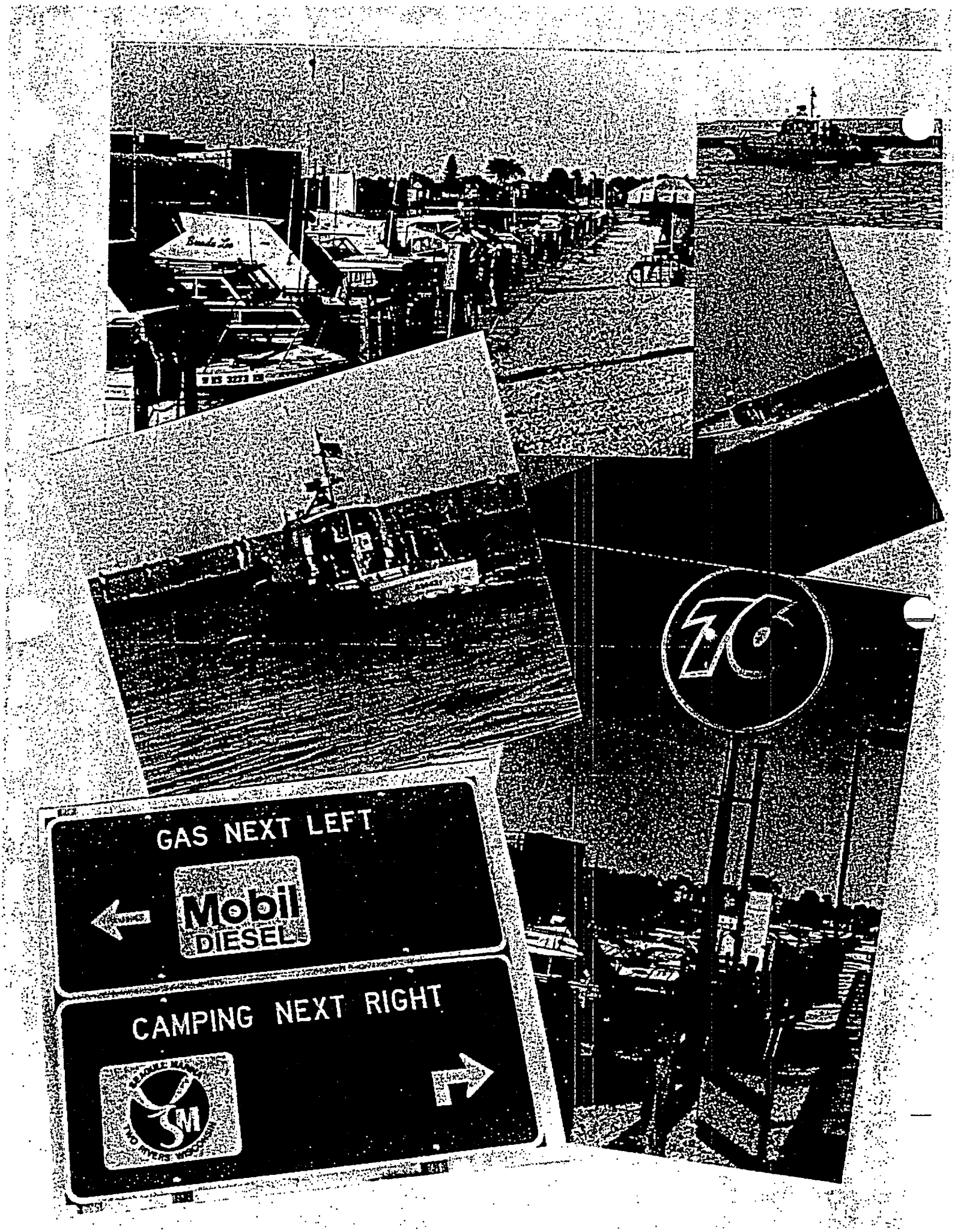
3. Have the Parks Department or Economic Development Department work at obtaining a historical marker commemorating the French Side Historic District to be placed in Harbor Park. The City should do this in 1988.

4. The City should help develop a brochure for a walking tour of the French Side Historic District. This should be done by the City in 1988.

5. The City should do a Feasibility Study for a new Library and City Hall. Possibly the study should be combined with the Visitor Center Feasibility Study. The City should do a City Hall and Library Feasibility Study in 1989 at a cost of $25,000.

Housing Implementation

1. The need to apply for additional WDF Housing Rehabilitation Funds, and amend the zoning ordinance to include accessory apartments and Bed and Breakfast units as previously discussed.


GAS NEXT LEFT
Mobil
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\CKGROUND REPORT

I. INTRODUCTION

A. The Comprehensive Planning Program

This is the first report prepared under the Comprehensive Planning Program for the City of Two Rivers and its Planning Area contracted with Mid-America Planning Services, Inc. on January 1, 1987. It contains the background analysis and recommendations component of the Comprehensive Plan.

The planning period for this plan is approximately twenty years. Forecasts and proposals made in the Plan are, therefore, officially aimed at the years 2000 and 2010. However, the Plan seeks to create a framework suitable for immediate adoption and yet capable of being used indefinitely, with modifications and regular updating.

1. Purpose of the Plan

The Comprehensive Plan is a policy statement, expressed in both written and graphic form, about the future development of the Planning Area. It represents a professional judgement as to the direction in which the Planning Area should proceed in order to achieve an optimum arrangement of various land uses, as well as the most efficient relationships of these uses to the highway network and major community facilities and public utilities.

The Plan represents long-range objectives to strive toward. It is part of a continuing planning process and is flexible to permit revision according to changing conditions and needs. It is comprehensive in that it considers the inter-relationship of the many factors of community development. The Plan is thus intended to set forth a framework for future growth with a target date of 2010.

The Comprehensive Plan serves as a framework within which responsible decisions on future development can be made, in both the public and private sphere - a framework in which the various elements of the community structure can function together efficiently. The Comprehensive Plan also provides a means of insuring that each new development makes a contribution to the betterment of the Planning Area as a whole.

The Comprehensive Plan is adopted by the City to serve as a general guide for future development. It has no force of law, even after official adoption. Its implementation is accomplished through such means as economic development, land acquisition, zoning, subdivision control, capital budgeting for public improvements, and community development. Decisions on the application of these legal controls are made within the framework provided by the Plan. Continuously changing needs and objectives, however, require continuous revision of the Plan. The General Plan does not, therefore, commit the Planning Area to a fixed course which can never be altered. Instead, the

Plan is a working document which should be amended periodically to be responsive to changing trends and needs.

2. What the Plan Compromises

The actual plan addresses itself to solve a changing economic base and existing development problems and to take advantage of potential development opportunities. It provides a guiding framework for future growth.

B. History

The significant characteristics of Two Rivers that led to early settlement were the surrounding miles of forest, the rivers which provided a means of travel, and sand banks extending ten or more miles into Lake Michigan from the rivers and shoreline. These natural resources created the ideal environment for the development of the fishing industry. The sand banks - providing excellent fishing grounds; the rivers - providing safe harbor and transportation; and lumber - with a wood working industry to make barrels for shipping fish as well as other wood products.

The opening of the entire area to the white man followed the Revolutionary War and the settlement of the War of 1812. In 1831, while Wisconsin was still part of Brown County, Michigan, a treaty was signed with the Menominee Tribe in which "the lands north of the Milwaukee River" were ceded to the United States. The first action required before selling land to settlers was a survey. From this survey, the identified land could be sold or granted.

The first sale of lands occurred at the Government Land Office at Green Bay in September of 1835. The first sawmill was built on the north side of the Washington Street Bridge, the first industry for Two Rivers in 1836. Also in 1836, on July 4, the first plat of the intended community was recorded at Green Bay. The plat showed all lots as being 60 feet wide and 150 feet deep, except the water lots on the east side of the Mishicott were to be 50 feet wide. Regular streets were laid out as being 60 feet wide, with Washington, Main (16th) and Lake (Harbor) at 80 feet in width. The fishing industry began in the summer of 1837 when Captain Joseph Edwards, a resident at the East Side Beach, constructed a seine net and landed a haul of ten barrels of fish. Edwards entered into partnership with J. P. Clark of Detroit, and in 1837 with a schooner, 20 men and all the necessary equipment, caught 2000 barrels of fish during the season. Their business continued until 1853 and, during the time, marketed immense quantities of whitefish.

In the succeeding decade, many French Canadians moved into the area and did work related to the fishing industry, making fishing nets and barrels for shipping salted fish.

In 1847 and 1848, political unrest in Germany brought a variety of cultural groups. Other nationalities were also present, such as Bohemians, Norwegians, Polish, Irish, Belgians, Danish, Swedish, etc.

In 1840, the population of Manitowoc County was only 240. In 1848, Two Rivers population was 924 and Manitowoc County had a population of 3,702. During that year an outbreak of cholera claimed 50 lives in seven days with the total being 100 stricken during that epidemic.

During the post Civil War, most Wisconsin lumbering towns were hurt economically except Two Rivers, because of its transformation from raw materials lumber processor to a wooden-ware manufacturer.

On March 18, 1878, the City of Two Rivers was granted a charter and divided into three wards. Each ward had a vote on the County Board.

In 1869, Two Rivers population was 1,300. In 1880, it was 2,052 and in 1885, 2,564 people resided in Two Rivers. In 1895, the population reached 3,593. This population growth came from the Polish which were being oppressed by the Russians along with a poor crop harvest which caused the Bohemians to settle in this area.

The City's sewer system was started in 1895. The first mains were laid on Monroe Street.

In 1900, the Civil War monument, now located in Central Park, was erected on behalf of veterans of the Civil War and the Spanish-American War. Two Rivers' population was 3,784. Within five years, it reached 4,602.

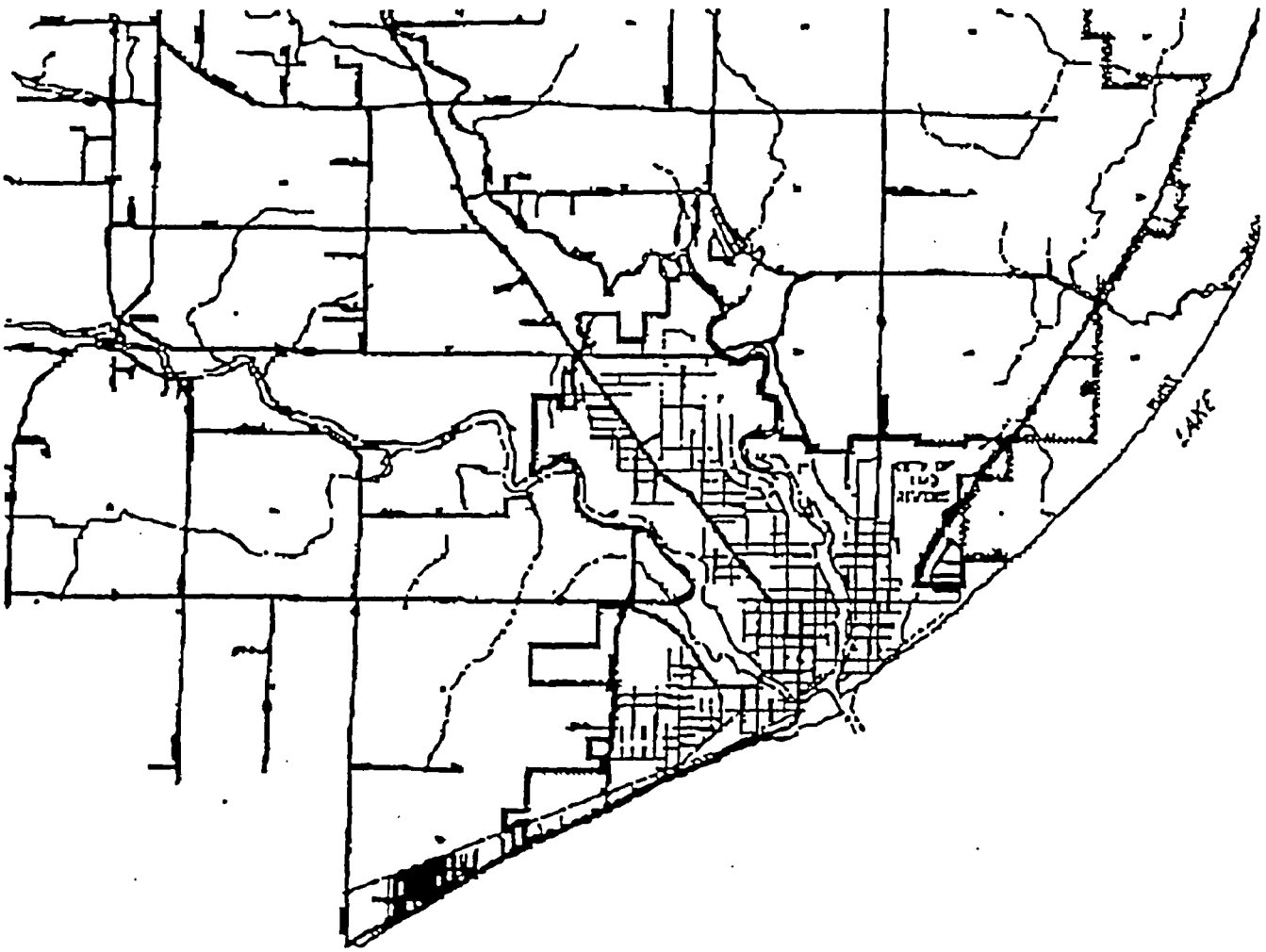
In 1922, the Washington High School was completed for a total cost of about $600,000. The original portion of the high school is earmarked by the reddish brick and tall window openings.

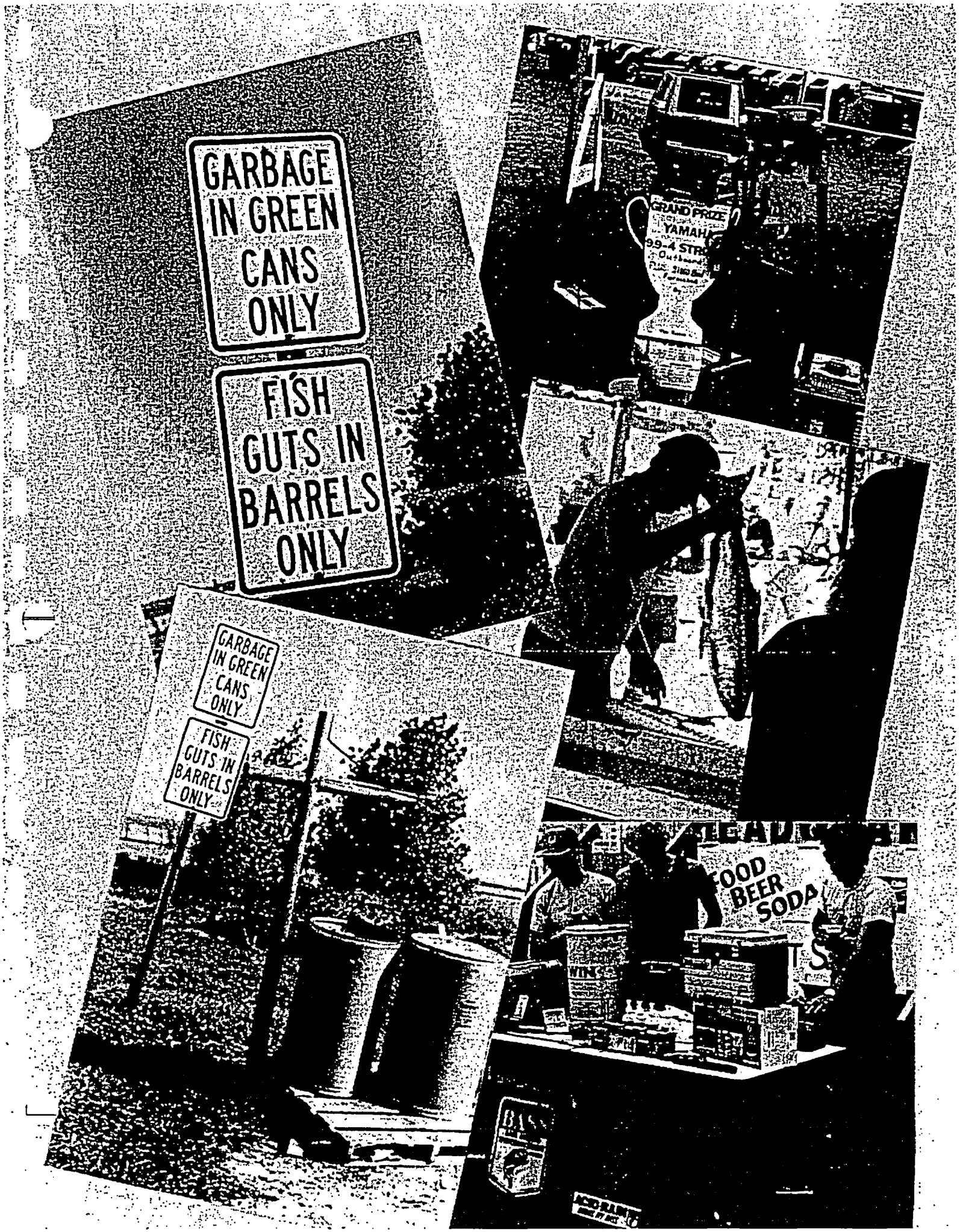
About 1920, the City water system was changed from one of wells to a water intake from Lake Michigan. This change was due in part to a fire which consumed the pail factory. The existing wells did not have enough pressure to fight the fire which threatened the entire community on that windy day. A deep well had failed to significantly increase the water supply thereafter, and in 1922 the Lake Michigan intake was constructed.

In 1927, according to a book by Elmer Frederick Beth, "History and Survey of Two Rivers," the government changed from the Mayoral form of government to the City Manager form of government. The City had known and borne all the efficiencies and evils which are inherent in the council-mayor form of government. Although the City had never suffered from flagrant political corruption, it paid the price of the inefficiency which results when a body of popularly elected officials act in both legislative and executive capacity, as is the case in the council-mayor form. The present council-city manager plan was established in Two Rivers on May 1, 1925, after active campaign in local papers had been run for more than six months.

Sources of historical information:

Historic Two Rivers Nineteenth Century Fishing District, 1983, by North Point Historical Society, Shirley McArthur, Curator.
1987 Two Rivers calendar.




GARBAGE IN GREEN CANS ONLY
FISH GUTS IN BARRELS ONLY
GRAND PRIZE
YAMAHA
GARBAGE IN GREEN CANS ONLY
FISH GUTS IN BARRELS ONLY
FOOD
BEER
SODA

GOALS AND OBJECTIVES

A. Problem Identification and Prioritization

1. City Council and Staff Work Session

The City Council and the City department heads met on Saturday, September 7, 1985 to identify and prioritize problems, concerns, and opportunities for the community. Through the use of a nominal group technique, three separate groups were structured to work independently in identifying and prioritizing their perceptions of the needs of the community.

The three most important concerns of the entire group were economic development, the need for more planning in all operations of the City and the promotion of tourism as an industry in the area.

TABLE 1. TOP 10 CONSOLIDATED STATEMENTS AS A GROUP

Ranking	Description	Points
1st	Need of Economic Development	170
2nd	Need of Comprehensive Planning	65
3rd	Tourism Development	47
4th	Improve Efficiency of Municipal Services	37
5th	Lack of Effective Communication	36
6th	Lack of Positive Attitude	35
7th	Need to Develop and Maintain Natural Resources	29
8th	Excessive Federal, State, and Local Regulations	26
9th	Lack of Developable Properties	6
10th	Stable Tax Rate	6

The following are definitions developed to clarify the above top ten consolidated statements:

a. Need of Economic Development
This category includes problems and concerns for industrial and commercial development expansion and retention.

b. Need of Comprehensive Planning
This category includes problems and deficiencies related to numerous aspects of planning including traffic control, parking, financial, capital improvements, disaster plans, recreation and public facilities and location of future land uses.

c. Tourism Development
This category includes problems and deficiencies related to the cyclical nature of the current tourist orientation, advertising and promotion, community preparedness, camping and R.V. facilities, and marina facilities.

d. Improved Efficiency of Municipal Services
This category includes problems and deficiencies related to maintaining services at a reasonable cost, improving budgetary practices, consolidating public safety operations and other improved efficiencies of operation.

e. Lack of Effective Communication
This category includes problems and deficiencies related to effective communications with and between citizens, media, elected officials and City departments. This area also included communicating to the public the type of and location of City services and facilities.

f. Lack of Positive Attitude
This category includes problems and deficiencies related to the negative attitude held by some people about the community and its future and toward change in new and different directions for the community.

g. Need to Develop and Maintain Natural Resources
This category includes problems and deficiencies related to the development and maintenance of the beaches, water resources, labor supply and natural surroundings.

h. Excessive Federal, State, and Local Regulations
This category addresses the perception and existence of too many laws, rules, regulations, record keeping requirements, and growth of governmental controls at all levels of government.

i. Lack of Developable Properties
This category addresses the need for more industrial, commercial and residential properties to allow growth in all areas.

j. Stable Tax Rate
This category includes concerns related to maintaining or reducing property taxes and improving the tax base.

Upon analysis, the ten consolidated statements listed in Table 1 on GO-1 illustrate how the problem of economic development is viewed by the City Council and department heads. Its first priority position revealed the participants' concern and their dedication to resolving the problem. The statements are the result of reviewing and prioritizing 77 statements about the City of Two Rivers. Each statement was reviewed and then ranked. Points were awarded according to ranking. The statements were then consolidated into ten broad statements which represented categories of statements.

Economic development was given the greatest number of points. The participants viewed the need to create more business and job opportunities as the most important problem facing the City. The participants also realized that economic development requires adequate planning for it to benefit the entire community. Therefore, they ranked the need for comprehensive planning second.

Each of the remaining eight statements is important by itself. However, they all relate to the need for economic development. The participants realized that by solving each set of problems presented by the statements, the City would be better able to create a better community for the citizens and more importantly, increase the number of business and employment opportunities.

The development of a list of needs and problems by the City Council and department heads was important. The list allowed them to determine what needs and problems do exist and methods of solving or planning for those needs and problems. The development of the list also illustrated the City government's willingness to deal with the problems facing the City of Two Rivers and to develop the appropriate plans.

2. Public Hearing.

On March 12, 1987, a public hearing was held to discuss some preliminary findings for the Comprehensive Plan and to obtain input from the citizens of Two Rivers. Notification of the meeting was sent to a number of civic groups as well as concerned committees and boards within the City government.

Those persons attending the hearing were presented with an explanation of the need for a Comprehensive Plan. The Consultant also explained the planning process through which the City of Two Rivers' Comprehensive Plan would be developed and the basic outline of its final form.

The members of the audience were asked to participate in the planning process by voicing their opinions in two areas. The first was the needs and problems of the City of Two Rivers. After being presented with the ten needs and problems as defined by the City Council and department heads, the public developed eight items they perceived as City needs and problems. These are listed in Table 2 on page GO-4. The audience was then asked to prioritize the items seen as the top three needs and problems. The audience chose the following:

1. Encourage economic development;
2. Develop tourism; and
3. Promote positive attitude of City.

The audience members were then asked to list what they perceived as assets and potentials found within the City of Two Rivers. The audience developed 32 items as shown in Table 3 on GO-5. Again, the audience was asked to list the top three assets and potentials found in Two Rivers. The audience chose the following:.

1. Its people;
2. Low tax rate; and
3. More than adequate utilities.

A more detailed explanation of the audience's responses can be found in Tables 4 and 5 on GO-6 and GO-7.

TABLE 2. NEEDS AND PROBLEMS

Community Needs As Identified By City Council and Department Administrators:

1. Stabilize Tax Rate
2. Develop Tourism
3. Develop Comprehensive Plan
4. Encourage Economic Development
5. Limit Excessive Federal, State and Local Regulations
6. Develop and Maintain Natural Resources
7. Locate Developable Properties
8. Promote Positive Attitude of City
9. Improve Public Awareness Through Effective Communication
10. Improve Efficiency of Municipal Services

Community Needs As Identified By Public:

11. Need To Retain Young Adults Once They Leave School
12. Industrial Search
13. Expand the Commercial Area
14. Unified Effort On Economic Development (County, Cities, & Towns)
15. Improve and Maintain Transportation Systems: Bus, Rail, Water, Air, & Highways
16. Develop New Industrial Park
17. Support More Cultural Events
18. Protect Commercial Interests, i.e. Commercial Fishing

TABLE 3. ASSETS AND POTENTIALITIES

Community Assets and Potentialities as Identified by Public:

1. Location on Lake
2. Its People
3. City Government
4. Hard Working People
5. Unusual Summer Weather
6. Honest and Safe Community
7. Good Climate - Weather
8. Beaches
9. More than Adequate Utilities
10. Neatness
11. Parks
12. Total County Educational System
13. Lake Michigan
14. Recreation Facilities
15. Low Tax Rate
16. Diversified Work Force
17. Area-Wide Economic Development
18. Geographic Location
19. Untapped Monetary and Human Resources
20. Cultural Advantages
21. Parades - Community Theater
22. Coast Guard Station
23. Good Downtown
24. Active Community Interaction
25. Environmental Amenities
26. Industrial Park
27. Churches
28. Good Permanent Street Program
29. Excellent Service Organizations
30. Landfill Sites
31. Debt Free City Government
32. Good Snow Removal Program

TABLE 4. AUDIENCE RESPONSES TO NEEDS AND PROBLEMS PRIORITIZATION

Statement Number	Number of 1st Priority Responses	Number of 2nd Priority Responses	Number of 3rd Priority Responses
1.	2	-	4
2.	-	6	2
3.	1	-	1
4.	14	2	-
5.	-	-	-
6.	-	-	-
7.	-	4	1
8.	-	3	5
9.	-	-	1
10.	-	-	1
11.	-	-	-
12.	-	-	2
13.	-	-	-
14.	1	3	1
15.	-	-	-
16.	-	-	-
17.	-	-	-
18.	-	-	-

TABLE 5. AUDIENCE RESPONSES TO ASSETS AND POTENTIALITIES PRIORITIZATION

Asset and Potential Number	Number 1st Priority Responses	Number 2nd Priority Responses	Number 3rd Priority Responses
1.	-	1	1
2.	6	-	-
3.	5	-	-
4.	3	-	-
5.	-	-	-
6.	-	1	1
7.	-	1	-
8.	-	-	-
9.	-	-	3
10.	-	-	-
11.	-	-	-
12.	-	-	-
13.	-	3	-
14.	-	-	-
15.	-	6	1
16.	-	-	-
17.	2	1	1
18.	-	-	1
19.	-	1	1
20.	-	-	1
21.	-	-	-
22.	-	-	-
23.	-	-	1
24.	-	-	1
25.	2	3	1
26.	-	-	1
27.	-	-	-
28.	-	-	-
29.	-	-	-
30.	-	-	-
31.	-	-	2
32.	-	-	-

An analysis of the audience's responses as to the City's needs and problems showed concerns over the economic situation in Two Rivers. The audience's top three statements were very similar to those chosen by the City Council and department heads.

The audience members were shown Table 1. However, to diminish the tendency of following the existing ranking, the statements were not placed in the same order. Audience members then developed a number of new needs and concerns (see Table 2 on GO-4). All 18 needs and concerns were then ranked.

Table 4 on GO-6 illustrates the number of votes each statement received. The audience members clearly showed how concerned they were about economic development. It received over 75 percent of the votes for the first rank position. No other statement in any ranking received as many votes. The other rankings were less clear in illustrating the audience concerns with "develop tourism" receiving 33 percent of the votes for the second ranked position and "promote positive attitude of City" receiving 28 percent of the votes for third ranked position.

Tables 3 and 5 on GO-5 and GO-7 are a listing of community assets and potentialities and their ranking by the audience. Table 4 shows the 32 items listed by audience members which they felt were assets and/or potentialities in the community. The items listed were volunteered readily by the audience and reflected the positive and progressive attitude held by the citizens of Two Rivers.

Another interesting aspect to these two tables is found in Table 5. When the responses in this table were analyzed only three clusters of responses occurred. These clusters were for "its people" and "city government" with six and five votes respectively for the first priority position and for "diversified work force" with six votes for second priority position. The remaining responses were scattered. The audience members were very sure of what items were the most important assets to the community. However, the scattering of responses illustrated the wide variety of positive aspects of the City of Two Rivers.

One important development of the meeting was a discussion centering around the concept of area-wide cooperation for economic development. This was mentioned as Item 17 in Table 4 on GO-6. Currently, area-wide economic development is occurring through the Lakeshore Development Bureau and the Chamber of Commerce. These two groups concentrate only on the Manitowoc-Two Rivers area. However, this type of economic cooperation should and could be done on a wider scale to include all of Manitowoc County and possibly the Bay Lake Region. Economic development conducted on this scale could prove to be very beneficial to the City of Two Rivers.

3. Interviews

In order to obtain a wider range of opinions on what the future goals of Two Rivers should be, a number of citizens were interviewed. Those interviewed included persons both in and out of city government. The persons interviewed included:

Lee Jensen - Lakeshore Development Bureau
Gerald A. Kasten - Clerk/Treasurer-Finance Director
Jerry Kirchner - Director of Manitowoc County Planning and Park Commission
Jerry Kulhanek - Director of Public Works-City Engineer
Michael Lien - Chief of Police
Stephen Nenonen - City Manager

Marvin Now - Director of Building and Zoning
Martin Owens - Secretary of Chamber of Commerce
Bill Pappathopoulos - Director of Utilities
Howard Perry - Director of Parks and Recreation
John Schroeder - Owner of Schroeder's Department Store
Leonard Stangel - Chairman of Business and Industrial Development Committee

Each person interviewed was asked to give his or her opinion of what direction Two Rivers was going in and if that direction should be changed. The interviewees were also asked what they perceived as problems and/or needs in Two Rivers within their area of expertise.

An analysis of the responses obtained in the interviews showed a positive attitude towards the City. All felt the City of Two Rivers was a good community to live in. A majority of the criticisms related more to the state of the local economy rather than the City itself.

The main concern of those interviewed was the need to increase employment opportunities within Two Rivers. Two sets of opinions of how to do this developed. Some viewed the development of tourism as a major employment source as the best method. Tourism could be increased easily because of the already existing sport fishing industry. Also, large numbers of tourists pass through Two Rivers on the way to the Door Peninsula.

Other persons interviewed expressed the belief that tourism was an unreliable employment sector because of its seasonality and long term variability. A better method of creating more employment opportunities would be locating more conventional businesses within the community. The rate at which the latest industrial park filled was cited as an example of the already expanding economy and increasing employment opportunities.

A point of agreement between both parties was a need to diversify the area's economy. The dependence on only a few large industrial employers has proven to be devastating to the City. A wide variety of businesses would help stabilize the economy over the long term.

Discussions concerning the current state of the City's municipal services brought out the high quality of those services. Two Rivers will be able to absorb a high level of development prior to any expansion being required. The excellent quality of the current municipal services are considered an asset and would allow the City to compete easily with surrounding communities for new business opportunities.

The major concerns of those interviewed were:.

- maintenance of the current quality level of municipal services;
- development of a new industrial park;
- diversification of the economic base;

- development of a secondary economy, possibly tourism;
- continued cooperation between the City government and local businesses; and
- the development of a comprehensive set of goals and objectives for the community.

Many other concerns and problems were discussed throughout the interviews. However, the list above represents the major concerns mentioned.

B. Goals, Objectives and Policies for the City of Two Rivers

The goals, objectives, and policies developed and compiled for the Comprehensive Plan cover every aspect of community development. They include residential, economic, and recreational aspects of the community. The first eight were designed to consider broad spectrum concerns rather than individual problems, and to help the City's decision makers in broad areas of policy.

1. Comprehensive Goals and Policies

a. General Land Use Goals

To create a balanced pattern of related urban land uses:

-- By ensuring that adjacent land uses are compatible with regard to such factors as smoke, noise, odor, traffic, activity and appearance.

To provide adequate amounts of land in a variety of sites suitable for each type of urban use, and allowing for anticipated change and growth based on economic forecasts:

-- By utilizing land that is adequately drained and reasonably level for urban purposes.

-- By providing adequate water supply and sanitary waste disposal to developed areas.

-- By building on soils which have adequate bearing capacity and are suitable for excavation and site preparation.

-- By restricting development in flood hazard areas.

-- By changing land use as the economic base changes.

To utilize vacant land within Two Rivers to its maximum potential:

-- By developing land adjacent to existing capital assets such as the developed infrastructure.

-- By reserving potentially scenic areas such as land along the waterways as public recreation areas.

b. Environmental Goals

To promote utilization of marginal land within the City to its maximum potential:

-- By discouraging development within or near sensitive wetlands or within the floodplain.

-- By discouraging development in areas of extremely poor or inappropriate soils.

To increase awareness of the excellent climate and environment in the area:

-- By promoting the positive aspects of the area's climate and environment.

c. Population Goals

To stop the current decrease in population and create a growth in population:

-- By expanding employment opportunities within the City.

-- By encouraging local schools to assist students developing or assessing their skills as they relate to the Two Rivers job market.

d. Residential Goals

To preserve and enhance the residential character in areas of single-family housing in the Planning Area:

-- By preventing the incursion of incompatible, non-residential uses into single-family residential neighborhoods.

-- By providing, where feasible, a full range of community facilities on a neighborhood by neighborhood basis.

-- By discouraging non-local traffic from passing through residential neighborhoods.

-- By continuing the housing rehabilitation program by both recycling funds and obtaining new funds.

To promote the construction of multi-family housing in the appropriate sections of the Planning Area:

-- By designating major areas suitable for the development of town houses, garden apartments, and similar medium density residential uses in selected areas suitable for that purpose.

-- By evaluating the possible development of high density apartment developments in certain selected areas.

To preserve and develop high quality housing areas to satisfy the demand for an adequate amount of dwellings of various types and densities:

-- By providing and developing conveniently located areas suitable for housing.

-- By modernizing and renewing deteriorating residential neighborhoods.

e. Commercial Goals

To provide an adequate framework for the future expansion of commercial development in Two Rivers:

-- By designating certain prime areas for commercial use, particularly along strategic sections of major arterial highway corridors.

-- By encouraging the clustering and coordinated development of compatible and mutually beneficial commercial uses.

To preserve, improve, and develop appropriate commercial facilities serving the inhabitants and providing increased sales and earnings:

-- By consolidating and expanding the existing commercial centers and discouraging these commercial facilities from moving to the fringe.

-- By discouraging unsightly, unsafe, and marginal commercial highway development.

-- By developing and adopting a downtown economic development plan.

-- By encouraging existing businesses to continually monitor and change to accommodate the retail market.

f. Industrial Goals

To improve existing industrial development consistent with compatibility to adjacent uses:

-- By providing land for new construction and expansion to existing industries.

-- By reusing vacant or underutilized industrial buildings.

-- By removing obsolete industrial buildings.

-- By improving highway access to existing industrial areas.

-- By maintaining off-street parking and loading facilities.

To promote new industrial development in the designated Industrial Park areas:

-- By defining large areas of open land suitable for industrial use.

-- By providing new industrial areas with good access to main transportation facilities.

-- By servicing new industrial areas with all public utilities and any other community facilities that are necessary.

g. Transportation Goals

To improve the efficiency of the major street network in the Planning Area:

-- By reconstructing and/or adding traffic control aids to major intersections which have inadequate alignments.

-- By separating local and through traffic wherever feasible.

-- By improving the major street system to carry projected traffic volumes.

h. Public Parks, Recreation and Tourism Goals

To maintain the policy of providing a wide range of local park and recreation facilities to serve all age groups and all parts of Two Rivers:

-- By maintaining and developing a variety of parks and recreation facilities throughout Two Rivers ranging from playgrounds and neighborhood parks to community-wide recreation facilities.

To take advantage of the scenic and recreational potential of the natural water courses in the Planning Area:

-- By providing public access to the lake and waterways.

-- By expanding the river walkways.

-- By designating floodplains along water courses as areas to be reserved as public open spaces.

To promote the further development of Woodland Dunes Preservation Area and Rogers Street Fishing Village area:

-- By providing a larger and broader range of facilities.

-- By providing adequate off-street parking facilities.

-- By working with the commercial fishermen to bring commercial fishing activities to the museum visitors.

To strengthen and expand commercial and sport fishing facilities and opportunities to meet the demand:

-- By developing the City of Two Rivers into the strongest sport fishing center on the western shoreline of Lake Michigan for lake-boat fishing and lakeshore fishing.

-- By continuing the City's role as the leader in commercial fishing.

-- By providing a balanced mix of public and private services and facilities.

-- By controlling the sport fishing activity so that it does not become a visual pollutant or social detriment to the City of Two Rivers.

-- By insuring that the entrails from fishermen's catches are collected, transported, and disposed of in a safe and sanitary manner.

i. Community Facilities Goals

To maintain an adequate system of public buildings in Two Rivers:

-- By maintaining public buildings in an attractive condition so as to enhance the appearance of the community and promote civic pride.

-- By providing and maintaining adequate, conveniently located off-street parking for all public uses, wherever necessary.

j. Implementation of the Plan

To insure the interested participation by the public in carrying out the Comprehensive Plan:

-- By utilizing available Federal and State programs which will aid the City in implementing its Comprehensive Plan.

-- By encouraging specific projects and other needed actions which will serve to implement the Plan.

-- By adopting and enforcing adequate codes and ordinances necessary to properly guide new development.

2. Business and Industrial Development Goals and Objectives and Policies

A number of goals and objectives were taken from the City of Two Rivers Business and Industrial Development Committee's Industrial Needs Study, first published in September 1980. The Committee has annually reviewed, commented on and updated the goals and objectives. Progress on accomplishing the various policies has been indicated in parentheses (taken from their 1987-88 meeting). The goals, objectives, and policies compiled from several other reports are also included.

a. Goal: Improve land use in the community.

Objective: Measure and monitor land use changes so that a distinct improvement can be seen.

Policies:

1) Assist in the development plans for the reuse of the Mirro properties.

2) Work with industries as opportunities arise to modernize or convert vacant or energy inefficient facilities to other uses for efficient operations (on-going process).

3) Encourage implementation of the adopted Land Use Plan for Two Rivers (on-going process).

4) Encourage annexation to provide opportunities for various types of development (accomplishments include the annexation of Mr. Hanson's motel on Memorial Drive).

b. Goal: Establish a specific program of economic development in Two Rivers.

Objective: Maintain a Two Rivers Economic Development Program, with the City government as the policy and program leader.

Policies:

1) Continue the present role of the Business and Industrial Development Committee (BIDC) in addressing broad economic activities (on-going process).

2) Continue to regularly update those goals and objectives (in progress).

3) Provide information concerning this program to all industries and interested individuals and groups, so that they are aware of the proposals and course of action (in progress).

4) Continue the use of industrial revenue bonding and explore other types of corporate funding sources such as subordinate debentures, sinking bond funds, commercial paper, City revenue, etc.

5) Work with the Two Rivers Tomorrow organization to assist its efforts to plan and carry out central city development activities (in progress).

6) Continue cooperative efforts toward economic development with Lakeshore Development Bureau and Chamber of Commerce (on-going process).

7) Encourage businesses to work with Network, Score, Ace and other types of assistance provided by active and retired business people.

c. Goal: Maintain industry as the City's economic base.

Objective: Put major emphasis on industry in the Economic Development Program.

Policies:

1) Continue to communicate with industry on a regular basis (visitation May 1986 with all industries written to and personal contact made with developing industries).

2) Develop a comprehensive marketing plan for Industrial Park (in progress).

3) Seek new industries with diverse markets for Two Rivers, utilizing, among other approaches, the promotional folder that has been developed and targeting efforts at specific "markets".

4) Encourage low cost maintenance of the undeveloped property in the Industrial Park to provide as positive an appearance as possible.

5) Investigate development of incubator/venture capital projects (proposals being evaluated at current time).

d. Goal: Search for a secondary economic base.

Objective: Supplement the main economic base of industry with other suitable businesses within five years.

Policies:

1) Encourage a suitable institution to locate in Two Rivers. College Hill may provide a good location for some types of institutions.

2) Encourage development of the tourist industry, including:

- Development of Rogers Street Fishing Village as a tourist attraction;
- Promotion of family-related activities in conjunction with Lake Michigan sport fishing to encourage greater tourist spending;
- Establishment of sleigh and cross-country ski trails through the City to points of interest in conjunction with the establishment of a trail between the City and Point Beach State Forest;
- Continue production of and involvement in a modest flyer to direct tourists to points of interest in the City;
- Encourage year-round tourism, including swimming, skiing, snowmobiling, etc.; and
- Encourage the creation of additional campsites at Point Beach State Forest (continuing effort - shower facility completed in 1987).

e. Goal: Maintain the high quality of life in Two Rivers.

Objective: Continue to devote resources to maintain the quality of life in the City.

Policies:

1) Encourage cultural activities through clubs and private organizations.

2) Encourage the maintenance of facilities, necessary public and recreational programs, etc. (continuing effort).

3) Encourage beautification of areas coming into the City, including Memorial Drive, STH 310 and Lincoln Avenue (continuing effort).

4) Promote scenic walkways along river frontage in downtown area to compliment Eggers' Walkway (completed River Walkway from Eggers' West Plant property).

f. Goal: Provide for some industrial use of the harbor.

Objective: At a minimum, insure the continued use of the harbor as it is, and investigate the possibility of harbor use expansion when appropriate.

Policies:

1) Encourage suitable use of the C. Reise Coal Company property (purchased and partially developed by Edith Anderson as of 1986).

2) Monitor the status of the Coast Guard Station to insure its continued operation (current reconstruction of the Coast Guard Station).

3) At the appropriate time in the future, try again to promote harbor use expansion through letters, calls, etc. (continuing effort).

g. Goal: Improve City transportation.

Objective: Improve the transportation patterns and course of doing business in Two Rivers.

Policies:

1) Support the development of STH 29 or some east/west corridor connecting with I-43 (continuing effort).

2) Encourage the Chamber of Commerce to continue to address mutual problems through its transportation committee (continuing effort).

3) Insure continuation of the railroad line between Manitowoc and downtown Two Rivers through maintenance by Chicago & Northwest Railroad and usage by local companies (under evaluation).

4) Pursue removal of the stop signs on STH 310 and CTH B (continuing effort).

5) Promote improvements to STH 310 (continuing effort).

h. Goal: Improve the City's labor supply.

