

MONTGOMERY ASSOCIATES, INC.  
Urban Planning Consultants

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# **Comprehensive Master Plan**

**For Burtchville Township, Michigan**

**2000-2020**

**Adopted: February 1, 2000**

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# Credits

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# Goals & Objectives

Communities are continually facing problems of growth and development. In the effort to provide essential municipal services, adequate and efficient areas for business and industry, pleasant living conditions and recreational facilities, communities have looked to planning as a process to prepare for these developmental pressures. The planning process, in turn, provides for that development in a well thought out manner that will most equitably benefit the entire community.

The goals and objectives formulated by the Planning Commission are the cornerstone of the planning process. They are intended to provide the basic framework for public and private decision-making. The Master Plan's arrangement of future land uses is based on the community's goals for the future. As such, the goals will effectively direct both public and private decisions regarding land use and development.

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## Purposes of the Master Plan

The Master Plan is the official document that serves as the long range, comprehensive policy guide to the day-to-day decisions about the future development of the Township. The Plan is written to be flexible in order to meet changing future conditions and is designed for the community as a whole, not for specific parcels. Through its text and graphic aids, the Master Plan explains the Township's philosophy and desires concerning future development.

The State of Michigan's Township Zoning Act<sup>1</sup> and Township Planning Act<sup>2</sup>

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<sup>1</sup>Act 184 of the Public Acts of 1943, as amended [MCL §125.271 et seq.]

<sup>2</sup>Act 168 of the Public Acts of 1959, as amended [MCL §125.321 et seq.]

requires that the provisions of the Zoning Ordinance be based upon a plan. A zoning ordinance is more likely to be defensible when based upon a well-conceived plan. Too often local officials and citizens find themselves dealing with development proposals with no firm direction and they must either succumb to development pressure or arbitrary denials. The Master Plan will establish policies that promote continuity when issues regarding growth arise. To be implemented effectively, the Master Plan must encourage the joint participation of both public officials and citizens. Only through this participation will the desirable use of land occur within the Township.

Specifically, the purposes of the Master Plan are:

- To improve the physical environment of the Township as a setting for human activities, minimize conflicts caused by growth and change and promote the general health, safety and welfare by making the Township more functional, beautiful, decent, healthful, interesting and efficient.
- To promote the public interest, the interest in the community at large, rather than the special interests of specific individuals or groups within the community.
- To facilitate the democratic determination and implementation of community policies and physical development. The plan is primarily a policy instrument. The plan constitutes a declaration of long-range goals and objectives and provides the basis for a program to accomplish the goals. By providing opportunities for citizen participation, the plan facilitates the democratic process.
- To effect political and technical coordination in community development.
- To inject long-range considerations into the determination of short-range actions.
- To bring professional and technical knowledge to bear on the making of decisions concerning the physical development of the community.

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## Policy Basis

Only through careful analysis of existing conditions and the forces that have brought them about, can the Township understand their interrelationships, identify their underlying causes, anticipate future problems and devise solutions.

Accordingly, the community identifies its objectives by relating them to current problems and issues and to tangible alternative solutions; at the same time, the Township must attempt to anticipate future problems and recommend the steps necessary to prevent their development or reduce their severity.

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## Policy Purpose

Administration by the Township officials, legislative action by the Board of Trustees, quasi-judicial rulings by the Zoning Board of Appeals and administrative action and recommendations by the Planning Commission are all frequently criticized as being capricious and arbitrary. Clear-cut statements of policy can go far to minimize the apparent arbitrariness of certain planning and planning related actions. They can guide and substantiate honest intelligent decisions. They can also serve the community planner and the Planning Commission as an anchor of objectivity. Another useful function performed by policy statements is to inform the public about the thinking of the Planning Commission with regard to land development.

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## Determining Policy

The Master Plan is not just a series of maps. Rather, it is first a series of policy statements of objectives. Policy statements, of course, do have limitations. They cannot cover every situation. Certain areas are so complex that it will be impossible to know what sort of policy decision can be made until all of the facts are assembled. Also, there must be agreement and consensus in the first place before a policy statement can be adopted. Obviously, this concurrence will not always exist. None of this negates, however, the desirability of formulating and adopting policy statements in as many areas of planning concern as possible.

