



St. Clair County Master Plan

# TRANSPORTATION

Technical Report

- Land Use
- Environment
- Economy
- **Transportation**
- Public Services
- Alternatives  
Analysis



March 2000

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Prepared by the:  
*St. Clair County Metropolitan Planning Commission*

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# TRANSPORTATION

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# **EXECUTIVE SUMMARY**

## **TRANSPORTATION TECHNICAL REPORT ST. CLAIR COUNTY MASTER PLAN**

A comprehensive approach to transportation planning considers the accommodation of existing and anticipated roadway traffic volumes safely while coordinating roadway improvements with intermodal and non-motorized transportation. Transportation planning also considers the relationship of land uses, impacts to community character, the environment, air quality, noise and fiscal constraints.

### **Transportation in St. Clair County**

Understanding the county's travel characteristics is imperative prior to making recommendations. Travel times, destinations, methods, and land use patterns are key ingredients in preparing a profile. Comparison of percentages to state figures provide a measure of relativity.

### **Time Distribution**

County residents leave for work at earlier times (prior to 7 a.m.) in comparison to the state averages.

### **Travel Time to Work**

Two trends are readily apparent as compared to the state; more residents commute less than 15 minutes to work than the state average (likely those that live and work in the Port Huron, Marysville and St. Clair area), and more residents commute over 45 minutes to work (likely those that live in St. Clair County but work in or near Detroit).

### **Work Location**

More St. Clair County residents work outside of their county of residence than the state as a whole. This accounts for a significant number of residents employed in Macomb County and Detroit area.

### **Method of Travel**

In general, the county percentages of travel types is similar to the state. Car pooling is slightly greater, however, bus ridership is less than the state average.

### **Environmental Conditions**

Lake Huron, the St. Clair and Black River waterways serve for boat traffic but present obstacles for ground transportation.

### **Organizational Framework**

Many organizations have transportation interests in the county including Federal Highway Administration (FHWA), Michigan Department of Transportation (MDOT), Southeast Michigan Council of Governments (SEMCOG), St. Clair County Road Commission (SCCRC), St. Clair County Transportation Study (SCCOTS), Blue Water Area Transportation Commission (BWATC), port authorities, cities and townships. Working

agreements have been made between SEMCOG, SCCOTS and BWATC to share responsibilities in the long-range transportation plan and transportation improvement program for the county.

## **ROADS**

### **Existing Road Network**

The vast majority of roads within the county are two lanes and carry less than 8,000 vehicles per day. As expected, higher volume roads are found in and around Port Huron, on M-25 and M-29. SEMCOG has projected traffic volumes and capacity levels to the year 2020. Traffic volumes are expected to increase in the Port Huron area and within the southern portion of the county due to suburbanization. The most severe congestion is expected to occur along the M-25 corridor north of Port Huron and on M-29 between New Baltimore and Algonac.

### **Land Use and Transportation**

There is a strong link between land uses and transportation. A significant portion of the county's recent commercial and industrial development has been in Fort Gratiot and Port Huron townships. One of the more visible impacts of this growth is the increase in traffic volumes. Because traffic patterns are largely dictated by land use, it is vital that road development be coordinated with the overall land use plan for St. Clair County. The plan focuses much of the development in the primary cultural/settlement centers and the major commercial centers. As these areas grow, roadway, utility and public service improvements can be focused in these areas to more efficiently support that growth. Much of the major roadway improvements proposed under the Regional Transportation Plan is focused around the existing urban areas. This will help support the continued growth and redevelopment of these areas as industrial, commercial, residential and cultural centers.

### **Thoroughfare Planning and Management**

The primary challenge will be to balance growth, provide a safe and efficient road network and to retain rural charm. The county should work closely with local governments and MDOT to evaluate conditions of specific developments and establish a focused plan of action. The following policies are recommended for implementation by the county and local governments:

- Transportation is directly related to local land use decisions. Local communities should develop master plans that consider and control land use intensities in comparison to the street system capacity. The best tool available is an integrated land use/transportation planning process that provides measuring mechanisms between a land use decision and suitability of the street network serving the property. The county should work with local communities in developing thoroughfare plans as part of the local master planning process.
- The County can be a key player by coordinating planning along major corridors that pass through multiple communities. St Clair County Transportation Study (SCCOTS)

can provide the guidance and facilitation between distinct jurisdictions. The county should organize multi-jurisdictional corridor plans for key roadways in the county such as M-25, M-29, Fred Moore Highway and Marine City Highway.

- Transportation demand management programs can be implemented such as car/van pooling, providing park and ride facilities, work with employers to improve use of telecommunications (telecommuting), encourage the use of staggered work shifts or flex-time, and provide non-motorized facilities for local trips.
- Local communities should adopt traffic impact analysis ordinances. All major developments should be required to prepare traffic impact studies and mitigation plans.
- Access management standards should be adopted by local governments along major thoroughfares. Access management is a means of preserving the capacity and safety of major roads by regulating the number, spacing and design of access points, and requiring the use of shared access systems where practical. Proper access management can be a viable alternative to widening roads. Access management standards should be consistent between communities along thoroughfares and should be enforced in a uniform manner.