Objective: Provide a means of starting to improve the quality of labor in Two Rivers.

Policies:

1) Continue to encourage the school system's programs that are tailored to the needs of local industries (continuing effort).

2) Work with local interests to relate the programs at Lakeshore Technical Institute to the needs of local businesses and industries (continuing effort).

3) Encourage the school system to continue to assess the needs of young people regarding their job seeking and job attainment skills as they may pertain to Two Rivers industries (continuing effort).

i. Goal: Expand housing opportunities to meet the needs of increased labor supply demand and the trend in fewer persons per household.

Objective: Provide greater housing opportunities so that new employees can be recruited for industrial, commercial and professional expansion and to make up for the trend toward fewer people in each dwelling unit.

Policies:

1) Encourage implementation of the adopted policy on the location of future multiple family housing (continuing effort).

2) Be alert to opportunities to open up College Hill for development (continuing effort-prison proposal).

3) Promote the development of additional subdivisions and the redevelopment of existing areas where appropriate (continuing effort, utilize Community Development Block Grant [CDBG] housing funds as was recently completed on Two Rivers south side. CDBG has changed its name to Wisconsin Development Fund [WDF]. An application was approved in April 1988 for WDF dollars for the east side of Two Rivers).

j. Goal: Encourage sports fishing opportunities.

Objective: Make the City of Two Rivers the strongest sport fishing center on the western shoreline of Lake Michigan.

Policies:

1) Provide a balanced mix of public and private services and facilities.

2) Control the sport fishing activity so that it does not become a visual pollutant or social detriment to the City of Two Rivers.

3) Maintain a minimum participation in the fish entrails collection and disposal process while promoting maximum participation by private interests.

k. Goal: Improve the distribution and quality of parks and recreation areas in the Two Rivers area.

Objective: Continue to devote resources to develop new parks and maintain the existing parks and open space areas.

Policies:

1) Ensure that the various levels of parks and recreation are provided in approximately equal measure for all parts of the City.

2) Use parks and open space as buffers between incompatible land uses, as delineators or constraints on urban development or as necessary complementary uses for other land development.

3) Provide recreation facilities and programs to meet the needs of all age groups and persons of various financial means including particularly the elderly and indigent population.

4) Encourage the use of school/park combinations.

5) Encourage and strengthen recreation programs in order to assure maximum use and enjoyment of the facilities provided.

3. Bay-Lake RPC Goals and Objectives

The following goals and objectives were identified by the Bay-Lake Regional Planning Commission and address the primary economic concerns in the Bay-Lake District. The City of Two Rivers is located within this district, which consists of the counties of Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Oconto, and Sheboygan. These concerns have been identified in previous Annual Reports. The purpose of these goals and objectives is to provide a reference point for future economic development projects in the district. The goals and objectives are:

- Increase employment opportunities.

- Increase local investment opportunities.

- Increase income within the district.

- Encourage the most efficient use of energy in the development of all economic projects.

- Improve the port and harbor facilities in the region.

- Encourage the linkage and coordination of the various federal, state, local, and private funding sources for economic development projects.

- Encourage the revitalization of existing commercial, and industrial areas and the diversification of the economic base.

- Encourage the preservation of existing manufacturing firms and promote the addition of new industries, especially within distressed areas.

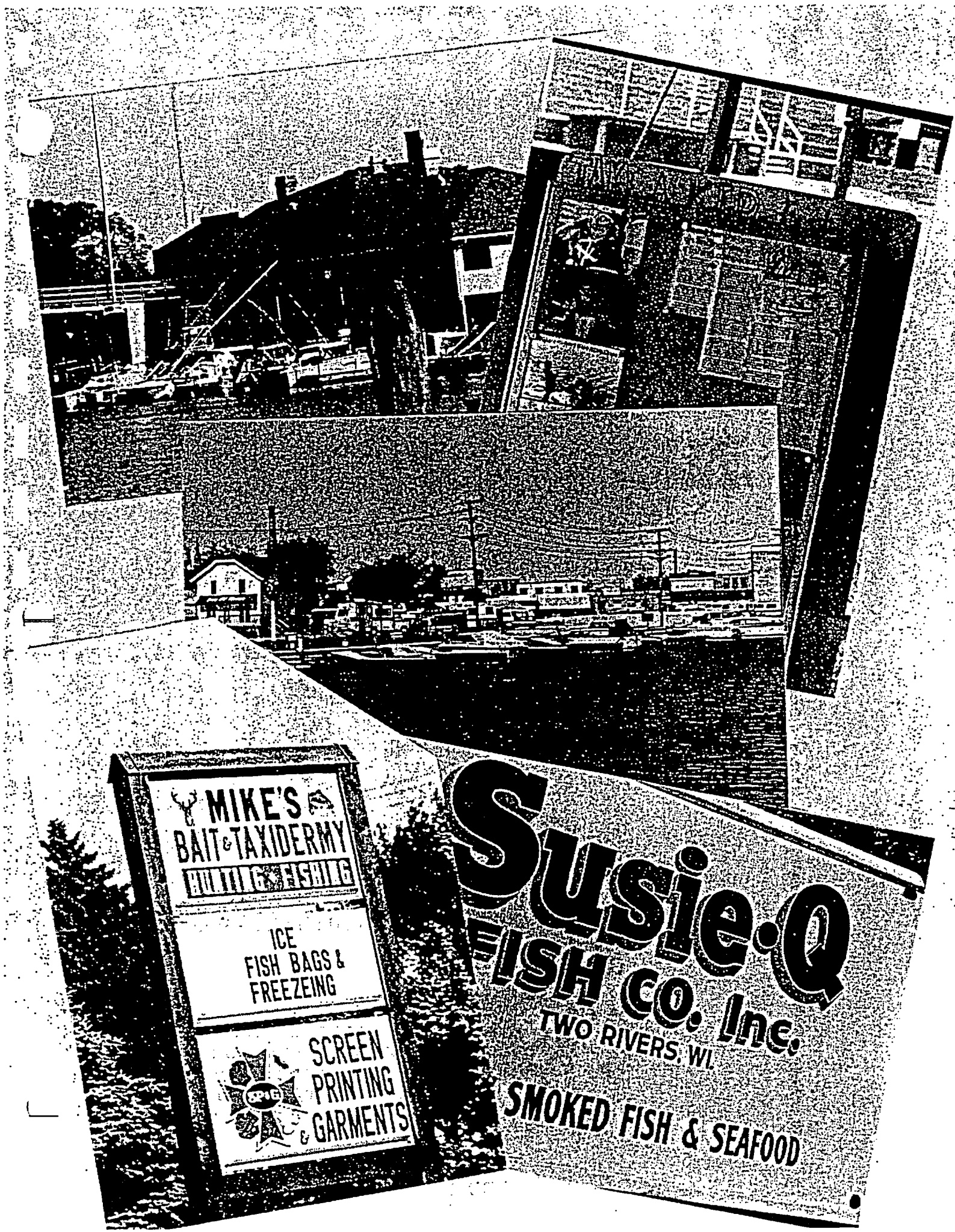
- Encourage the maintenance and expansion of the tourism and recreation industry.

- Encourage the maintenance and improvement of the region's transportation network and telecommunications system.

The goals, objectives, and policies listed in this section were derived from the Industrial Needs Study-1980, the Lake Michigan Sport Fishing Support Services-1980, Fish Entrails Disposal Study-1980, Overall Economic Development Program-1985, Manitowoc County Recreation and Open Space Plan-1973, the Two Rivers Business and Industrial Development Committee work session and other various reports, and based on the priorities laid out by the City Council at their work session of September 1985. The comprehensive goals and policies were designed to be used as an overall guideline for the development of Two Rivers. These goals, objectives, and policies are believed to accurately reflect the needs and desires of the people of Two Rivers.

The development of goals, objectives, and policies for the City of Two Rivers, has been a major asset in directing the growth and development of the City. The goals and objectives developed by the Business and Industrial Development Committee, in particular, are an excellent example. The Committee has developed a series of long range goals and has accomplished them through reaching a series of short range objectives. Also, because the goals and objectives are reviewed annually, they can be constantly updated.

The process of setting long range goals and short range objectives by the Business and Industrial Development Committee has had a measurable impact on the City of Two Rivers. This process is very effective. It should be continued by the Committee and be used by other committees and groups throughout the community.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TWO RIVERS, WI.
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ECONOMIC DATA

A. Employment

The City of Two Rivers is the second largest city within Manitowoc County. It is located adjacent to the City of Manitowoc and has been identified as part of the Manitowoc area growth center by the Bay-Lake Regional Planning Commission (BLRPC).

From 1970 to 1980, the number of employed persons in the City of Two Rivers increased from 5,523 persons to 6,326 persons, an increase of 803 persons or 14.5 percent. This growth of 14.5 percent, however, is less than the County as a whole, which increased from 32,325 employed persons to 37,656, an increase of 16.5 percent. This data is shown in Table 1 below. In 1980, the growth center accounted for 66 percent of the district's employed persons, which is less than the 69.3 percent figure for 1970.

TABLE 1. EMPLOYED PERSONS 16 YEARS AND OVER BY GROWTH CENTER 1970-1980

	1970	1980	Actual Number	Percent Change
T. Manitowoc Rapids	1,253	1,359	106	8.5%
T. Newton	933	1,176	243	26.1%
T. Two Rivers	1,043	1,219	176	16.9%
C. Manitowoc	3,637	14,827	1,190	8.7%
C. Two Rivers	**5,523**	**6,326**	**803**	**14.5%**
CENTER TOTAL	22,389	24,907	2,518	11.3%
MANITOWOC COUNTY	32,325	37,656	5,331	16.5%
PERCENT OF COUNTY	69.3%	66.1%	- 3.2%	-.-

Source: U.S. Bureau of the Census, 1970 Census of Population and Housing, 1970 Census Tapes Series 400, Wisconsin Table 467; 1980 Census of Population and Housing, Summary Characteristics for Governmental Units and Standard Metropolitan Statistical Areas, Wisconsin PHCBO-3-51, Table 3; and BLRPC. Corrections made by Mid-America Planning Services, Inc.

B. Civilian Labor Force

The civilian labor force is defined as employed persons and those seeking employment. It excludes persons in the armed forces and those under age 16. Variation in the number of persons in the labor force is a result of many factors. Shifts in the age and sex characteristics of residents, changes in the number of residents aged 16 and over, the proportion of this group working or seeking

employment, and seasonal elements are all factors affecting the size of the labor force.

Table 2 below illustrates the fluctuations within the civilian labor force in Manitowoc County for a seven-year period.

TABLE 2. CIVILIAN LABOR FORCE ESTIMATES 1980-1986

Manitowoc County	Civilian Labor/Force	Employed	Unemployed	Percent Unemployed
1980	41,300	38,200	3,100	7.5
1981	42,400	39,200	3,200	7.5
1982	43,600	37,300	6,300	14.4
1983	41,400	36,100	5,300	12.8
1984	37,500	33,500	4,000	10.7
1985	38,500	35,300	3,200	8.3
1986	38,000	35,000	3,000	7.9
% Change				
1980-1986	-8.0	-8.4	-3.2	3.9
1985-1986	-1.30	-.85	-6.25	-4.82

Note: 1987 data was not included due to insufficient data.

Source: Wisconsin Department of Industry, Labor and Human Relations; BLRPC. Corrections made by Mid-America Planning Services, Inc.

The County's annual average unemployment rate, recorded at 7.5 percent in 1980, peaked in 1982 at 14.4 percent and is currently at 11.8 percent (1987 January). Although following the general trend of the State and the nation, the County's unemployment rate continues to be above that of the district, State, and the U.S. as a whole.

C. All Industries

NOTE: The following employment information is from the report series, "Employment and Wages Covered by Wisconsin's Unemployment Compensation Law" prepared by the Wisconsin Department of Industry, Labor and Human Relations. This source of information is used to identify the various sectors of employment and does not necessarily represent the total number of people employed. This data does, however, serve well for year-to-year comparisons.

In 1985, there were 28,464 employed persons covered by unemployment compensation in the County, a decline of 8.8 percent over the 1980 figure of 31,194. For the same period, the State experienced a decline of .6 percent and the region an increase of 2.5 percent.

Growth in the year 1984 was recorded at 3.3 percent in the District and 2.3 percent for the State and 2.5 percent in the County as shown in Table 3 below.

TABLE 3. EMPLOYMENT BY AREA
1980 - 1986

	1980	1984	1985	1986
Manitowoc	31,194	27,747	28,464	35,000
Bay-Lake District	181,951	180,490	186,428	226,700
State	1,882,772	1,828,953	1,870,427	2,230,000

Source: Wisconsin Department of Industry, Labor and Human Relations, Employment and Wages Covered by Wisconsin's Unemployment Compensation Law, First Quarter, 1980 to 1984.

D. Employment by Industry

The greatest increase in number of employees by industry in Manitowoc County occurred in the mining sector which grew by 156 percent, or 78 jobs, from 1985 to 1986. The largest decrease in Manitowoc County occurred in the wholesale trade sector, decreasing by 7.73 percent, or 88 jobs, from 1985 to 1986.

In terms of the Bay-Lake Region as a whole, the most significant increase in number of employees similarly occurred in the mining sector, increasing by 65.67 percent, or by 44 jobs, from 1984 to 1985. The least amount of growth occurred in the wholesale trade sector which only grew by 1.35 percent, or 115 jobs, from 1984 to 1985.

Table 4 on page ED-4 illustrates employment by industry in more detail.

TABLE 4. EMPLOYMENT BY INDUSTRY NUMBER OF EMPLOYEES 1984 - 1986

	Manitowoc County				
	1984	1985	1986	% Change 1984-1985	% Change 1985-1986
Ag/For/Fish	237	223	265	-5.91	18.83
Mining	33	50	128	51.52	156.00
Construction	680	668	771	-1.76	15.42
Manufacturing	11,579	11,803	11,596	1.93	- 1.75
Transp/Commun/ Electric Serv.	787	781	810	- .76	3.71
Wholesale Trade	1,169	1,138	1,050	-2.65	- 7.73
Retail Trade	4,728	4,782	5,292	1.14	10.66
Finance/Insur/ Real Estate	659	697	741	5.77	6.31
Services	4,232	4,580	4,721	8.22	3.07
Government	3,643	3,742	3,819	2.72	2.06
All Industries	27,747	28,464	29,184	2.58	2.53

	Region		
	1984	1985	% Change 1984-1985
Ag/For/Fish	1,005	1,022	1.69
Mining	67	111	65.67
Construction	5,573	5,796	4.00
Manufacturing	64,451	65,476	1.59
Transp/Commun/ Electric Serv.	8,444	8,822	4.48
Wholesale Trade	8,538	8,653	1.35
Retail Trade	32,532	33,780	3.84
Finance/Insur/ Real Estate	6,147	6,348	3.27
Services	30,105	32,230	7.06
Government	23,516	24,161	2.74
All Industries	180,490	186,428	3.29

Source: Employment and Wages Covered by Wisconsin's Unemployment Compensation Law, First Quarter 1983, Wisconsin Department of Industry, Labor and Human Relations and BLRPC. Corrections made by Mid-America Planning Services, Inc.

1. Distribution of Payroll by Industry Group 1974-1984

From 1974 to 1984, the relative share of total U.S. payroll declined in the goods-producing sectors with a corresponding increase in the services-producing sectors. The State of Wisconsin and Manitowoc County followed the same trends as shown in Tables 5-7 and Figures 1-3 on pages ED-5 through ED-8.

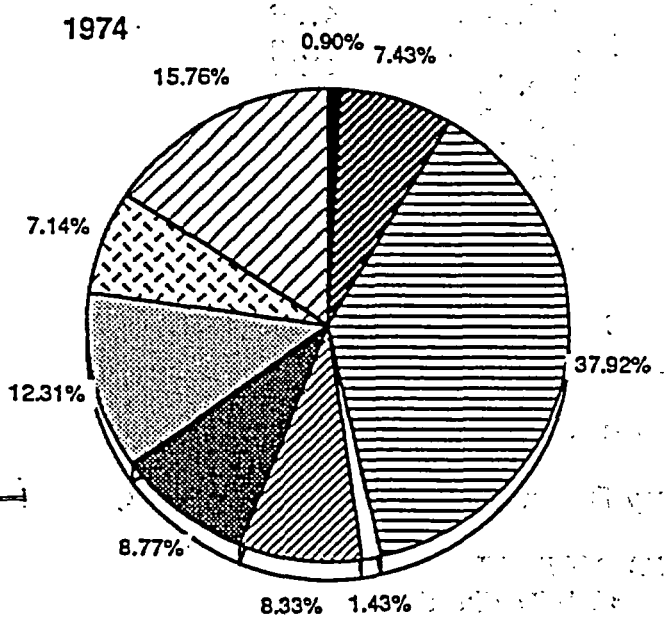
TABLE 5. UNITED STATES
FIRST QUARTER PAYROLL BY INDUSTRY

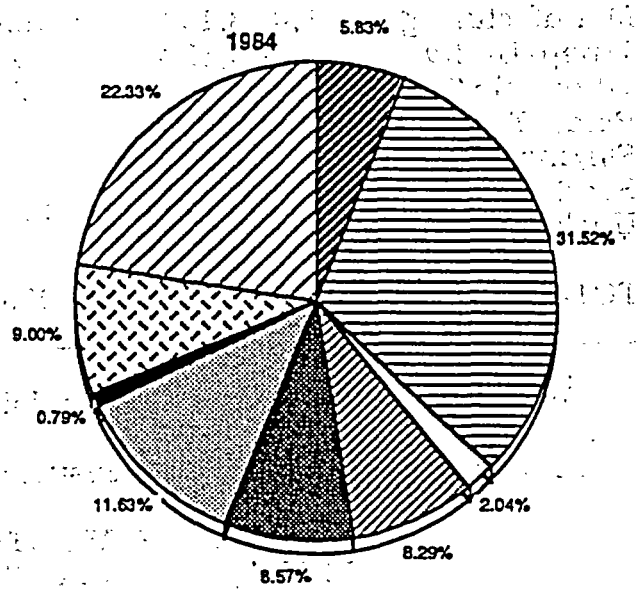
Industry	1974 Payroll ($1000)	Percent of Total	1984 Payroll ($1000)	Percent of Total
Ag/For/Fishing	$ 300,337	0.22	$985,396	0.29
Mining	1,937,434	1.43	6,948,857	2.04
Construction	10,064,039	7.44	19,802,664	5.82
Manufacturing	51,339,215	37.95	107,090,817	31.49
Trnsp/Utility	11,287,881	8.34	28,141,372	8.28
Wholesale Tr	11,883,496	8.78	29,126,447	8.56
Retail Trade	16,665,364	12.32	39,523,905	11.62
Fin/Ins/R.E.	9,674,395	7.15	30,558,800	8.99
Services	21,336,864	15.77	75,857,060	22.31
Unclassified	781,571	0.58	2,029,179	0.60
TOTAL	$108,084,852	100.00	$291,083,249	100.00

Note: Dollars shown are current dollars with no adjustment for inflation.

Source: U.S. Bureau of the Census; County Business Patterns, 1974, 1984.

FIGURE 1. UNITED STATES FIRST QUARTER PAYROLL BY INDUSTRY





- Ag/Fish/Unclass
- Construction
- Manufacturing
- Mining
- Trnsp/Util
- Wholesale Tr
- Retail Trade
- Fir/Ins/R.E.
- Services

- Construction
- Manufacturing
- Mining
- Trnsp/Util
- Wholesale Tr
- Retail Trade
- Ag/Fish/Unclass
- Fir/Ins/R.E.
- Services

TABLE 6. STATE OF WISCONSIN
FIRST QUARTER PAYROLL BY INDUSTRY

Industry	1974 Payroll ($1000)	Percent of Total	1984 Payroll ($1000)	Percent of Total
Ag/For/Fishing	$ 5,701	0.20	$ 19,129	0.30
Mining	7,055	0.25	7,533	0.12
Construction	164,987	5.78	272,144	4.26
Manufacturing	1,418,144	49.65	2,768,939	45.3
Trnsp/Utility	189,824	6.65	435,954	6.82
Wholesale Tr	207,980	7.28	483,075	7.56
Retail Trade	322,365	11.29	684,545	10.71
Fin/Ins/R.E.	159,405	5.58	462,236	7.23
Services	369,821	12.95	1,234,350	19.31
Unclassified	10,935	0.38	25,205	0.39
TOTAL	$2,856,218	100.00	$6,393,110	100.00

Note: Dollars shown are current dollars with no adjustment for inflation.

Source: U.S. Bureau of the Census; County Business Patterns, 1974, 1984.

TABLE 7. MANITOWOC COUNTY
FIRST QUARTER PAYROLL BY INDUSTRY

Industry	1974 Payroll ($1000)	Percent of Total	1984 Payroll ($1000)	Percent of Total
Ag/For/Fishing	$ --	0.00	$ --	0.00
Mining	90	0.19	--	0.00
Construction	2,200	4.75	3,107	3.21
Manufacturing	30,663	66.25	57,733	59.66
Trnsp/Utility	2,115	4.57	7,369	7.62
Wholesale Tr	2,172	4.69	3,466	3.58
Retail Trade	4,067	8.79	8,589	8.88
Fin/Ins/R.E.	1,020	2.20	2,520	2.60
Services	3,811	8.23	13,479	13.93
Unclassified	--	0.00	229	0.24
TOTAL	$46,138	99.67	$96,492	99.72

Note: Dollars shown are current dollars with no adjustment for inflation.

Source: U.S. Bureau of the Census; County Business Patterns, 1974, 1984.

FIGURE 2. STATE OF WISCONSIN FIRST QUARTER PAYROLL BY INDUSTRY

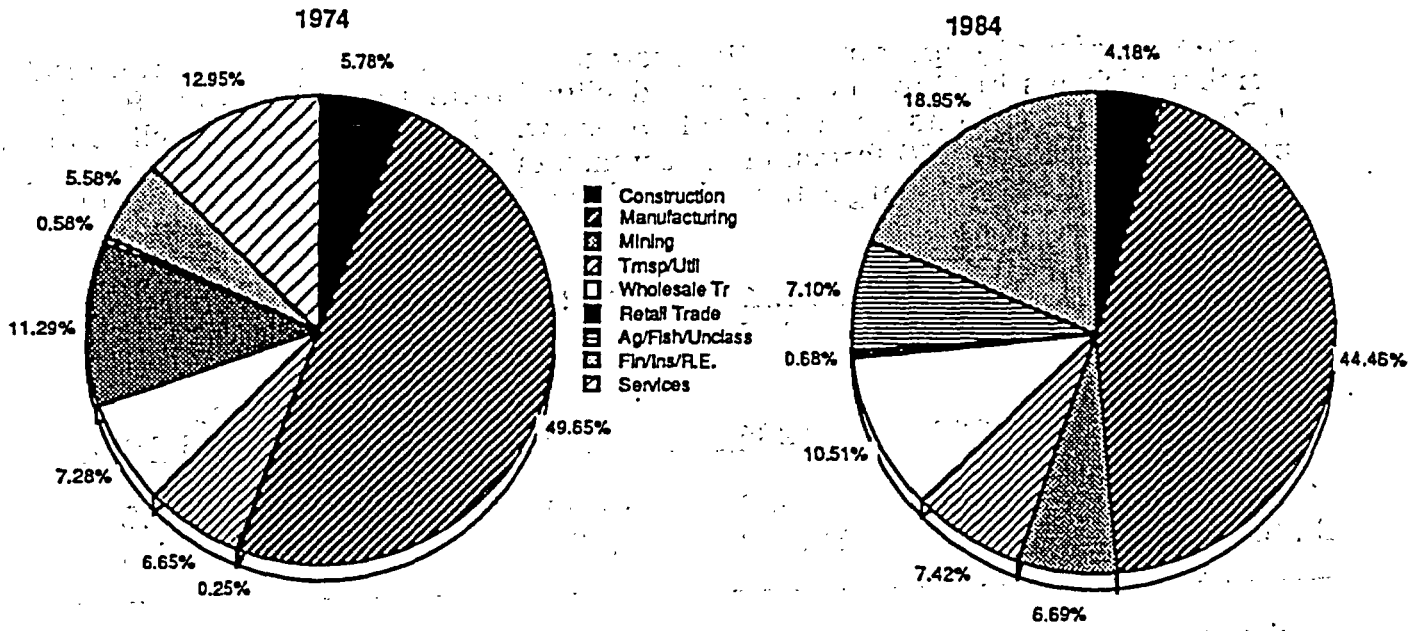
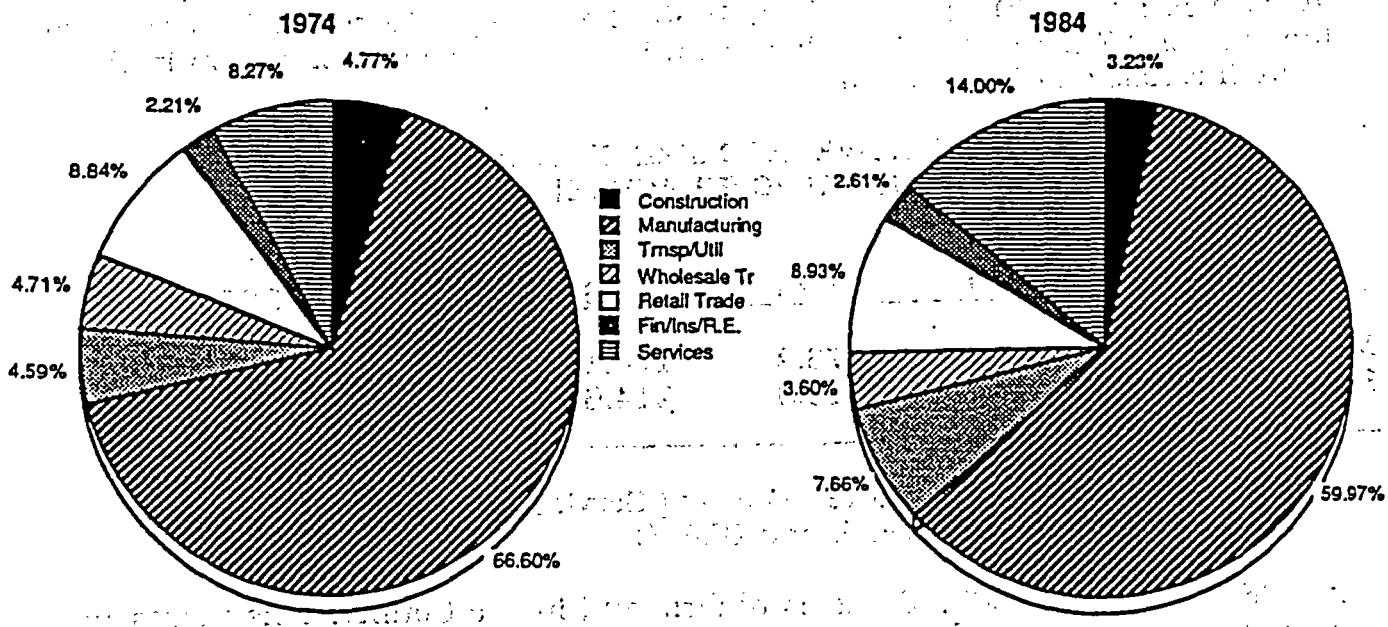


FIGURE 3. MANITOWOC COUNTY FIRST QUARTER PAYROLL BY INDUSTRY



E. Description of Employment Sectors

1. Agriculture

Farming is of vital importance to the economy of Manitowoc County. The total number of farms in Manitowoc County declined from 1,980 farms in 1980 to 1,660 farms in 1986 as noted in Table 8 below. This represents a decline in the number of farms by 320 farms, or a decrease of 16.2 percent. This decrease in the number of farms is larger than that of the State which decreased by 11.8 percent.

TABLE 8. TOTAL NUMBER OF FARMS 1980-1986

	1980	1985	1986	Percent Change 1980-1986	Percent Change 1985-1986
Manitowoc	1,980	1,680	1,660	-16.2	-1.2
State	93,000	83,000	82,000	-11.8	-1.2

Source: Wisconsin Agriculture Reporting Service, Wisconsin Agricultural Statistics, 1982-1985; and BLRPC.

The average size of a farm in Manitowoc County is increasing. In 1980, the average size was 159 acres, while in 1986, the average size was 174 acres or an increase of 9.7 percent (see Table 9 below). The average size of a farm in the State increased by 7.3 percent.

TABLE 9. AVERAGE SIZE OF FARMS 1980-1986 [IN ACRES]

	1980	1985	1986	Percent Change 1980-1986	Percent Change 1985-1986
Manitowoc	158.7	173.2	174.1	9.7	0.52
State	200.0	213.3	214.6	7.3	0.61

Source: Wisconsin Agriculture Reporting Service, Wisconsin Agricultural Statistics, 1982-1985; and BLRPC.

In 1986, there were 289,000 acres of farmland in the County. This represents an 8.0 percent decline from the 1980 figure of 314,200 acres. The State also lost acres in farmland, experiencing a 5.4 percent decrease in farmland.

TABLE 10. LAND IN FARMS
1980-1986 [IN ACRES]

	1980	1985	1986	Percent Change 1980-1986	Percent Change 1985-1986
Manitowoc	314,200	291,000	289,000	-8.0	-.69
State	18,600,000	17,700,000	17,600,000	-5.4	-.56

Source: Wisconsin Agriculture Reporting Service, Wisconsin Agricultural Statistics, 1982-1985; and BLRPC.

With the continued trend of urban sprawl, the State of Wisconsin established a statute outlining the development of farmland preservation plans. Financial assistance from the State has given counties the opportunity to define where the prime agricultural land is located in the county and to provide tax incentives to farmers to maintain this land in agricultural use.

2. Wholesale Trade Sales

Wholesale trade sales are a measure of the scope of this economic activity within an area. Between 1972 and 1982, wholesale trade sales in the City of Two Rivers increased by 103.6 percent. In the County, sales increased by 117.5 percent.

TABLE 11. TOTAL WHOLESALE TRADE SALES FOR MANITOWOC COUNTY AND TWO RIVERS

Location	1972	1977	1982	1972-1982	1977-1982
Two Rivers (C)	**10,943**	**17,675**	**22,277**	**103.6**	**26.0**
Manitowoc County Total	103,179	173,479	224,426	117.5	29.4

Source: U.S. Department of Commerce, Bureau of the Census, Census of Wholesale Trade, 1972, 1977, and 1982; and BLRPC. Corrections made by Mid-America Planning Services, Inc.

3. Value Added By Manufacture

The Census of Manufactures defines value added by manufacture as "the value derived by subtracting the total cost of materials from the value of shipments and other receipts, and adjusting the resulting amount by the net change in finished products and work-in-process inventories between the beginning and end of the year".

As shown in Table 12 below, from 1972 to 1982, the City of Two Rivers increased its value from 62.7 million dollars to 87 million dollars, an increase of 24.3 million dollars, or 27.9 percent. However, from 1977 to 1982, Two Rivers experienced a decrease of .3 million dollars or 3.3 percent. Manitowoc County experienced a much greater increase from 1972-1982, or 120.7 percent. From 1977-1982, the growth was much smaller, increasing by only 15.2 percent.

TABLE 12. VALUE ADDED BY MANUFACTURE FOR CENTRAL CITIES IN THE MANITOWOC GROWTH CENTER

GROWTH CENTER		1972	1977	1982	Percent Change 1972-1982	Percent Change 1977-1982
		(Millions of Dollars)				
Manitowoc						
(C) Two Rivers	**$**	**62.7**	**90.0**	**87.0**	**27.9**	**-3.3**
(C) Manitowoc		117.7	244.6	309.6	163.0	21.0
CENTER TOTAL		180.4	334.6	396.6	119.8	15.6
MANITOWOC COUNTY TOTAL	$	194.7	364.6	429.7	120.7	15.2
CENTER AS A PERCENT OF COUNTY		92.6%	91.8%	92.3%	--	--

Source: U.S. Department of Commerce, Bureau of the Census, Census of Manufactures, 1972 and 1977; and BLRPC.

4. Total Retail Trade Sales

Total retail sales figures provide a measure of the impact of retail purchases on an area. Between 1972 and 1982, Manitowoc County recorded a sales increase of 32.2 percent, and Two Rivers recorded a retail sales increase of 29 percent between 1977-1982. Table 13, on page ED-12, shows total retail sales for Manitowoc County and Two Rivers between 1972 and 1982.

TABLE 13. TOTAL RETAIL TRADE SALES FOR MANITOWOC COUNTY AND TWO RIVERS

Location	1972	1977	1982	1972-1982	1977-1982
Two Rivers (C)	**$ 23,570**	**$ 39,118**	**$ 50,449**	**114.0%**	**29.0%**
Manitowoc County Total	140,834	217,163	287,121	103.9%	32.2%

Source: U.S. Department of Commerce, Bureau of the Census, Census of Retail Trade, 1972, 1977, and 1982; and BLRPC.

5. Per Capita Retail Sales

Per capita retail sales were higher in Two Rivers than in Manitowoc County for the period 1972-1982, with an increase of 121.2 percent, compared with 106.2 percent for Manitowoc County as shown in Table 14 below. Manitowoc County retail sales grew 33.5 percent from 1977-1982, and Two Rivers retail sales grew by 28.1 percent from 1977 to 1982.

TABLE 14. PER CAPITA RETAIL SALES FOR MANITOWOC COUNTY AND TWO RIVERS

Location	1972	1977	1982	1972-1982	1977-1982
Two Rivers (C)	**$ 1,714**	**$ 2,960**	**$ 3,791**	**121.2 %**	**28.1%**
Manitowoc County Total	1,686	2,604	3,477	106.2 %	33.5%

Source: U.S. Department of Commerce, Bureau of the Census, Census of Retail Trade, 1972, 1977, and 1982; Wisconsin Department of Administration, Official Population Estimates for 1982; and BLRPC. Corrections made by Mid-America Planning Services, Inc..

When analyzed, the economy of the Two Rivers area appears to be stagnating. A combination of out-migration and slightly lowered unemployment have made the employment data appear much better than it is in reality.

Prior to 1980, Two Rivers had a good economy with high levels of employment. As shown in Table 1 on page ED-1, Two Rivers and the surrounding communities all experienced expanding economies with very low unemployment rates. For Manitowoc County between 1975-1979, the average annual unemployment rate was less than 5.0 percent. However, as shown in Table 2 on page ED-2, the unemployment rate skyrocketed in the 1980's.

Between 1979 and 1982, the unemployment rate for Manitowoc County increased from 4.2 percent to 14.4 percent, representing a total of 6,300 unemployed

persons. While the unemployment rate for the County has decreased, it is still much higher than it was during the 1970's. The average annual unemployment rate in Manitowoc County for the years 1980-1986 was 9.9 percent versus less than 5.0 percent during the late 1970's.

The decrease in unemployment in the Two Rivers area appears to be the result of two factors. Unemployment has decreased due to a slight increase in the number of employment opportunities. However, the effect of the increase is greatly outweighed by the decrease created by people simply leaving the area or the workforce. By viewing unemployment in conjunction with the population data, the relationship between decreasing unemployment rates and the decreasing population can be seen. As the population decreases, fewer people are competing for the same jobs. Therefore, unemployment appears to decrease.

A major problem of the Two Rivers economy is its lack of diversification. Table 4 on page ED-4 lists employment by industry. Manufacturing, with 11,596 employees in 1986, represents nearly 40 percent of the available jobs. This is nearly twice the national level of 22 percent in manufacturing. The retail trade sector with only 18 percent is the next largest employment sector. In order to promote stability, the City must diversify its economy into other areas such as the retail, service, and tourism sectors.

Manufacturing has been an important part of the Two Rivers economy. However, because of the industry's variability since 1980, the City can no longer rely on it to provide such a large percentage of the employment opportunities.

Agriculture, while employing only a small percentage of the population, has been an important aspect to the area economy. As shown in Table 8 on page ED-9, the number of farms has been decreasing since 1980. However, Table 9 on page ED-9 states that the average size of farms has increased 9.7 percent over the same period of time. It is possible that the farmland was simply sold to adjoining farms. However, the data in Table 10 on page ED-10 makes this seem unlikely. Approximately 8.0 percent or 25,200 acres of farmland has been lost throughout the County since 1980.

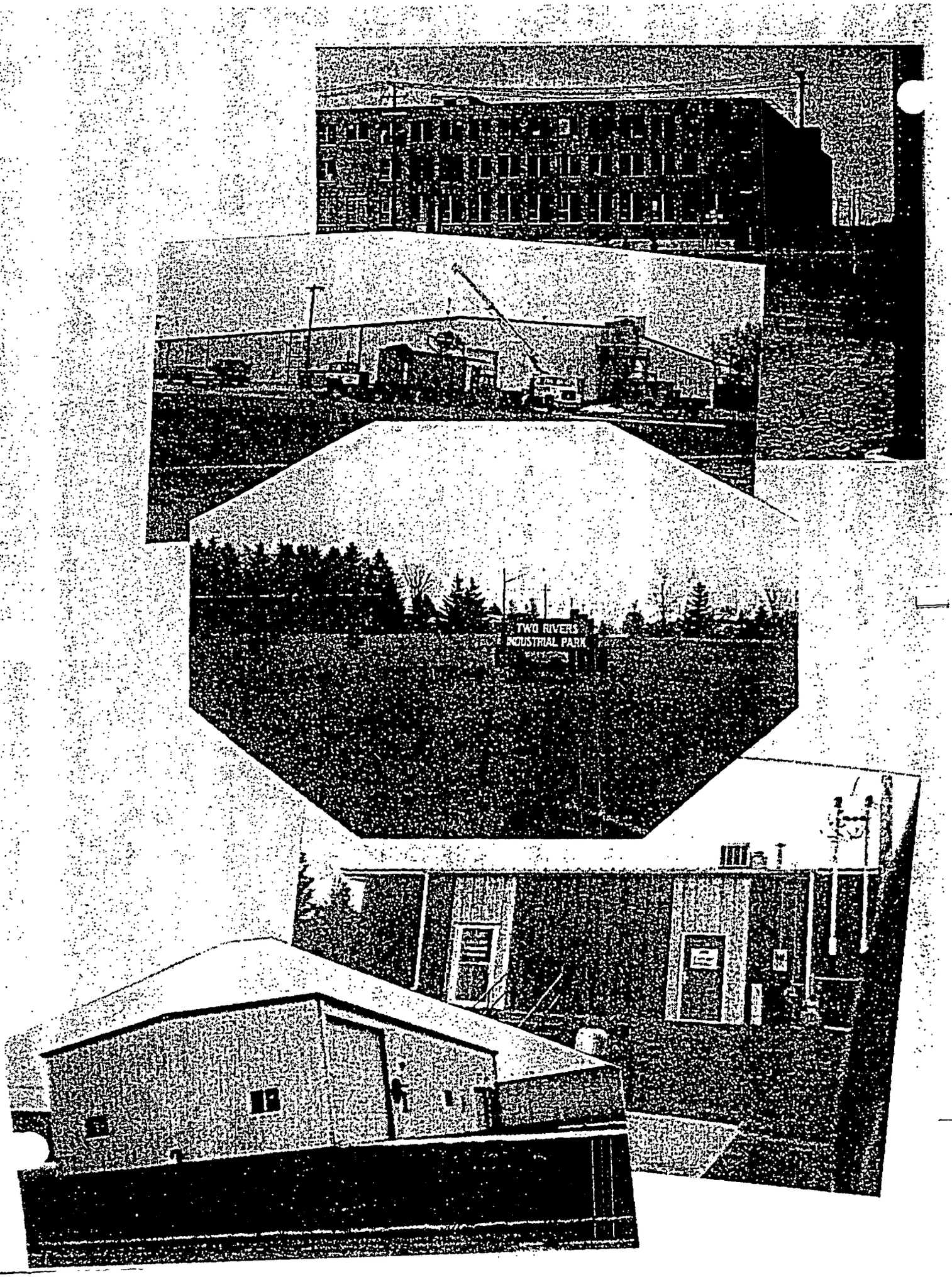
In general, it appears Manitowoc County has been constantly losing more farmland and at a faster rate than the State as a whole. In addition, Manitowoc County's average size of farms has been increasing at a faster rate than the State. These facts indicate that Manitowoc County is losing farmland at a faster rate than the State, and that the smaller farmer is losing out to the large farms. Measures may need to be taken to ensure that scarce farmland is not exploited or developed unnecessarily.

It appears that the retail trade sector is continuing to grow while the wholesale trade sector is shrinking. According to Table 4 on page ED-4, the retail sector grew 10.66 percent between 1985 and 1986. The wholesale sector decreased by 7.73 percent during this same period.

The downward trend within the wholesale trade sector will probably continue in the future, with the main area of growth being in the area of retail trade. Assistance to maintain the current high level of growth should be promoted. Continued growth in this sector and other economic sectors will help in stabilizing and diversifying the Two Rivers economy.

The economy of Two Rivers took a downward turn in the 1980's. Much of the downward turn was due to the reduction in workforce or the removal of production lines by major manufacturing employers in Two Rivers. The impact was devastating because of the City's undiversified economy.

In order to avoid a repetition of the early 1980's, the City must plan to have a diverse economic and labor base. Through appropriate planning and the retraining of employees, Two Rivers can once again have an expanding rather than a stagnating economy.


TWO RIVERS
INDUSTRIAL PARK

. POPULATION DATA

The City of Two Rivers is the second largest city within Manitowoc County. It is located adjacent to the City of Manitowoc and has been identified as part of the Manitowoc area growth center by the Bay-Lake Regional Planning Commission.

Two River's 1986 estimated population was 13,208. This represents a decrease of 1.09 percent since 1980. As shown in Tables 1 and 2, Two Rivers, along with much of the Manitowoc-Two Rivers area, has been steadily losing population for nearly the past two decades.

TABLE 1. POPULATION OF THE MANITOWOC GROWTH CENTER

Growth Center	1970	1980	1986
Manitowoc Rapids (T)	3,552	3,186	2,785
Newton (T)	2,256	2,332	2,308
Two Rivers (T)	2,627	2,663	2,498
Manitowoc (C)	33,430	32,547	32,482
Two Rivers (C)	**13,553**	**13,354**	**13,208**
Area Total	55,418	54,082	53,281
Manitowoc County Total	82,115	82,918	82,697
Area as a Percent of County	67.5%	65.2%	64.4%

Source: U.S. Department of Commerce, Bureau of the Census, Census of the Population 1970, 1980; Wisconsin Department of Administration, Official Population Estimates for 1986; and BLRPC.