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## Planning Objectives

### GENERAL CHARACTER:

- Encourage only development that can be well assimilated by the community while preserving the Township's character, natural features, and overall quality of life.
- Assure compatibility of land use activities to the greatest extent possible.
- Work to keep the natural and man-made environment in balance.
- Provide, as most appropriate, the transition of uses from the most intensive to the least intensive.
- Require developers to preserve natural features, including trees, as an integral part of development.
- Strengthen zoning regulations to better achieve the Township's goals.
- Enhance the overall environment and appearance of the Township by always giving consideration to quality of life standards in the development process.

- Employ new and innovative planning tools to enhance aesthetics in the land development process.
- Promote a land use pattern that considers and takes advantage of natural features.
- Provide for a balance of land uses within the Township both urban and rural, with the location and boundaries of the urban and rural areas defined through the planning process which includes a detailed inventory and analysis of man-made and natural features in the community.
- Preserve the character of the rural portion of the Township through proper and thoughtful arrangement of land uses on the Master Plan.
- Prevent haphazard intrusion of urban areas into those rural areas of the Township not planned to receive public utilities.

#### **FARMLAND AND AGRICULTURE:**

- Encourage farmland preservation and the use of open space easements by assisting individuals who wish to enroll their lands under Public Act 116.
- Provide areas for residential, commercial and industrial growth on lands that are inappropriate for farming or will not affect the status of agriculture in Burtchville Township.
- Encourage residential uses to be clustered together where soils are suitable for development thereby preserving the integrity of large agricultural tracts.
- Where development is allowed to occur along existing roads, establish maximum depths for the urban users and require proper access to be maintained so that agricultural activities can be continued on the interior acreage.
- Where practical, allow agricultural uses to serve as a buffer between residential uses and commercial or industrial areas.

#### **RESIDENTIAL:**

- Preserve and enhance the Township's predominantly low-density single-family residential development pattern.
- Maintain the low-density character of the Township as it currently exists while providing for the development of medium density housing of different building types at a limited number of appropriate locations to meet anticipated need.
- Provide housing opportunities at both ends of the housing affordability range without compromising the existing residential character of the Township.

- Encourage the provision of quality and affordable housing.
- Discourage strip frontage residential development along major roads that results in the isolation of interior acreage.
- Preserve transitional residential districts from untimely intrusions and blighting influences.
- Prohibit intensive residential development in areas with poor soil absorption capabilities.
- Protect single-family residential areas from through-traffic and non-related uses.

### **COMMERCIAL:**

- Establish well-defined limits to the spread of convenience and general commercial uses along M-25.
- Consolidate future commercial development within and adjacent to the village of Lakeport.
- Provide opportunities for convenience commercial uses that are related to existing and planned residential neighborhoods.
- Develop more stringent site design and architectural regulations for new commercial development.
- Prohibit spot commercial development, except where part of an overall development plan.
- Encourage the development of professional and business offices at appropriate locations and as a transitional land use between commercial districts and less intensive uses.

### **INDUSTRIAL:**

- Discourage the development of heavy industrial uses; since the Township is not served by rail or direct interstate highway access, and favor uses that do not result in nuisances or negative environmental impacts.
- Ensure that all industries shall not intrude on other uses physically, visually, or through other negative external effects.
- Buffer industrial uses from less intensive land uses through the use of appropriate setback standards, landscaping, and by locating industrial uses adjacent to other intensive land uses.

## **RECREATION/OPEN SPACE:**

- Provide public open space that offers direct access to Lake Huron.
- Cooperate with adjoining communities and the St. Clair County Parks and Recreation Commission on the delivery of public open space opportunities.
- Avoid unwarranted duplication of public and commercial recreation opportunities that are available in nearby communities.
- Recognize and incorporate the Township's existing natural features into the development of future recreation sites.
- Enhance existing public recreation sites by expanding the range of passive and active recreational opportunities that are available at each site.
- Incorporate neighborhood level parks as desirable facilities into future residential development.
- Encourage the development of non-motorized, bicycle and pedestrian linkages between existing and planned open space sites.
- Relate recreation programs and facilities to changing demographic characteristics of the Township.
- Utilize appropriate planning and zoning tools that encourage developers to incorporate more open space in new residential developments to be owned and maintained by private homeowner associations.
- Set aside sufficient land area to meet the leisure time recreation needs of existing and potential users.
- Encourage the joint development and use of park/school facilities by the Township and school district.
- Consider a purchase of development rights program and/or a transfer of development rights program.