### **New Road Development**

The county has residential road standards in its Subdivision Control Regulations. Their primary function is to assure that proper access is provided to abutting residential land and not serve higher volumes of through traffic. The county needs to continue to enforce requirements within the subdivision plat standards for the following:

- A hierarchy of roads is needed in larger developments to reflect through connectors to the arterial part of the county system. Collector roads need to be provided within all large developments.
- The continuity of section line/mile roads and half-mile roads must be continued and extended as areas develop.
- For good neighborhood design and community planning, connections of streets to adjacent neighborhoods is essential. Interconnection of subdivision streets with adjacent lands and in particular connections to adjacent city or village streets is essential.
- Cul-de-sacs and other dead end streets should be discouraged unless natural features or existing development patterns predicate their use. The number and length of cul-de-sacs must be limited.
- Streets within subdivisions should be designed with variable standards such as width depending upon their function within the subdivision, anticipated traffic level, density of dwelling units and natural features.

- Private road standards should be adopted by local communities to assist with the goals of the public system. Developments which include private roads should be limited to sites where there is no possibility for through streets due to natural features or surrounding development patterns.
- St. Clair County should require developers to dedicate right-of-way along all existing and planned roads. As an alternative to dedication, the area needed for future right-of-way can be reserved through larger setbacks. The road commission can also work with local communities to develop other zoning techniques for right-of-way preservation.

### **Funding**

Funding of road improvements is often through public sources only. However, more communities are requiring private developers to install and fund improvements that affect the abutting street system. Partnerships between federal, state, county, local and private concerns are needed to maximize finite resources. There are a number of federal and state programs for transportation. Examples of such programs include: The Michigan Transportation Fund, the Michigan Economic Development Fund, the National Corridor Planning and Development Program and federal transportation funds (currently the Transportation Efficiency Act (TEA21)). Many additional sources of funding for local involvement include dedicated millage, special assessments, bond programs and tax increment financing.

### **Blue Water Bridge**

The Blue Water Bridge is a critical international transportation link that connects directly to the interstate expressway system and other critical links of the national highway system (i.e., Business Loop 69 and 94). Since 1993, the number of automobile trips has dropped while the value of commodities shipped by truck has increased. Of importance, the county has observed that many of the imported products are hazardous waste materials. To increase capacity, a second span was added in 1998.

### **Transit Facilities**

Transportation methods, other than private vehicles, are limited in scope and are necessary for residents that rely on their existence. Transit is provide by the public BWATC bus system, quasi-public agencies, private airport transportation companies, taxicab companies and ferries. The ferry system operates from Marine City and Algonac and affords alternative international crossings as well as providing the sole means of auto traffic to Harsen's and Russell Islands. Ridership has remained steady.

### **Air, Rail and Boat Facilities**

Air, rail and boat facilities primarily serve important industrial, commercial and public needs of the County. Commercial seaports are located in Algonac, Marine City, St. Clair, Marysville and Port Huron. The Port of Port Huron has reported that cargo tonnage drastically dropped from 1,700,000 tons in 1993 to 500,000 tons in 1995. Stone and sand

was the only category to have an increase. Petroleum/chemical cargo and “other” cargo are the second and third categories used.

The CN tunnel opened in 1995 to accommodate double-stacked intermodal carriers and multi-level auto carriers. About 24 trains per day use the facility. The U.S. Port of Entry reports that freight value has significantly increased from 1994 to 1996. Canadian imports are the primary source.

The St. Clair County International and Marine City airports are in the county. The St. Clair County facility is considered a Transport airport by the FAA which can accommodate jets. The number of cargo and private aircraft going through Immigration has fluctuated since 1993, without a clear pattern. The Marine City airport is classified by the FAA as a Basic Utility airport which allows single-engine and some light twin-engine aircraft.

### **Non-motorized and Pedestrian Pathways**

Pathways for pedestrians, bicyclists, and similar trail and sidewalk users are becoming increasingly more popular due to improved awareness of health and environmental benefits. A conceptual non-motorized plan for St. Clair County has been prepared. Non-motorized transportation should be considered with any roadway improvements. Land use and community design standards should also consider non-motorized transportation. A bike path system should be developed for the county.

A regional greenways concept plan, prepared by the Southeast Michigan Greenways Initiative, has been embraced by the county. Greenways should pursue the goals of recreation and conservation.

Resources for both the non-motorized and greenways systems are comprised of a variety of public and private land and water areas. Decisions on individual locations should be based on the vision as a whole and not solely on parts.

Both of these plans are designed to allow non-motorized access for residents to recreation, cultural, civic, employment, commerce and, critically, natural resources.