TABLE 2. POPULATION CHANGES IN GROWTH CENTER

	Growth 1970-1980		Growth 1980-1986		Growth 1970-1986	
Growth Center	Actual	%Change	Actual	%Change	Actual	%Change
Manitowoc R. (T)	-366	-10.30	-401	-12.59	-767	-21.59
Newton (T)	76	3.26	- 24	- 1.03	52	2.30
Two Rivers (T)	36	1.35	-165	- 6.20	- 99	- 4.91
Manitowoc (C)	-883	- 2.64	- 65	- 2.00	-948	- 2.84
Two Rivers (C)	-199	- 1.47	-146	- 1.09	-345	- 2.54
Area Total	-1,336	- 2.41	-801	- 1.48	-2,137	-3.86
County Total	803	97	-221	- 2.67	582	70

Source: U.S. Department of Commerce, Bureau of the Census, Census of the Population 1970, 1980; Wisconsin Department of Administration, Official Population Estimates for 1986; and Mid-America Planning Services, Inc.

This steady decrease began after 1970. During the prior decade, the City of Two Rivers grew by 9.4 percent or 1,160 persons. Between 1960 and 1986 the City experienced an overall growth of 6.6 percent as shown in Tables 3 and 4 below.

TABLE 3. POPULATION TRENDS 1960 - 1986

Area	1960	1970	1980	1986
Two Rivers (C)	12,393	13,553	13,354	13,208
Manitowoc County	75,215	82,294	82,918	82,697
State	3,951,777	4,417,821	4,705,335	4,789,122

Source: U.S. Department of Commerce, Bureau of the Census; and Wisconsin Department of Administration, Official Population Estimates for 1986.

TABLE 4. POPULATION PERCENTAGE CHANGES 1960 - 1986

Area	% Change 1960-1970	% Change 1970-1980	% Change 1960-1980	% Change 1960-1986	% Change 1980-1986
Two Rivers (C)	9.4	-1.5	7.8	6.6	-1.1
Manitowoc County	9.4	0.8	10.2	9.9	-0.3
State	11.8	6.5	9.1	21.2	1.8

Source: U.S. Department of Commerce, Bureau of the Census; and Wisconsin Department of Administration, Official Population Estimates for 1986.

Since 1970, however, the City has experienced a negative growth rate of about 2.5 percent per year.

Approximately 51.4 percent of the population was listed as female during the 1980 census. The median age for males was placed at 29.7 years and at 33.2 years for females, with an average median age of 30.8 years. A more detailed illustration of Two Rivers' age structure can be found in Table 5 on page P-3 and Figure 1, on page P-4.

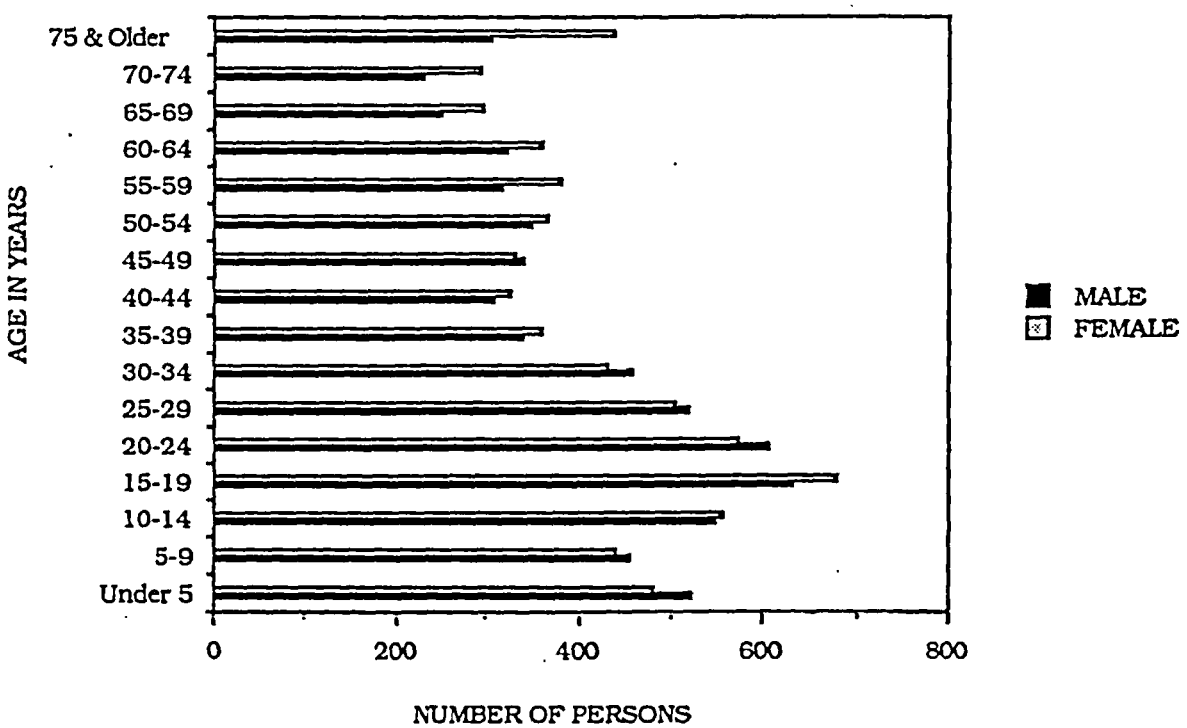
TABLE 5. AGE OF POPULATION - AGE STRUCTURE OF TWO RIVERS, 1980

	Total		White		Black		Spanish	
	M	F	M	F	M	F	M	F
Total Persons	6491	6863	6422	6804	---	---	48	45
Under 5 years	520	479	506	461	---	---	13	11
5 to 9 years	454	439	447	433	---	---	5	6
10 to 14 years	547	557	540	554	---	---	7	3
15 to 19 years	630	678	624	673	---	---	1	6
20 to 24 years	604	573	590	568	---	---	7	6
25 to 29 years	517	503	508	495	---	---	5	4
30 to 34 years	456	432	453	431	---	---	3	3
35 to 39 years	340	362	340	359	---	---	1	3
40 to 44 years	308	325	303	323	---	---	2	1
45 to 49 years	339	332	338	331	---	---	1	--
50 to 54 years	350	367	349	365	---	---	-	-
55 to 59 years	318	380	317	378	---	---	-	-
60 to 64 years	323	360	323	358	---	---	2	-
65 to 69 years	251	296	251	295	---	---	-	-
70 to 74 years	229	294	228	294	---	---	-	2
75 to 79 years	164	240	164	240	---	---	1	-
80 to 84 years	93	101	93	151	---	---	-	-
85 years & older	48	95	48	95	---	---	-	-
18 " "	4584	4992	4546	4964	---	---	23	20
62 " "	961	1293	960	1292	---	---	2	2
65 " "	785	1076	784	1075	---	---	1	2
Median	29.7	33.2	30.0	32.4	---	---	14.0	16.6

Source: U.S. Bureau of the Census, 1980 Census of Population and Housing.

The overall population of Two Rivers is steadily aging. As shown in Table 6 on page P-5 and Figure 2 on page P-6, the population under the age of 15 experienced a negative growth rate, showing decreases of up to 35 percent between 1970 and 1980. Also, the median age of the population increased from 28.8 years in 1970 to 30.8 years in 1980.

FIGURE 1. AGE OF POPULATION - AGE STRUCTURE OF TWO RIVERS, 1980



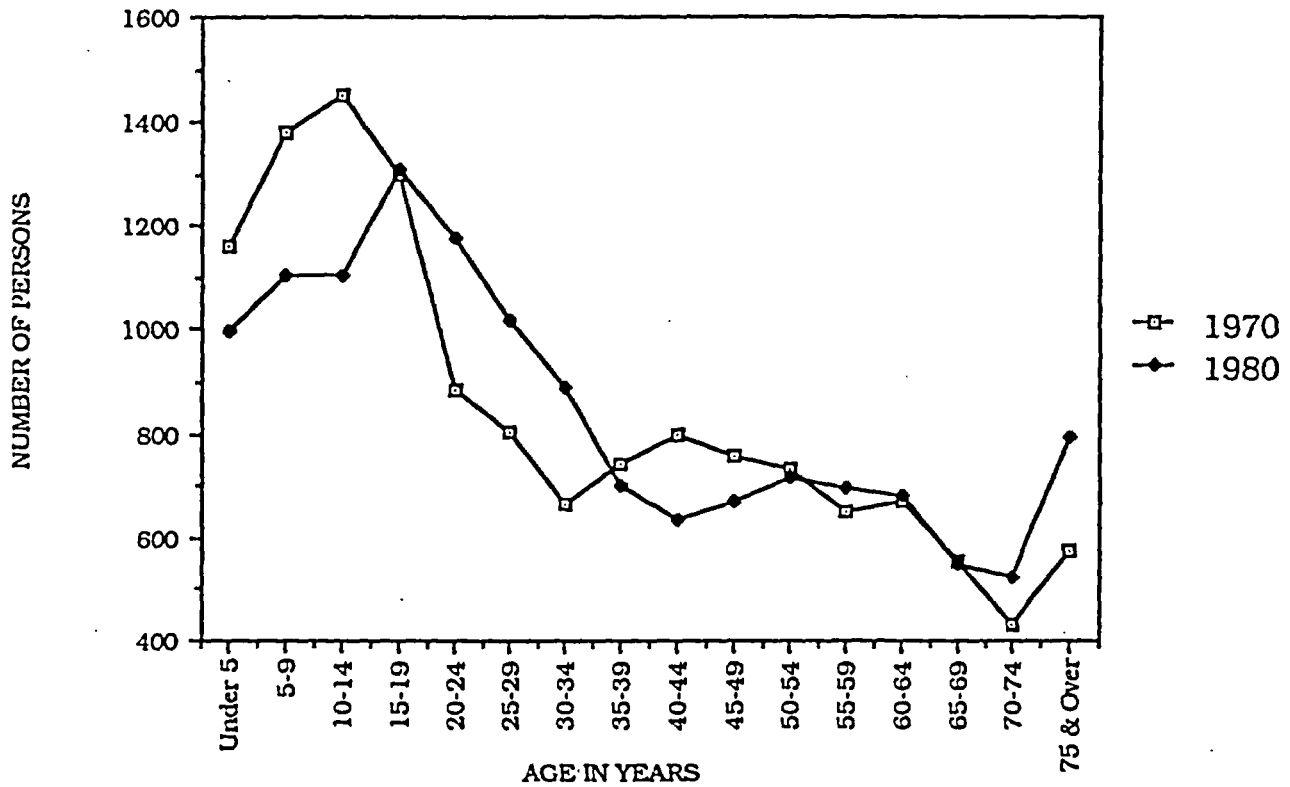
Source: U.S. Bureau of the Census, 1980 Census of Population and Housing.

TABLE 6. PERSONS BY AGE FOR CITY OF TWO RIVERS, 1970-1980

	1970	1980	% Change
Total Persons	13,553	13,354	-1
Under 5 years	1,163	999	-14
5 to 9 years	1,378	1,104	-20
10 to 14 years	1,450	1,104	-24
15 to 19 years	1,297	1,308	0.8
20 to 24 years	883	1,177	33
25 to 29 years	805	1,020	27
30 to 34 years	665	888	33
35 to 39 years	741	702	-5
40 to 44 years	798	633	-21
45 to 49 years	757	671	-11
50 to 54 years	733	717	-2
55 to 59 years	651	698	7
60 to 64 years	670	683	2
65 to 69 years	555	547	-1
70 to 74 years	431	523	21
75 to 79 years	313	404	29
80 to 84 years	162	244	51
85 years & older	101	143	42
18 " "	8,712	9,576	10
62 " "	1,969	2,254	14
65 " "	1,652	1,861	13
Median	28.8	30.8	

Source: U.S. Bureau of the Census, 1980 Census of Population and Housing.

FIGURE 2. PERSONS BY AGE FOR CITY OF TWO RIVERS, 1970-1980



Source: U.S. Bureau of the Census, 1980 Census of Population and Housing.

The aging trend which occurred between 1970 and 1980 appears to be continuing. School enrollments have consistently dropped from 1980 through 1987. Table 7 on page P-7 illustrates the downward trend in the number of school age children.

TABLE 7. SCHOOL ENROLLMENTS

	1980-81	1984-85	1986-87	% Change 1980-1987
Kindergarten	199	179	175	-12
1 - 8	1,344	1,207	1,188	-12
9 - 12	1,045	930	849	-19
Total	2,588	2,316	2,212	-14.5

Source: Board of Education, City of Two Rivers; and Mid- America Planning Services, Inc.

Upon analysis of the data, it appears uncertain whether the aging trend will continue due to the large number of adults within the 20-34 year age group. Also, because females within this age group are defined as being within their high reproductive years, fertility rates may increase. However, net out-migration may temper the impact of potentially high fertility rates as out-migration typically occurs within this same age group. Therefore, if high rates of out-migration continue, then the population will continue to age in spite of high fertility rates.

Population projections published by the State of Wisconsin estimate a slight rise in the population of Two Rivers by 1995. The increase will then be followed by a decline in the population through 2010 as shown in Table 8 which follows. According to Mr. B. Kale, demographer for Wisconsin Demographic Service, the patterns exhibited in the Two Rivers' projections are due to a short period of high fertility followed by a decrease in fertility and continued out-migration. The out-migration will continue to have a greater impact on the population than fertility rates because of the area's poor economic climate.

TABLE 8. PROJECTIONS

	1980 (Census)	1985	1990	1995	2000	2005	2010
Manitowoc County	82,918	83,599	84,514	85,062	84,934	84,376	83,753
Two Rivers(C)	**13,354**	**13,485**	**13,518**	**13,649**	**13,529**	**13,484**	**13,272**
Manitowoc County*	-	83,859	84,606	83,450	85,307	85,420	85,007

Source: Department of Administration County Population Projections; (March 25, 1983) (Revised August 1983); County Projections (1983); City Projections (1985); * County Projections (1985); Based on the summation of the municipality projections.

The population increase shown in Table 8 equals a 2.2 percent rise between 1980 and 1995, an increase of 295 persons. The decrease shown to occur between 1995 and 2010 represents a 2.8 percent decline or a loss of 377 people. The decrease occurring between 1995 and 2010 would bring the estimated 2010 population below the 1980 census population. The overall growth between 1980 and 2010 would be -.6 percent.

Analysis of the data shows that the projected decrease in the population of Two Rivers is due to two main factors: out-migration and lower fertility rates. Out-migration has a greater impact on population growth than lower fertility rates as out-migration often affects fertility rates as well as population growth.

Out-migration typically occurs within those age groups which are defined as being in the high reproductive stages. Therefore, out-migration removes potentially fertile couples from the population. The current population is decreased by the out-migration and the future population is decreased by the relocation of fertile adults.

Lower fertility rate can also be attributed to an aging population. Older age groups produce fewer children. Therefore, population growth is lower in a population with a higher median age.

A second factor in the decrease in population is the loss of population through out-migration. A major portion of the population decrease which has occurred since 1970 has been caused by out-migration. People have been leaving Two Rivers due to a loss of employment and/or a belief that few or no employment opportunities exist. As shown in Table 6, the age groups with negative growth in 1980 were those groups between 35-54 years and those groups between 0-14 years. It can be assumed that the 0-14 group represents the children of the 35-54 group. The increases in the 15-34 year group in 1980 can be assumed to be caused by the aging of the 1970 age groups between 0-24 years. However, comparisons made between the 1970 and 1980 counts show decreases, if calculated by cohorts, as shown in Table 9 below.

TABLE 9. COHORT COMPARISON: 1970 VS 1980

1970	Age	1980	Age	% Change
1,378	5-9 years	1,308	15-19 years	- 5.1
1,450	10-14 years	1,177	20-24 years	-18.8
1,297	15-19 years	1,020	25-29 years	-21.4
883	20-24 years	888	30-34 years	0.6

Source: U.S. Department of Commerce, Bureau of the Census, Census of the Population 1970, 1980; Mid-America Planning Services, Inc.

All the data collected and previous population predictions point towards a steadily decreasing and older population for the City of Two Rivers. However, because much of the decrease appears to be due to a downturn in the local economy, it can be stopped.

A major component required to promote an increase in the Two Rivers' population is the creation of new employment opportunities. These new jobs will encourage people currently living in Two Rivers to stay as well as possibly attracting others to move into the area. The increasing population will have a positive effect on the retail sector of the economy which in turn will create more jobs.

It is not unreasonable to expect growth rates similar to those experienced by Two Rivers between 1960 and 1970 if sufficient numbers of jobs are created. Using a 4.7 percent growth rate - one half of the 9.4 percent growth rate which occurred between 1960 and 1970 - Table 10 and Figure 3 on page P-10 can be developed to illustrate population trends over a 25-year period.

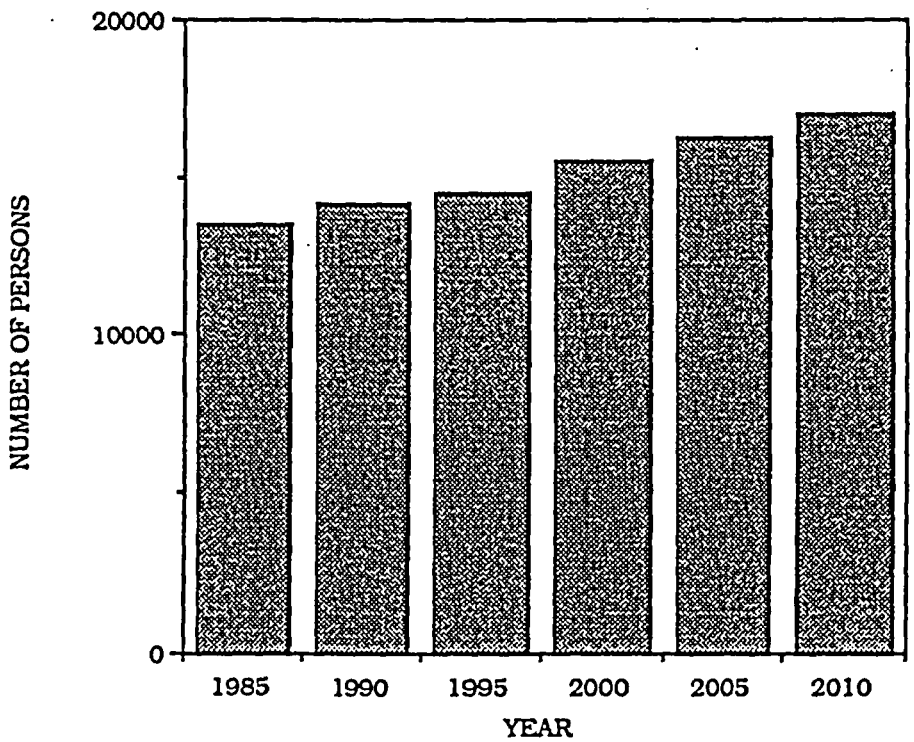
While the use of a 4.7 percent growth rate for each five-year period over 25 years may be optimistic, it is not unreasonable. If sufficient growth occurs within the local economy, it will cause growth within the population.

TABLE 10. PROJECTIONS

	1985	1990	1995	2000	2005	2010
Two Rivers	13,485	14,119	14,783	15,478	16,205	16,967

Source: U.S. Department of Commerce, Bureau of the Census, Census of the Population 1970, 1980; Mid-America Planning Services, Inc.

FIGURE 3. PROJECTIONS



LAND USE

The area included in this land use analysis is all of the City of Two Rivers and the three-mile extra-territorial area. The purpose of this study is to provide a detailed land use plan for the area under consideration.

The City adopted its first detailed Land Use Plan in 1982. In the early 1960's, a comprehensive Land Use Plan was prepared for the City; however, it was not adopted. Many elements of the Plan were not considered feasible and, therefore, it was not utilized by the City government in its decision making processes. In the early 1970's, a Land Use Plan was prepared by Manitowoc County Park and Plan Commission as part of the Areawide Transportation Study. Although this study lacked the detail of a parcel-by-parcel basis, it was adopted by the Two Rivers City Council.

Also early in the 1970's, land use questions facing the City Council and Plan Commission required that detailed Land Use Plans be prepared for Memorial Drive and North Lincoln Avenue. These Land Use Plans were prepared by the Consultant, and reviewed and adopted by the Plan Commission and City Council.

Then in the late 1970's, land uses along the Lake Michigan Coast were given a very detailed examination. First, a study was prepared on City-owned property fronting on the water. This principally included street ends, parks and parking lots. Recommendations were made for all thirty of these areas. Second, the program required the Consultant to prepare a detailed Land Use Plan for the Rogers Street Fishing Village, which is between 17th and 22nd Streets on the east side of the East Twin River. The information received from these two studies was used to prepare the 1982 Land Use Plan.

A. Land Use Survey

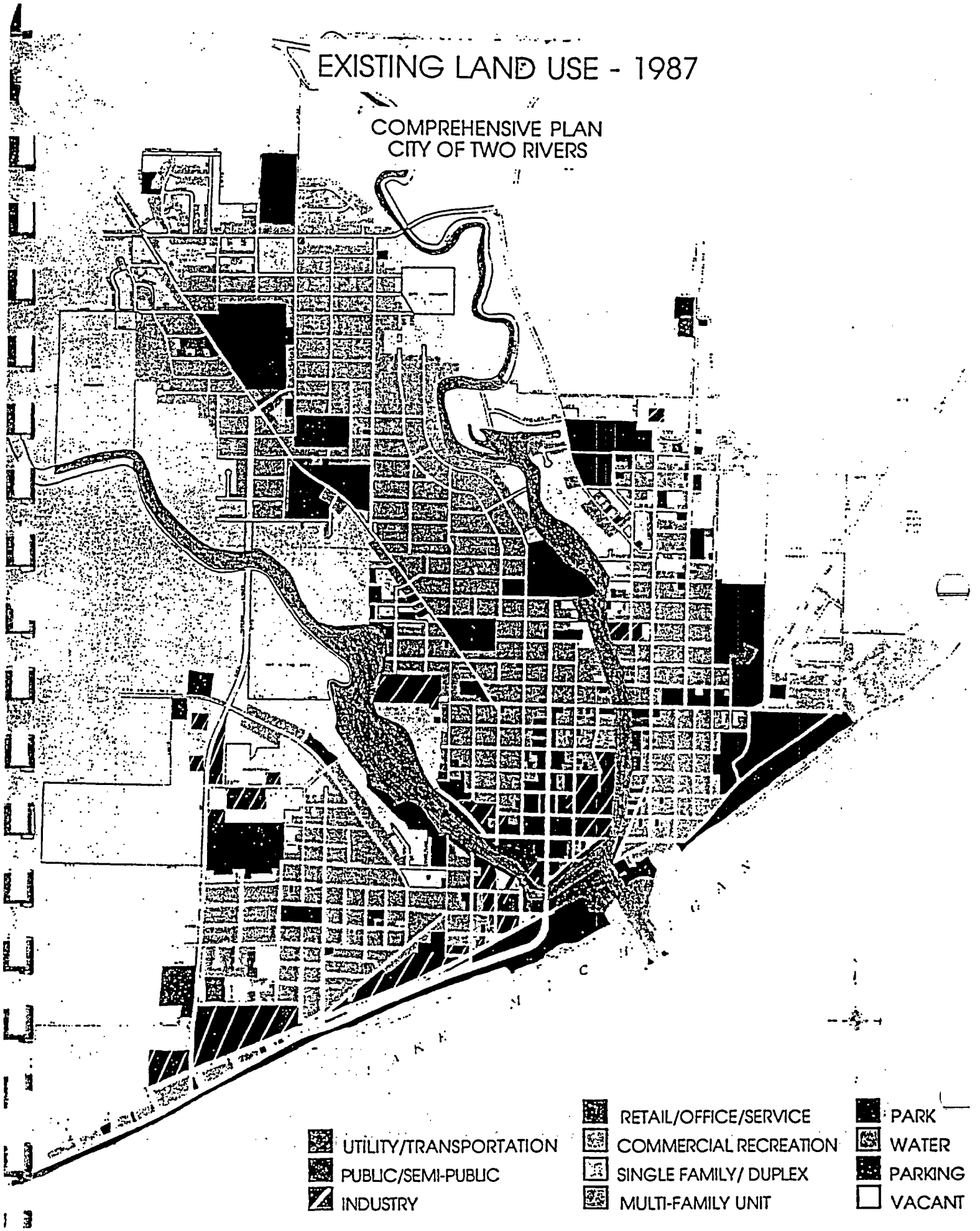
The Consultant conducted a parcel-by-parcel survey in 1981 for the entire City of Two Rivers. The City was resurveyed in 1987 by City staff and changes in the land use in those six years noted. Also, a parcel-by-parcel survey was conducted of the three mile extra-territorial area by City staff and those land uses mapped. Table 1 on page LU-4 indicates the categories used in the survey.

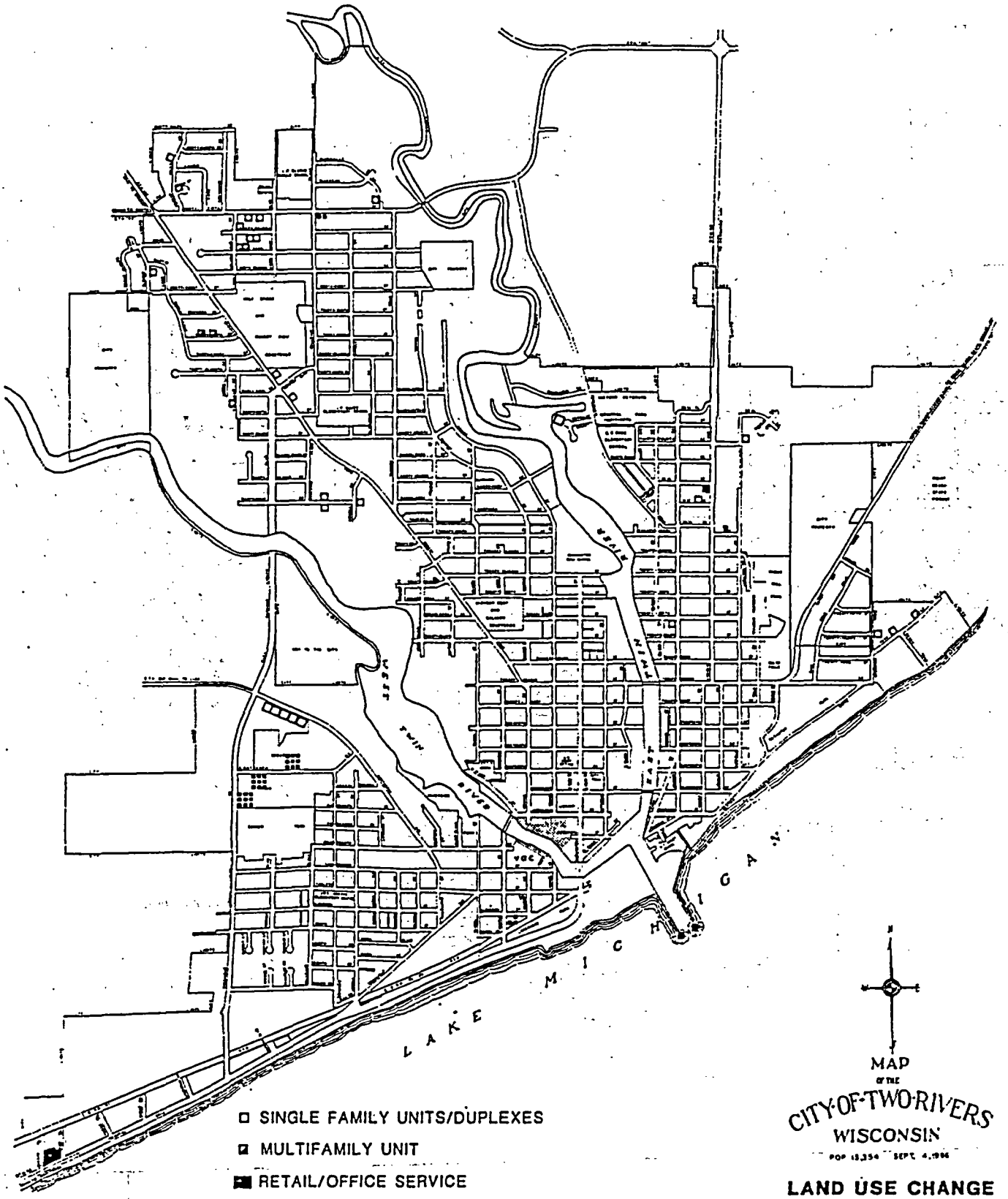
The colored Existing City Land Use Maps for 1981 and 1987 are on file in the Zoning Administrator's Office, along with the colored 1987 Extra-territorial Land Use Map. Maps showing current land use and land use changes since 1981 can be found following page LU-1. All three maps are generalized on the following pages.

B. Land Use in Two Rivers

Upon analysis, it can be seen that Two Rivers is dissected into three segments by the East and West Twin Rivers. These segments have distinctive land use patterns which are noteworthy in considering development needs.

The City is focused principally around the Central Business District (CBD) which is along Washington Street between the East and West Twin Rivers and near the


EXISTING LAND USE - 1987
COMPREHENSIVE PLAN
CITY OF TWO RIVERS
UTILITY/TRANSPORTATION
PUBLIC/SEMI-PUBLIC
INDUSTRY
RETAIL/OFFICE/SERVICE
COMMERCIAL RECREATION
SINGLE FAMILY/ DUPLEX
MULTI-FAMILY UNIT
PARK
WATER
PARKING
VACANT



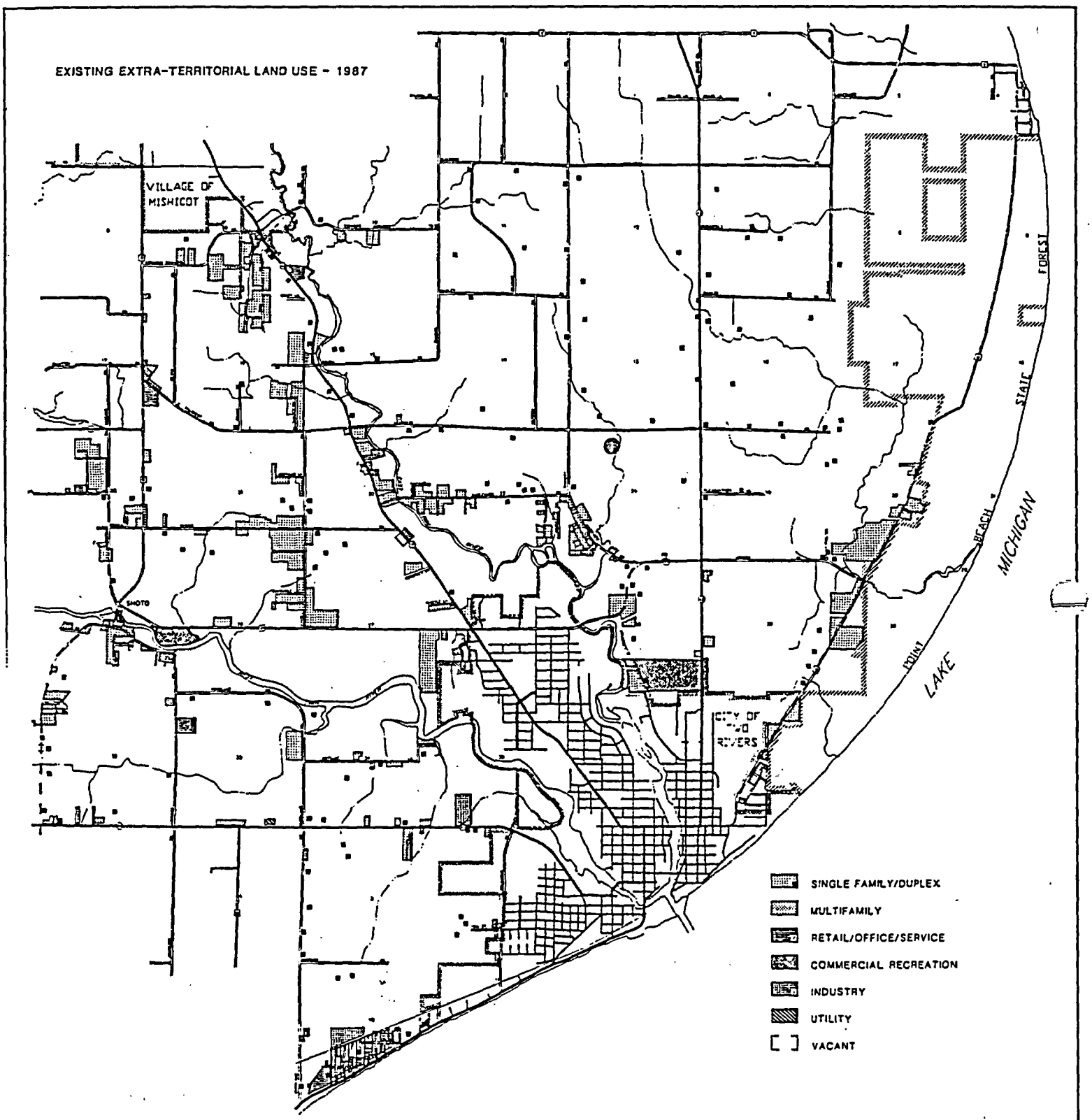
MAP
OF THE
CITY OF TWO RIVERS
WISCONSIN
POP 13,354 SEPT. 4, 1986

LAND USE CHANGE

1981-1987

- SINGLE FAMILY UNITS/DUPLEXES
- MULTIFAMILY UNIT
- RETAIL/OFFICE SERVICE
- COMMERCIAL RECREATION
- INDUSTRY
- vac VACANT

TWO RIVERS COMPREHENSIVE PLAN
Mid-America Planning Services, Inc.
MAPS Consultants *1987*



TWO RIVERS AREA

confluence of the two rivers. Though a limited amount of scattered commercial development has emerged along the major highways going through the City, the CBD still functions as the governmental and commercial center of Two Rivers. The primary employment and industrial centers of Two Rivers are located between the rivers adjacent to the CBD area.

To the north-northwest of the CBD, between the East and West Twin Rivers lie a majority of the City's residential development. The significant continuing trend to locate residences in the area between the rivers is due to such factors as: the availability of developable land, the ease of access to the center of the City, and the desire to locate somewhat away from Lake Michigan and its micro-climatic effects of fog and cooler temperatures. Residential subdivisions west of Forest Avenue and in the vicinity of 45th Street have been the locations where most of the new single-family construction starts have occurred in recent years.

The segment of Two Rivers east of the East Twin River contained about one-fifth of the City's residents in 1980 according to U.S. Census counts. As in the other areas, growth began in the south near the commercial-industrial center and proceeded to the north in subsequent years. With the exception of commercial development on 22nd and Lincoln Streets, this segment is mainly residential in character. Neshotah Park, Fairview Golf Course, and the adjacent state forest make this part of the City well supplied with open space and recreational land. There is some suitable land available to the north, so it can be assumed that some additional residential growth will occur east of the East Twin River.

The third segment is the area south and west of the West Twin River and harbor area. The area contains industrial and residential development. About one-fourth of the City's 1980 population resided in the area generally bounded by Columbus Street on the west, Madison Street on the east, and Roosevelt Avenue on the south. The area east of Madison Street is primarily industrial and considered part of the CBD-industrial complex of the City. The newer industrial development in the City has occurred along and near Columbus Street. While there is little available land for additional residential development in this segment of the City, some additional industrial growth along Columbus Street is likely in the future.

The rate of land use change in Two Rivers is comparatively slow. As shown on the Land Use Change Map following page LU-1, very few parcels of land have changed in use since the 1981 survey. A majority of the use changes were vacant land turned into single family residences. Another set of parcels were developed for industrial purposes.

Little urban development appears to exist outside of the City limits. Only the area around Manitowoc Beach, CTH VV, and the Mishicot Road area have experienced development. The remainder of the development occurring outside the City has been very scattered.

Growth is restricted on the south side of the City by Lake Michigan and Woodland Dunes and on the east side by Point Beach State Forest. The only possible means of

expansion to the south is through the annexation of Manitowoc Beach. On the east side, growth is restricted to the west side of CTH O.

On the west and east sides, development can occur along STH 310 or STH 42. A number of developable parcels exist in both areas. The land along STH 310 may prove to be an excellent site for a new industrial park. Along STH 42, there is a large subdivision which is only partially developed. Particular attention should be paid to this area to promote further residential development.

The areas most likely to develop are to the north and northwest of the downtown. These areas have been experiencing growth for the past 25 years. From a land suitability standpoint, they present the greatest potential for growth in the future. However, because only a limited amount of the land available is suitable for residential growth, residential growth should take precedence over other types of development in the future.

Two Rivers has little non-conforming or blighting land uses. This is a result of the many years of effective zoning ordinances and enforcement. The effective zoning ordinances and enforcement have eliminated many of the non-conforming and blighting uses throughout the City. This practice has continued in the areas of newer development.

In general, Two Rivers has had little land use change in the past few years. Growt in the past has been handled sensibly. Therefore, the land use base which Two Rivers will use to plan future development is excellent.

TABLE 1. LAND USE CODE

Code Number	Land Use Description	General Category
11	Single-Family Residential	Residential
12	Two-Family Residential	"
13	Multiple-Family Residential	"
14	Mobile Homes	"
15	Group Homes	"
21	Manufacturing	Industrial/Open Storage
31	Wholesaling and Open Storage	"
41	Retail	Retail/Office/Service
51	Office Commercial	"
52	Other Commercial Services	"
61	Education Services	Public/Semi-Public
62	Government Services	"
63	Other Public & Semi-Public Services	"
71	Parking	Parking
72	Streets and Highways	Street R.O.W.
74	Utilities & Other Transportation	Utility/ Transportation
75	Railroads	Railroad R.O.W.
81	Parks	Park/Conservancy
82	Other Recreation	Commercial/ Recreation
95	Vacant	Vacant

Source: "Standard Land Use Coding Manual," Washington, D.C., January, 1965.

ENVIRONMENTAL CONSTRAINTS

There are a number of environmental constraints in the Two Rivers area. These include soil suitability, the floodplains of the East and West Twin Rivers, the high water markers of Lake Michigan and the East and West Twin Rivers, the area's wetlands, preservation areas and the proximity to nuclear power plants.

Soil Suitability maps were prepared for industrial development and residential development with basements and public sewers. The official floodway and floodplain have also been mapped. The City Engineering Department has identified the area that would be flooded if Lake Michigan rose 6 inches and 12 inches higher than the high water mark in the fall of 1986. The Department of Natural Resources (DNR) has identified the wetlands in the Two Rivers area.

A. Floodplains

The City of Two Rivers is subject to the threat of flooding from two different sources; riverine flooding caused by the East and West Twin Rivers and coastal flooding caused by Lake Michigan. In response to the threat of flooding, the City has participated in the federally funded National Flood Insurance Program and developed its own maps and regulations on flooding. However, according to existing flood records, no flood is believed to have occurred within Two Rivers.

The City was mapped by the Federal Emergency Management Agency (FEMA) in the 1970's. The maps became effective in April 1978 when Two Rivers fulfilled all the requirements necessary to participate in the Regular Program phase of the National Flood Insurance Program (NFIP). The NFIP maps delineate those areas within the 100-year flood zone, the 500-year flood zone as well as those areas within the 100-year coastal flood zone with wave action. The maps also designate those areas with only minimal flooding potential.

As part of the requirements to enter the Regular Program of the NFIP, the City of Two Rivers developed a Floodplain Ordinance. The Floodplain Ordinance was adopted on April 3, 1978 and regulated development within both the coastal and riverine floodplains.

In 1987, as a response to the heavy rains in the fall of 1986, the City petitioned for and received permission to develop its own floodplain maps. The new maps are on a much larger scale than those produced by FEMA. The new maps also more accurately reflect the threat posed by the rise of Lake Michigan's water levels.

Upon analysis, the City of Two Rivers exhibits a very low incidence of flooding. The main threats facing the City are highwater from Lake Michigan and coastal erosion. Riverine flooding appears unlikely due to past experience.

The City of Two Rivers has worked hard to minimize the threat of flooding within the community. The implementation of the Floodplain Ordinance in 1978, the development of flood disaster guidelines, and the development of new, more

accurate floodplain maps illustrate the City's concern about the problem of flooding.

Maps depicting the floodplain delineations as determined by FEMA and the City of Two Rivers can be found following page E-2.

B. Wetlands

The majority of wetlands in the Two Rivers area are located adjacent to the East and West Twin Rivers. The wetlands are mainly of the emergent/wet meadow class with some forested and scrub/shrub class wetlands.

Only two areas away from the rivers have large amounts of wetlands. One wetlands area is located to the west and south of the City within the Woodland Dunes Preservation Area. The second wetlands area is located to the east and north of the City within Point Beach State Forest on the shore of Lake Michigan. Both wetland areas are of the forested classification.