## **COMMUNITY FACILITIES:**

- Encourage the development of a Township Civic Center consolidating and centralizing basic community services at a convenient location.
- Design the Civic Center site so that it becomes a community focal point contributing to the overall identity of the Township.
- Encourage the development of a branch library site in the Township.
- Plan development in a manner that best utilizes the Township's utility system.

- Encourage large lots and on-site disposal systems where sewer extensions are not foreseeable within the planning period.
- Recognize that drainage can be a problem and that a variety of solutions are available for correcting drainage problems (retention, pumping, gravity design, and drain deepening).
- Encourage and assist affected property owners in petitioning the Drain Commission for drain maintenance and improvement projects, and adopt ordinance provisions that prohibit blocking and filling of drains.
- Stage any sewer or water installations to provide efficient growth and revenues to pay for the system.
- Extend future sewer and water service in an orderly manner, leaving no gaps or spaces in coverage.
- Install sewer and water facilities only where planning and zoning will not be compromised by their use.
- Establish a planned boundary for urban development beyond which urban infrastructure (sewer, water, widened roads, etc.) will not be extended during the planning period.

#### **TRANSPORTATION:**

- Plan for a network of roads by type and function that will provide a complete road system including major, secondary, collector and local roads.
- Obtain necessary right-of-way dedications and reservations.
- Cooperate with the Michigan Department of Transportation, the St. Clair County Road Commission and the St. Clair County Transportation Study to ensure that a proper relationship exists between planned road improvements and the Township's desired future land use pattern.
- Increase pedestrian safety by providing opportunities for pedestrian circulation along existing and planned road systems through a coordinated program of sidewalk construction.
- Limit points of ingress/egress on major roads.
- Provide a transportation system that furnishes the maximum in convenient, safe, and economic movement of people and goods.
- Provide a transportation system that recognizes the need for both auto and truck traffic and eliminates as many points of conflict between the two as possible.

- Improve the road system to better serve residences and businesses.
- Recognize the relationship between land use patterns and the availability and adequacy of the transportation system.
- Plan for and encourage the development of a network of non-motorized transportation facilities connecting key origins and destinations.
- Encourage development of new roads that meet the County Road Commission standards for new roads.

# Regional Setting

Many factors influence the growth and development of a given community. Some relate to local decisions and can be controlled by the local community; others result from actions and/or developments outside the community and are, therefore, subject to somewhat less local control. In turn, the influence of actions and/or developments outside the community depends on the position of the community within the larger surrounding region. This position is a factor that cannot be changed, but must be recognized and accommodated. Furthermore, local actions and developments that have occurred in the past influence current local and regional actions and developments and as such, community growth and development. Local policies and decisions impacting land use, therefore, should take these regional and historical influences into account to be relevant and effective.

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## History

The area that is now Burtchville Township was first settled in 1836. The first settlers were attracted to the area by the abundant supply of white pine trees and by the relatively easy access afforded by Lake Huron. Also in 1836, Jonas H. Titus laid out Milwaukee City at the mouth of Milwaukee Creek in Section 20. However, for reasons unknown, this community was never built.