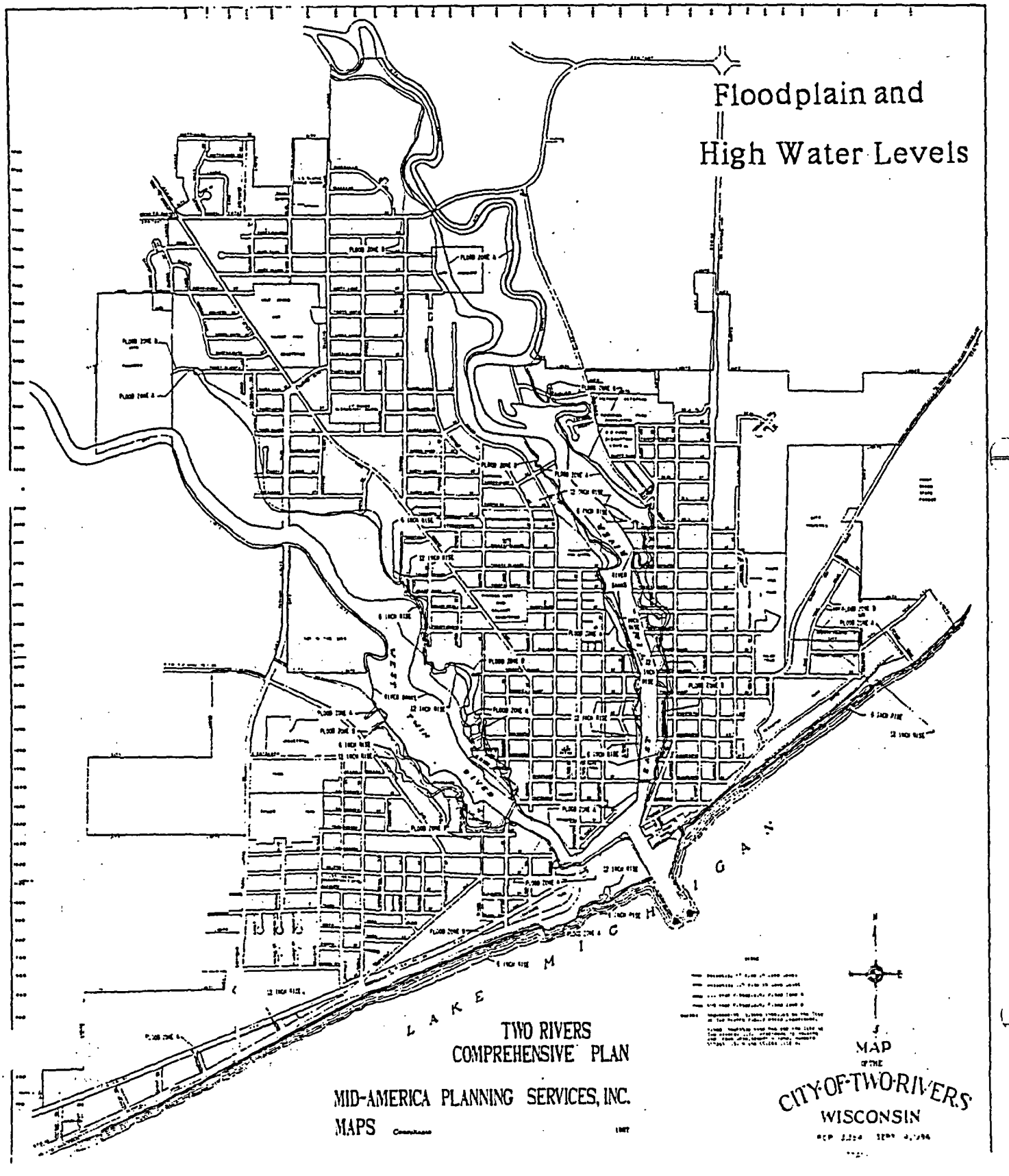
Of the eight classes of wetlands (see Table 1 on page E-3) only two, emergent/wet meadows and flats/unvegetated wet soil, should be defined as undevelopable. These wetlands are typically located near or in rivers. Often they are within the river's floodway. These wetlands occupy a vital position in the flood control process by storing and holding floodwaters. The filling of these types of wetlands could result in higher and more damaging flooding.

Two other wetland types in which development should be closely watched are the aquatic bed and moss classes. These wetlands typically have standing water year round. The removal of these wetlands will have an effect on aquatic wildlife and possibly the surrounding drainage patterns.

A final grouping of wetlands is one consisting of the scrub/shrub and forested wetlands. These wetlands may have standing water part of the year or may never have standing water. However, soils in these wetlands are poorly drained and therefore are wet through much or all of the year. Development in these areas would be possible with only minimal supervision. It would also create only minor disruptions in the drainage patterns and/or wildlife populations.

An analysis of the wetland maps developed by the Wisconsin Department of Natural Resources showed that a majority of the more developable wetlands in the Two Rivers area are located within preservation areas, specifically Point Beach State Forest and the Woodland Dunes Preservation Area. The remaining wetland areas are either small in area or located on the banks of the East and West Twin Rivers. Those wetlands located near the rivers will have less development pressure because development will be directed away by the City's Floodplain Ordinance.

In general, because so many of the wetlands within Two Rivers have already been developed or placed in preservation areas, the remaining wetlands are of either minimal importance or undevelopable due to flooding or high water. Therefore,


Floodplain and
High Water Levels
TWO RIVERS
COMPREHENSIVE PLAN
MID-AMERICA PLANNING SERVICES, INC.
MAPS
MAP
OF THE
CITY OF TWO RIVERS
WISCONSIN
LAKE MICHIGAN

wetlands can not be considered a major environmental constraint within Two Rivers.

TABLE 1. CLASSIFICATION OF WETLANDS

Class	Number of Subclasses	Description	Plant Species
A Aquatic	4	Plants growing entirely on or in a body of water	Milfoil, pond weeds, pond lilies, duckweed, surface algae
M Moss	-	Wetlands where uppermost layer of vegetation is moss	Sphagnum moss
E Emergent/ Wet Meadows	6	Herbaceous plants which stand above the surface of the water or soil	Cattails, sedges, grasses, wild rice, arrowhead
S Scrub/ Shrub	9	Woody plants less than 20 feet tall	Stunted tamaracks, willows, alders, stunted black spruce
T Forested	6	Woody plants taller than 20 feet	Tamaracks, black ash, elm, silver maple, white cedar, balsam
F Flats/ Unvegetated Wet Soil	6	Exposed wet soils which do not support vegetation	--
W Open Water	5	Lakes and ponds less than 20 acres in size, all lakes with a maximum depth of 6 feet or less, and unvegetated river sloughs	--
U Upland	-	Upland areas surrounded by wetland	--

Source: Wisconsin Department of Natural Resources, Wisconsin Wetlands Inventory Map Legend.

C. Soils

1. General Soils Interpretations

The basic source of soil information used herein is the "Soil Survey of Calumet and Manitowoc Counties, Wisconsin" by the USDA Soil Conservation Service in cooperation with Research Division of the College of Agricultural and Life Science, University of Wisconsin, published in 1980. The following overview of Manitowoc County soil resources points out soil areas which have particular limitations for certain uses. A table has been prepared to indicate the suitability of the County's soils for "Residential Development" and "Industrial Development", which are defined below.

Table 2 on pages E-9 - 12 shows the County's map symbols, soil names, and an evaluation of their limitations for residential dwelling units and general industry. These ratings apply only to the predominant condition for each soil type. Certain sub-areas within each principal soil type may have limitations either more or less severe than that indicated for the principal soil type. A further determinant of limitation is slope, and therefore, because each soil may vary greatly in this characteristic, the evaluations are necessarily general.

"Residential Dwelling Units" refers to all residential dwellings with basements and public sewers. Although some variation exists among different uses in their susceptibility to any given soil property, most urban uses are generally limited to some degree by the same soil conditions, such as high water table, low load-bearing capacity, poor surface drainage, steep slopes, bedrock near the surface, or impermeable soil material. Suburban-type development on large lots (1 acre or more) without public sewers has essentially the same limitations as urban development when viewed on a generalized map in light of the kinds of soils occurring in Manitowoc County. These large-lot subdivisions, if well-planned, can be adapted to somewhat steeper slopes than can dense urban development as long as each lot has a good building site containing adequate area for effluent absorption and suitable grades for roads.

"Industrial" refers to the type of industrial use most common in Manitowoc County. Pertinent limitations are steepness of slope, degree of wetness, drainage difficulties, water supplying capacity, texture, and stoniness.

2. The Soil Survey and Land Use Planning

The 1980 Soil Survey is valuable in planning as an aid in describing the nature of the basic soil resources and in locating those soils which have either a particular problem or a particular potential. It thus serves to identify areas of high potential for agricultural, residential, industrial, and recreational uses.

The degree and kind of soil limitations that affect shallow excavations, dwellings with and without a basement, small commercial buildings, industrial buildings, local roads and streets, lawns and landscaping are classified as slight, moderate and severe. A slight limitation indicates that soil properties generally are

favorable for the specified use and that limitations are minor and easily overcome. A moderate limitation indicates that soil properties and site features are unfavorable for the specified use, but the limitations can be overcome or minimized by special planning and design. A severe limitation indicates that one or more soil properties or site features are so unfavorable or difficult to overcome that a major increase in construction effort, special design, or intensive maintenance is required. For some soils that are rated severe, costly measures may not be feasible.

3. Principal Soils

The survey area is in the Southeastern Wisconsin Drift Plain Land Resource Area. The soils are predominantly light colored clayey and loamy soils that formed under forest vegetation. Slope is the main management concern in cultivating the soils in the survey area. Soils that have slopes of more than 2 percent are subject to water erosion if they are not protected. The nearly level soils are mostly seasonally wet and need drainage.

Much of the topography of the survey area is controlled by the underlying bedrock. The survey area is in the Eastern Ridges and Lowlands geographical province of Wisconsin. The highest point in the survey area is in the Town of Stockbridge, Calumet County, where the elevation is 1,128 feet above sea level. The lowest point is the surface of Lake Michigan, which is 580 feet above sea level.

The soils in the survey area formed mostly in the glacial drift of the Wisconsin Age. They are usually level and/or gently sloping and are medium in natural fertility. The various advances of the glacial ice masses deposited different types of till in which many of the soils developed.

Valders till, which was deposited by the last major glacial advance, is common in the survey area. It occurs in about one-half of Manitowoc County. Valders till is easily recognized by its red color and clayey texture. Kewaunee and Manawa soils formed in Valders till.

Cary till was deposited by an earlier ice advance. In many areas, it underlies Valders till. Two lobes of Cary till were deposited in the survey area. One of the lobes is in the southwestern corner of Manitowoc County and extends into the southern part of Calumet County. This lobe of Cary till is easily distinguished from the Valders and the other Cary lobe by its yellowish color, loam, or sandy loam texture, and high content of calcium carbonate. The major soils in this lobe of Cary till are Hochheim, Lamartine, and Theresa soils.

The other lobe of Cary till is in the northwestern part of Manitowoc County. It is reddish in color, has a lower content of calcium carbonate, and is sandy loam, loam or clay loam. The major soils in this lobe of Cary till are Hortonville, Symco and Waymor soils.

The thickness of the glacial drift ranges from a trace to more than 150 feet throughout the survey area. The major soils that formed in a trace of drift over dolomite bedrock are Channahon, Kolberg, and Whalan soils. The dolomite is used for construction purposes and agricultural lime.

Melt water from the receding ice masses deposited sand and gravel as river terraces, eskers, kames, and outwash plains. Boyer and Lutzke soils are the major soils underlain by sand and gravel. The sand and gravel is used for road construction.

Most of the early settlements were along rivers and lakes. Early settlers used water as a source of power to cut lumber. Water also served as a means of transportation and provided fish for food. The survey area has an excellent supply of underground water. Potable water is available in almost every part of the survey area, although it is sometimes necessary to drill to 200 feet or more to tap an adequate supply.

The main aquifer is the Niagara Dolomite formation. This aquifer begins at the Niagara escarpment adjacent to Lake Winnebago and continues eastward to Lake Michigan.

The general flow of surface water is toward Lake Michigan. Surface water includes about 34 miles of Lake Michigan shoreline, 22 miles of Lake Winnebago shoreline, 8 rivers, and many streams and lakes. The survey area has more than 30 small to medium-sized lakes. Many areas are subject to flooding or ponding during periods of peak runoff.

4. General Soil Map for Broad Land-Use Planning

A general soil map shows map units that have a distinct pattern of soils, relief, and drainage. Each map unit is a unique natural landscape. Typically, a map unit consists of one or more major soils and some minor soils. It is named for the major soils. The soils making up one unit can occur in other units but in a different pattern. The general soil map provides a broad perspective of the soils and landscape in the survey area. It provides a basis for comparing the potential of large areas for general kinds of land use. Areas that are, for the most part, suited to certain kinds of farming or to other land uses can be identified on the map. Likewise, areas of soils having properties that are distinctly unfavorable for certain land uses can be located.

Because of its small scale, the map does not show the kind of soil at a specific site. Thus, it is not suitable for planning the management of a farm or field or for selecting a site for a road or building or other structure. The kinds of soil in any one map unit differ from place to place in slope, depth, stoniness, drainage or other characteristics that affect their management.

The map units in this survey have been grouped into six general kinds of landscapes for broad interpretative purposes.

a. Areas Dominated by Soils that Formed in Glacial Till

This group of soils makes up about 64 percent of the Manitowoc and Calumet Counties survey area. The soils are nearly level to moderately steep. They have a loamy surface layer and a loamy or clayey subsoil and substratum. They are well drained to poorly drained and are moderately permeable to slowly permeable.

Most of the soils are in cropland. Corn, small grains, and hay are the main crops. Some of the steeper soils and undrained wet soils are used for pasture, as woodland, or as wildlife habitat.

The soils in this group have fair to poor potential for use as septic tank absorption fields. Wetness, slope, and permeability are the main limitations.

The soils in this group include: Kewaunee, Manawa, Poygan, Hortonville-Symco and Hochheim-Lamartine-Mayville.

b. Areas Dominated by Soils that Formed in Lacustrine Deposits

This group of map units makes up about 10 percent of the survey area. The soils are nearly level to sloping. They formed in loamy and clayey deposits. They are well drained to poorly drained and are moderately permeable or moderately slowly permeable.

Most of the soils are in cropland. Corn, small grains, and hay are the major crops. Some of the soils are used for specialty crops, which include sweet corn, peas, beans and beets. Undrained wet soils are used for pasture, as woodland or as wildlife habitat.

Most soils in this group have poor potential for use as septic tank absorption fields because of wetness or slow permeability.

The soils in this group include: Zurich-Mundelein-Briggsville and Pella-Mndelein-Shiocton.

c. Areas Dominated by Soils that Formed in Glacial Drift

This group of map units makes up about 11 percent of the survey area. The soils are gently sloping to steep. They formed on a complex topography of moraines, outwash terraces and lacustrine plains. They are well drained to moderately well drained and are very rapidly permeable to slowly permeable.

Most of the soils are in cropland. Corn, small grains, and hay are the major crops. Moderately steep soils and some sloping soils are used for pasture or as woodland.

Most gently sloping soils in this group have good potential for use as septic tank absorption fields. Moderately steep and steep soils and slowly permeable, gently sloping soils have poor potential for this use.

The soils in this group include: Kewaunee-Boyer-Nichols and Hochheim-Lutzke.

d. Areas Dominated by Soils that are Underlain by Outwash Deposits

This group of map units makes up about 6 percent of the survey area. The soils are nearly level to moderately steep. They formed in sandy or loamy deposits and are underlain by sand and/or gravel. They are excessively drained to poorly drained and are rapidly permeable or very rapidly permeable in the substratum.

Some of the soils are in cropland. Corn, small grains, and hay are the major crops. Other soils in this group are used as woodland or wildlife habitat.

The gently sloping soils on knolls have good potential for use as septic tank absorption fields. The nearly level and gently sloping soils on concave side slopes have poor potential for this use because of wetness.

Soils in this area include: Wasepi-Plainfield-Boyer and Granby-Oakville-Tedrow.

e. Areas Dominated by Organic Soils

This map unit makes up about 9 percent of the survey area. The soils are nearly level. They formed in organic material that is more than 16 inches thick. They are very poorly drained and are moderately rapidly permeable to very slowly permeable.

Most of the soils are in natural vegetation of trees and sedges. In some small areas, the soils are used for pasture. Most of the soils have poor potential for cropland.

These soils have poor potential for use as septic tank absorption fields because of wetness.

The soil group in this area is Houghton-Palms-Willette.

f. Areas Dominated by Soils that are Underlain by Dolomite

This map unit makes up about 1 percent of the survey area. The soils are gently sloping and sloping. They formed in loamy and clayey deposits over dolomite. They are well drained and are moderately permeable or moderately slowly permeable.

Most of the soils are used as cropland. In some areas the soils are used as woodland, for pasture, or as wildlife habitat. The bedrock in some areas is a source of stone for construction and for agricultural lime.

Most of the soils have poor potential for use as septic tank absorption fields because of the depth to rock.

The soil group in this area is Channahon-Whalan-Kolberg.

5. The Soil Survey and Land Use Planning in the Two Rivers Area

An analysis of the soils data showed that a majority of the soils in the Two Rivers area are classified as having severe limitations for development. Development would be possible only if extensive construction or maintenance measures are taken. Development would therefore be quite costly.

The soils in the Two Rivers area are usually of four types. The soil types are:.

Gb - Granby;
McB - Manawa-Kewaunee-Poygan;
OaB - Oakville; and
TeA - Tedrow.

A detailed listing soil types used in the mapping and analysis can be found in Table 2, on pages E-9 - 12.

TABLE 2. SEVERE SOIL SUITABILITY IN TWO RIVERS

Map Symbol/ Soil Name	Limitations For: Residential Dwellings With Basements and Public Sewers	Industry
Ac-Adrian	Severe: wetness, floods, low strength	Severe: wetness floods, low strength
BcA-Bellevue	Severe: floods, wetness	Severe: floods
BtB-Briggsville		
BtC2-Briggsville	Severe: low strength	Severe: low strength
Bu-Brookston	Severe: wetness, floods, low strength	Severe: wetness floods, low strength
CnB-Channahon	Severe: depth to rock	Severe: depth to rock
CnC-Channohon	Severe: depth to rock	Severe: depth to rock

TABLE 2. SEVERE SOIL SUITABILITY IN TWO RIVERS (CONT.)

Map Symbol/ Soil Name	Limitations For: Residential Dwellings With Basements and Public Sewers	Industry
CoA-Cosad	Severe: wetness	
DoB-Dodge		Severe: low strength frost action
Gb-Granby	Severe: wetness, floods	Severe: wetness, floods
HmD2-Hochheim	Severe: slope	Severe: slope
HnB-Hochheim		Severe: frost action
HnC2-Hochheim		Severe: frost action
HnD-Hochheim	Severe: slope	Severe: slope, frost action
HrB-Hortonville		Severe: low strength
HrC2-Hortonville		Severe: low strength
HrD2-Hortonville		Severe: low strength
Hu-Houghton	Severe: wetness, low strength, flood	Severe: wetness low strength, floods
Ke-Keowns	Severe: wetness	Severe: wetness, floods frost action
KnB-Kewaunee		Severe: low strength
KnC2-Kewaunee		Severe: low strength
KnD2, KnE-Kewaunee	Severe: slope	Severe: low strength, slope
KpB-Kewaunee		Severe: low strength, frost action
KpC2-Kewaunee		Severe: low strength, frost action
KpD-Kewaunee	Severe: slope	Severe: low strength, slope

TABLE 2. SEVERE SOIL SUITABILITY IN TWO RIVERS (CONT.)

Map Symbol/ Soil Name	Limitations For: Residential Dwellings With Basements and Public Sewers	Industry
KrB-Kolberg		Severe: low strength
KrC2-Kolberg		Severe: low strength
LmA-Lamartine	Severe: wetness, floods	Severe: wetness, floods, frost action
LuD-Lutzke	Severe: slope	Severe: slope
MbA-Manawa	Severe: wetness floods, low strength	Severe: floods, low strength
McB-Manawa	Severe: wetness, floods, low strength	Severe: floods, low strength, wetness
MlA-Mayville		Severe: frost action, low strength
MsA-Mosel	Severe: wetness, floods	Severe: frost action, low strength
MuA-Mundelein	Severe: wetness	Severe: frost action, low strength
NsB-Nichols		Severe: frost action
NsC2-Nichols		Severe: frost action
OgB-Oakville	Severe: wetness, floods	Severe: wetness, floods
OzC2-Omro		Severe: low strength
Pa-Palms	Severe: wetness, floods, low strength	Severe: wetness, floods, low strength
Pe-Pella	Severe: wetness, floods	Severe: wetness, floods, low strength

TABLE 2. SEVERE SOIL SUITABILITY IN TWO RIVERS (CONT.)

Map Symbol/ Soil Name	Limitations For: Residential Dwellings With Basements and Public Sewers	Industry
PlD-Plainfield	Severe: slope	Severe: slope
Po-Poygan	Severe: wetness, floods, low strength	Severe: wetness, floods, low strength
ShA-Shiocton	Severe: wetness, floods	Severe: wetness, floods
SyA-Symco	Severe: wetness floods	Severe: frost action, low strength
TeA-Tedrow	Severe: wetness	Severe: wetness
ThB-Tustin	Severe: low strength	
WaA-Wasepi	Severe: wetness, floods	Severe: frost action
We-Wauseon	Severe: wetness, low strength	Severe: wetness, low strength, frost action
WoB-Waymor		Severe: low strength
WoC2-Waymor		Severe: low strength
WoD2-Waymor	Severe: slope	Severe: slope, low strength
WpB-Whalan	Severe: depth to rock, slope, shrink-swell	Severe: low strength, shrink-swell
Wt-Willette	Severe: wetness, floods	Severe: wetness, low strength, frost action
ZuB-Zurich		Severe: frost action, low strength
ZuC2-Zurich		Severe: frost action, low strength

These soil types cover broad areas in and around Two Rivers. The remaining land is composed of complex mixes of many different soil types. Of the four soil types listed above only two, Kewaunee and Oakville, could be used for construction. Kewaunee soils, however, are severely limited as to industrial

development and moderately limited for residential construction. Therefore, only the Oakville soils with only slight limitations are easily developed for both residential dwellings with basements and public sewers and industrial buildings.

A majority of the properties of Oakville soils have already been developed. The remaining soils are in general poorly drained, of low strength, or subject to flooding. Building throughout the area would be expensive due to the need to use extensive construction techniques or maintenance measures.

Two Rivers should direct residential development towards those soils which are less expensive to develop. In this way, residential development costs can be minimized. Industrial development should be directed towards the less desirable property. Because of the importance of industrial development to the Two Rivers area, assistance should be found to enable developers to overcome the soil limitations of industrial sites.

D. Climate

The climate of Two Rivers is on average cooler in the summer and warmer in the winter than surrounding communities. The City's location on the shore of Lake Michigan is the main cause for the lower summer and warmer winter temperatures known as the Lake Effect. However, another important cause is the location of Two Rivers on a headland which bulges out into Lake Michigan.

The winds in the summer tend to blow from the south or southwest, driving the cooler surface waters of Lake Michigan north towards Two Rivers. The winds also cause the colder bottom currents to turn northward. As the waters move north, they collide with the Two Rivers headland. The colder waters cause the air to become cooler and move inland creating the Lake Effect as shown in Figures 1 and 2 on page E-19 - 20. The effect extends inland for approximately five miles. The effect is intensified around Two Rivers because the City is located on a headland.

The Lake Effect is reversed in the winter because the lake waters are relatively warmer than the surrounding land. This continues until the lake freezes. Therefore, Two Rivers is warmer than the surrounding inland communities in the winter.

Two Rivers receives an average of 28.7 inches of precipitation each year. Average snowfall is just over 40 inches. The snowfall normally occurs between the months of November and April as shown in Table 3 on page E-17 - 18.

Upon analysis, the Two Rivers area exhibits a climate very similar to that found on Washington Island located approximately 80 miles to the north. Washington Island is located 17 miles offshore at the end of the Door Peninsula. Both areas exhibit climates heavily influenced by Lake Michigan. A comparison of climatic data for the two areas showed an almost one-to-one matching for average temperatures throughout the year.

The cooler summers and warmer winters experienced by Two Rivers are both an asset and a liability to the City. The cooler summers make Two Rivers an excellent summer resort area. However, the temperature can drop rapidly making the area uncomfortably cold for summer. August, with an average monthly temperature of 66.9°, is the warmest month.

E. Preservation Areas

Woodland Dunes Preservation Area and Point Beach State Forest are areas of privately or publicly held lands which are not open to development. Woodland Dunes occupies approximately 640 acres between STH 42 and STH 310 west of Columbus Street. A portion of the 640 acres lies to the north of STH 310 along the West Twin River. Point Beach State Forest is located along the shore of Lake Michigan east of CTH 0. The State Forest occupies 2,950 acres. Both of the preservation areas contain large amounts of wetland areas making development, if allowed, very difficult.

Upon analysis, it can be seen that the location of Woodland Dunes Preservation area and Point Beach State Forest to the west and east, respectively, of the City will have an effect on development in the Two Rivers area. Development to the west of the City will be forced to the north side of STH 310 and to the south along the Chicago and Northwestern Railroad tracks and STH 42. On the east side, development will be restricted to the land west of CTH 0. The future development in the City will be forced to occur between STH 310 on the west and STH 42 on the east.

Because both Woodland Dunes and Point Beach State Forest are preservation areas, development will be impossible within them and should be restricted around them.

F. Nuclear Power Plants

There are three nuclear power plants in the Two Rivers area. Two of the plants are located at Point Beach in Manitowoc County and the third is at Kewaunee in Kewaunee County. Emergency evacuation plans are maintained by both Manitowoc and Kewaunee's County Divisions of Emergency Government.

The Point Beach Nuclear Power Plants are located 8 to 10 miles to the north of the City of Two Rivers near the Town of Two Creeks. Point Beach consists of two pressurized water reactors which produce 485 megawatts each. These plants are of the first generation type commercial plant. They are smaller than nuclear plants being constructed currently.

The plants at Point Beach are less than 20 years old. Unit 1 became critical in November 1970. Unit 2 became critical in May 1972. These plants will be shut down sometime during the first decade of the 21st century.

The Kewaunee Nuclear Power Plant is located approximately 20 miles to the north of Two Rivers near the City of Kewaunee. The plant has only one pressurized water

reactor. The Kewaunee plant is similar in type and age to the Point Beach plants. The reactor became critical in March 1974 and produces 522 megawatts. It will be shut down at the same time as the Point Beach plants.

Manitowoc County has developed an emergency response plan entitled Manitowoc County Radiological Emergency Response Plan in Support of the Point Beach Nuclear Plant and the Kewaunee Nuclear Power Plant to deal with the possibility of a leak or explosion at the nuclear power plants. A similar plan was developed by Kewaunee County.

An analysis of the data shows that nuclear power plants can be both an asset and a liability to a community. While Two Rivers does not obtain electricity from the plants, the plants do contribute to the local economy by providing jobs. The plants represent a liability to the Two Rivers area because of the risks involved in possible leaks and/or explosions. To some, the risks involved are too great despite the existence of emergency evacuation plans and therefore, are a limiting factor.

G. Land Use Constraints in Two Rivers

Upon analysis, the environmental constraints existing in the Two River's area do not appear to be impossible to overcome. The six constraints discussed - flooding, wetlands, soil, climate, preservation areas, and nuclear power plants - will have only a minor impact on future development in the Two Rivers area.

Flooding has proven to be only a minor constraint on the City. The area has a history of few floods. Also, the implementation of a Floodplain Ordinance has already directed development away from the few flood prone areas. The main flood hazard confronting the City is the problem of rising lake levels and the accompanying coastal erosion.

The wetlands within Two Rivers have been developed in most areas. Those that remain are primarily within preservation areas or near the rivers. Therefore, development is unlikely.

The wetlands near the rivers should not be developed because of their flood water retention capabilities. The existence of the wetlands may be a major factor in the City's low flood rate. Development of these wetlands could cause an increase in flood levels and the rate of occurrence.

The soils in the Two Rivers area are generally poor for any type of development. However, development has occurred in the past and is possible in the future. Through the use of certain construction techniques, the City should be able to develop many areas classified as poor. Those areas with fewer problems should be reserved for residential development in order to reduce costs.

The City is unable to alter its current climate. However, the City must learn to use the positive aspects of the cool summers and warmer winters to promote itself. Certain types of industry may desire this type of climate. Also, because the Lake Effect is active for only five miles inland, it does not affect the northern part of the

City. Therefore, the coolness on the shore and the warmth inland could prove to be a major asset in promoting tourism.

A constraint which is both environmental and in the area of land use is the existence of the Woodland Dunes Preservation Area and Point Beach State Forest. Both of these areas contain large amounts of wetlands which they are designed to protect. Therefore, development plans must take these areas into consideration. Actions outside the two areas which could affect them might be forced to stop or be redirected if the effect is deemed damaging. Also, the existence of both areas will influence the direction of growth in Two Rivers by simply being areas which are removed from development.

The existence of three nuclear plants within 20 miles of the City of Two Rivers is only a minor constraint on development. All of the plants have good safety records and the existence of emergency evacuation plans ameliorate the potential risks associated with nuclear power plants.

In general, the six environmental constraints discussed are unlikely to restrict development within Two Rivers. With careful planning, the City should be able to overcome those minor environmental constraints, which may restrict development, and continue with its planned growth.

.IMATOGRAPHY OF THE UNITED STATES NO. 20

TABLE 3.

O RIVERS, HI

PERIOD: 1951-80
ELEVATION: 599 FT

CLIMATOLOGICAL SUMMARY

	TEMPERATURE (F)															PRECIPITATION TOTALS (INCHES)											
	MEANS			EXTREMES						MEAN NUMBER OF DAYS				DEGREE DAYS								SNOW			MEAN NUMBER OF DAYS		
										MAX		MIN															
	* DAILY MAXIMUM	* DAILY MINIMUM	* MONTHLY	RECORD HIGHEST	YEAR	DAY	RECORD LOWEST	YEAR	DAY	90 AND ABOVE	32 AND BELOW	32 AND BELOW	0 AND BELOW	* HEATING BASE 65	* COOLING BASE 65	* MEAN	* GREATEST MONTHLY	YEAR	GREATEST DAILY	YEAR	DAY	MEAN	MAXIMUM MONTHLY	YEAR	.10 OR MORE	.50 OR MORE	1.00 OR MORE
JAN	26.3	10.7	18.5	52+	79	25	-28	51	30	0	20	30	8	1442	0	1.36	3.21	79	1.01	73	22	9.9	32.4	79	4	0	0
FEB	30.2	14.2	22.2	54+	61	22	-20	51	2	0	15	27	4	1198	0	1.27	3.15	53	2.02	66	08	8.2	22.3	59	3	1	0
MAR	38.2	23.3	30.8	68+	68	28	-17+	62	1	0	6	26	0	1060	0	2.31	5.97	76	1.61	59	06	8.7	29.3	59	5	1	0
APR	50.4	34.1	42.3	82+	57	29	9+	54	3	0	0	11	0	681	0	2.97	5.64	54	1.50	54	15	1.6	12.5	73	6	2	0
MAY	60.6	42.2	51.5	91	52	4	27+	78	1	0	0	1	0	419	0	2.83	6.68	73	2.12	73	28	.0	.0	0	6	2	0
JUN	70.1	50.6	60.3	97+	64	26	35+	56	2	0	0	0	0	155	14	2.92	6.38	68	2.28	68	26	.0	.0	0	6	2	0
JUL	76.1	57.2	66.7	97+	70	1	40+	65	6	1	0	0	0	46	98	3.10	8.88	52	4.65	52	18	.0	.0	0	6	2	1
AUG	75.9	57.8	66.9	95+	65	14	42+	68	27	1	0	0	0	52	111	3.15	10.74	75	4.37	80	20	.0	.0	0	6	2	0
SEP	68.5	50.6	59.6	96+	53	1	29	56	20	0	0	0	0	170	8	2.80	6.91	65	2.16	70	03	.0	.0	0	6	2	1
OCT	57.3	41.3	49.3	86+	71	1	19+	72	19	0	0	5	0	487	0	2.27	5.15	59	3.20	54	03	.0	.0	0	5	1	0
NOV	43.6	29.7	36.7	70	53	16	-6	76	29	0	3	18	0	849	0	1.91	3.77	57	1.60	61	16	2.7	16.2	51	5	1	0
DEC	31.9	17.8	24.9	58+	70	1	-14+	72	7	0	15	28	3	1243	0	1.81	4.52	71	1.87	59	28	9.3	27.9	51	4	1	0
YEAR	52.4	35.8	44.1	97	JUL 70	1	-28	JAN 51	30	2	59	146	15	7802	231	28.70	10.74	AUG 75	4.65	JUL 52	18	40.4	32.4	JAN 79	62	17	2

*FROM 1951-80 NORMALS

+ ESTIMATED VALUE BASED ON DATA FROM SURROUNDING STATIONS

+ ALSO ON EARLIER DATES.

DEGREE DAYS TO SELECTED BASE TEMPERATURES (F)

ISE	HEATING DEGREE DAYS												
LOW	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
65	1442	1198	1060	681	419	155	46	52	170	487	849	1243	7802
60	1287	1058	905	531	268	60	8	11	65	336	699	1088	6316
57	1194	974	812	441	184	23	0	0	25	250	609	995	5507
55	1132	918	750	381	135	11	0	0	11	198	549	933	5018
50	977	778	595	237	50	0	0	0	0	97	403	778	3915

SE	COOLING DEGREE DAYS												
OVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
55	0	0	0	0	27	170	363	369	149	21	0	0	1099
57	0	0	0	0	0	13	122	301	311	103	12	0	862
60	0	0	0	0	0	69	216	225	53	0	0	0	563
65	0	0	0	0	0	14	98	111	8	0	0	0	231
70	0	0	0	0	0	0	28	37	0	0	0	0	65

DERIVED FROM THE 1951-80 MONTHLY NORMALS

PROBABILITY THAT THE MONTHLY PRECIPITATION WILL BE EQUAL TO OR LESS THAN THE INDICATED PRECIPITATION AMOUNT

MONTHLY PRECIPITATION (INCHES)

PROBABILITY LEVELS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
.05	.33	.12	.47	1.40	.90	.84	.95	.61	.42	.24	.62	.31
.10	.46	.22	.69	1.66	1.17	1.12	1.25	.89	.66	.41	.80	.47
.20	.66	.39	1.02	2.01	1.57	1.54	1.68	1.36	1.07	.73	1.07	.74
.30	.83	.57	1.33	2.30	1.91	1.90	2.06	1.78	1.45	1.04	1.30	.98
.40	1.01	.76	1.65	2.56	2.24	2.26	2.43	2.22	1.86	1.38	1.51	1.24
.50	1.20	.97	1.98	2.83	2.57	2.63	2.81	2.68	2.30	1.76	1.74	1.51
.60	1.40	1.23	2.36	3.11	2.95	3.03	3.22	3.21	2.80	2.21	1.99	1.82
.70	1.65	1.55	2.81	3.43	3.38	3.51	3.71	3.84	3.42	2.77	2.28	2.20
.80	1.97	1.99	3.41	3.84	3.94	4.14	4.34	4.68	4.25	3.53	2.65	2.71
.90	2.49	2.71	4.37	4.45	4.81	5.11	5.33	6.03	5.61	4.79	3.23	3.52
.95	2.97	3.43	5.28	5.00	5.62	6.02	6.25	7.32	6.90	6.02	3.76	4.30

THESE VALUES WERE DETERMINED FROM THE INCOMPLETE GAMMA DISTRIBUTION.

TABLE 3,

478672 TWO RIVERS, WI — LAT: 44 09N (DEG MIN) LONG: 87 34W (DEG MIN) — PERIOD: 1951-80

FREEZE DATA

PROBABILITY OF LATER DATE IN SPRING (THRU JULY 31) THAN INDICATED(*)

TEMP (F)	.90	.80	.70	.60	.50	.40	.30	.20	.10
	SPRING FREEZE DATES (MO/DAY)								
36	5/02	5/08	5/11	5/14	5/17	5/20	5/23	5/27	6/01
32	4/19	4/24	4/27	4/30	5/03	5/06	5/09	5/12	5/17
28	4/05	4/10	4/13	4/16	4/19	4/22	4/24	4/28	5/03
24	3/24	3/28	3/31	4/03	4/05	4/08	4/10	4/13	4/17
20	3/17	3/21	3/24	3/26	3/29	3/31	4/03	4/06	4/10
16	3/07	3/12	3/16	3/19	3/22	3/25	3/28	3/31	4/05

PROBABILITY OF EARLIER DATE IN FALL (BEGINNING AUG 1) THAN INDICATED(*)

TEMP (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
	FALL FREEZE DATES (MO/DAY)								
36	9/20	9/24	9/27	9/29	10/01	10/03	10/05	10/08	10/12
32	9/27	10/02	10/06	10/10	10/13	10/16	10/19	10/23	10/29
28	10/13	10/18	10/22	10/25	10/28	10/31	11/04	11/08	11/13
24	10/24	10/29	11/02	11/05	11/07	11/10	11/13	11/16	11/21
20	10/31	11/05	11/09	11/13	11/16	11/19	11/22	11/26	12/01
16	11/11	11/16	11/19	11/21	11/24	11/26	11/29	12/02	12/06

PROBABILITY OF LONGER THAN INDICATED FREEZE FREE PERIOD (DAYS)

TEMP (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
	FREEZE FREE PERIOD								
36	156	149	144	140	136	132	128	123	116
32	183	175	170	166	162	158	154	149	143
28	211	204	200	196	192	188	184	179	172
24	234	228	223	219	215	212	208	202	196
20	255	247	241	236	231	227	222	216	208
16	267	260	255	250	246	242	238	233	226

(*)PROBABILITY OF OBSERVING A TEMPERATURE AS COLD, OR COLDER, LATER IN THE SPRING OR EARLIER IN THE FALL THAN THE INDICATED DATE. 0/00 INDICATES THAT THE PROBABILITY OF OCCURRENCE OF THRESHOLD TEMPERATURE IS LESS THAN INDICATED PROBABILITY.

GROWING DEGREE UNITS TO SELECTED BASE TEMPERATURES (F)

BASE		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
		GROWING DEGREE UNITS												
40	M	0	0	9	121	362	615	834	838	595	305	60	3	3742
	S	0	0	9	130	492	1107	1941	2779	3374	3679	3739	3742	
45	M	0	0	2	52	219	465	679	683	445	175	19	0	2739
	S	0	0	2	54	273	738	1417	2100	2545	2720	2739	2739	
50	M	0	0	0	18	106	317	524	528	299	79	4	0	1875
	S	0	0	0	18	124	441	965	1493	1792	1871	1875	1875	
55	M	0	0	0	6	37	179	369	373	168	25	0	0	1157
	S	0	0	0	6	43	222	591	964	1132	1157	1157	1157	
60	M	0	0	0	1	8	78	219	223	70	4	0	0	603
	S	0	0	0	1	9	87	306	529	599	603	603	603	

M = MONTHLY DATA S = SUM OF MONTHLY DATA

		GROWING DEGREE UNITS FOR CORN												
CORN	M	0	0	5	59	176	337	523	529	333	135	17	0	2114
	S	0	0	5	64	240	577	1100	1629	1962	2097	2114	2114	

NOTE: FOR CORN THE BASE IS 50, AND THE DEGREE UNITS ARE ADJUSTED FOR TEMPERATURES BELOW 50 AND ABOVE 86

OTHER CLIMATOLOGICAL DATA ARE AVAILABLE IN A VARIETY OF SUMMARIES AND FORMATS, SUCH AS THE CLIMATOGRAPHY OF THE UNITED STATES: NO. 60 - CLIMATE OF STATES: NO. 81 - MONTHLY NORMALS (AND SUPPLEMENTS: ANNUAL DEGREE DAYS TO SELECTED BASES DERIVED FROM THE 1951-80 NORMALS: AND MONTHLY PRECIPITATION PROBABILITIES, SELECTED PROBABILITY LEVELS DERIVED FROM THE 1951-80 NORMALS): NO. 84 - DAILY NORMALS: NO. 85 - DIVISIONAL NORMALS. A VARIETY OF DATA IS AVAILABLE EITHER ON MAGNETIC TAPE, MICROFICHE, OR PAPER COPY.

TO OBTAIN INFORMATION ABOUT CLIMATOLOGICAL DATA AND RELATED PUBLICATIONS, CONTACT:

DIRECTOR
NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, NC 28801-2696
(OR TELEPHONE: (704) 259-0682)

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER
ASHEVILLE, NC

USCOMM-NOAA-ASHEVILLE, NC 7/84/200

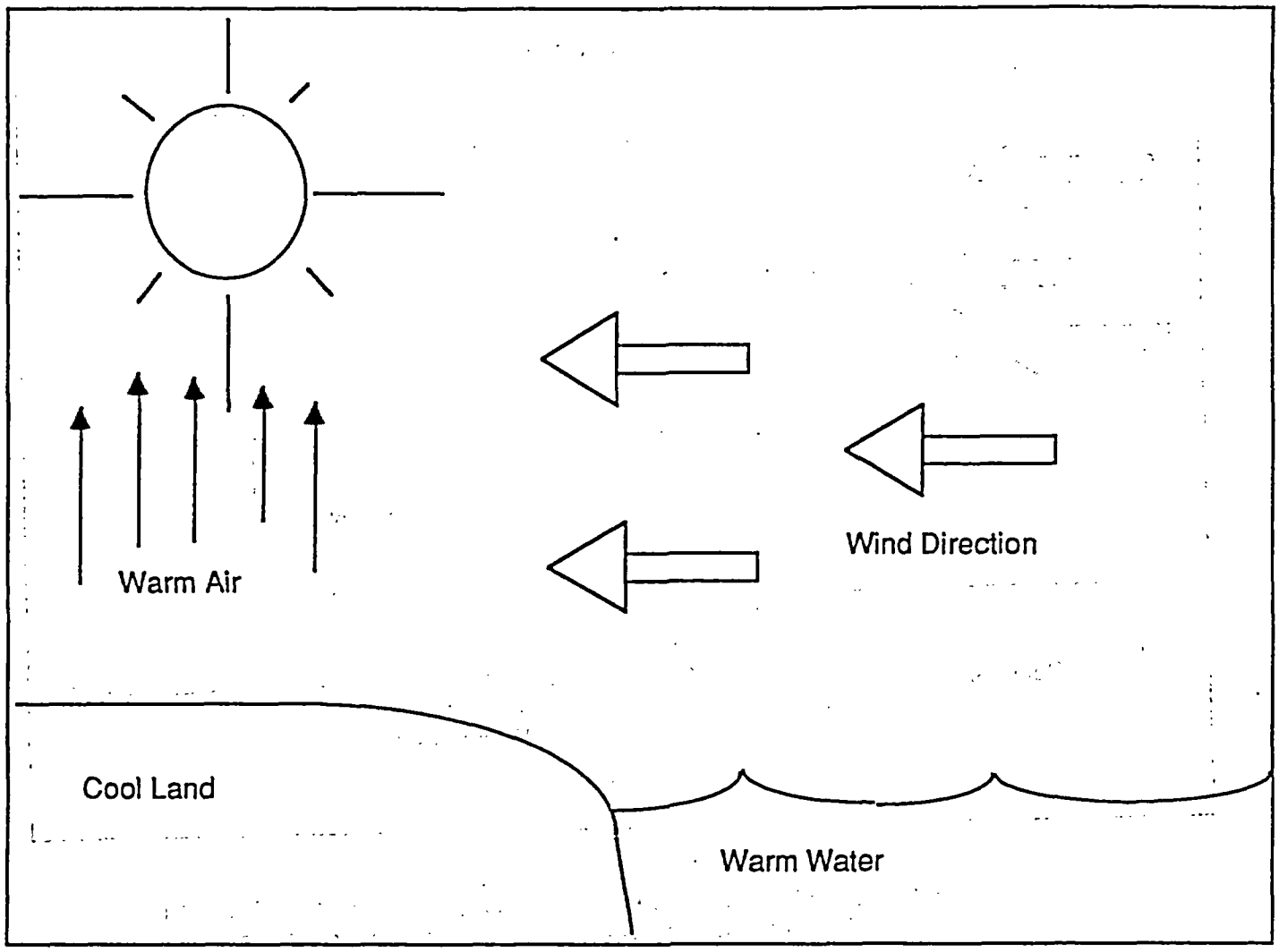


FIGURE 1. During the day, the land warms fater than the water. The warm air over the land rises allowing the cool air over the lake to move inland creating cold winds

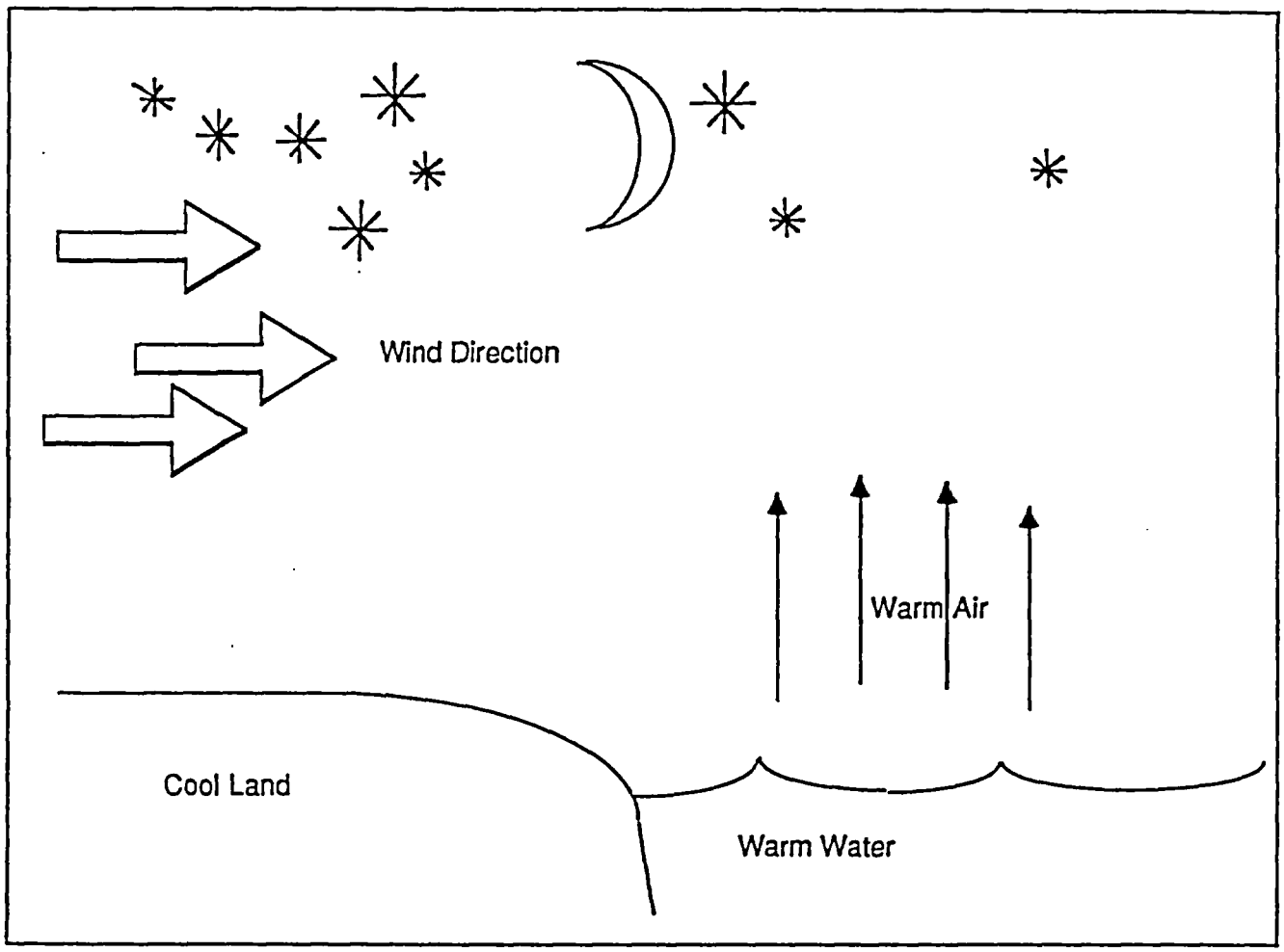
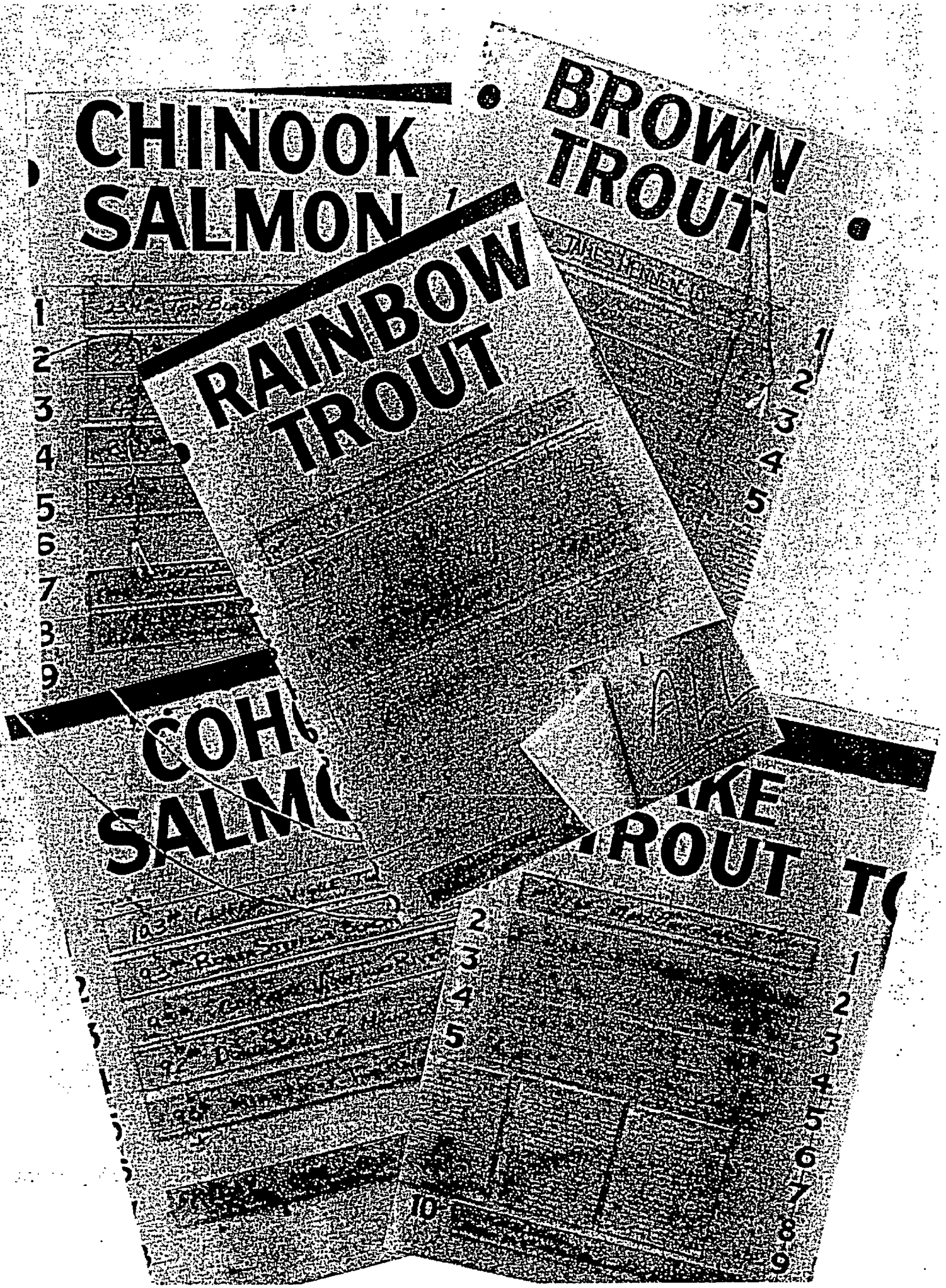


FIGURE 2. During the night, the land cools faster than the water. The warm air over the water rises allowing the cool air over the land to move out over the water creating warm winds on shore.


CHINOOK SALMON
BROWN TROUT
RAINBOW TROUT
COHO SALMON
LAKE TROUT

I. TRAFFIC

A. Traffic Data

The following traffic data comes from several sources including the Wisconsin Department of Transportation, Manitowoc County, City of Two Rivers Police Department, and the Consultant's survey.

The Traffic Map, following page T-1, shows the 1984 existing average daily traffic volumes. These numbers are not the raw data collected by the automatic counters, but factored data that takes into account the weather, time of the year, day of the week, etc. The map also shows the percent increase or decrease since the 1972 traffic counts. In general terms, the traffic volumes have increased on major arterials and decreased on local streets. Table 1 on pages T-2 - 3 lists the 1972 and 1984 traffic volumes. The traffic volumes are summarized in the following section.

1. Traffic Counts - Percent change in average weekday volume from 1972-1984

The top six sections of streets or intersections which experienced the largest increase in average weekday volume include:

a. 16th Street at Monroe grew by 135 percent, increasing in volume from 2,150 vehicles to 5,060 vehicles, an increase of 2,910 vehicles per day;

b. 22nd Street at Lincoln grew by 79 percent, increasing from 2,620 vehicles to 4,690 vehicles, an increase of 2,070 vehicles per day;

c. 27th Street at Washington grew by 77 percent, increasing from 1,450 vehicles in 1972 to 2,570 vehicles in 1984, an increase of 1,120 vehicles per day;

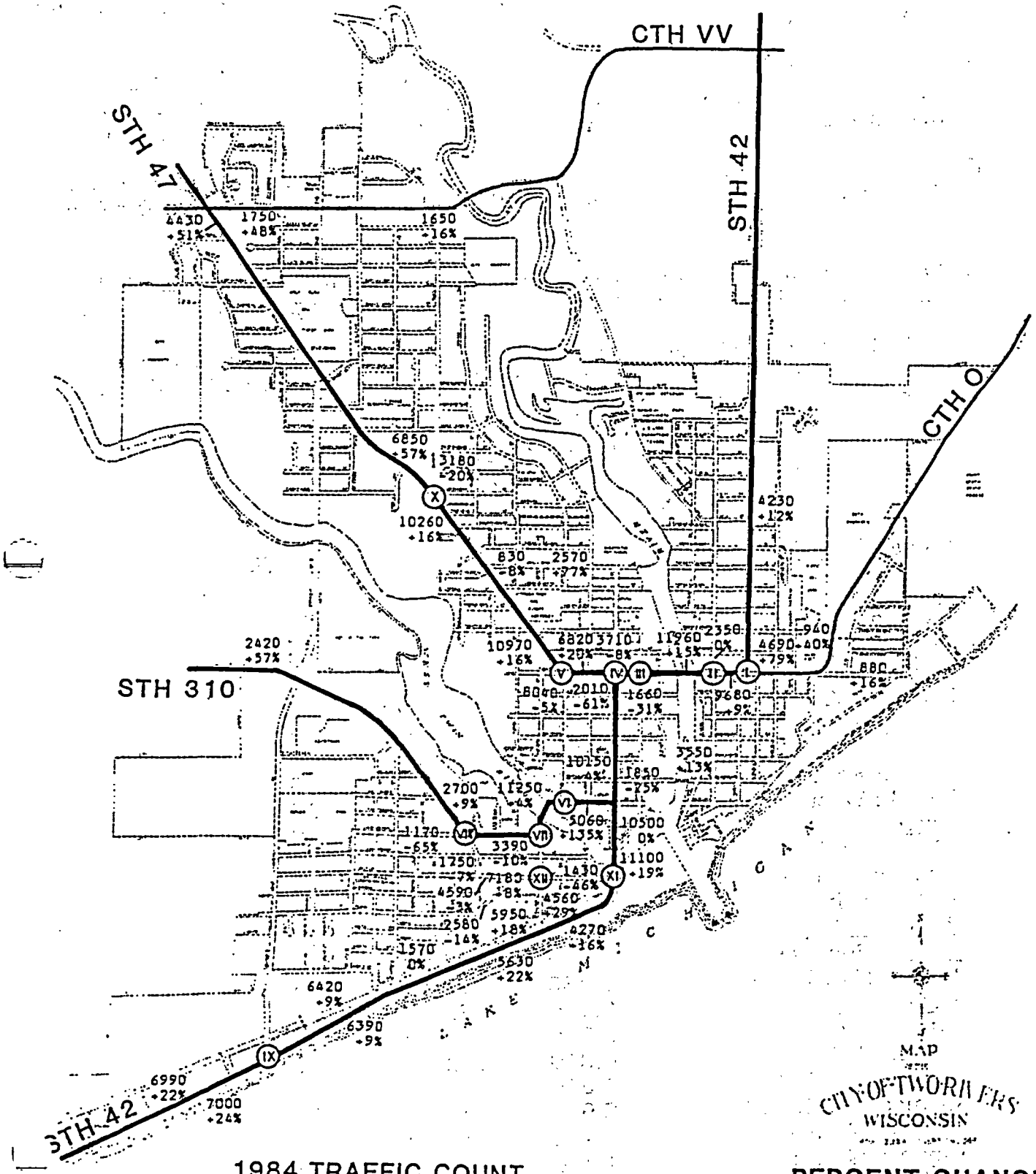
d. Hawthorne West grew by 57 percent, from 1,540 vehicles per day in 1972 to 2,420 vehicles per day in 1984, an increase of 880 vehicles;

e. Mishicot at Bellevue also increased in volume by 57 percent, from 4,350 vehicles in 1972 to 6,850 vehicles in 1984, an increase of 2,500 vehicles;

f. Mishicot at 45th Street had an average weekday volume of 2,930 vehicles in 1972. By 1984, this had increased to an average weekday volume of 4,430 vehicles, an increase of 1,500 vehicles or 51 percent.

Conversely, a number of sections of road recorded a decrease in average weekday volumes. The roads recording the greatest decrease in volume are noted in the following:

a. 14th at Hawthorne - From 1972 to 1984, the average daily volume decreased from 3,380 vehicles to 1,170 vehicles, a decrease of 65 percent or 2,210 vehicles;



1984 TRAFFIC COUNT

Sourse: Dept. of Transportation

PERCENT CHANGE IN TRAFFIC COUNT, 1972-1984

TWO RIVERS COMPREHENSIVE PLAN
Mid-America Planning Services, Inc.

b. Adams at 22nd Street - This traffic count also recorded a decrease in traffic from 5,190 vehicles in 1972 to 2,010 vehicles in 1984, a decrease of 3,180 vehicles or -61 percent;

c. 12th Street at Washington - In 1972, 2,630 vehicles crossed the traffic counter, however, by 1984, this number decreased to 1,430 vehicles, a decrease of 1,200 vehicles per average weekday volume or -46 percent;

d. Jefferson at 22nd Street - From 1972 to 1984, the number of vehicles had decreased from 2,410 vehicles to 1,660 vehicles, a decrease of 750 vehicles or -31 percent;

e. 17th Street at Jefferson - Experienced a 25 percent decrease from 2,480 vehicles to 1,850 vehicles, a decrease of 630 vehicles per day;

f. 17th Street at Washington - This area also experienced a 25 percent decrease in average daily volume from 2,480 vehicles to 1,850 vehicles, a decrease of 630 vehicles per day.

TABLE 1. TRAFFIC COUNTS
PERCENT CHANGE IN AVERAGE WEEKDAY VOLUME
FROM 1972 TO 1984

Name of Road	1972	1984	% Change
Hwy 42 East	5,640	7,000	24
Hwy 42 West	5,750	6,990	22
Hwy 42 E @ Roosevelt Ave.	5,870	6,390	9
Hwy 42 W @ Roosevelt Ave.	5,890	6,420	9
Roosevelt Ave.	1,570	1,570	0
Hwy 42 E @ School	4,630	5,630	22
Hwy 42 W @ School	5,050	5,950	18
Hwy 42 East	3,670	4,270	16
Hwy 42 West	3,530	4,560	29
Washington @ 12th	9,300	11,100	19
12th @ Washington	2,630	1,430	-46
Madison @ 12th	6,630	7,180	8
12th @ School	4,720	4,590	-3
Roosevelt Ave. @ 12th	3,000	2,580	-14
12th @ Roosevelt	1,880	1,750	-7
14th @ Hawthorne	3,380	1,170	-65
Hawthorne @ 14th	2,480	2,700	9
14th @ School	3,770	3,390	-10
16th St. Bridge	10,810	11,250	4
Hawthorne West	1,540	2,420	57
Mishicot @ 45th St.	2,930	4,430	51
45th St. @ Mishicot	1,180	1,750	48
Tannery @ 45th	1,420	1,650	16
Mishicot @ Bellevue	4,350	6,850	57

TABLE 1. TRAFFIC COUNTS (CONT.)
PERCENT CHANGE IN AVERAGE WEEKDAY VOLUME
FROM 1972 TO 1984

Name of Road	1972	1984	% Change
Tannery @ Mishicot	3,920	3,180	-20
Mishicot @ Tannery	8,830	10,260	16
27th @ Forest	900	830	-8
27th @ Washington	1,450	2,570	77
Forest @ Monroe	9,480	10,970	16
Monroe @ Forest	8,460	8,040	-5
16th @ Monroe	2,150	5,060	135
Washington @ 14th	10,500	10,500	0
17th @ Jefferson	2,480	1,850	-25
Washington @ 17th	10,580	10,150	-4
17th @ East St.	3,140	3,550	13
22nd @ Adams	5,690	6,820	20
Adams @ 22nd	5,190	2,010	-61
Washington @ 22nd	4,020	3,710	-8
17th @ Washington	2,480	1,850	-25
Jefferson @ 22nd	2,410	1,660	-31
22nd St. Bridge	10,380	11,960	15
Jackson @ 22nd	2,350	2,350	0
22nd @ Emmet	8,850	9,680	9
22nd @ Lincoln	2,620	4,690	79
Lincoln North	3,790	4,230	12
Sandy Bay	670	940	40
22nd @ Neshotah	760	880	16

_____Indicates the street the traffic counter was placed on.

Note: The traffic count from 1972 to 1984 experienced an 11% increase.

2. Accident Reports

The City Police Department maintains records of traffic accidents. From September 8, 1985 to March 7, 1987, the intersection with the most accidents was Monroe and Forest at 22nd Street, followed by 22nd Street and Washington Street, Washington Street and the Madison Street Bridge and Jefferson and 22nd Street. Madison and 12th Street and Jackson and 22nd Street were also intersections with higher accident rates. A summary of accidents with dates of occurrence are listed in Table 2 on page T-4.

TABLE 2. ACCIDENTS AT OBSERVED INTERSECTIONS (SEPTEMBER 8, 1986 - MARCH 7, 1987) RANKED FROM GREATEST TO LEAST IN NUMBER

Location	Total Number of Accidents	Date
Monroe, Forest, & 22nd Street	10	9/08/85
		9/15/85
		9/16/85
		12/22/85
		1/27/86
		2/01/86
		4/02/86
		7/30/86
		10/09/86
		3/04/87
22nd Street & Washington	7	10/15/85
		11/20/85
		12/26/85
		1/28/86
		5/03/86
		10/10/86
		1/22/87
Madison Street Bridge (16th & Monroe)	7	10/24/85
		11/01/85
		11/11/85
		12/15/85
		12/20/85
		9/16/86
		3/03/87
22nd Street & Jefferson	6	10/06/85
		11/05/85
		11/22/85
		2/07/86
		6/22/86
		1/03/87
12th Street & Madison	6	11/01/85
		1/15/86
		1/16/86
		8/08/86
		9/12/86
		10/20/86

TABLE 2. ACCIDENTS AT OBSERVED INTERSECTIONS (CONT.)
(SEPTEMBER 8, 1986 - MARCH 7, 1987)
RANKED FROM GREATEST TO LEAST IN NUMBER

Location	Total Number of Accidents	Date
22nd Street & Jackson	5	1/15/86
		2/13/86
		7/07/86
		8/22/86
		11/24/86
12th Street & Washington Street Bridge	3	11/20/85
		1/10/86
		9/29/86
Columbus Street & Memorial Drive	2	10/10/85
		1/14/87
14th Street & Hawthorne	2	5/22/86
		12/30/86
14th Street & Madison	2	3/27/86
		4/28/86
22nd Street & Lincoln	2	2/24/86
		11/20/86
Tannery Road & Mishicot Road	1	11/14/86

3. Windshield Survey

The Consultant conducted two windshield surveys at twelve "problem" intersections in the City during March and April 1987. A summary of those surveys followed by a tabulation of the raw data are shown in Tables 3, 4, and 5 on pages T-6 - 10.

TABLE 3. RESULTS OF TRAFFIC SURVEY CONDUCTED MARCH 20, 1987

Location	Problems/Observations
I. 22nd Street & Lincoln	Moderate problems observed (illegal turns). The longest wait occurred for vehicles which needed to cross 22nd to continue on Lincoln. However, no one waited longer than 30 seconds during the observation. Also observed were a number of illegal turns, 28% (22) of the cars observed on March 20, 1987 and 40% (25) of the cars observed April 16, 1987. Most of the illegal turns were caused by people not using their turn signal indicator light. Very rarely did vehicles turn from the wrong lane. The turn problem is not from vehicles on Lincoln Avenue turning right (west) onto 22nd Street, but rather from vehicles going east onto 22nd St. and not indicating turns onto Lincoln Ave., thus confusing those at the 22nd St. stop sign.
II. 22nd Street & Jackson	No serious problems observed. The longest wait occurred for vehicles wanting to continue on Jackson which needed to cross 22nd Street. However, most cars on Jackson were able to turn onto 22nd Street or cross it in less than 30 seconds.
III. 22nd Street & Jefferson	No serious problems observed. Vehicles appeared to move freely. The majority, 71% to 88%, of which could turn onto 22nd Street or continue on Jefferson Street in less than 10 seconds.
IV. 22nd Street & Washington	No serious problems observed. Heavy traffic. Most vehicles were turning (64%) with few continuing on straight (36%). However, traffic ran relatively smoothly with minimal delays. Vehicles turning onto 22nd Street west from Washington often had to wait until near the end of the light for traffic to clear in order to make a left-hand turn. The majority of cars (93-98%) were able to cross the intersection in less than 10 seconds.

V. 22nd Street, Forest, & Monroe Street	Significant problems observed. Oddly shaped intersection. 14-31% (52) of the vehicles observed made illegal moves. The most serious of these included continuing straight while in the left hand turn-only lane, and not putting on turn signals while turning. 0-8% (17) of the vehicles had to wait over 30 seconds at this intersection in order to turn onto Forest from 22nd Street.
VI. Madison Street Bridge	Significant problems observed. Many trucks seemed to use this road but not much traffic. Traffic often came in groups, all at one time. Many illegal turns were observed - 35% (99) of all turns observed. The majority of these were caused by people not using their turn signals for turns from Monroe onto 16th Street. Also, another problem was that few people made complete stops. Observed two near accidents caused by the vehicles on Monroe not stopping at the stop sign or yielding to the people on 16th Street.
VII. 14th Street & Madison	No serious problems observed.
VIII. 14th Street & Hawthorne	No serious problems observed. Traffic moved very freely with 96-100% (47) of the vehicles crossing the intersection in less than 10 seconds. It was observed, however, that trucks had a difficult time looking west on 14th St. to observe traffic.
IX. Columbus Street & Memorial Drive	Moderate problems observed. This intersection was observed from 15 minutes prior to the Hamilton shift leaving until 15 minutes after the shift was over in order to observe the effects this work force may have on traffic flow. It was concluded that the Hamilton shift did not greatly affect traffic flow. However, those people wanting to go east on Memorial Drive from Columbus often had to wait a significant amount of time, which ranged from over 30 seconds, to a minute and a half. 15% (5) had to wait from 30 seconds to a minute, and 3% (1) had to wait over a minute on March 20, 1987. However, on April 16, 1987, only 8% (2) of the vehicles needed to wait over 30 seconds to go east on Memorial Drive from Columbus.

X. Tannery Road & Mishicot Road	Moderate problems observed. Traffic on Tannery Road was light. However, 11-23% of the vehicles had to wait over 30 seconds to get onto Mishicot Road.
XI. 12th Street & Washington	Moderate problems observed. Location of a McDonald's Restaurant seemed to cause difficulties. People in the left lane of Washington going south often had to wait while the person ahead of them tried to turn into the McDonald's parking lot. Traffic was heavy and vehicles appeared to move faster than conditions would recommend. Also, vehicles which wanted to continue on to 12th St. seemed to have difficulty crossing Washington.
XII. 12th Street & Madison	No serious problems observed. This intersection has four stop lights which appear to work very well. Traffic moved very smoothly with little or no delay.

TABLE 4. LEGAL VS. ILLEGAL MOVES

Location	Survey Date	Legal	Illegal	Total Vehicles
I. 22nd Street & Lincoln	3/20/84	72% (56)	28% (22)	78
	4/16/84	60% (38)	40% (23)	63
V. 22nd Street & Forest	3/20/87	86% (312)	14% (52)	364
	4/16/87	69% (285)	31% (131)	416
VI. Madison Street Bridge	3/20/84	65% (182)	35% (99)	281
	4/16/84	75% (248)	25% (84)	332

TABLE 5. TRAFFIC SURVEY WORKSHEET - TIME TO MAKE TURN VS. NUMBER OF CARS FOR LOCATION

	22nd & Lincoln I	22nd & Jackson II	22nd & Jefferson III	22nd & Washington IV	22nd & Forest V	22nd & Madison St Bridge VI
Under	58% (68)	92% (58)	88% (44)	93% (309)	82%(185)	72% (63)
10 sec.	N/A	89% (41)	71% (22)	98% (125)	99%(304)	73% (91)
10-20 sec.	48% (65)	5% (3)	10% (5)	---	---	22% (19)
	N/A	11% (5)	26% (8)	2% (3)	1% (3)	18% (23)
21-30 sec.	2% (3)	2% (1)	2% (1)	7% (22)	10% (22)	3% (3)
	N/A	---	---	---	---	6% (7)
31-40 sec.	---	2% (1)	---	---	8% (17)	1% (1)
	---	---	3% (1)	---	---	3% (4)
41-50 sec.	---	---	---	---	---	1% (1)
	---	---	---	---	---	---
51-60 sec.	---	---	---	---	---	---
	---	---	---	---	---	---
1-1 1/2 min.	---	---	---	---	---	---
	---	---	---	---	---	---
1 1/2-2 min.	---	---	---	---	---	---
	---	---	---	---	---	---
Over 2 min.	---	---	---	---	---	---
	---	---	---	---	---	---
Total, 1st line	(136)	(63)	(50)	(331)	(224)	(87)
Total, 2nd line	N/A	(46)	(31)	(128)	(304)	(125)

First line, observed March 20, 1987
Second line, observed April 16, 1987
N/A - Data not available

TABLE 5. TRAFFIC SURVEY WORKSHEET - TIME TO MAKE TURN (CONT.) VS. NUMBER OF CARS FOR LOCATION

	14th & Madison VII	14th & Hawthorne VIII	Columbus & Memorial IX	Tannery Rd & Mishicot X	12th & Washington XI
Under	58% (30)	100% (47)	32% (11)	39% (19)	70% (49)
10 sec.	75% (58)	96% (54)	73% (19)	57% (30)	80% (49)
10-20 sec.	25% (13)	---	38% (13)	21% (10)	14% (10)
	19% (15)	4% (2)	8% (2)	19% (10)	11% (7)
21-30 sec.	11% (6)	---	12% (4)	17% (8)	6% (4)
	5% (4)	---	11% (3)	13% (7)	8% (5)
31-40 sec.	4% (2)	---	6% (2)	19% (9)	3% (2)
	---	---	8% (2)	7% (4)	---
41-50 sec.	---	---	6% (2)	4% (2)	7% (5)
	---	---	---	2% (1)	---
51-60 sec.	2% (1)	---	3% (1)	---	---
	---	---	---	2% (1)	---
1-1 1/2 min.	---	---	3% (1)	---	---
	---	---	---	---	---
1 1/2-2 min.	---	---	---	---	---
	---	---	---	---	---
Over 2 min.	---	---	---	---	---
	---	---	---	---	---
Total, 1st line	(52)	(47)	(34)	(48)	(70)
Total, 2nd line	(77)	(56)	(26)	(53)	(61)

First line, observed March 20, 1987; Second line, observed April 16, 1987
N/A - Data not available

4. Other Concerns

At a public hearing held in Two Rivers on March 30, 1987, a serious concern was voiced by residents. Traffic traveling south on Mishicot Road utilizing the Madison Street Bridge and turning west on 14th Street could pass through the entire City without ever going through a traffic light or coming to a stop sign. This "beltway" in essence causes many problems, such as encouraging through traffic to speed. Moreover, this condition makes it difficult for local traffic to be able to gain access onto this major non-stop arterial. In addition, this situation makes it nearly impossible for people within Two Rivers to cross from the east side of the City to the west side, creating almost a barrier.

On all other major arterials, there exists some form of stop (stop sign or traffic light) which allows local traffic to gain access onto the road. For example, when traffic comes in on STH 42 southbound and turns west on 22nd Street, it must stop at Washington Street. Since all the other arterials do have some type of traffic control, the problem on Mishicot (Forest) Road is further exacerbated as it will tend to attract additional traffic for its additional "benefit".

5. Explanations

After analyzing the data, one can observe that there has been a definite increase in traffic on main arterials, but a decline in traffic on local streets. This trend could be related to the loss of a number of manufacturing jobs in Two Rivers. A change in driver preference for a different way to get there, be it faster, more conventional or more scenic, road construction or blockage and/or poor road conditions could also have affected the traffic counts.

An increase in the amount of traffic on main arterials along with a decrease in the amount of traffic on local roads probably indicates that there is much more traffic coming to and going through Two Rivers. In other words, more out-of-city people are choosing to come to or go through Two Rivers. Striving to capture or attract more of this out-of-city traffic could greatly enhance the economy of Two Rivers. An overall increase in vehicle volume such as was observed in Two Rivers is probably best explained by a broad increase in daily trip generation.

Those intersections experiencing an increase in daily vehicle volumes will need to be re-evaluated in terms of the appropriateness of traffic control mechanisms in place and in terms of the physical condition of the roads in question.

II. CITY PARKS AND FACILITIES

A. Parks and Recreation

1. Existing Facilities

The City of Two Rivers is fortunate to have a large number of well maintained parks and other recreational areas. The City has over 168 acres of land devoted to parks and recreation. These range from the 50 acre Neshotah Park with a wide variety of recreational opportunities to the one acre Central Park located at the City Center. Table 1 on pages CPF 4-12 lists the type, size, and features of the many parks and other recreational areas located in Two Rivers.

The North and South Pier Parks have been upgraded in the past few years. The North Pier now has a City maintained and owned parking lot. Public access is guaranteed to the pier for fishing. The South Pier also has a City owned and maintained parking area now.

Both of these parks are extremely popular. The parks attract large numbers of fishermen to Two Rivers by providing a convenient and pleasant fishing site.

The River Walkway System, located on the west bank of the West Twin River, consists of an asphalt walkway with lights and benches. The walkway is handicap accessible. The walkway extends from Madison Street to Adams Street near Vet's Park.

Table 2 on page CPF-13 illustrates the extent of Two Rivers dedication to providing quality recreational areas to its citizens. Only in the areas of neighborhood parks is the City deficient. In all areas, the recreational facilities are more than adequate.

Table 3 on page CPF-14 lists the recreation standards set for larger urban centers. The table lists standards for different types of parks and describes the location, size and facilities and features of the park.

2. Future Suggestions for Park Improvements in the 1973 Plan

A summary of priorities for projects consistent with the general recommendations contained in the plan section of the Manitowoc County Recreation and Open Space Plan, 1973 have been discussed by the Recreation Board and Planning Commission of the City of Two Rivers. They have also placed priorities on needs for certain special facilities (such as boating), or have at least recognized the need for additional in-depth study of some facilities. Projects identified with an asterisk (*) have a high priority and, if possible, should be accomplished within the next five years. Projects with no asterisk are considered less urgent than those assigned a five-year priority rating. The availability of labor and/or land, however, may require the City to take early action on any one of these projects. They are, therefore, planned to be undertaken anytime from now until the year 2000.

*a. A large community park-playfield should be acquired in the area adjacent to the West Twin River southwest of the intersection of 45th Street and Forest Avenue.

b. The proposed community park near 45th Street and Forest Avenue should be developed when the population growth warrants it.

c. Existing undeveloped city-owned property, such as the land west of Riverside Park and at the ends of 41st and 42nd Streets east of Tannery Road could be considered special purpose facilities, and receive a minimum of development such as establishment or improvement of trails, improved pedestrian or auto access.

*d. The tennis courts at Neshotah Park and Lakeshore Park should be considered for lighting.

e. All existing neighborhood and community parks, playgrounds, and playfields within the City should be improved at least to the level of the recreation standards for cities included in this plan (see Table 3 on page CPF-14).

*f. Construction of a parking lot off Columbus Street by the tennis courts in Zander Park.

*g. Construction of restrooms and development of a jogging rest area and canoe launch and fishing areas at Riverside Park.

3. Deficiencies/Improvement

Upon analysis, the City of Two Rivers has an excellent park and recreation system. The community has over 168 acres of land devoted to parks. However, deficiencies do exist in the Park System.

Table 4 on page CPF-15 is an analysis of existing and/or potential problems with the parks and recreational areas in the City of Two Rivers. Deficiencies other than those listed in Table 4 do exist. In particular, is the limited use of Lakeshore Park and the lack of a community marker.

Lakeshore Park parallels Memorial Drive on the southern edge of Two Rivers. Approximately 6,000 cars pass by daily. A significant marker for the community should be placed within the park to identify the City. The marker could be a boat, as it once was, or a statue of a fisherman representing the community's long association with the Coast Guard and commercial fishing. To avoid vandalism, the marker should be fenced.

An identification marker could prove to be a great asset to the community. It would provide tourists with a reason to stop in Two Rivers as well as provide a unique advertising opportunity. An important aspect of implementing this

concept is the development of access to the park from Lake Street. This is necessary as access is impossible off Memorial Drive.

Another deficiency is the lack of a large community park on the north side of Two Rivers. Existing parks are located on the east and south sides of the community. At least two possible sites exist on the East and West Twin Rivers.

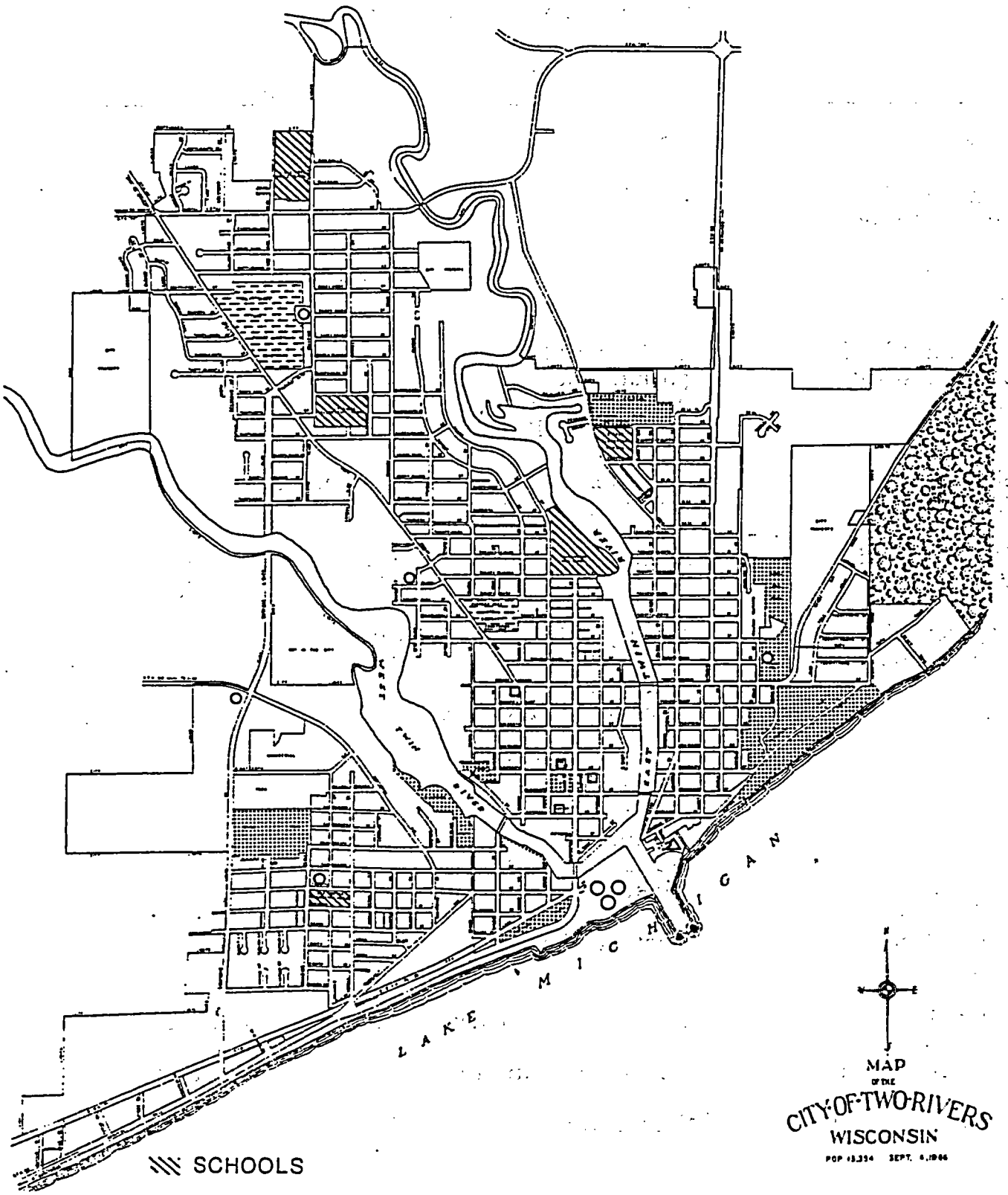
Harbor Park, located adjacent to the Coast Guard Station on the East Twin River, would be an excellent lower-end anchor to the Rogers Street Fishing Village. It could be advantageous for the City to rename the park. By renaming the park, possibly to French Side Park, the function of the park would be clarified. A historical marker could be erected to explain the history of the area and would connect the park to the Rogers Street Fishing Village.

The River Walkway, located on the west bank of the West Twin River should be expanded. By converting the Chicago & Northwestern Railroad tracks to a walkway/bicycle path whenever the tracks are abandoned, the City will be able to extend the Walkway System from the City boundary on the west to the Eggers property on the West Twin River and the Rogers Street area on the East Twin River.

Improvements could be made in the use and promotion of other parks within the City. The current level of use of Central Park, which is located within the downtown of the City, should be continued. The park's central location makes it an important asset to the community. An expansion of use should be considered. If a Farmer's Market or other similar use is developed, it should be placed in Central Park.

Neshotah Park, located on the shore of Lake Michigan, is considered the best park within the Two Rivers park system. It has been used as a major promotional item in the City's Economic Development Program. However, this park, as well as a number of other parks throughout the City, is in need of reorganization and rehabilitation. Failure on the part of the City to maintain the parks throughout the community will cause their slow deterioration and the eventual loss of a major asset to the community. The City should continue to maintain the facilities in good condition and upgrade them when necessary.

A map showing the location of parks and other public facilities can be found following this page.