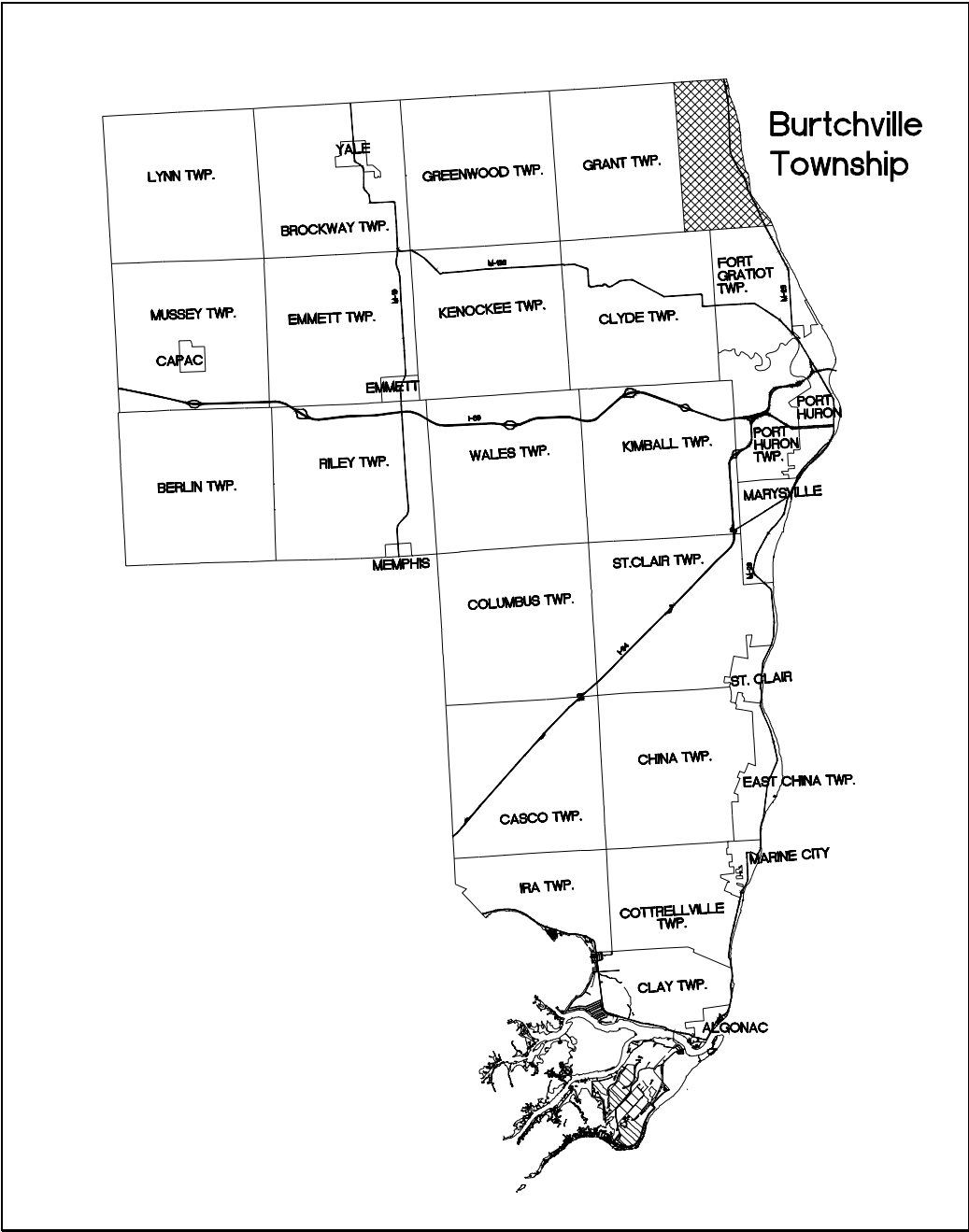
Burtchville Township was first organized on February 16, 1842. At that time the Township stretched from Lake Huron to the eastern border of Lynn Township. In 1848 the two westernmost townships were split off to form Brockway Township and Greenwood Township. In 1866, Grant Township split off from Burtchville Township, leaving the Township with its present borders. The Township was named for Jonathan Burtch, one of the original settlers to the area and the Township's first supervisor.

In 1853 B. C. Farand laid out the Village of Lakeport on the same site that was to have been occupied by Milwaukee City. This community was eventually built and exists today as an unincorporated settlement.

In the 20<sup>th</sup> Century, Burtchville Township developed first as a farming community, then, with the construction of Lakeport State Park and several private resorts and campgrounds on the Lakeshore, it also became somewhat of a tourist community.