SCHOOLS

PARKS AND RECREATION

MUNICIPAL AGENCIES

CEMETERIES

UTILITIES

STATE AND FEDERAL FACILITIES

PUBLIC FACILITIES

TWO RIVERS COMPREHENSIVE PLAN
Mid-America Planning Services, Inc.
MAPS Consultants *1987*

TABLE 1. TWO RIVERS PARK FACILITIES

	Zander	Walsh Field
Acres	22.55	17.50
Number of Picnic Tables	34	None
Number of Grills	8	None
Number of Off-Street Parking Places	Unlit, paved parking lot (indirect lighting from baseball field)	200+
Shelters & Facilities	1 shelter with no men's restroom	Restrooms
Ball Diamonds, Lights, Stands	None	1 baseball field for Semi-Pro, 1500 seats with lights
Playground Equipment	1 volley ball 2 slides with monkey bars 1 rocking horse type teeter totter 4 teeter totters 1 merry-go-round 1 carousel 1 monkey bar 3-6 unit swings 1 bike stall	None
Tennis Courts & Lights	2 without lights	None
Restrooms	1 men's, 1 women's	1 men's, 1 women's
Drinking Water	1 drinking fountain	Water available at shelter
Other Facilities	Nature trails	Vita Course

	Neshotah Park	Vets Park
Acres	50	4.77
Number of Picnic Tables	49	None
Number of Grills	1	None
Number of Off-Street Parking Places	15	Street only
Shelters & Facilities	2 shelters 1 beach 1 playground	1 shelter
Ball Diamonds, Lights, Stands	1 baseball field with lights	1 baseball field with lights
Playground Equipment	8 horse shoes 1 tether ball 2-4 unit swings 1-8 unit swings 1-2 unit swings 2 teeter totters 8 shuffle boards 2 monkey bars 1 circular slide 1 wood gym set with slide	1 basketball on sod 1 volley ball 1-2 unit swing 1 6 unit swing 2 slides 1 merry-go-round 1 hand bar 1 sand box
Tennis Courts & Lights	2 without lights	2 without lights
Restrooms	None	1 men's, 1 women's
Drinking Water	None	None
Other Facilities	Walkways overgrown with dogwood; lots of litter; old garage door; 2 ash pits; lots of spigots for watering the lawn	None

	Central Park	Harbor
Acres	1	0.4
Number of Picnic Tables	None 8 to 16 benches	None 5 benches, 4 good
Number of Grills	2	2
Number of Off-Street Parking Places	Street parking only	
Shelters & Facilities	1 open bandstand with roof	None
Ball Diamonds, Lights, Stands	None	None
Playground Equipment	None	None
Tennis Courts & Lights	None	None
Restrooms	None	None
Drinking Water	None	None
Other Facilities	1 bus shelter 2 fountains	6 power with water

	Lakeshore	Case
Acres	8	N/A
Number of Picnic Tables	12	None
Number of Grills	4, 3 good	None
Number of Off-Street Parking Places	11+ along entrance; 1/2 grass, 1/2 paved	24 side 18 front 5 side
Shelters & Facilities	1 shelter	In school
Ball Diamonds, Lights, Stands	None	1 softball field, no lights
Playground Equipment	1 basketball on blacktop 1-4 unit swing 1-6 unit swing 2 rocking horses 1 merry-go-round 1 slide with monkey bars	2 wood gym sets with shelter 2-3 unit swings 1 chin-up bar 1 monkey bar 2-1/2 size basketball courts
Tennis Courts & Lights	2 with lights	None
Restrooms	1 men's, 1 women's	None
Drinking Water	1	None
Other Facilities	None	None

	Vietnam	L. B. Clarke
Acres	22.66	14
Number of Picnic Tables	None	None
Number of Grills	None	None
Number of Off-Street Parking Places	50+	25 side, 45+ rear, plus off-street parking
Shelters & Facilities	1 shelter	In school
Ball Diamonds, Lights, Stands	2 baseball fields with lights	2 baseball fields without lights, also used as a soccer field; 1/2 size basketball court
Playground Equipment	None	1-6 unit swing 1-5 unit swing 1-2 unit swing 1 slide 2 monkey bars 1 teeter totter 1 hand-over-hand 1 merry-go-round pole vault area
Tennis Courts & Lights	None	2 with lights
Restrooms	1 men's, 1 women's	In school
Drinking Water	At shelter	In school
Other Facilities	None	None

	Washington Neighborhood Park	Washington High School
Acres	2.27	14.3
Number of Picnic Tables	None	None
Number of Grills	None	None
Number of Off-Street Parking Places	Off-street only	45+
Shelters & Facilities	1 shelter	None
Ball Diamonds, Lights, Stands	1 baseball field without lights	None
Playground Equipment	1-6 unit swing 1-2 unit swing 1 basketball on sod 1 merry-go-round 2 slides, 1 circular	None
Tennis Courts & Lights	None	4 without lights
Restrooms	1 men's, 1 women's	In school
Drinking Water	1	In school
Other Facilities	None	1 football field, seats 1,500; 1 blacktop track-6 lanes, discus, long jump, shotput practice field

	Magee	Riverside
Acres	6.15	9
Number of Picnic Tables	None	None
Number of Grills	None	None
Number of Off-Street Parking Places	45+	37 without lights
Shelters & Facilities	In school	None
Ball Diamonds, Lights, Stands	3 baseball fields without lights	1 baseball field with cyclone fence without lights
Playground Equipment	1-8 unit swing 5-2 unit swings 1-4 unit swing 3 monkey bar 2 slides with monkey bars 1-3 unit round slide 3 1/2 size basketball courts 1 large slide 2 hand bars 1 tether ball 1 wooden gym set 1 volley ball	1-1/2 size lighted basketball court, paved 1-4 unit swing 1-2 unit swing 1-4 unit teeter 4-1 unit teeters 2 benches 1 gym set 1 monkey bar 4 slides
Tennis Courts & Lights	None	None
Restrooms	In school	None
Drinking Water	In school	None
Other Facilities	7 bicycle racks	Path here and along water frontage

	Koenig	River Walkway
Acres	2.88	800 feet long
Number of Picnic Tables	None	None
Number of Grills	None	None
Number of Off-Street Parking Places	20 unlit parking places; street parking available	None
Shelters & Facilities	School used in summer	Walkway, Stairway Ramp Deck Over Water 12 Benches 12 Trash Cans
Ball Diamonds, Lights, Stands	2 baseball fields without lights	None
Playground Equipment	2-6 unit swings 1-basket ball 1-volley ball 1-tether ball 1 slide hand-over-hand bars (all on blacktop)	None
Tennis Courts & Lights	None	15 with lights
Restrooms	None	None
Drinking Water	None	None
Other Facilities	None	Located on public property through an easement. Excellent example of private-public partnership.

	North Pier	South Pier
Acres	0.1	0.1
Number of Picnic Tables	None	None
Number of Grills	None	None
Number of Off-Street Parking Places	15	12
Shelters & Facilities	Fish cleaning hook and trashcan	Fish cleaning hook and trashcan
Ball Diamonds, Lights, Stands	None	None
Playground Equipment	None	None
Tennis Courts & Lights	None	None
Restrooms	None	None
Drinking Water	None	None
Other Facilities	Exceedingly popular in summer months. Parking expansion necessary. Need to make pier handicap accessible. Need fish-cleaning station.	Exceedingly popular in summer months. Parking expansion necessary. Need fish-cleaning station.

TABLE 2. SUMMARY OF EXISTING AND FUTURE ACREAGE NEEDS IN THE CITY OF TWO RIVERS

Type of Facility & Standard	1970 Pop. (13,553) 1970 Acreage			1980 Pop. (13,354) 1980 Acreage		1986 Pop. (13,208) 1986 Acreage		1990 Pop. (13,518) 1990 Acreage	
	R*	E*	D*	R	D	R	D	R	D
Neighborhood Park (1.5 acres/ 1000 people)	20.3	19.5	0.8	20.0	0.5	19.8	0.3	20.3	0.8
Neighborhood Playground (1.5 acres/ 1000 people)	20.3	53.7	---	20.0	---	19.8	---	20.3	---
Community Park (5 acres/ 1000 people)	67.8	72.6	---	66.8	---	66.0	---	67.6	---
Community Playfield (2 acres/ 1000 people)	27.1	31.8	---	26.7	---	26.4	---	27.0	---

*R - Required
E - Existing
D - Deficient

Notes:

1. The amount "required" is based on providing the minimum acreage per 1,000 residents for each park type as listed in the Summary Table - Recreation Standards for Larger Urban Centers for the actual and projected populations in the Manitowoc County Recreation and Open Space Plan, 1973.

2. Actual 1970 and 1980 census population figures were used in the City of Two Rivers. An estimate for 1990 was provided by the Department of Administration, 1985.

Source: Manitowoc County Recreation and Open Space Plan, 1973.

TABLE 3. RECREATION STANDARDS FOR LARGER URBAN CENTERS

FACTORS	PLAYLOT	NEIGHBORHOOD PLAYGROUND	NEIGHBORHOOD PARK	COMMUNITY PLAYFIELD	COMMUNITY PARK
Group Served	Preschool age group.	Elementary school children and adolescents, 5-15 year age group.	All age groups in neighborhood.	School ages and adults of several neighborhoods.	All ages of the community.
Service Area	1 or 2 blocks depending on density.	A neighborhood, up to 1/2 mile service radius.	A neighborhood, up to 1/2 mile service radius.	Several neighborhoods up to 1 mile service radius.	Several neighborhoods or entire community. Serves up to 1-1/2 mile area.
Location	Center of block or housing development or in corner of playground site.	Near center of neighborhood or adjacent to elementary school.	Same as playground but scenic values should also be considered	Near center of service area; can be located adjacent to high school.	Wherever scenic or other natural features are available.
Size	2,000 to 5,000 sq. ft., depending upon available space and number of children.	3 to 8 acres, 1-1/2 acres pre 1000 persons.	3 acres miniumum and 5 acres desirable size, 1-1/2 acres per 1000 persons.	12-25 acres, 2 acres per 1000 persons.	Minimum of 25 to 50 acres. 5 acres per 1000 persons.
Facilities and Features	Sand boxes, swings, play aparatus, shelter paved and grass areas.	Active recreation area; play apparatus, open space, paved area, athletic field.	Passive recreation area; open lawn, shaded areas, pathways and walks.	Children's playground, athletic fields, court games.	Utilize natural features; picnic areas; summer and winter sports; specialized uses.
Comments	Not essential in large-lot residential developments.	The playground and park may be combined with elementary school; combination then serves as center for neighborhood.		Provides activities not normally found in neighborhood playground.	Acerages do not inclued specialized recreation facilities.

Source: Manitowoc County Recreation and Open Space Plan, 1973

TABLE 4. ANALYSIS OF RECREATIONAL DEFICIENCIES IN THE CITY OF TWO RIVERS

Type	# Sites	Total Acreage	Analysis
Community Park	2	72.6	The facilities provided are basically adequate, particularly at Neshotah Park. However, they are heavily used and some need repair or replacement. Zander Park is only 1/3 developed. Lack of a community park on the northern section of the City.
Community	3	31.8	The two problems are the lack of a centrally located park south of the West Twin River and possible need for a playfield in the newly developed northwest area.
Neighborhood Playgrounds	8	53.7	There exists an abundance of playgrounds, both independent and in conjunction with schools, serving virtually all sections of Two Rivers. The deficiencies found in the neighborhood playgrounds involve a lack of facilities at given sites.
Neighborhood Parks	5	19.5	If there is one type of recreational facility which has been neglected by the City of Two Rivers, it would be the passive neighborhood park. The location, acreage, & facilities at these parks are all in need of improvement. The entire area north of 22nd Street is lacking in passive facilities & the southern part of the City needs upgraded facilities.

Source: Manitowoc County Recreation and Open Space Plan, 1973. Consultant and Staff Surveys, 1987.

B. Community and Municipal Support Services

The City and the community at large, including private interests in the County, provide a number of services that support the industries and residents in Two Rivers. All levels of services appear to be adequate, and in some cases they are above average, when one compares the per capita income of Two Rivers with other areas of the State.

1. Electricity

The City owns the electric utility, and it has kept pace with the times. In the future, the City will need planned expansions of the system, but currently everyone receives adequate services. Moreover, since the electric utility is owned by the City a considerable savings in electric bills is realized by City residents.

The Municipal Electric Utility (one of 82 in the State of Wisconsin) serves over 5,700 customers through more than 60 miles of electric distribution lines. Bulk energy is purchased at wholesale at the 69,000 volt level through the Columbus Street Substation located at the intersection of Columbus Street and STH 310. There, it is transformed to the 13,200 volt level for distribution to most of the customers. The balance of the customers are served from a 4,160 volt distribution system supplied from stepdown transformers located in the Lakeshore Substation at 12th and Washington Streets and the West River Substation located at 27th and West River Streets. The distribution system of lines, poles, transformers, meters, and etc. has a value of about $3,700,000. The buildings and maintenance facilities have a value of about $610,000.

2. Water

Lake Michigan provides the City of Two Rivers with an abundant source of water. The City has been making use of this natural resource since 1936 when the original water filtration plant went into operation. The original plant has a capacity of two million gallons per day and is still in service, supplemented by an expansion, completed in 1953, which brought the total plant capacity up to four million gallons per day by 1969. Conservation efforts by the customers have reduced the current maximum daily consumption to the 2.4 million gallon level. The City also maintains two 500,000 gallon elevated water storage tanks and an underground storage reservoir with a capacity of two million gallons. There is adequate water pressure in all areas of the community now served with City water. Major water main extensions will be needed to open up new growth areas of the City.

The water system infrastructure also represents a significant investment on the part of the users. The water intake, pumping plant, and water treatment plant are valued at about $605,000 and the mains, hydrants, meters, and etc. are valued at $3,230,000.

3. Sewage

The City has an excellent sewage treatment plant that is operating below capacity, and generally adequate sewer mains. Clear water inflow/infiltration has been cut to a minimum and no main is over-taxed. The sewage plant could handle growth in the Two Rivers area. The plant and all of its equipment represent a very significant investment of about $9,400,000.

4. Streets

Streets in Two Rivers are generally excellent as the City has both a good maintenance program and constructs primarily concrete streets. Repaving is an ongoing program and major arterials are in good condition. There are still a few streets that need to be resurfaced and some local streets that need paving.

5. Garbage Collection

Residential property owners within the City of Two Rivers receive garbage collection service twelve months a year on a weekly basis. The City contracts to private haulers. The cost of this service is included in the overall City tax rate.

6. Police and Fire Service

The City of Two Rivers provides a full-time Fire Department with an average response time to fires within the City of approximately one minute. Response time is the interval between the receipt of a call at the fire station and the departure of a fire truck from the station.

The Fire Department is adequate and meets all standards of the Fire Underwriters Bureau. In the future, the possibility of new equipment is the only change that may need to be made.

Moreover, the City of Two Rivers provides intensive security protection through the City Police Department. The Police Department has recently undergone studies and may need changes and modernization. The County force is responsible for a much larger geographic area and, therefore, response time can vary.

7. Public Transportation

The bus system is a good example of cooperation between Two Rivers and Manitowoc. Although certainly not everyone uses the bus system, it is a facility that can only improve the quality of life in Two Rivers by providing needed transportation to a segment of the population.

8. Educational Facilities

The City of Two Rivers generally has a very good grade and high school educational system. The educational system is a major resource of the

community, not only in providing education, but as an institution employment and requiring services.

The public school system includes three elementary schools, one middle and one senior high school. There are also three parochial schools. Adult and vocational education is fostered through a full schedule of daytime classes as well as evening courses in the arts, trades, and crafts.

Two Rivers Public Schools:

C. C. Case Elementary School
1322 33rd Street

L. B. Clarke Middle School
4608 Bellevue Place

Joseph Koenig Elementary School
1114 Lowell Street

J. F. Magee Elementary School
3502 Glenwood Street

Washington High School
1500 27th Street

Two Rivers Private Schools:

St. John's Lutheran School
East Park

St. Luke's Catholic School
1800 Jefferson

St. Mark's Catholic School
2203 12th Street

9. Recreation Facilities

Parks and recreation, including the elderly recreation center, are a large part of life in Two Rivers. The City has a good park system, provides many recreation activities, operates the Hamilton House, and has an active and growing recreation program for the elderly. This department certainly provides one of the qualities of life that is needed in the City.

Unique to Two Rivers' recreational program is a handsome, one million dollar Community Building equipped with a Youth Center, gymnasium, meeting rooms, and bowling alleys. The City's parks and sandy beaches provide 6.6 acres of park for each 100 members of the community. Park facilities include supervised

beaches, dressing rooms, tennis courts, game areas, and picnic sites. There is also excellent sport fishing for coho salmon and trout in Two Rivers.

A fishing village, with its museum of early fishing gear, is open during the summer months. A privately owned, nine-hole golf course is located just south of County Highway VV on the east side of the City. The course is open to the public.

Adjoining the City is Point Beach State Forest which provides 2,950 acres of pine forest and white sand beaches and nearly 200 campsites. There are also hiking trails, archery ranges, and picnic facilities. On its shore is one of Great Lakes' most powerful beacons to guide the mariners, known as Twin Rivers Point Light.

One of the most imposing structures of its kind on the Lakes is the U.S. Coast Guard Lifeboat Station, which is the key station for all Coast Guard units on the west shore of Lake Michigan and inland tributaries. The station was recently modernized.

Also, located less than ten miles north of the City are the $165 million plus Point Beach Nuclear Power Plants, which have an extensive information center for visitors, students, and scientists. Just north of the Point Beach Nuclear Power Plants is the Kewaunee Nuclear Power Plant.

There are also five service organizations in the City which schedule meetings Mondays, Wednesdays, and Thursdays.

10. Health Services

The City is currently serviced by a community hospital. The hospital facilities and land are owned by the City and leased for $1 per year.

The Two Rivers Community Hospital was founded in 1928 as a municipal hospital. In 1975, it was converted to a non-profit community hospital. A home for the elderly was built in 1970 and an extended care unit was added in 1970.

11. Miscellaneous Services

The City provides a variety of services to its residents. These services include street cleaning, a fire department operated ambulance service with trained attendants, curb and gutter maintenance, street lighting, and streets constructed to urban area standards.

12. City Hall

The City Hall is located at 1717 East Park Street. The building was originally a school. However, after a fire destroyed the previous City Hall in the 1930's, the City government moved to its present location.

The current building contains a total of 43,508 square feet and is three stories in height. The building also includes a basement and a garage (see Table 5, page CPF-22).

The City Hall's annual budget for 1987 is $64,436. This amount includes all utilities and wages for the maintenance personnel. Capital repairs are included when required on a yearly basis.

In an attempt to determine the current level of use and future needs, all department heads with offices located within City Hall were asked to comment on the adequacy of certain aspects of the City Hall. Responses were obtained from the Engineering Department, Police Department, Building Inspection, Assessor's Department, Community Development and the City Manager's Office.

Each department head was specifically asked to comment on office space, equipment, personnel and parking. The department heads were to list current levels of use and items desired to meet future needs.

a. Engineering Department. The Engineering Department currently occupies 1,089 sq. feet. It employs five people and uses a wide variety of equipment. Space, equipment and personnel are considered adequate at current levels. No changes are anticipated or considered necessary other than normal replacement.

b. Police Department. The Police Department occupies a total of 5,783 sq. feet, which includes 2,456 sq. feet in the basement, 1,500 sq. feet on the first floor and 1,827 sq. feet of shared space within the garage.

   The Police Chief believes that although the Department occupies a great deal of space, it is not laid out in an efficient or professional manner. The Police Chief desires to add a total of 1,260+ sq. feet of which 700 sq. feet would be used for a training/briefing/squad room, 200 sq. feet for two patrol interview rooms and 360+ sq. feet in the garage for vehicle and large evidence storage.

   The Police Department currently employs 22 officers, 5 civilians and 2 part-time employees. The addition of one more part-time secretarial position is desired.

   The Police Department uses a wide variety of equipment most of which has been deemed adequate. However, the following additions and/or replacements are believed to be necessary:

   - the addition of two CRT work stations;
   - the addition of microfilm equipment;
   - addition of a copy machine; and
   - updating of current communications systems.

   The microfilm equipment could be purchased to serve the needs of all of the departments, not just the Police Department.

c. Building Inspection Department. The Department currently occupies 1,228 sq. feet and employs three full-time employees. The Department does not anticipate the need to expand the amount of office space or the number of employees. Expansions and/or replacements may be necessary in the areas of equipment and parking.

The current Department automobile is scheduled for replacement in 1989. However, the Department would like an additional two-way radio unit and additional files. Also, when the photo copier and word processing equipment is replaced, the new equipment should have more features than the existing equipment.

The Department currently is assigned two parking spaces. One additional space would be desired.

d. Assessor's Department. The Assessor's Department currently occupies 1,005 sq. feet and employs one full-time and one part-time employee. The Department would like to upgrade the part-time position to a full-time position. No expansion in space requirements is anticipated.

The Department is currently budgeted to receive a personal computer during 1987. All other equipment is considered adequate. The Department would like to increase its assigned parking spaces from one to two spaces.

e. Community Development. The Department currently occupies 260 sq. feet and employs one full-time and one part-time employee. The Department does not anticipate any need to expand its current number of employees or the amount of space it occupies.

The Department currently has no assigned parking space. One assigned parking space would be required in the future. Also, the addition of a personal computer/word processor is needed to update the Department's office equipment.

f. City Manager/Administrative Services. The City Manager's office, the Council Chambers and two conference rooms total 2,234 sq. feet, 482 sq. feet and 1,752 sq. feet respectively. No further expansion is planned. Currently, there is no Committee room. The addition of a 450 square foot room would give the various committees a place to meet.

g. Credit Union. The Credit Union occupies approximately 350 square feet and employes two full-time employees. The Credit Union did not respond to the memo, therefore no information is currently available on current or future needs.

h. Water and Power Business Office. The business office currently occupies approximately 1,000 square feet, and employes five full-time employees. The

Water and Power Business Office did not respond to the memo, therefore no information is available on current or future needs.

Table 6 on page CPF-23 lists the above information in table form.

TABLE 5. CITY HALL - CURRENT USE OF SPACE

	Use	Square Footage	Total
Basement	Office	8,939	12,584
	Halls/Stairs	2,865	
	Washrooms	780	
	Storage	-	
1st Floor	Office	7,373	11,658
	Halls/Stairs	3,135	
	Washrooms	1,150	
	Storage	-	
2nd Floor	Office	6,633*	10,818
	Halls/Stairs	3,135	
	Washrooms	1,050	
	Storage	-	
3rd Floor	Office	-	6,621
	Halls/Stairs	1,237	
	Washrooms	-	
	Storage	5,384	
Garage	Office	-	1,827+
	Halls/Stairs	-	
	Washrooms	-	
	Storage	1,827	

*City Offices = 3,876 square feet
Leased Space = 2,757 square feet

+Addition possible in 1988 or 1989.

Source: Building Inspector Department City of Two Rivers; Mid-America Planning Services, Inc.

Upon analysis, the City's support services appear to be in very good condition. The majority require only normal upkeep and replacement. Only the City Hall and the public library may need replacement.

The electric and water utilities are in excellent shape. The City has invested a great deal in the infrastructure and, due to the excellent condition and current underutilization of the utilities, little future investment will be required in either replacement or expansion of the systems.

TABLE 6. CITY HALL - CURRENT USE AND FUTURE NEEDS

DEPARTMENT	CURRENT OFFICE SPACE	PERSONNEL	FUTURE NEEDS
Engineering	1,089 sq. ft	5 full-time	No changes anticipated other than normal replacement.
Police	2,456 basement 1,500 1st floor 1,827 garage 5,783 sq. ft. total	22 officers 5 civilians 2 part-time	Increase in space needed: 700 sq. ft.for training/briefing/squad room; 200 sq. ft. for two patrol interview rooms; 360+ sq. ft. in garage for vehicle and large evidence storage - Total 1,260+ sq. ft.; Addition of one part-time secretarial position; Addition on two CRT work stations, a copy machine and microfilm equipment; and Updating of current communications system.
Building Inspection	1,228 sq. ft.	3 full-time	Replacement of Department automobile as scheduled; Addition of another 2-way radio unit and additional files; Upgrading of copy machine and word processing equipment when replaced; and Addition of third parking place.
Assessor's	1,005 sq.ft.	1 full-time 1 part-time	Upgrade part-time position to full-time position; Addition of personal computer as budgeted; and Addition of second parking place.
Community Development	260 sq. ft.	1 full-time 1 part-time	Addition of word processor/personal computer; and Addition of one parking place.
City Manager & AdministrativeServices	482 sq. ft. City Manager 1,752 sq. ft. Council Chambers	2 full-time	Addition of 450 sq. ft. room for committee meetings.
Credit Union	350 sq. ft.*	2 full-time	No Comment
Water & Power Business Office	1,000 sq. ft.*	5 full-time	No Comment

* Estimated by Consultant

The sewage treatment plant is also in excellent condition. It, too, is currently operated at a level below its maximum capacity. Therefore, a large amount of development can occur prior to expansion being required.

The current low levels of use of the utilities has created some problems. The water utility is a typical of underutilization. The water utility bases its fees on the cost of operating the plant. Operating costs remain constant despite the number of users. Therefore, the higher the number of users, the lower will be the fee charged to individuals. The use of water conservation techniques and/or a reduction in the number of users will cause water fees to rise.

The addition of more users to the system will increase the amount of money received by the utility. But, because utility rates are set by the Public Service Commission based on profits, the rates will decrease. Additional users can be added through residential development or through a large industrial or commercial water user locating in Two Rivers.

The other city services are also in good condition. Garbage collection, police and fire services, public transportation and education facilities are all adequate for the needs of the community. Expansion in the student population can be accommodated due to vacant space existing in the schools.

The streets are also in good condition. This is due to the City's long standing policy of constructing concrete streets and constant maintenance.

The high quality of the services offered by the City is the result of the management style used by the City government over the past 50 years. This management style has resulted in an excellent physical infrastructure and a virtually debt free government.

An example of this management style is the five-year plan developed by the Public Works Department (see Table 7 on page CPF 25-26). The five-year plan determines what vehicles or pieces of equipment will need replacement and when the replacement will be required. The plan allows the Department to determine its long-range costs and to prepare for them.

Only the City Hall and the public library appear to be in need of replacement. The City Hall currently uses all of the available office space. The remaining space in the building is taken up by halls, stairs, restrooms and storage as shown in Table 5 on page CPF-22. An additional 1,350 square feet in office space has been requested by the departments.

The City Hall has other deficiencies besides limited office space. The building is very expensive to heat. In an effort to reduce costs the third floor was closed to all uses except storage. Another problem is the poor condition of the plumbing system. Replacement of the entire system will be required in the near future. Also, the building's slate roof will need to be replaced soon. Both are expensive capital repairs.

The public library has similar problems. The current building is rapidly becoming much too small. Also, the building does not have handicap accessible doorways or washrooms. The installation of an elevator is needed to make the other floors more accessible as well as to assist in moving parts of the collection from one floor to another. Another problem facing the library is the lack of adequate parking for patrons and staff.

The construction of a new City Hall and public library would solve the problems associated with the existing buildings. The two could be combined into one building to lower the cost of construction. Because the City's other services are in such good condition, capital outlays in these areas are not expected. Therefore, the City will not be required to be concerned about splitting one amount of money among many projects.

The recreation facilities available in the City are excellent. However, the City must maintain them in good condition. Also, the City should consider assisting in expanding certain private facilities such as expanding parking facilities for Rogers Street Fishing Village or expanding the golf course to 18 holes.

In general, the City's support services are in very good condition. This is the result of a combination of good construction in the beginning, constant maintenance and good management on the part of City government. The existing infrastructure should be more than adequate for a number of years.

TABLE 7. PUBLIC WORKS FIVE YEAR PLAN
1988 - 1992

Street Department Vehicles and Equipment Replacement

1988	Cost
Dump Truck and Plow	$ 33,000
Dump Truck and Plow	33,000
Pickup Truck	13,000
Van	8,000
Mower Tractor and #80 Skid Loader To be replaced with trackless machine with mower, blower, blade, and broom.	40,000
Sub Total	$127,000

1989	
Salter/Sander	$ 8,000
Leaf Picker	9,000
Jeep	13,500
Jeep	13,500
Pickup Truck	13,000
Sedan	6,000
Portable Boiler	11,000
New Tar Kettle	12,000
Sub Total	$ 86,000

TABLE 7. PUBLIC WORKS FIVE YEAR PLAN(CONT.)
1988 - 1992

1990		
Snow Blower		$ 35,000
#70A Sewer Jetter and Chassis		60,000
	Sub Total	$95,000
1991		
Dump Truck and Plow		$ 33,000
Dump Truck and Plow		33,000
Sedan		6,000
Salter/Sander		8,000
Air Compressor		10,000
	Sub Total	$ 96,000
1992		
Dump Truck and Plow		$ 33,000
Dump Truck and Plow		33,000
Van		11,000
Street Sweeper		58,000
	Sub Total	$135,000

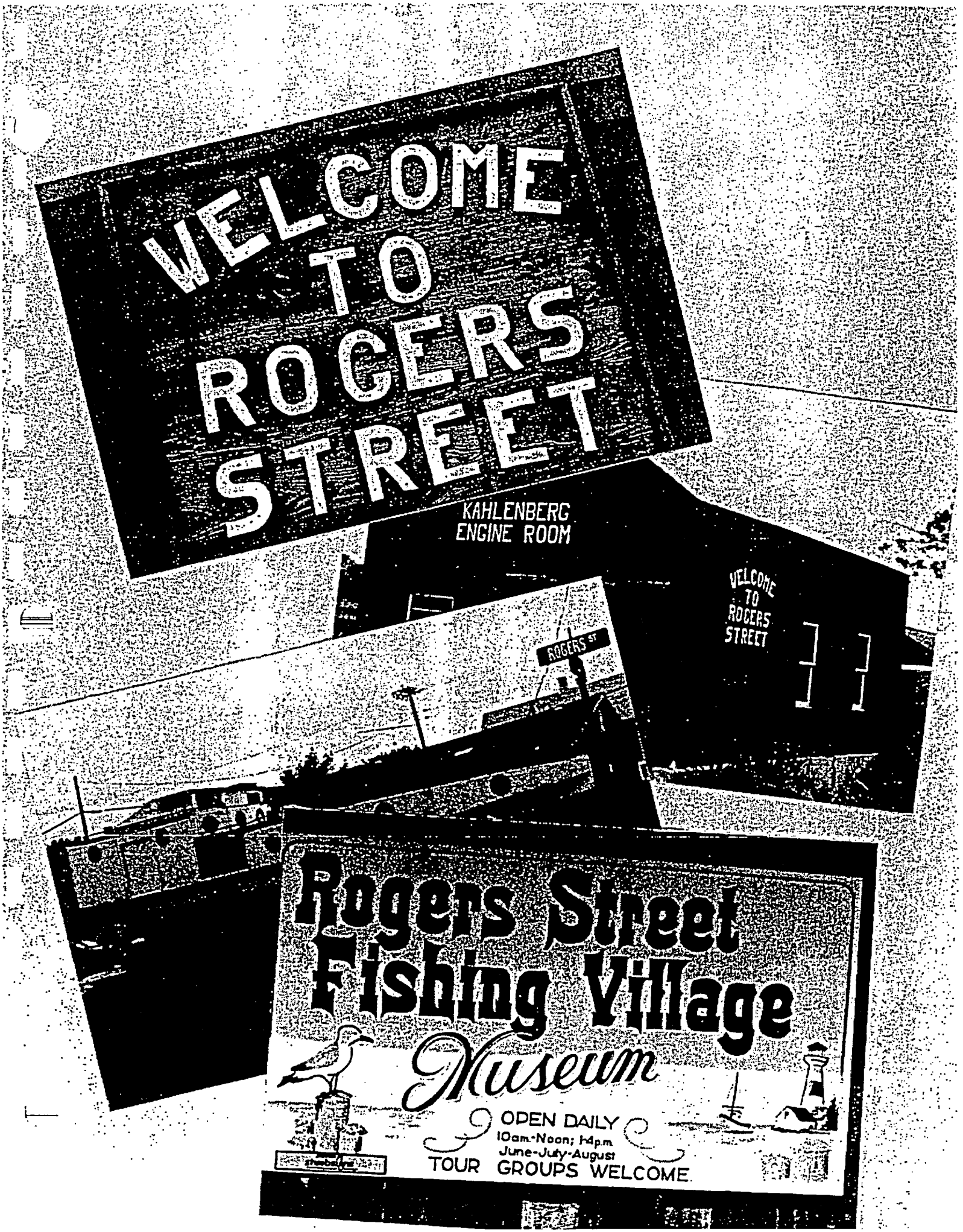
1989

Public Works garage addition - the construction of an additional public works garage north of the Wastewater Treatment Plant. The building would be approximately 30 X 60 sq. ft. and contain three or four access doors. The primary purpose of the facility would be off-season storage of public works equipment and vehicles. This would be cold storage only, but would have electrical service to it. The building is estimated to cost $40,000.

Upgrade lighting - rewire the existing public works department shop area and install new light fixtures. This would cost an estimated $6,000.

1990

Covered storage shed - the construction of a covered storage shed for the storage of road salt and sand for the prevention of caking, freeze-ups and compliance with environmental standards. This would cost an estimated $28,000.


WELCOME
TO
ROGERS
STREET
KAHLENBERG
ENGINE ROOM
WELCOME
TO
ROGERS
STREET
ROGERS ST
Rogers Street
Fishing Village
Museum
OPEN DAILY
10am.-Noon; 1-4p.m.
June-July-August
TOUR GROUPS WELCOME

HOUSING

A. Number of Dwelling Units

The number of dwelling units in Two Rivers reached approximately 5,000 by 1979, an increase of 13.1 percent over the 4,421 units in 1970. In Manitowoc County, there are 30,140 housing units. The number of housing units increased by 18.6 percent from 1970 to 1980. The Bay Lake region experienced an increase of 32 percent and the State, as a whole, increased by 27 percent as indicated in Table 1 below.

TABLE 1. HOUSING 1970-1980

			1970-1980	
	1970	1980	Number Change	Percent Change
Two Rivers	4,421	5,000	579	13.1
Manitowoc	25,411	30,140	4,729	18.6
Region	148,035	194,960	46,925	31.7
State	1,472,322	1,863,981	391,659	26.6

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population and Housing; and Bay-Lake Regional Planning Commission.

B. Vacancy Rate

The 1980 U.S. Census data shows that the vacancy rate in the City was 2.6 percent. Of the 149 vacant units in 1980, 59 were rental units with a median rent of $160 per month. Since the City-wide median rent is $140, it can be assumed that these units were over priced or priced above what the market could bear.

Moreover, the 1980 Census indicates that Two Rivers had an average vacancy rate of 2.6 percent. Of this percentage, .9 percent of the vacant units were owner-occupied, and 4.3 percent were renter-occupied.

The age of housing units determines the future need for repairs and possible housing assistance. Table 2 on page H-2 lists the age of housing structures in Two Rivers, in Manitowoc County, in the region and the State. Two Rivers housing units built before 1950 represented 57.0 percent of the City's entire housing stock. The housing characteristics will be changing dramatically within the next ten years as housing repairs and replacements become a necessity.

TABLE 2.
AGE OF HOUSING UNITS

Area	Earlier Than 1950	1950-1959	1960-1969	1970-1980	Total Units	Percent Before 1950
Two Rivers	2,852	666	694	788	5,000	57.0
Manitowoc	17,944	3,636	3,528	5,032	30,140	59.5
Region	91,197	21,526	27,387	54,850	194,960	46.8
State	884,053	245,935	286,439	447,554	1,863,981	47.4

Source: 1970 and 1980 Census of Housing and Bay-Lake Regional Planning Commission and Summary Tape File 3A.

C. Housing Conditions, 1970-1980

In the 1980, DOD Four-Count Housing Distribution Report, 673 units were classified as "Four-Count" Housing or substandard. Of these, 331 or 49 percent were owner-occupied, and 51 percent or 342 units were renter-occupied.

The 1970 DOD "Four-Count" Housing Distribution Report classified 769 units as substandard. Of these, 401 or 52 percent were owner occupied and 48 percent or 368 units were renter occupied. From 1970 to 1980, the number of "Four-Count" Housing units had decreased by 96 units or 12 percent.

It is also possible to compare the number of units lacking plumbing facilities over the past two decades as a measure of substandardness. In 1970, 234 units or 5 percent of the City's units lacked some or all plumbing facilities; in 1980, the number was 110 or 2.2 percent. This was a considerable improvement for the community.

D. Current Housing Conditions

The 1980 "Four-Count" Housing Distribution compiled by the State of Wisconsin showed that over 30 percent of the 4,848 households in the City of Two Rivers were occupied by elderly persons as shown in Table 3 on page H-3. Nearly 32 percent of the households were occupied by low to moderate income (LMI) persons. Nearly 29 percent of these housing units were defined as substandard as shown in Table 4 on page H-3. Over 9 percent of the population was in need of housing assistance.

Between 1980 and 1986, two housing units were listed as abandoned and 149 units were vacant. In 1986, the City Housing Inspector's Office listed 23 new housing starts between 1984 and 1986.

TABLE 3.
HOUSING DISTRIBUTION ELDERLY VS. NON-ELDERLY

	1980 Non-Elderly	1980 Elderly
Owner-occupied units		
Total	2,410	1,110
Total 4-count	204	127
Percent which are 4-count households	8.5%	11.4%
Renter-occupied units		
Total	953	375
Total 4-count	196	146
Percent which are 4-count households	20.6%	38.9%

Source: DOA and DLAD, "Four-Count Housing Distribution -1980."

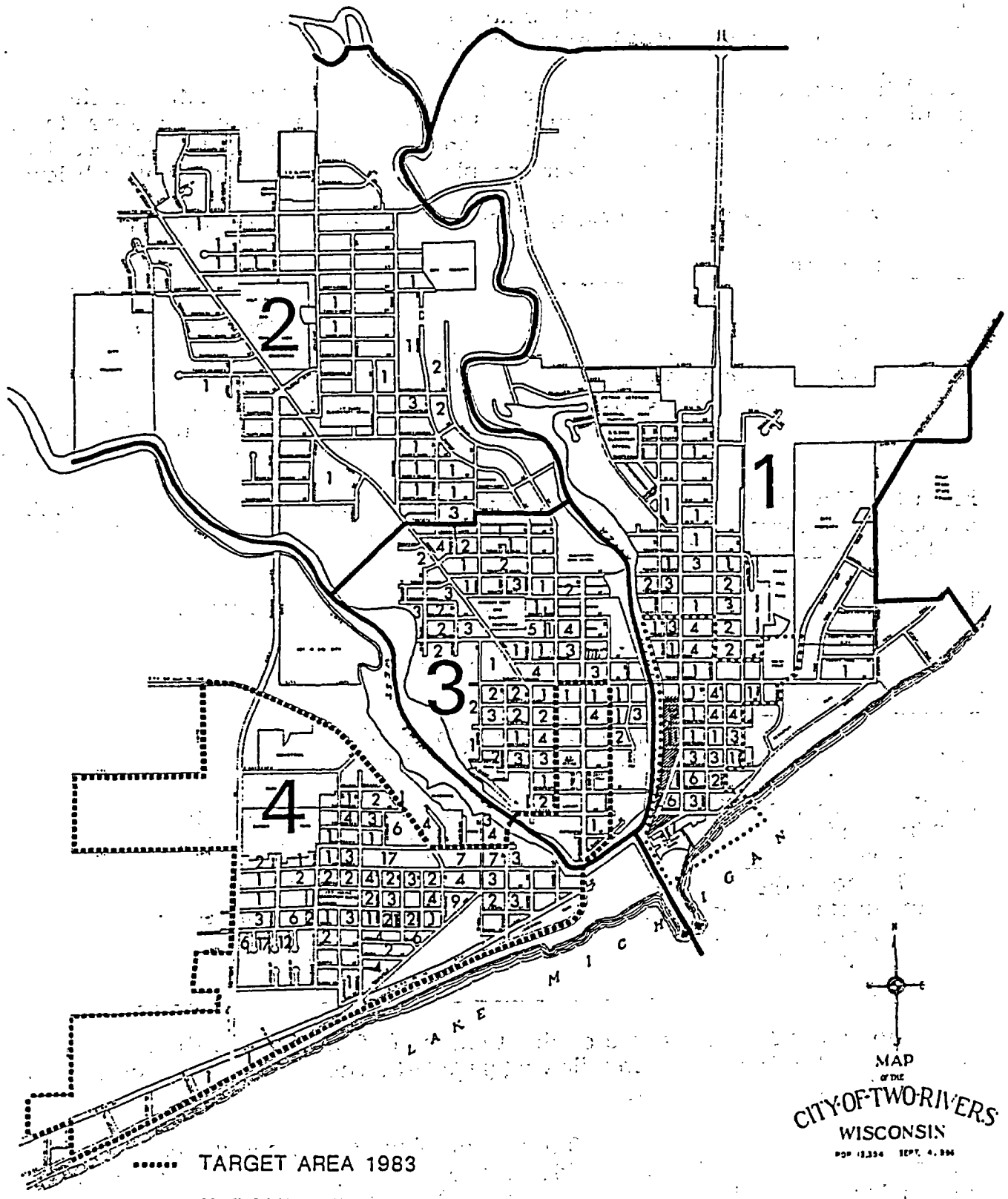
TABLE 4.
HOUSING DISTRIBUTION - LOW TO MODERATE INCOME VS. NON-LOW TO MODERATE INCOME

# LMI households 1,548	# Non-LMI households 3,300
# in standard units 1,104	# in standard units 3,071
# owners 736	# owners 2,453
# renters 368	# renters 618
# in substandard units 444	# in substandard units 229
# owners 144	# owners 187
# renters 300	# renters 42

Source: DOA and DLAD, "Four-Count Housing Distribution - 1980."

In addition to the housing conditions being determined by the census data as above, the City has conducted four housing-condition surveys on a house-to-house basis. The surveys in November-December 1983 and November-December 1985 are the most recent and most accurate. The 1983 Target Area Survey included all of the south side and a portion of the central area as shown on the Housing Map following page H-3. The results of the 1983 Target Area Survey follows.

The 1983 target area contained 10.7 percent of the City's population and 10.3 percent of the City's households. Over 66 percent of all target area households were LMI, as compared with 31 percent in the whole community.



TARGET AREA 1983

TARGET AREA 1985

DESIGATED HISTORICAL AREA

1980 CENSUS TRACTS

3 UNITS REHABILITATED WITH CITY PROGRAM ASSISTANCE SINCE 1977

EXISTING HOUSING

TWO RIVERS COMPREHENSIVE PLAN
Mid-America Planning Services, Inc.
MAPS Consultants *1987*

The 1983 target area included 502 units, of which 165 were substandard (119 owner-occupied and 46 renter-occupied).

The 1983 target area was 66.2 percent LMI. It contained 106 LMI households needing housing assistance. Per unit, this was more than twice as many as in the balance of the City. A total of 73 owners and 33 renters needed assistance. LMI housing needs include major repair or replacement as shown in Table 5 below:

TABLE 5. HOUSING REPAIRS AND/OR REPLACEMENT- 1983

NUMBER	NEED	NUMBER	NEED
57	New Roof	52	Electrical System
72	Exterior Siding	39	New Foundation
20	Water Heater	46	Interior Walls & Floors
33	Plumbing System	85	Furnace & Chimney
		97	Insulation without defects in roof, siding and foundation

From the November-December 1983 Target Area Survey, it is known that 52.9 percent of all target area homes needed weatherization, including insulation, caulking, or storm windows.

Table 6 shows the housing conditions for all of the 1983 Target Area.

TABLE 6. HOUSING CONDITIONS - 1983

Target area population 1,384
Target area households 502

# LMI households 339	# Non-LMI households 170
# in standard units 228	# in standard units 111
# owners 169	# owners 91
# renters 64	# renters 20
# in substandard units 106	# in substandard units 59
# owners 73	# owners 46
# renters 33	# renters 13

The 1985 Target Area consisted of about one-half of the area on the east side as shown on the Housing Map following page H-3. The following are the results of the 1985 Target Area Survey.

The 1985 target area contained 10.0 percent of the City's population, and 11.6 percent of the City's households. A total of 63.9 percent of all target area households were LMI, as compared with 31.9 percent in the whole community.

The 1985 target area included 567 units, of which 195 were substandard (147 owner-occupied and 48 renter-occupied).

The 1985 target area was 63.9 percent LMI. It contained 124 LMI households needing housing assistance. Per unit, this was more than twice as many as in the balance of the City. A total of 85 owners and 39 renters needed assistance. LMI housing needs included major repair or replacement of the following:

TABLE 7. HOUSING REPAIRS AND/OR REPLACEMENT- 1985

NUMBER	NEED	NUMBER	NEED
49	New Roof	50	Electrical System
45	Exterior Siding	26	New Foundation
15	Water Heater	49	Interior Walls & Floors
30	Plumbing System	44	Furnace & Chimney
		95	Insulation

The survey response of 64.4 percent of all occupied dwellings identified the housing substandardness as shown in Table 8 below:

TABLE 8. HOUSING SUBSTANDARDNESS 1985

	Raw		Factored	
	Total	LMI	Total	LMI
1. Major repair or replacement of 2 or 3 major elements	46	30	71	46
2. Major repair or replacement of 1 major element and one minor element	72	45	112	70
3. Major repair or replacement of 3 or more minor elements	8	5	12	8
Total	126	80	195	124

As can be seen, most of the substandardness was in the major elements of roof, siding and foundation. Over 93 percent or 116 of the 124 LMI units were classified substandard by these major elements. A total of eight LMI houses did have three or more minor elements that needed major repair or replacement, but as one or more of the major elements also needed major repair or replacement, the substandardness was measured there rather than under the three or more minor elements.

From the November-December 1985 Target Area Survey it is known that 54 of all target area LMI homes needed weatherization, including: insulation, caulking, or

storm windows. These are homes that will be done as part of the housing rehabilitation.

Table 9, below, shows the housing conditions for all of the 1985 Target Area.

TABLE 9. HOUSING - 1985

Target area population 1,344
Target area households 567

# LMI households 362	# Non-LMI households 205
# in standard units 230	# in standard units 134
# owners 172	# owners 97
# renters 66	# renters 37
# in substandard units 124	# in substandard units 71
# owners 85	# owners 62
# renters 39	# renters 9

E. Rehabilitation Efforts

The City of Two Rivers has had Wisconsin Development Fund (WDF) funded housing programs that have indeed aided in rehabilitating the City's housing stock. A major problem has been the fact that Two Rivers is so large. Therefore, while rehabilitation occurred in a specific area, such as the south side, other areas of the City continued to deteriorate. In years 1984 to 1986, 105 LMI units were rehabilitated, and 239 units have been rehabilitated since 1980, as shown in Table 10.

TABLE 10.
HOUSING REHABILITATION 1978-1986

Calendar Year	Total City Owners	Renters
1978	77	1
1979	57	1
1980	65	10
1981	39	2
1982	11	-
1983	42	40
1984	21	4
1985	40	14
1986	22	4
	374	76

Two Rivers has substantial housing needs, particularly for LMI households. Using 1980 Census data and 1983 DOD data, 673 units need to be brought up to

standard quality (331 are owner-occupied and 342 renter-occupied). The 1980 Housing Assistance Plan indicated a need for 96 new rental units and at least 22 rehabilitated rental units. There are 444 LMI households in need of housing assistance (144 owners and 300 renters). Since 1980, 153 owner units and 58 rental units have been rehabilitated, for a total of 211 LMI units. Even if no units deteriorated, which is certainly not true, there would still be a need to rehabilitate 300 units, which is a very significant number. In addition, the Citizen Participation Committee has identified 39 units that should be demolished because rehabilitating them would not be feasible. Also, the Plan Committee has identified nine City-owned vacant lots that are suitable for housing.

A breakdown of LMI households by tenure and type is as follows:

- 73% owners and 27% renters;
- 21% elderly and 69% non-elderly;
- 28% female-headed; and
- 7% handicapped

The community also has needs for special housing and for more opportunities for LMI to obtain their own housing. In a 1978 survey, 67 percent of the respondents felt that low-income persons require additional housing opportunities. Respondents indicated that apartments, mobile homes, and single houses are needed for LMI in all areas of the City. The 1985 Target Area Survey indicated the highest need was for elderly housing and single family units, followed by multi-family units. Condominiums, mobile homes, and rooming houses were the least popular.

The vacancy rate in the City is 2.9 percent, which is very low. The low vacancy rate shows a need for additional low- and moderate-income housing opportunities.

The November-December 1985 survey found that there was a very high percentage of LMI female headed households (36.7%) and LMI elderly (46.1%) housing units. There are 133 female headed households and 167 elderly households. There were also 8 units of LMI handicap persons who needed modifications and would take grant assistance. There is a need to assist 28 elderly, 53 female, and 14 elderly female LMI substandard units. There are another 54 LMI units that need weatherization that are not substandard. There is also a need to eliminate 48 LMI sewer backups and 27 incidents of water standing in the street and yard.

The City has been working to deconcentrate low- and moderate-income housing. In 1982, Two Rivers developed and adopted a land use plan and a policy on the location of multi-family housing throughout the City. An area in the northernmost portion was rezoned for multi-family housing. An area in the southern portion of the City immediately adjacent to the two target multi-family LMI complexes, has been rezoned for single family use. This means that no additional new apartments will be built in the immediate area. In this target area, deconcentration will be accomplished by acquiring two vacant, substandard houses, demolishing them, and then not replacing them with LMI housing.

Upon analysis, a majority of the housing stock in the City of Two Rivers is in good condition, and many of the homes are very desirable. The community provides a high standard of living that many have come to expect. This is particularly true of the residential areas which are supported by the excellent infrastructure developed by the City of Two Rivers.

However, there are problems within the housing stock. These problems can be summarized in the following categories:

- age;
- vacancy rate;
- need of rehabilitation of additional units; and
- lack of new construction;

The age of housing is important. Wherever wood frame houses are, they are susceptible to deterioration. Approximately 57 percent of the homes in Two Rivers were built prior to 1950, which is 10 percent more than the State average. A primary concern is the development of housing inspection codes, housing inspections, and programs to maintain the housing stock.

The 1980 vacancy rate of 2.6 percent represents a low vacancy rate. However, it is believed that the current vacancy rate is higher than this and is an element of concern for the City. An important reason to have economic growth within Two Rivers is the need to keep the existing housing stock occupied so that it will be maintained. By encouraging economic development, out-migration will decrease. Therefore, the vacancy rate will also decrease. It is important to keep any houses that are now in standard condition, or if in need of rehabilitation but salvageable, from further deterioration and the eventual loss of the unit.

There is a definite need to continue to rehabilitate housing within the City. The 1980 census data and surveys conducted by the Community Development Office for the South and East Sides indicate that there is still a significant need for housing rehabilitation. This is despite the fact that 374 owner units and 76 rental units have been rehabilitated since 1977 with government assistance. Also, a large number of units have been rehabilitated with private funds.

Another housing problem within the City is the lack of new construction. Only twenty-three units have been built in the last three years. New construction must increase if the City begins to grow. Good housing is necessary to attract new residents and employers.

Much of the housing within the City is in good condition. In order to attract new residents and employers, the City must maintain the existing good housing at current levels, rehabilitate those units in need and increase new construction. By doing this, the City will be able to maintain its reputation as being a good community in which to live.

Community Assessment

The first element of the Comprehensive Plan involved going to the people of Two Rivers to determine their needs, problems and desires. The Consultant developed a four page survey along with City staff and the Plan Commission. That survey was mailed to 1000 homes selected at random from the City's mailing list. Seven hundred and ninety-seven copies of the Confidential Surveys were returned to the Consultant's Madison office. It has been tabulated using the total of all surveys and by the four Census Districts as shown on the Housing Map following page H-3.

The survey results can be found on pages CA-2 - 37.

A. Analysis of Specific Survey Responses

In Question 6, it was observed that most people see new residential growth occurring on the north side.

For Question 7, only 2.5 percent of the people believe that their neighborhood is a poor place to live, whereas most of the people feel that it is an excellent place to live.

For Question 8, the greatest problem identified was traffic, but only by a quarter of the people responding to the survey.

Assuming the survey is representative of the families in Two Rivers, Question 10 would indicate that the City has 172 unemployed persons who are unable to find a job in Two Rivers. This was determined by factoring up the 143 people that the survey indicated were unable to find a job by the 16.4 percent of the total homes that this survey represents.

It appears that a large number of residents in Two Rivers do not rely on employment within the City. This is referenced in Question 11.

In Questions 12 and 13, a majority of the residents indicated that the City should have another industrial park, and the City should assist local businesses to grow and expand.

Question 14 indicates that people do shop more often in Two Rivers than Manitowoc, but in Question 16, it appears that more money is spent outside of the City of Two Rivers than within it.

Question 17 indicates that convenience is by far the major reason for shopping in Two Rivers.

Question 18 indicates that food, medicine and banking are the most adequate commercial services, although medicine and banking would not be considered large retail items. Clothing stores are the least adequate service.

Question 19 indicates that the major item residents would like increased regarding shopping would be more stores, followed by more parking.

Questions 20 and 21 indicate that not many people use the bus, but everyone feels that it is necessary. The major complaint in service appears to be that they would like the hours of operation to be extended. Not many people feel that Two Rivers has a traffic problem or a parking problem. These are the responses to Questions 22 through 24 of the survey.

The responses for Question 25 indicate that the intersection of 22nd Street and Forest Avenue is a problem intersection. However, it must be remembered that people on the east and south sides probably do not encounter problems at Tannery and Mishicot Roads very often and, therefore, are not likely to see it as a problem. This would be true of almost all of the intersections.

Questions 26 and 27 indicate that the Rogers Street Fishing Village is a very important community asset, and that most people in Two Rivers have visited it.

Questions 28 and 29 indicate that the majority of the people see a need to improve parking at Neshotah Park. Regarding the need to improve traffic circulation in the park, responses are almost evenly divided between those who feel that something needs to be done and those that feel that the traffic circulation is fine as it exists.

Question 30 indicates that Neshotah Park is utilized quite heavily, as 49 percent of the survey respondents stated that they use the park four or more times per year.

In Question 31, a majority of the people feel that the park should be improved, but they cannot agree on which improvements are the most necessary and should be included. Shelters and additional parking seem to predominate, as do additional facilities for the elderly, civic and fraternal organizations.

Question 32 indicates that the Senior Citizen Center has the most adequate services. The City boat launch, fish cleaning facilities, and restrooms are the least adequate services, followed by boat launch parking.

Question 33 indicates that the majority of the people do feel that the City should charge a fee for the City boat ramps. As regards the users fee, the majority of the people indicate that they did not want to be charged a fee, but they don't say that they would not pay a fee if it were imposed.

Question 34 indicates that almost the same number of residents feel that the City should expand the marina and sport fishing opportunities as oppose it. They indicate that the private boat launch facilities and parking facilities are adequate.

Question 37 is about even as to whether the City should promote the development of additional recreational vehicle courts and campgrounds.

Question 38 indicates that 44.7 percent of the respondents qualify as low- and moderate-income (LMI), compared to 1980 census data which indicated 31 percent were LMI. It is possible that as the population grows older, it develops a greater percentage of low- to moderate-income families.

It is interesting to note that 57 percent of the northsiders felt their neighborhood was an excellent place to live, and only 29 percent of the central, 27 percent of the east side, and 17 percent of the south side felt that their neighborhood was an excellent place to live. This indicates a spread of 40 percent between opinions in the different areas of the City.

B. Analysis of the 1979 Survey as Compared to the 1987 Survey

The City conducted a survey in the early part of 1979 somewhat similar to the 1987 survey. Some of the questions were similar and the results were compared on a percentage basis to determine the trends. In the 1979 survey, 18 percent of the respondents were female-headed households, whereas in 1987, they accounted for 26 percent of the total respondents. This could be a result of a greater elderly population and/or single parent households.

In 1979, the people felt that there was a greater need for housing in all categories than they did in 1987. In some of these categories, the need was 20 percent greater in 1979 than what is indicated in 1987.

The two surveys asked how people felt about their neighborhood as an excellent place to live, and the results are as follows:

	1979	1987
Central Area	34%	29%
North Side	62%	57%
East Side	34%	27%
South Side	24%	17%

All neighborhoods felt themselves to be a better place to live in 1979 than they do in 1987. This could be more of an expression of the poor economy than of the quality of the neighborhood.

A comparison of residents' opinions relative to the adequacy of the shopping facilities in the City was also obtained. Those that responded "yes", that shopping facilities are adequate, are listed as follows:

	1979	1987
Food	97%	95%
Medicine	98%	94%
Banking	98%	96%
Auto Service	86%	70%
Clothing	54%	27%
Restaurants	71%	64%

Residents felt that the adequacy for all of these has fallen, with clothing and restaurants showing the greatest decline.

In 1979, 87 percent of the people felt that the bus system was adequate, whereas in the 1987 survey only 76 percent of the people feel that the bus system is adequate.

On a note of optimism, the municipal recreation and boating facilities are considered to be as good as, if not better, in 1987 than they were in 1979. The comparison of the "yes" answers can be found in Table 1 below.

It is interesting to note that the responses to the question concerning the city boat launch, restrooms and fish cleaning facilities have basically stayed the same since 1979, and they are still considered to be as inadequate now as then.

The 1982 and 1986 Community Development Housing Needs Surveys found that there were 195 units that need rehabilitation on the south and central portions of the City, and another 175 units on the east side, bringing the number of known totals-in-need-of-rehabilitation to 370 units. These surveys do not represent all of the east side and do not represent any of the northern half of the community between the East and West Twin Rivers.

TABLE 1. COMPARISON OF SURVEY RESPONSES - 1979 VS. 1987

	1979	1987
Senior Citizen Center	88%	97%
Recreation Facilities for:		
0 - 6 year olds	64%	67%
7 - 12 year olds	64%	64%
13 - 18 year olds	53%	51%
19 - 64 year olds	69%	67%
65 and over	81%	90%
City Boat Launch Facilities	71%	65%
City Boat Launch Restrooms and Fish Cleaning Facilities	42%	43%

CITY OF TWO RIVERS CONFIDENTIAL HOUSING AND COMMUNITY NEEDS SURVEY
COMPREHENSIVE PLAN - SPRING 1987

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TOTAL ALL RECORDS
797 Records

1. Number of people in your family living at this address: (circle the correct number)

0	1	2	3	4	5	6	7	8 or more
0	181	295	122	119	49	18	4	6

2. Age of head of household: (CHECK ONE)

2	under 18 years	267	41-61 years
10	18-21 years	37	62-64 years
103	22-30 years	215	65 or older
162	31-40 years		

3. Sex of head of household? Female 207 or Male 588

Do you: Own the place you live at 609 or Rent the place you live at 182

5. Do you feel there is a need for new housing in Two Rivers of the following types: (circle your answer)

Single family	YES	189	NO	568	High Rent	YES	33	NO 724
Multi-family	YES	102	NO	655	Low Rent	YES	290	NO 467
Elderly Housing	YES	325	NO	435	Moderate Rent	YES	388	NO 370
Rooming Houses	YES	98	NO	659	Mobile Homes	YES	64	NO 693
Condominiums	YES	108	NO	649				

6. Do you wish to see future residential growth on the:

Northside	YES	438	NO	329
Eastside	YES	311	NO	455
Southside	YES	276	NO	490

7. How do you feel about your neighborhood as a place to live:

EXCELLENT 273 GOOD 380 FAIR 118 POOR 20

8. Which of these, if any, are problems in your neighborhood: (check all that apply)

Traffic	201	Garbage Collection	9
Crime or Vandalism	135	Neighborhood Appearance	117
Air Pollution	36	Animals or Pets	113
Noise	134	Lake Related Water Problems	81

How many resident members of your family are employed? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
220	268	258	33	12	4	0	0	0

10. How many resident members of your family are unemployed and unable to find a job? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
675	103	13	2	2	0	0	0	1

11. In what community is the main wage earner employed?

(check one)

Two Rivers	343	Manitowoc	163
Mishicot	6	Rural	13
Other	51	Not Applicable	210

12. Should the city develop another industrial park? YES 436 or NO 302

13. Should the city assist local business to grow and expand? YES 648 or NO 95

14. How often do you shop in Manitowoc? (check one)

4 or more times per week	38	2 - 3 times per week	120
0 - 1 times per week	249	Once per month	69
Occasionally	293	Never	17

15. How often do you shop in downtown Two Rivers? (check one)

4 or more times per week	153	2 - 3 times per week	289
0 - 1 times per week	192	Once per month	27
Occasionally	121	Never	9

About what percentage of your total retail purchases, not including groceries, do you buy in the City of Two Rivers? (circle one)

0 - 25% 390 25 - 50% 215 50 - 75% 126 75 - 100% 44

17. If you shop in Two Rivers, what are your reasons for doing so in order of priority 1, 2, 3, etc. with 1 being the highest?

Priority Rating	Ranking Response: Quality	Selection	Price	Convenience	Service	Loyalty	N/A
1	83	11	32	536	21	60	23
2	71	56	67	75	156	166	5
3	84	49	86	42	161	107	7
4	114	58	65	36	73	54	1
5	50	97	101	12	62	37	2
6	31	109	74	5	24	87	3
7	1	2	4	0	1	2	86

18. Do you feel shopping facilities are adequate in the City for:

Food	YES 746	NO 40	Auto Service	YES 549	NO 235
Medicine	YES 741	NO 45	Clothing	YES 214	NO 569
Banking	YES 757	NO 29	Restaurants	YES 505	NO 279
Applicances	YES 411	NO 372	Hardware/Building Supplies	YES 547	NO 237

). Do you want to see shopping amenities improved in downtown Two Rivers?
YES 675 or NO 122 If yes, what? (check all applicable)

More Parking	146	More Convenient Parking	217
Free Parking	361	Benches and Trees	159
Covered Sidewalks	33	Trash Receptacals	148
More Stores	519	Expanded Shopping Hours	195

). Have you ever used the bus to shop or work in the City of Two Rivers?
YES 142 or NO 637

1. Is the bus system necessary? YES 692 or NO 67

22. Is the bus system adequate? YES 485 or NO 157

If NO, what changes should be made? (check all applicable)

Lower Fees	20	Operate All Day Saturday	98
Higher Fees	7	Operate All Day Sunday	58
Different Routes	55	Operate Longer on Weekdays	63
Operate More Often	64	Operate Longer on Weekends	0

3. Does the City of Two Rivers have traffic problems? YES 179 or NO 564

24. Does the City of Two Rivers have parking problems? YES 247 or NO 445

5. Does the City of Two Rivers need intersection improvements?
YES 707 or NO 90

If Yes, where?

22nd St. & Forest	YES 335	NO 371	16th St. & Monroe	YES 153	NO 551
22nd St. & Jackson	YES 183	NO 521	14th St. & Madison	YES 242	NO 462
22nd St. & Jefferson	YES 108	NO 596	14th St. & Hawthorn Avenue	YES 100	NO 604
Tannery Rd. & Mishicot Rd.	YES 209	NO 495	Columbus Drive & Memorial Drive	YES 125	NO 579

26. Do you feel Rogers Street Historic Area is a community asset that should be promoted by the City? YES 523 or NO 189

27. Have you visited Rogers Street Historic Area? YES 512 or NO 249

8. Should the City improve parking at Neshotah Park? YES 428 or NO 286

29. Should the City improve traffic circulation at Neshotah Park?
YES 320 or NO 367

30. How many times a year do you use Neshotah Park? (Please circle one)
None 89 1 - 3 times 295 4 - 10 times 200 10 or more 173

31. Is there a need to change Neshotah Park? YES 413 or NO 307
If YES, in what ways?

More Shelters	YES 217 NO 485	More Parking	YES 264 NO 438
No Ball Diamond	YES 45 NO 657	New Ball Diamond	YES 81 NO 620
More Picnic Areas	YES 251 NO 450	More Playground Equipment	YES 190 NO 510
More Horseshoe Courts	YES 40 NO 660		

More Beach by Eliminating Zlatnik Drive YES 132 NO 569

More Facilities for Family, Civic or Fraternal Organizations
YES 251 NO 448

2. Do you consider the following municipal services adequate:

Senior Citizen Center	YES 436	NO 15	NO OPINION 232
Recreation Facilities for:			
0 - 6 year olds	YES 212	NO 106	NO OPINION 314
7 - 12 year olds	YES 220	NO 122	NO OPINION 295
13 - 18 year olds	YES 192	NO 186	NO OPINION 272
19 - 64 year olds	YES 253	NO 126	NO OPINION 253
65 and over	YES 303	NO 34	NO OPINION 322
City Boat Launch Facilities	YES 274	NO 146	NO OPINION 317
City Boat Launch Restrooms & Fish Cleaning Facilities	YES 174	NO 233	NO OPINION 329
Boat Launch Parking	YES 215	NO 193	NO OPINION 327

3. Should the City charge a fee for use of City boat ramps? YES 396 NO 310

Should the City establish a family plan for paying for use of the Community House facilities? YES 196 NO 325 NO OPINION 220

Should there be more user fees for use of City recreation facilities? YES 184 NO 380 NO OPINION 183

4. Should the City expand marina and sport fishing opportunities? YES 349 NO 358

Are private boat launch facilities adequate? YES 510 NO 123

36. Are private boat launch parking facilities adequate? YES 461 NO 158

7. Should the city promote the development of additional Recreation Vehicle courts and campgrounds? YES 359 NO 338

8. This information is <u>completely confidential</u>. Please think of your total family <u>income</u> for last year, <u>before taxes</u>. For your family size, was your gross family income less or more than the amount listed below for the number of people in your family:

Family Size	Less Than	Income	More Than
1 person	126	$15,200	54
2 persons	129	17,350	166
3 persons	46	19,550	76
4 persons	27	21,700	92
5 persons	14	23,050	35
6 persons	6	24,400	12
7 persons	3	25,750	1
8 persons	3	27,100	2

CITY OF TWO RIVERS CONFIDENTIAL HOUSING AND COMMUNITY NEEDS SURVEY
COMPREHENSIVE PLAN - SPRING 1987

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TWO RIVERS CENSUS TRACK 1 - EAST
153 Records

1. Number of people in your family living at this address: (circle the correct number)

0	1	2	3	4	5	6	7	8 or more
1	36	53	26	23	11	3	0	0

2. Age of head of household: (CHECK ONE)

0	under 18 years	41	41-61 years
0	18-21 years	5	62-64 years
29	22-30 years	36	65 or older
42	31-40 years		

3. Sex of head of household? Female 41 or Male 112

4. Do you: Own the place you live at 121 or Rent the place you live at 32

5. Do you feel there is a need for new housing in Two Rivers of the following types: (circle your answer)

Single family	YES	38	NO	112	High Rent	YES	3	NO 147
Multi-family	YES	25	NO	125	Low Rent	YES	57	NO 93
Elderly Housing	YES	77	NO	73	Moderate Rent	YES	86	NO 63
Rooming Houses	YES	25	NO	125	Mobile Homes	YES	10	NO 140
Condominiums	YES	14	NO	136				

6. Do you wish to see future residential growth on the:

Northside	YES	66	NO	84
Eastside	YES	93	NO	57
Southside	YES	40	NO	111

7. How do you feel about your neighborhood as a place to live:

EXCELLENT 41 GOOD 80 FAIR 26 POOR 5

8. Which of these, if any, are problems in your neighborhood: (check all that apply)

Traffic	49	Garbage Collection	2
Crime or Vandalism	21	Neighborhood Appearance	25
Air Pollution	11	Animals or Pets	23
Noise	7	Lake Related Water Problems	40

How many resident members of your family are employed? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
39	53	50	5	4	2	0	0	0

10. How many resident members of your family are unemployed and unable to find a job? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
131	21	1	0	0	0	0	0	0

11. In what community is the main wage earner employed?

(check one)

Two Rivers	64	Manitowoc	35
Mishicot	1	Rural	3
Other	12	Not Applicable	36

12. Should the city develop another industrial park? YES 84 or NO 58

13. Should the city assist local business to grow and expand? YES 127 or NO 18

14. How often do you shop in Manitowoc? (check one)

4 or more times per week	5	2 - 3 times per week	25
0 - 1 times per week	48	Once per month	13
Occasionally	56	Never	4

15. How often do you shop in downtown Two Rivers? (check one)

4 or more times per week	29	2 - 3 times per week	43
0 - 1 times per week	44	Once per month	7
Occasionally	28	Never	1

About what percentage of your total retail purchases, not including groceries, do you buy in the City of Two Rivers? (circle one)

0 - 25% 82 25 - 50% 28 50 - 75% 24 75 - 100% 11

17. If you shop in Two Rivers, what are your reasons for doing so in order of priority 1, 2, 3, etc. with 1 being the highest?

Priority Rating	Ranking Response: Quality	Selection	Price	Convenience	Service	Loyalty	N/A
1	17	3	7	105	5	8	3
2	16	12	15	13	31	26	1
3	25	12	18	8	29	18	1
4	19	12	11	8	17	14	0
5	11	19	21	2	13	10	1
6	8	22	21	1	2	18	0
7	0	1	1	0	1	0	21

18. Do you feel shopping facilities are adequate in the City for:

Food	YES 147	NO 4	Auto Service	YES 102	NO 49
Medicine	YES 143	NO 8	Clothing	YES 41	NO 110
Banking	YES 144	NO 7	Restaurants	YES 104	NO 46
Applicances	YES 82	NO 69	Hardware/Building Supplies	YES 95	NO 56

19. Do you want to see shopping amenities improved in downtown Two Rivers?
YES 34 or NO 119 If yes, what? (check all applicable)

More Parking	29	More Convenient Parking	42
Free Parking	72	Benches and Trees	26
Covered Sidewalks	7	Trash Receptacals	28
More Stores	96	Expanded Shopping Hours	44

20. Have you ever used the bus to shop or work in the City of Two Rivers?
YES 23 or NO 128

21. Is the bus system necessary? YES 135 or NO 10

22. Is the bus system adequate? YES 92 or NO 28

If NO, what changes should be made? (check all applicable)

Lower Fees	1	Operate All Day Saturday	12
Higher Fees	2	Operate All Day Sunday	8
Different Routes	14	Operate Longer on Weekdays	12
Operate More Often	12	Operate Longer on Weekends	0

23. Does the City of Two Rivers have traffic problems? YES 43 or NO 99

24. Does the City of Two Rivers have parking problems? YES 48 or NO 87

25. Does the City of Two Rivers need intersection improvements?
YES 140 or NO 13

If Yes, where?

22nd St. & Forest	YES 54	NO 86		16th St. & Monroe	YES 22	NO 118	
22nd St. & Jackson	YES 64	NO 76		14th St. & Madison	YES 43	NO 97	
22nd St. & Jefferson	YES 26	NO 114		14th St. & Hawthorn Avenue	YES 14	NO 126	
Tannery Rd. & Mishicot Rd.	YES 24	NO 116		Columbus Drive & Memorial Drive	YES 29	NO 111	

26. Do you feel Rogers Street Historic Area is a community asset that should be promoted by the City? YES 114 or NO 28

27. Have you visited Rogers Street Historic Area? YES 106 or NO 41

28. Should the City improve parking at Neshotah Park? YES 87 or NO 51

29. Should the City improve traffic circulation at Neshotah Park?
YES 67 or NO 70

30. How many times a year do you use Neshotah Park? (Please circle one)
None 9 1 - 3 times 35 4 - 10 times 33 10 or more 64

31. Is there a need to change Neshotah Park? YES 93 or NO 49
If YES, in what ways?

More Shelters	YES 38	NO 101		More Parking	YES 54	NO 85	
No Ball Diamond	YES 5	NO 134		New Ball Diamond	YES 13	NO 126	
More Picnic Areas	YES 50	NO 89		More Playground Equipment	YES 39	NO 100	
More Horseshoe Courts	YES 6	NO 132					

More Beach by Eliminating Zlatnik Drive YES 31 NO 108

More Facilities for Family, Civic or Fraternal Organizations YES 53 NO 86

2. Do you consider the following municipal services adequate:

Senior Citizen Center	YES	74	NO	2	NO OPINION	55
Recreation Facilities for:						
0 - 6 year olds	YES	31	NO	20	NO OPINION	66
7 - 12 year olds	YES	30	NO	25	NO OPINION	65
13 - 18 year olds	YES	27	NO	35	NO OPINION	58
19 - 64 year olds	YES	39	NO	30	NO OPINION	50
65 and over	YES	49	NO	7	NO OPINION	68
City Boat Launch Facilities	YES	45	NO	32	NO OPINION	63
City Boat Launch Restrooms & Fish Cleaning Facilities	YES	26	NO	46	NO OPINION	70
Boat Launch Parking	YES	38	NO	38	NO OPINION	65

3. Should the City charge a fee for use of City boat ramps? YES 69 NO 66

Should the City establish a family plan for paying for use of the Community House facilities? YES 30 NO 71 NO OPINION 40

Should there be more user fees for use of City recreation facilities? YES 34 NO 73 NO OPINION 36

4. Should the City expand marina and sport fishing opportunities? YES 69 NO 64

Are private boat launch facilities adequate? YES 95 NO 25

36. Are private boat launch parking facilities adequate? YES 81 NO 35

7. Should the city promote the development of additional Recreation Vehicle courts and campgrounds? YES 68 NO 64

8. This information is <u>completely confidential</u>. Please think of your total family <u>income</u> for last year, <u>before taxes</u>. For your family size, was your gross family income less or more than the amount listed below for the number of people in your family:

Family Size	Less Than	Income	More Than
1 person	22	$15,200	14
2 persons	26	17,350	27
3 persons	9	19,550	17
4 persons	6	21,700	17
5 persons	4	23,050	7
6 persons	0	24,400	3
7 persons	0	25,750	0
8 persons	0	27,100	0

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TWO RIVERS CENSUS TRACK 2 - NORTH
246 Records

1. Number of people in your family living at this address: (circle the correct number)

0	1	2	3	4	5	6	7	8 or more
0	50	92	37	42	15	6	1	3

2. Age of head of household: (CHECK ONE)

0	under 18 years	104	41-61 years
1	18-21 years	17	62-64 years
13	22-30 years	64	65 or older
46	31-40 years		

3. Sex of head of household? Female 56 or Male 189

Do you: Own the place you live at 209 or Rent the place you live at 35

5. Do you feel there is a need for new housing in Two Rivers of the following types: (circle your answer)

Single family	YES	51	NO	180	High Rent	YES	20	NO 211
Multi-family	YES	33	NO	198	Low Rent	YES	71	NO 160
Elderly Housing	YES	84	NO	148	Moderate Rent	YES	125	NO 106
Rooming Houses	YES	22	NO	209	Mobile Homes	YES	16	NO 215
Condominiums	YES	51	NO	180				

6. Do you wish to see future residential growth on the:

Northside	YES	168	NO	68
Eastside	YES	84	NO	151
Southside	YES	68	NO	166

7. How do you feel about your neighborhood as a place to live:

EXCELLENT 139 GOOD 93 FAIR 11 POOR 1

8. Which of these, if any, are problems in your neighborhood: (check all that apply)

Traffic	33	Garbage Collection	3
Crime or Vandalism	36	Neighborhood Appearance	10
Air Pollution	5	Animals or Pets	27
Noise	15	Lake Related Water Problems	7

How many resident members of your family are employed? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
67	80	80	15	3	1	0	0	0

10. How many resident members of your family are unemployed and unable to find a job? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
213	28	3	1	1	0	0	0	0

11. In what community is the main wage earner employed?

(check one)

Two Rivers	102	Manitowoc	43
Mishicot	3	Rural	7
Other	23	Not Applicable	65

12. Should the city develop another industrial park? YES 131 or NO 93

13. Should the city assist local business to grow and expand? YES 202 or NO 26

14. How often do you shop in Manitowoc? (check one)

4 or more times per week	15	2 - 3 times per week	35
0 - 1 times per week	75	Once per month	25
Occasionally	91	Never	1

15. How often do you shop in downtown Two Rivers? (check one)

4 or more times per week	41	2 - 3 times per week	91
0 - 1 times per week	67	Once per month	6
Occasionally	35	Never	3

About what percentage of your total retail purchases, not including groceries, do you buy in the City of Two Rivers? (circle one)

0 - 25% 105 25 - 50% 79 50 - 75% 43 75 - 100% 12

17. If you shop in Two Rivers, what are your reasons for doing so in order of priority 1, 2, 3, etc. with 1 being the highest?

Priority Rating	Ranking Response: Quality	Selection	Price	Convenience	Service	Loyalty	N/A
1	21	2	10	167	9	22	9
2	19	13	21	28	46	56	2
3	23	14	23	12	53	35	3
4	38	15	18	6	18	17	0
5	13	27	30	3	18	6	0
6	7	34	18	2	7	21	0
7	0	0	1	0	0	0	19

18. Do you feel shopping facilities are adequate in the City for:

Food	YES 229	NO 15	Auto Service	YES 163	NO 80
Medicine	YES 229	NO 15	Clothing	YES 66	NO 176
Banking	YES 238	NO 6	Restaurants	YES 147	NO 97
Applicances	YES 139	NO 105	Hardware/Building Supplies	YES 169	NO 74

19. Do you want to see shopping amenities improved in downtown Two Rivers?
YES 199 or NO 47 If yes, what? (check all applicable)

More Parking	41	More Convenient Parking	60
Free Parking	100	Benches and Trees	44
Covered Sidewalks	14	Trash Receptacals	40
More Stores	152	Expanded Shopping Hours	64

20. Have you ever used the bus to shop or work in the City of Two Rivers?
YES 42 or NO 197

21. Is the bus system necessary? YES 203 or NO 27

22. Is the bus system adequate? YES 152 or NO 41

If NO, what changes should be made? (check all applicable)

Lower Fees	5	Operate All Day Saturday	23
Higher Fees	1	Operate All Day Sunday	10
Different Routes	14	Operate Longer on Weekdays	19
Operate More Often	16	Operate Longer on Weekends	0

23. Does the City of Two Rivers have traffic problems? YES 52 or NO 178

24. Does the City of Two Rivers have parking problems? YES 66 or NO 140

25. Does the City of Two Rivers need intersection improvements?
YES 215 or NO 31

If Yes, where?

22nd St. & Forest	YES 104	NO 111		16th St. & Monroe	YES 41	NO 174
22nd St. & Jackson	YES 49	NO 166		14th St. & Madison	YES 55	NO 160
22nd St. & Jefferson	YES 26	NO 189		14th St. & Hawthorn Avenue	YES 23	NO 192
Tannery Rd. & Mishicot Rd.	YES 92	NO 123		Columbus Drive & Memorial Drive	YES 29	NO 186

26. Do you feel Rogers Street Historic Area is a community asset that should be promoted by the City? YES 156 or NO 57

27. Have you visited Rogers Street Historic Area? YES 155 or NO 76

28. Should the City improve parking at Neshotah Park? YES 130 or NO 85

29. Should the City improve traffic circulation at Neshotah Park?
YES 93 or NO 112

30. How many times a year do you use Neshotah Park? (Please circle one)
None 30 1 - 3 times 100 4 - 10 times 69 10 or more 34

31. Is there a need to change Neshotah Park? YES 113 or NO 107
If YES, in what ways?

More Shelters	YES 59	NO 156		More Parking	YES 70	NO 145
No Ball Diamond	YES 13	NO 202		New Ball Diamond	YES 26	NO 189
More Picnic Areas	YES 70	NO 145		More Playground Equipment	YES 54	NO 160
More Horseshoe Courts	YES 15	NO 200				

More Beach by Eliminating Zlatnik Drive YES 37 NO 178

More Facilities for Family, Civic or Fraternal Organizations
YES 65 NO 150

2. Do you consider the following municipal services adequate:

Senior Citizen Center	YES	145	NO	2	NO OPINION	67
Recreation Facilities for:						
0 - 6 year olds	YES	76	NO	22	NO OPINION	101
7 - 12 year olds	YES	83	NO	30	NO OPINION	86
13 - 18 year olds	YES	72	NO	47	NO OPINION	83
19 - 64 year olds	YES	90	NO	38	NO OPINION	72
65 and over	YES	106	NO	4	NO OPINION	93
City Boat Launch Facilities	YES	95	NO	37	NO OPINION	95
City Boat Launch Restrooms & Fish Cleaning Facilities	YES	56	NO	73	NO OPINION	94
Boat Launch Parking	YES	73	NO	54	NO OPINION	97

3. Should the City charge a fee for use of City boat ramps? YES 125 NO 97

Should the City establish a family plan for paying for use of the Community House facilities? YES 66 NO 96 NO OPINION 65

Should there be more user fees for use of City recreation facilities? YES 65 NO 112 NO OPINION 53

4. Should the City expand marina and sport fishing opportunities? YES 105 NO 116

Are private boat launch facilities adequate? YES 163 NO 34

36. Are private boat launch parking facilities adequate? YES 143 NO 49

7. Should the city promote the development of additional Recreation Vehicle courts and campgrounds? YES 104 NO 110

8. This information is <u>completely confidential</u>. Please think of your total family <u>income</u> for last year, <u>before taxes</u>. For your family size, was your gross family income less or more than the amount listed below for the number of people in your family:

Family Size	Less Than	Income	More Than
1 person	29	$15,200	21
2 persons	31	17,350	61
3 persons	9	19,550	28
4 persons	6	21,700	36
5 persons	2	23,050	13
6 persons	1	24,400	5
7 persons	1	25,750	0
8 persons	1	27,100	1

CITY OF TWO RIVERS CONFIDENTIAL HOUSING AND COMMUNITY NEEDS SURVEY
COMPREHENSIVE PLAN - SPRING 1987

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TWO RIVERS CENSUS TRACK 3 - CENTRAL
228 Records

1. Number of people in your family living at this address: (circle the correct number)

0	1	2	3	4	5	6	7	8 or more
0	59	90	30	34	9	3	3	0

2. Age of head of household: (CHECK ONE)

1	under 18 years	74	41-61 years
6	18-21 years	6	62-64 years
36	22-30 years	70	65 or older
35	31-40 years		

3. Sex of head of household? Female 70 or Male 158

4. Do you: Own the place you live at 153 or Rent the place you live at 75

5. Do you feel there is a need for new housing in Two Rivers of the following types: (circle your answer)

Single family	YES	53	NO	161	High Rent	YES	9	NO 205
Multi-family	YES	27	NO	187	Low Rent	YES	91	NO 123
Elderly Housing	YES	94	NO	122	Moderate Rent	YES	109	NO 106
Rooming Houses	YES	33	NO	181	Mobile Homes	YES	14	NO 200
Condominiums	YES	29	NO	185				

6. Do you wish to see future residential growth on the:

Northside	YES	135	NO	82
Eastside	YES	93	NO	124
Southside	YES	76	NO	141

7. How do you feel about your neighborhood as a place to live:

EXCELLENT 65 GOOD 113 FAIR 39 POOR 8

8. Which of these, if any, are problems in your neighborhood: (check all that apply)

Traffic	62	Garbage Collection	2
Crime or Vandalism	28	Neighborhood Appearance	47
Air Pollution	13	Animals or Pets	34
Noise	49	Lake Related Water Problems	16

How many resident members of your family are employed? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
64	79	77	5	2	0	0	0	0

10. How many resident members of your family are unemployed and unable to find a job? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
190	30	8	0	0	0	0	0	0

11. In what community is the main wage earner employed?

(check one)

Two Rivers	111	Manitowoc	41
Mishicot	1	Rural	2
Other	7	Not Applicable	61

12. Should the city develop another industrial park? YES 131 or NO 82

13. Should the city assist local business to grow and expand? YES 185 or NO 24

14. How often do you shop in Manitowoc? (check one)

4 or more times per week	6	2 - 3 times per week	35
0 - 1 times per week	66	Once per month	18
Occasionally	95	Never	5

15. How often do you shop in downtown Two Rivers? (check one)

4 or more times per week	53	2 - 3 times per week	87
0 - 1 times per week	46	Once per month	5
Occasionally	34	Never	2

About what percentage of your total retail purchases, not including groceries, do you buy in the City of Two Rivers? (circle one)

0 - 25% 112 25 - 50% 62 50 - 75% 37 75 - 100% 14

17. If you shop in Two Rivers, what are your reasons for doing so in order of priority 1, 2, 3, etc. with 1 being the highest?

Priority Rating	Ranking Response: Quality	Selection	Price	Convenience	Service	Loyalty	N/A
1	31	3	6	156	4	18	6
2	19	15	25	25	53	50	0
3	22	15	31	13	44	34	3
4	38	22	17	13	24	12	0
5	18	30	29	3	18	14	0
6	6	34	23	0	8	32	1
7	0	0	1	0	0	0	26

18. Do you feel shopping facilities are adequate in the City for:

Food	YES 215	NO 10	Auto Service	YES 170	NO 55
Medicine	YES 215	NO 10	Clothing	YES 62	NO 163
Banking	YES 218	NO 7	Restaurants	YES 150	NO 75
Applicances	YES 114	NO 109	Hardware/Building Supplies	YES 167	NO 57

19. Do you want to see shopping amenities improved in downtown Two Rivers?
YES 199 or NO 29 If yes, what? (check all applicable)

More Parking	40	More Convenient Parking	66
Free Parking	108	Benches and Trees	57
Covered Sidewalks	5	Trash Receptacals	52
More Stores	160	Expanded Shopping Hours	53

20. Have you ever used the bus to shop or work in the City of Two Rivers?
YES 43 or NO 179

21. Is the bus system necessary? YES 204 or NO 16

22. Is the bus system adequate? YES 135 or NO 51

If NO, what changes should be made? (check all applicable)

Lower Fees	9	Operate All Day Saturday	40
Higher Fees	2	Operate All Day Sunday	25
Different Routes	13	Operate Longer on Weekdays	16
Operate More Often	17	Operate Longer on Weekends	0

23. Does the City of Two Rivers have traffic problems? YES 43 or NO 172

24. Does the City of Two Rivers have parking problems? YES 73 or NO 130

25. Does the City of Two Rivers need intersection improvements?
YES 202 or NO 26

If Yes, where?

22nd St. & Forest	YES	99	NO 103	16th St. & Monroe	YES	47	NO 154
22nd St. & Jackson	YES	41	NO 160	14th St. & Madison	YES	54	NO 147
22nd St. & Jefferson	YES	32	NO 169	14th St. & Hawthorn Avenue	YES	25	NO 176
Tannery Rd. & Mishicot Rd.	YES	60	NO 141	Columbus Drive & Memorial Drive	YES	36	NO 165

26. Do you feel Rogers Street Historic Area is a community asset that should be promoted by the City? YES 151 or NO 57

27. Have you visited Rogers Street Historic Area? YES 148 or NO 74

28. Should the City improve parking at Neshotah Park? YES 118 or NO 92

29. Should the City improve traffic circulation at Neshotah Park?
YES 83 or NO 113

30. How many times a year do you use Neshotah Park? (Please circle one)
None 30 1 - 3 times 93 4 - 10 times 47 10 or more 51

31. Is there a need to change Neshotah Park? YES 114 or NO 95
If YES, in what ways?

More Shelters	YES	69	NO 133	More Parking	YES	77	NO 125
No Ball Diamond	YES	14	NO 189	New Ball Diamond	YES	29	NO 173
More Picnic Areas	YES	70	NO 132	More Playground Equipment	YES	58	NO 144
More Horseshoe Courts	YES	8	NO 194				

More Beach by Eliminating Zlatnik Drive YES 35 NO 168

More Facilities for Family, Civic or Fraternal Organizations YES 67 NO 134

2. Do you consider the following municipal services adequate:

Senior Citizen Center	YES	126	NO	3	NO OPINION	64
Recreation Facilities for:						
0 - 6 year olds	YES	58	NO	37	NO OPINION	88
7 - 12 year olds	YES	62	NO	32	NO OPINION	89
13 - 18 year olds	YES	56	NO	51	NO OPINION	81
19 - 64 year olds	YES	72	NO	32	NO OPINION	76
65 and over	YES	82	NO	11	NO OPINION	98
City Boat Launch Facilities	YES	78	NO	39	NO OPINION	95
City Boat Launch Restrooms & Fish Cleaning Facilities	YES	52	NO	63	NO OPINION	97
Boat Launch Parking	YES	58	NO	56	NO OPINION	97

3. Should the City charge a fee for use of City boat ramps? YES 125 NO 77

Should the City establish a family plan for paying for use of the Community House facilities? YES 53 NO 85 NO OPINION 77

Should there be more user fees for use of City recreation facilities? YES 55 NO 104 NO OPINION 57

4. Should the City expand marina and sport fishing opportunities? YES 101 NO 104

Are private boat launch facilities adequate? YES 153 NO 28

36. Are private boat launch parking facilities adequate? YES 141 NO 38

7. Should the city promote the development of additional Recreation Vehicle courts and campgrounds? YES 110 NO 92

8. This information is <u>completely confidential</u>. Please think of your total family <u>income</u> for last year, <u>before taxes</u>. For your family size, was your gross family income less or more than the amount listed below for the number of people in your family:

Family Size	Less Than	Income	More Than
1 person	46	$15,200	13
2 persons	37	17,350	53
3 persons	16	19,550	14
4 persons	11	21,700	23
5 persons	1	23,050	8
6 persons	2	24,400	1
7 persons	2	25,750	1
8 persons	0	27,100	0

CITY OF TWO RIVERS CONFIDENTIAL HOUSING AND COMMUNITY NEEDS SURVEY
COMPREHENSIVE PLAN - SPRING 1987

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TWO RIVERS CENSUS TRACK 4 - SOUTH
169 Records

1. Number of people in your family living at this address: (circle the correct number)

0	1	2	3	4	5	6	7	8 or more
0	36	60	29	19	14	6	0	3

2. Age of head of household: (CHECK ONE)

1	under 18 years	48	41-61 years
3	18-21 years	9	62-64 years
25	22-30 years	45	65 or older
38	31-40 years		

3. Sex of head of household? Female 40 or Male 129

4. Do you: Own the place you live at 126 or Rent the place you live at 39

5. Do you feel there is a need for new housing in Two Rivers of the following types: (circle your answer)

Single family	YES	46	NO	115	High Rent	YES	1	NO 160
Multi-family	YES	17	NO	144	Low Rent	YES	71	NO 90
Elderly Housing	YES	70	NO	91	Moderate Rent	YES	68	NO 94
Rooming Houses	YES	18	NO	143	Mobile Homes	YES	23	NO 138
Condominiums	YES	14	NO	147				

6. Do you wish to see future residential growth on the:

Northside	YES	69	NO	94
Eastside	YES	41	NO	122
Southside	YES	91	NO	72

7. How do you feel about your neighborhood as a place to live:

EXCELLENT 28 GOOD 93 FAIR 42 POOR 6

8. Which of these, if any, are problems in your neighborhood: (check all that apply)

Traffic	56	Garbage Collection	2
Crime or Vandalism	50	Neighborhood Appearance	35
Air Pollution	7	Animals or Pets	29
Noise	34	Lake Related Water Problems	18

How many resident members of your family are employed? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
50	56	50	8	3	1	0	0	0

10. How many resident members of your family are unemployed and unable to find a job? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
140	24	1	1	1	0	0	0	1

11. In what community is the main wage earner employed?

(check one)

Two Rivers	66	Manitowoc	43
Mishicot	1	Rural	1
Other	9	Not Applicable	48

12. Should the city develop another industrial park? YES 89 or NO 69

13. Should the city assist local business to grow and expand? YES 133 or NO 27

14. How often do you shop in Manitowoc? (check one)

4 or more times per week	12	2 - 3 times per week	25
0 - 1 times per week	59	Once per month	13
Occasionally	51	Never	7

15. How often do you shop in downtown Two Rivers? (check one)

4 or more times per week	30	2 - 3 times per week	68
0 - 1 times per week	34	Once per month	9
Occasionally	24	Never	3

About what percentage of your total retail purchases, not including groceries, do you buy in the City of Two Rivers? (circle one)

0 - 25% 90 25 - 50% 46 50 - 75% 22 75 - 100% 7

17. If you shop in Two Rivers, what are your reasons for doing so in order of priority 1, 2, 3, etc. with 1 being the highest?

Priority Rating	Ranking Response: Quality	Selection	Price	Convenience	Service	Loyalty	N/A
1	14	3	9	107	3	12	5
2	17	15	6	9	26	34	2
3	14	8	14	9	35	19	0
4	18	9	19	9	14	11	1
5	8	21	20	4	13	7	1
6	10	19	12	2	6	16	2
7	1	1	1	0	0	2	20

18. Do you feel shopping facilities are adequate in the City for:

Food	YES 155	NO 10	Auto Service	YES 113	NO 51
Medicine	YES 153	NO 12	Clothing	YES 45	NO 119
Banking	YES 156	NO 9	Restaurants	YES 104	NO 60
Applicances	YES 75	NO 89	Hardware/Building Supplies	YES 116	NO 49

9. Do you want to see shopping amenities improved in downtown Two Rivers?
YES 144 or NO 25 If yes, what? (check all applicable)

More Parking	36	More Convenient Parking	48
Free Parking	81	Benches and Trees	32
Covered Sidewalks	7	Trash Receptacals	28
More Stores	110	Expanded Shopping Hours	33

0. Have you ever used the bus to shop or work in the City of Two Rivers?
YES 34 or NO 132

1. Is the bus system necessary? YES 149 or NO 14

22. Is the bus system adequate? YES 106 or NO 36

If NO, what changes should be made? (check all applicable)

Lower Fees	5	Operate All Day Saturday	23
Higher Fees	2	Operate All Day Sunday	15
Different Routes	14	Operate Longer on Weekdays	16
Operate More Often	18	Operate Longer on Weekends	0

23. Does the City of Two Rivers have traffic problems? YES 41 or NO 114

24. Does the City of Two Rivers have parking problems? YES 59 or NO 88

5. Does the City of Two Rivers need intersection improvements?
YES 149 or NO 20

If Yes, where?

22nd St. & Forest	YES 78	NO 70		16th St. & Monroe	YES 42	NO 105	
22nd St. & Jackson	YES 29	NO 118		14th St. & Madison	YES 90	NO 57	
22nd St. & Jefferson	YES 24	NO 123		14th St. & Hawthorn Avenue	YES 38	NO 109	
Tannery Rd. & Mishicot Rd.	YES 33	NO 114		Columbus Drive & Memorial Drive	YES 31	NO 116	

26. Do you feel Rogers Street Historic Area is a community asset that should be promoted by the City? YES 102 or NO 46

27. Have you visited Rogers Street Historic Area? YES 103 or NO 57

8. Should the City improve parking at Neshotah Park? YES 93 or NO 57

29. Should the City improve traffic circulation at Neshotah Park?
YES 77 or NO 71

30. How many times a year do you use Neshotah Park? (Please circle one)
None 20 1 - 3 times 67 4 - 10 times 50 10 or more 24

31. Is there a need to change Neshotah Park? YES 92 or NO 56
If YES, in what ways?

More Shelters	YES 51	NO 94		More Parking	YES 62	NO 83	
No Ball Diamond	YES 13	NO 131		New Ball Diamond	YES 13	NO 131	
More Picnic Areas	YES 60	NO 84		More Playground Equipment	YES 39	NO 105	
More Horseshoe Courts	YES 11	NO 133					
More Beach by Eliminating Zlatnik Drive					YES 29	NO 114	
More Facilities for Family, Civic or Fraternal Organizations					YES 65	NO 78	

31. Do you consider the following municipal services adequate:

Senior Citizen Center	YES	91	NO	8	NO OPINION	45
Recreation Facilities for:						
0 - 6 year olds	YES	46	NO	27	NO OPINION	59
7 - 12 year olds	YES	44	NO	35	NO OPINION	55
13 - 18 year olds	YES	37	NO	53	NO OPINION	49
19 - 64 year olds	YES	51	NO	26	NO OPINION	55
65 and over	YES	66	NO	12	NO OPINION	62
City Boat Launch Facilities	YES	56	NO	38	NO OPINION	63
City Boat Launch Restrooms & Fish Cleaning Facilities	YES	40	NO	50	NO OPINION	68
Boat Launch Parking	YES	46	NO	45	NO OPINION	67

33. Should the City charge a fee for use of City boat ramps? YES 76 NO 70

Should the City establish a family plan for paying for use of the Community House facilities? YES 47 NO 73 NO OPINION 37

Should there be more user fees for use of City recreation facilities? YES 30 NO 90 NO OPINION 37

34. Should the City expand marina and sport fishing opportunities? YES 73 NO 74

Are private boat launch facilities adequate? YES 99 NO 35

36. Are private boat launch parking facilities adequate? YES 96 NO 35

37. Should the city promote the development of additional Recreation Vehicle courts and campgrounds? YES 76 NO 72

38. This information is <u>completely confidential</u>. Please think of your total family <u>income</u> for last year, <u>before taxes</u>. For your family size, was your gross family income less or more than the amount listed below for the number of people in your family:

Family Size	Less Than	Income	More Than
1 person	29	$15,200	6
2 persons	35	17,350	25
3 persons	12	19,550	17
4 persons	4	21,700	15
5 persons	7	23,050	7
6 persons	3	24,400	3
7 persons	0	25,750	0
8 persons	2	27,100	1

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TWO RIVERS RESIDENTS AGE 62 and OVER
252 Records

1. Number of people in your family living at this address: (circle the correct number)

0	1	2	3	4	5	6	7	8 or more
2	109	122	13	4	2	0	0	0

2. Age of head of household: (CHECK ONE)

0	under 18 years	0	41-61 years
0	18-21 years	37	62-64 years
0	22-30 years	215	65 or older
0	31-40 years		

3. Sex of head of household? Female 102 or Male 150

Do you: Own the place you live at 207 or Rent the place you live at 43

5. Do you feel there is a need for new housing in Two Rivers of the following types: (circle your answer)

Single family	YES	45	NO	183	High Rent	YES	2	NO 226
Multi-family	YES	15	NO	213	Low Rent	YES	86	NO 142
Elderly Housing	YES	117	NO	113	Moderate Rent	YES	92	NO 137
Rooming Houses	YES	15	NO	213	Mobile Homes	YES	8	NO 220
Condominiums	YES	15	NO	213				

6. Do you wish to see future residential growth on the:

Northside	YES	124	NO	109
Eastside	YES	78	NO	155
Southside	YES	63	NO	171

7. How do you feel about your neighborhood as a place to live:

EXCELLENT 93 GOOD 121 FAIR 32 POOR 5

8. Which of these, if any, are problems in your neighborhood: (check all that apply)

Traffic	52	Garbage Collection	1
Crime or Vandalism	34	Neighborhood Appearance	33
Air Pollution	8	Animals or Pets	36
Noise	36	Lake Related Water Problems	23

9. How many resident members of your family are employed? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
191	47	11	2	0	0	0	0	0

10. How many resident members of your family are unemployed and unable to find a job? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
238	12	1	0	0	0	0	0	0

11. In what community is the main wage earner employed?

(check one)

Two Rivers	47	Manitowoc	14
Mishicot	0	Rural	0
Other	6	Not Applicable	181

12. Should the city develop another industrial park? YES 111 or NO 107

13. Should the city assist local business to grow and expand? YES 181 or NO 40

14. How often do you shop in Manitowoc? (check one)

4 or more times per week	8	2 - 3 times per week	20
0 - 1 times per week	58	Once per month	26
Occasionally	124	Never	12

15. How often do you shop in downtown Two Rivers? (check one)

4 or more times per week	59	2 - 3 times per week	102
0 - 1 times per week	55	Once per month	3
Occasionally	28	Never	2

About what percentage of your total retail purchases, not including groceries, do you buy in the City of Two Rivers? (circle one)

0 - 25% 80 25 - 50% 78 50 - 75% 54 75 - 100% 28

17. If you shop in Two Rivers, what are your reasons for doing so in order of priority 1, 2, 3, etc. with 1 being the highest?

Priority Rating	Ranking Response: Quality	Selection	Price	Convenience	Service	Loyalty	N/A
1	39	6	17	145	10	21	1
2	20	16	21	27	42	36	2
3	21	14	16	20	32	26	0
4	11	7	14	16	26	17	1
5	9	10	16	3	17	9	0
6	3	18	9	1	4	23	0
7	0	0	0	0	0	0	8

18. Do you feel shopping facilities are adequate in the City for:

Food	YES 240	NO 8	Auto Service	YES 166	NO 81
Medicine	YES 228	NO 20	Clothing	YES 97	NO 150
Banking	YES 243	NO 5	Restaurants	YES 158	NO 89
Applicances	YES 164	NO 82	Hardware/Building Supplies	YES 184	NO 64

9. Do you want to see shopping amenities improved in downtown Two Rivers?
YES 206 or NO 46 If yes, what? (check all applicable)

More Parking	43	More Convenient Parking	57
Free Parking	120	Benches and Trees	38
Covered Sidewalks	6	Trash Receptacals	37
More Stores	138	Expanded Shopping Hours	21

0. Have you ever used the bus to shop or work in the City of Two Rivers?
YES 48 or NO 195

1. Is the bus system necessary? YES 211 or NO 19

22. Is the bus system adequate? YES 133 or NO 64

If NO, what changes should be made? (check all applicable)

Lower Fees	10	Operate All Day Saturday	40
Higher Fees	4	Operate All Day Sunday	25
Different Routes	23	Operate Longer on Weekdays	13
Operate More Often	21	Operate Longer on Weekends	0

3. Does the City of Two Rivers have traffic problems? YES 38 or NO 176

24. Does the City of Two Rivers have parking problems? YES 55 or NO 130

5. Does the City of Two Rivers need intersection improvements?
YES 208 or NO 44

If Yes, where?

22nd St. & Forest	YES 91	NO 116		16th St. & Monroe	YES 38	NO 167	
22nd St. & Jackson	YES 46	NO 159		14th St. & Madison	YES 61	NO 144	
22nd St. & Jefferson	YES 27	NO 178		14th St. & Hawthorn Avenue	YES 25	NO 180	
Tannery Rd. & Mishicot Rd.	YES 68	NO 137		Columbus Drive & Memorial Drive	YES 31	NO 174	

26. Do you feel Rogers Street Historic Area is a community asset that should be promoted by the City? YES 165 or NO 48

27. Have you visited Rogers Street Historic Area? YES 183 or NO 52

8. Should the City improve parking at Neshotah Park? YES 126 or NO 77

29. Should the City improve traffic circulation at Neshotah Park?
YES 96 or NO 91

30. How many times a year do you use Neshotah Park? (Please circle one)
None 53 1 - 3 times 116 4 - 10 times 43 10 or more 21

31 Is there a need to change Neshotah Park? YES 101 or NO 106
If YES, in what ways?

More Shelters	YES 53	NO 149		More Parking	YES 55	NO 146	
No Ball Diamond	YES 10	NO 192		New Ball Diamond	YES 15	NO 186	
More Picnic Areas	YES 47	NO 154		More Playground Equipment	YES 33	NO 168	
More Horseshoe Courts	YES 11	NO 190					

More Beach by Eliminating Zlatnik Drive YES 29 NO 172

More Facilities for Family, Civic or Fraternal Organizations YES 58 NO 141

2. Do you consider the following municipal services adequate:

Senior Citizen Center	YES	133	NO	7	NO OPINION	49
Recreation Facilities for:						
0 - 6 year olds	YES	43	NO	13	NO OPINION	107
7 - 12 year olds	YES	44	NO	16	NO OPINION	107
13 - 18 year olds	YES	45	NO	28	NO OPINION	99
19 - 64 year olds	YES	62	NO	10	NO OPINION	88
65 and over	YES	107	NO	7	NO OPINION	86
City Boat Launch Facilities	YES	67	NO	30	NO OPINION	123
City Boat Launch Restrooms & Fish Cleaning Facilities	YES	52	NO	45	NO OPINION	121
Boat Launch Parking	YES	57	NO	38	NO OPINION	124

3. Should the City charge a fee for use of City boat ramps? YES 142 NO 65

Should the City establish a family plan for paying for use of the Community House facilities? YES 52 NO 96 NO OPINION 76

Should there be more user fees for use of City recreation facilities? YES 55 NO 85 NO OPINION 87

4. Should the City expand marina and sport fishing opportunities? YES 91 NO 115

Are private boat launch facilities adequate? YES 135 NO 43

36. Are private boat launch parking facilities adequate? YES 121 NO 50

7. Should the city promote the development of additional Recreation Vehicle courts and campgrounds? YES 84 NO 111

8. This information is <u>completely confidential</u>. Please think of your total family <u>income</u> for last year, <u>before taxes</u>. For your family size, was your gross family income less or more than the amount listed below for the number of people in your family:

Family Size	Less Than	Income	More Than
1 person	94	$15,200	14
2 persons	72	17,350	50
3 persons	9	19,550	4
4 persons	2	21,700	2
5 persons	0	23,050	2
6 persons	0	24,400	0
7 persons	0	25,750	0
8 persons	0	27,100	0

CITY OF TWO RIVERS CONFIDENTIAL HOUSING AND COMMUNITY NEEDS SURVEY
COMPREHENSIVE PLAN - SPRING 1987

This survey consists of two pages, on both sides, that will provide vital information to the City of Two Rivers to assist in forming a Comprehensive Plan. Your cooperation will assist the City in planning the use of City resources to best serve you, the residents. This survey is completely confidential; only our Consultant, who is located in Madison, will view the answers and tabulate the results. Please CIRCLE or CHECK YOUR ANSWERS, ENCLOSE IT in the SELF-ADDRESSED STAMPED ENVELOPE and MAIL to Madison before March 20, 1987. THANK YOU VERY MUCH.

TWO RIVERS RESIDENTS UNDER AGE 62
544 Records

1. Number of people in your family living at this address: (circle the correct number)

0	1	2	3	4	5	6	7	8 or more
1	72	173	109	115	47	18	4	5

2. Age of head of household: (CHECK ONE)

2	under 18 years	267	41-61 years
10	18-21 years	0	62-64 years
103	22-30 years	0	65 or older
162	31-40 years		

3. Sex of head of household? Female 105 or Male 438

Do you: Own the place you live at 401 or Rent the place you live at 139

5. Do you feel there is a need for new housing in Two Rivers of the following types: (circle your answer)

Single family	YES	143	NO	385	High Rent	YES	31	NO 497
Multi-family	YES	86	NO	442	Low Rent	YES	204	NO 324
Elderly Housing	YES	207	NO	322	Moderate Rent	YES	295	NO 233
Rooming Houses	YES	83	NO	445	Mobile Homes	YES	56	NO 472
Condominiums	YES	92	NO	436				

6. Do you wish to see future residential growth on the:

Northside	YES	313	NO	220
Eastside	YES	232	NO	300
Southside	YES	213	NO	318

7. How do you feel about your neighborhood as a place to live:

EXCELLENT 179 GOOD 259 FAIR 86 POOR 15

8. Which of these, if any, are problems in your neighborhood: (check all that apply)

Traffic	149	Garbage Collection	8
Crime or Vandalism	101	Neighborhood Appearance	84
Air Pollution	28	Animals or Pets	77
Noise	98	Lake Related Water Problems	58

How many resident members of your family are employed? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
28	221	247	31	12	4	0	0	0

10. How many resident members of your family are unemployed and unable to find a job? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
436	91	12	2	2	0	0	0	1

11. In what community is the main wage earner employed?

(check one)

Two Rivers	296	Manitowoc	149
Mishicot	6	Rural	13
Other	45	Not Applicable	29

12. Should the city develop another industrial park? YES 325 or NO 195

13. Should the city assist local business to grow and expand? YES 467 or NO 55

14. How often do you shop in Manitowoc? (check one)

4 or more times per week	30	2 - 3 times per week	100
0 - 1 times per week	191	Once per month	43
Occasionally	169	Never	5

15. How often do you shop in downtown Two Rivers? (check one)

4 or more times per week	94	2 - 3 times per week	187
0 - 1 times per week	137	Once per month	24
Occasionally	93	Never	7

About what percentage of your total retail purchases, not including groceries, do you buy in the City of Two Rivers? (circle one)

0 - 25% 310 25 - 50% 137 50 - 75% 72 75 - 100% 16

17. If you shop in Two Rivers, what are your reasons for doing so in order of priority 1, 2, 3, etc. with 1 being the highest?

Priority Rating	Ranking Response: Quality	Selection	Price	Convenience	Service	Loyalty	N/A
1	44	5	15	391	11	39	22
2	51	40	46	48	114	130	3
3	63	35	70	22	129	81	7
4	103	51	51	20	47	37	0
5	41	87	85	9	45	28	2
6	28	91	65	4	20	64	3
7	1	2	4	0	1	2	78

18. Do you feel shopping facilities are adequate in the City for:

Food	YES 506	NO 32	Auto Service	YES 383	NO 154
Medicine	YES 513	NO 25	Clothing	YES 117	NO 419
Banking	YES 514	NO 24	Restaurants	YES 347	NO 190
Applicances	YES 247	NO 290	Hardware/Building Supplies	YES 363	NO 173

20. Do you want to see shopping amenities improved in downtown Two Rivers?
YES 469 or NO 75 If yes, what? (check all applicable)

More Parking	103	More Convenient Parking	160
Free Parking	241	Benches and Trees	121
Covered Sidewalks	27	Trash Receptacals	111
More Stores	381	Expanded Shopping Hours	174

21. Have you ever used the bus to shop or work in the City of Two Rivers?
YES 94 or NO 442

22. Is the bus system necessary? YES 481 or NO 48

22. Is the bus system adequate? YES 352 or NO 93

If NO, what changes should be made? (check all applicable)

Lower Fees	10	Operate All Day Saturday	58
Higher Fees	3	Operate All Day Sunday	33
Different Routes	32	Operate Longer on Weekdays	50
Operate More Often	43	Operate Longer on Weekends	0

23. Does the City of Two Rivers have traffic problems? YES 141 or NO 388

24. Does the City of Two Rivers have parking problems? YES 192 or NO 315

25. Does the City of Two Rivers need intersection improvements?
YES 499 or NO 45

If Yes, where?

22nd St. & Forest	YES 244	NO 255	16th St. & Monroe	YES 115	NO 384
22nd St. & Jackson	YES 137	NO 362	14th St. & Madison	YES 181	NO 318
22nd St. & Jefferson	YES 81	NO 418	14th St. & Hawthorn Avenue	YES 75	NO 424
Tannery Rd. & Mishicot Rd.	YES 141	NO 358	Columbus Drive & Memorial Drive	YES 94	NO 405

26. Do you feel Rogers Street Historic Area is a community asset that should be promoted by the City? YES 358 or NO 141

27. Have you visited Rogers Street Historic Area? YES 329 or NO 197

28. Should the City improve parking at Neshotah Park? YES 302 or NO 209

29. Should the City improve traffic circulation at Neshotah Park?
YES 224 or NO 276

30. How many times a year do you use Neshotah Park? (Please circle one)
None 36 1 - 3 times 179 4 - 10 times 157 10 or more 152

31. Is there a need to change Neshotah Park? YES 312 or NO 201
If YES, in what ways?

More Shelters	YES 164	NO 336	More Parking	YES 209	NO 292
No Ball Diamond	YES 35	NO 465	New Ball Diamond	YES 66	NO 434
More Picnic Areas	YES 204	NO 296	More Playground Equipment	YES 157	NO 342
More Horseshoe Courts	YES 29	NO 470			

More Beach by Eliminating Zlatnik Drive YES 103 NO 397
More Facilities for Family, Civic or Fraternal Organizations
YES 193 NO 307

31. Do you consider the following municipal services adequate:

Senior Citizen Center	YES 303	NO 8	NO OPINION 183
Recreation Facilities for:			
0 - 6 year olds	YES 169	NO 93	NO OPINION 207
7 - 12 year olds	YES 176	NO 106	NO OPINION 188
13 - 18 year olds	YES 147	NO 158	NO OPINION 173
19 - 64 year olds	YES 191	NO 116	NO OPINION 165
65 and over	YES 196	NO 27	NO OPINION 236
City Boat Launch Facilities	YES 207	NO 116	NO OPINION 194
City Boat Launch Restrooms & Fish Cleaning Facilities	YES 122	NO 188	NO OPINION 208
Boat Launch Parking	YES 158	NO 155	NO OPINION 203

33. Should the City charge a fee for use of City boat ramps? YES 254 NO 245

Should the City establish a family plan for paying for use of the Community House facilities? YES 144 NO 229 NO OPINION 144

Should there be more user fees for use of City recreation facilities? YES 129 NO 295 NO OPINION 96

34. Should the City expand marina and sport fishing opportunities? YES 258 NO 243

Are private boat launch facilities adequate? YES 375 NO 80

36. Are private boat launch parking facilities adequate? YES 340 NO 108

37. Should the city promote the development of additional Recreation Vehicle courts and campgrounds? YES 275 NO 227

38. This information is <u>completely confidential</u>. Please think of your total family <u>income</u> for last year, <u>before taxes</u>. For your family size, was your gross family income less or more than the amount listed below for the number of people in your family:

Family Size	Less Than	Income	More Than
1 person	32	$15,200	40
2 persons	57	17,350	116
3 persons	37	19,550	72
4 persons	25	21,700	90
5 persons	14	23,050	33
6 persons	6	24,400	12
7 persons	3	25,750	1
8 persons	3	27,100	2

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FEMALED HEADED HOUSEHOLDS IN TWO RIVERS
207 Records

1. Number of people in your family living at this address: (circle the correct number)

0	1	2	3	4	5	6	7	8 or more
1	129	42	23	9	2	0	0	1

2. Age of head of household: (CHECK ONE)

1	under 18 years	46	41-61 years
4	18-21 years	12	62-64 years
21	22-30 years	90	65 or older
33	31-40 years		

3. Sex of head of household? Female 207 or Male 0

Do you: Own the place you live at 124 or Rent the place you live at 81

5. Do you feel there is a need for new housing in Two Rivers of the following types: (circle your answer)

Single family	YES	49	NO	148	High Rent	YES	4	NO 193
Multi-family	YES	25	NO	172	Low Rent	YES	90	NO 107
Elderly Housing	YES	90	NO	107	Moderate Rent	YES	111	NO 87
Rooming Houses	YES	28	NO	169	Mobile Homes	YES	18	NO 179
Condominiums	YES	26	NO	171				

6. Do you wish to see future residential growth on the:

Northside	YES	90	NO	107
Eastside	YES	73	NO	124
Southside	YES	63	NO	134

7. How do you feel about your neighborhood as a place to live:

EXCELLENT 64 GOOD 106 FAIR 32 POOR 2

8. Which of these, if any, are problems in your neighborhood: (check all that apply)

Traffic	37	Garbage Collection	3
Crime or Vandalism	28	Neighborhood Appearance	29
Air Pollution	14	Animals or Pets	20
Noise	35	Lake Related Water Problems	23

How many resident members of your family are employed? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
102	85	14	5	0	0	0	0	0

10. How many resident members of your family are unemployed and unable to find a job? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
173	31	1	0	0	0	0	0	1

11. In what community is the main wage earner employed?

(check one)

Two Rivers	57	Manitowoc	36
Mishicot	5	Rural	1
Other	5	Not Applicable	100

12. Should the city develop another industrial park? YES 85 or NO 91

13. Should the city assist local business to grow and expand? YES 155 or NO 32

14. How often do you shop in Manitowoc? (check one)

4 or more times per week	11	2 - 3 times per week	18
0 - 1 times per week	57	Once per month	20
Occasionally	90	Never	8

15. How often do you shop in downtown Two Rivers? (check one)

4 or more times per week	30	2 - 3 times per week	72
0 - 1 times per week	58	Once per month	9
Occasionally	30	Never	4

About what percentage of your total retail purchases, not including groceries, do you buy in the City of Two Rivers? (circle one)

0 - 25% 96 25 - 50% 56 50 - 75% 26 75 - 100% 16

17. If you shop in Two Rivers, what are your reasons for doing so in order of priority 1, 2, 3, etc. with 1 being the highest?

Priority Rating	Ranking Response: Quality	Selection	Price	Convenience	Service	Loyalty	N/A
1	24	2	9	136	9	15	8
2	18	13	19	24	39	29	2
3	20	16	28	12	26	22	2
4	19	14	9	7	25	14	1
5	13	17	19	2	15	8	0
6	6	19	11	1	4	22	2
7	1	0	3	0	0	0	17

18. Do you feel shopping facilities are adequate in the City for:

Food	YES 194	NO 8	Auto Service	YES 134	NO 67
Medicine	YES 188	NO 14	Clothing	YES 58	NO 143
Banking	YES 196	NO 6	Restaurants	YES 118	NO 82
Applicances	YES 107	NO 94	Hardware/Building Supplies	YES 145	NO 56

20. Do you want to see shopping amenities improved in downtown Two Rivers?
YES 177 or NO 30 If yes, what? (check all applicable)

More Parking	32	More Convenient Parking	48
Free Parking	99	Benches and Trees	48
Covered Sidewalks	6	Trash Receptacals	33
More Stores	127	Expanded Shopping Hours	47

21. Have you ever used the bus to shop or work in the City of Two Rivers?
YES 53 or NO 147

22. Is the bus system necessary? YES 181 or NO 14

22. Is the bus system adequate? YES 100 or NO 64

If NO, what changes should be made? (check all applicable)

Lower Fees	11	Operate All Day Saturday	41
Higher Fees	0	Operate All Day Sunday	25
Different Routes	22	Operate Longer on Weekdays	25
Operate More Often	27	Operate Longer on Weekends	0

23. Does the City of Two Rivers have traffic problems? YES 34 or NO 147

24. Does the City of Two Rivers have parking problems? YES 56 or NO 102

25. Does the City of Two Rivers need intersection improvements?
YES 170 or NO 37

If Yes, where?

22nd St. & Forest	YES 75	NO 94		16th St. & Monroe	YES 37	NO 132	
22nd St. & Jackson	YES 39	NO 130		14th St. & Madison	YES 45	NO 124	
22nd St. & Jefferson	YES 28	NO 141		14th St. & Hawthorn Avenue	YES 22	NO 147	
Tannery Rd. & Mishicot Rd.	YES 50	NO 119		Columbus Drive & Memorial Drive	YES 40	NO 129	

26. Do you feel Rogers Street Historic Area is a community asset that should be promoted by the City? YES 132 or NO 42

27. Have you visited Rogers Street Historic Area? YES 131 or NO 64

28. Should the City improve parking at Neshotah Park? YES 92 or NO 76

29. Should the City improve traffic circulation at Neshotah Park?
YES 66 or NO 89

30. How many times a year do you use Neshotah Park? (Please circle one)
None 33 1 - 3 times 81 4 - 10 times 42 10 or more 34

31. Is there a need to change Neshotah Park? YES 93 or NO 78
If YES, in what ways?

More Shelters	YES 51	NO 119		More Parking	YES 53	NO 116	
No Ball Diamond	YES 6	NO 164		New Ball Diamond	YES 15	NO 154	
More Picnic Areas	YES 58	NO 111		More Playground Equipment	YES 39	NO 130	
More Horseshoe Courts	YES 8	NO 161					

More Beach by Eliminating Zlatnik Drive YES 30 NO 140

More Facilities for Family, Civic or Fraternal Organizations YES 59 NO 110

2. Do you consider the following municipal services adequate:

Senior Citizen Center	YES	99	NO	3	NO OPINION	57
Recreation Facilities for:						
0 - 6 year olds	YES	40	NO	21	NO OPINION	89
7 - 12 year olds	YES	42	NO	27	NO OPINION	85
13 - 18 year olds	YES	38	NO	39	NO OPINION	80
19 - 64 year olds	YES	49	NO	28	NO OPINION	71
65 and over	YES	66	NO	9	NO OPINION	86
City Boat Launch Facilities	YES	49	NO	17	NO OPINION	117
City Boat Launch Restrooms & Fish Cleaning Facilities	YES	28	NO	32	NO OPINION	121
Boat Launch Parking	YES	35	NO	23	NO OPINION	120

3. Should the City charge a fee for use of City boat ramps? YES 107 NO 61

Should the City establish a family plan for paying for use of the Community House facilities? YES 45 NO 74 NO OPINION 65

Should there be more user fees for use of City recreation facilities? YES 27 NO 85 NO OPINION 71

34. Should the City expand marina and sport fishing opportunities? YES 71 NO 86

Are private boat launch facilities adequate? YES 107 NO 24

36. Are private boat launch parking facilities adequate? YES 95 NO 32

37. Should the city promote the development of additional Recreation Vehicle courts and campgrounds? YES 82 NO 69

38. This information is <u>completely confidential</u>. Please think of your total family <u>income</u> for last year, <u>before taxes</u>. For your family size, was your gross family income less or more than the amount listed below for the number of people in your family:

Family Size	Less Than	Income	More Than
1 person	101	$15,200	27
2 persons	29	17,350	13
3 persons	15	19,550	8
4 persons	3	21,700	6
5 persons	1	23,050	1
6 persons	0	24,400	0
7 persons	0	25,750	0
8 persons	1	27,100	0

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HOMEOWNERS
609 Records

1. Number of people in your family living at this address: (circle the correct number)

0	1	2	3	4	5	6	7	8 or more
1	108	237	101	98	41	17	2	4

2. Age of head of household: (CHECK ONE)

1	under 18 years	232	41-61 years
1	18-21 years	29	62-64 years
49	22-30 years	178	65 or older
118	31-40 years		

3. Sex of head of household? Female 124 or Male 484

4. Do you: Own the place you live at 609 or Rent the place you live at 0

5. Do you feel there is a need for new housing in Two Rivers of the following types: (circle your answer)

Single family	YES	128	NO	450	High Rent	YES	27	NO 551
Multi-family	YES	66	NO	512	Low Rent	YES	201	NO 377
Elderly Housing	YES	252	NO	328	Moderate Rent	YES	278	NO 301
Rooming Houses	YES	71	NO	507	Mobile Homes	YES	34	NO 544
Condominiums	YES	84	NO	494				

6. Do you wish to see future residential growth on the:

Northside	YES	339	NO	247
Eastside	YES	235	NO	350
Southside	YES	206	NO	378

7. How do you feel about your neighborhood as a place to live:

EXCELLENT 229 GOOD 283 FAIR 81 POOR 12

8. Which of these, if any, are problems in your neighborhood: (check all that apply)

Traffic	152	Garbage Collection	4
Crime or Vandalism	102	Neighborhood Appearance	79
Air Pollution	23	Animals or Pets	94
Noise	88	Lake Related Water Problems	63

How many resident members of your family are employed? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
164	176	221	32	11	4	0	0	0

10. How many resident members of your family are unemployed and unable to find a job? (circle correct number)

0	1	2	3	4	5	6	7	8 or more
530	67	9	1	2	0	0	0	0

11. In what community is the main wage earner employed?

(check one)

Two Rivers	279	Manitowoc	122
Mishicot	1	Rural	8
Other	37	Not Applicable	156

12. Should the city develop another industrial park? YES 340 or NO 224

13. Should the city assist local business to grow and expand? YES 486 or NO 78

14. How often do you shop in Manitowoc? (check one)

4 or more times per week	28	2 - 3 times per week	85
0 - 1 times per week	190	Once per month	51
Occasionally	231	Never	14

15. How often do you shop in downtown Two Rivers? (check one)

4 or more times per week	124	2 - 3 times per week	228
0 - 1 times per week	143	Once per month	18
Occasionally	85	Never	5

About what percentage of your total retail purchases, not including groceries, do you buy in the City of Two Rivers? (circle one)

0 - 25% 283 25 - 50% 175 50 - 75% 100 75 - 100% 38

17. If you shop in Two Rivers, what are your reasons for doing so in order of priority 1, 2, 3, etc. with 1 being the highest?

Priority Rating	Ranking Response: Quality	Selection	Price	Convenience	Service	Loyalty	N/A
1	63	11	23	415	18	46	15
2	59	43	43	56	127	130	4
3	66	36	68	29	126	85	4
4	87	42	54	27	46	44	1
5	32	78	78	11	48	24	1
6	25	81	53	5	18	67	0
7	0	1	2	0	0	0	60

18. Do you feel shopping facilities are adequate in the City for:

Food	YES 576	NO 24	Auto Service	YES 423	NO 176
Medicine	YES 565	NO 35	Clothing	YES 162	NO 436
Banking	YES 577	NO 23	Restaurants	YES 395	NO 203
Applicances	YES 320	NO 277	Hardware/Building Supplies	YES 418	NO 180

9. Do you want to see shopping amenities improved in downtown Two Rivers?
YES 512 or NO 97 If yes, what? (check all applicable)

More Parking	110	More Convenient Parking	159
Free Parking	271	Benches and Trees	114
Covered Sidewalks	24	Trash Receptacals	108
More Stores	395	Expanded Shopping Hours	132

20. Have you ever used the bus to shop or work in the City of Two Rivers?
YES 100 or NO 496

21. Is the bus system necessary? YES 528 or NO 51

22. Is the bus system adequate? YES 377 or NO 114

If NO, what changes should be made? (check all applicable)

Lower Fees	11	Operate All Day Saturday	67
Higher Fees	6	Operate All Day Sunday	41
Different Routes	39	Operate Longer on Weekdays	42
Operate More Often	43	Operate Longer on Weekends	0

23. Does the City of Two Rivers have traffic problems? YES 139 or NO 427

24. Does the City of Two Rivers have parking problems? YES 184 or NO 349

25. Does the City of Two Rivers need intersection improvements?
YES 547 or NO 62

If Yes, where?

22nd St. & Forest	YES 274	NO 272	16th St. & Monroe	YES 115	NO 430
22nd St. & Jackson	YES 148	NO 397	14th St. & Madison	YES 198	NO 347
22nd St. & Jefferson	YES 84	NO 461	14th St. & Hawthorn Avenue	YES 81	NO 464
Tannery Rd. & Mishicot Rd.	YES 166	NO 379	Columbus Drive & Memorial Drive	YES 87	NO 458

26. Do you feel Rogers Street Historic Area is a community asset that should be promoted by the City? YES 407 or NO 149

27. Have you visited Rogers Street Historic Area? YES 415 or NO 169

28. Should the City improve parking at Neshotah Park? YES 322 or NO 226

29. Should the City improve traffic circulation at Neshotah Park?
YES 241 or NO 289

30. How many times a year do you use Neshotah Park? (Please circle one)
None 70 1 - 3 times 230 4 - 10 times 156 10 or more 126

31. Is there a need to change Neshotah Park? YES 317 or NO 242
If YES, in what ways?

More Shelters	YES 160	NO 383	More Parking	YES 201	NO 342
No Ball Diamond	YES 34	NO 509	New Ball Diamond	YES 57	NO 485
More Picnic Areas	YES 194	NO 348	More Playground Equipment	YES 141	NO 400
More Horseshoe Courts	YES 32	NO 509			

More Beach by Eliminating Zlatnik Drive YES 98 NO 444

More Facilities for Family, Civic or Fraternal Organizations YES 197 NO 343

32. Do you consider the following municipal services adequate:

Senior Citizen Center	YES 352	NO 11	NO OPINION 163
Recreation Facilities for:			
0 - 6 year olds	YES 176	NO 73	NO OPINION 240
7 - 12 year olds	YES 186	NO 84	NO OPINION 220
13 - 18 year olds	YES 159	NO 141	NO OPINION 204
19 - 64 year olds	YES 206	NO 85	NO OPINION 197
65 and over	YES 253	NO 21	NO OPINION 239
City Boat Launch Facilities	YES 220	NO 114	NO OPINION 237
City Boat Launch Restrooms & Fish Cleaning Facilities	YES 143	NO 182	NO OPINION 246
Boat Launch Parking	YES 171	NO 154	NO OPINION 245

33. Should the City charge a fee for use of City boat ramps? YES 314 NO 236

Should the City establish a family plan for paying for use of the Community House facilities? YES 147 NO 264 NO OPINION 160

Should there be more user fees for use of City recreation facilities? YES 153 NO 293 NO OPINION 133

34. Should the City expand marina and sport fishing opportunities? YES 260 NO 284

. Are private boat launch facilities adequate? YES 397 NO 92

36. Are private boat launch parking facilities adequate? YES 355 NO 123

37. Should the city promote the development of additional Recreation Vehicle courts and campgrounds? YES 254 NO 279

38. This information is <u>completely confidential</u>. Please think of your total family <u>income</u> for last year, <u>before taxes</u>. For your family size, was your gross family income less or more than the amount listed below for the number of people in your family:

Family Size	Less Than	Income	More Than
1 person	79	$15,200	28
2 persons	90	17,350	147
3 persons	31	19,550	70
4 persons	18	21,700	80
5 persons	11	23,050	30
6 persons	5	24,400	12
7 persons	1	25,750	1
8 persons	1	27,100	2