## Regional Location

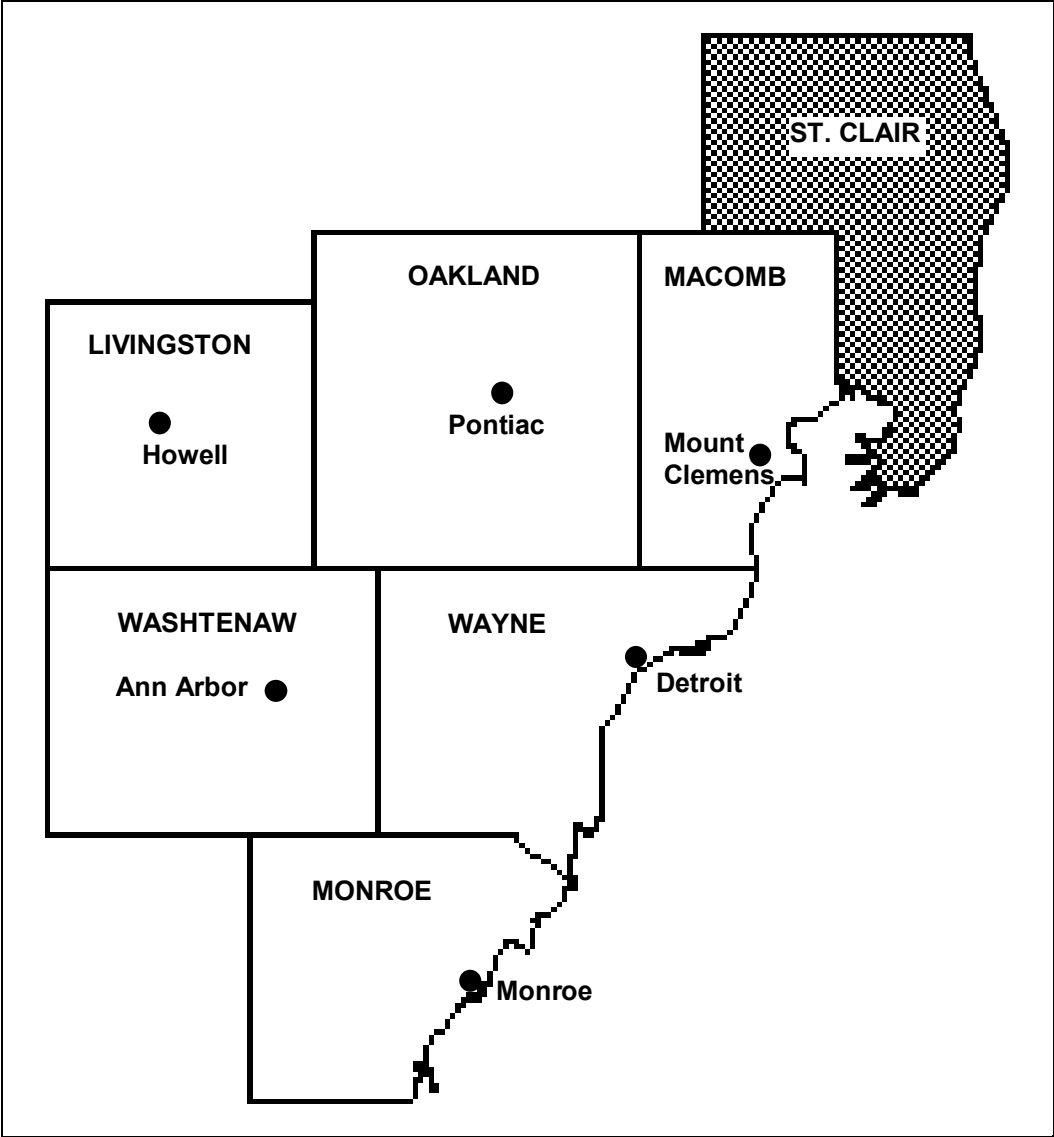
Figure 1: Location of Burtchville Township in St. Clair County



Burtchville Township is situated in the northeastern corner of St. Clair County, one of the seven counties making up the southeastern Michigan region, which is the most heavily populated region of the State. The Township is located on the shores of Lake Huron, five miles north of the City of Port Huron (the county seat), and is located approximately 60 miles east of Flint and approximately 65 miles northeast of downtown Detroit. The Township is bordered by Fort Gratiot Township and Clyde Township to the south, Grant Township to the west, and Sanilac County's Worth Township to the north.

Other nearby communities include the Village of Lexington and the City of Crosswell, located approximately 7 miles north of the Township, the City of Yale, located 13 miles to the west, and the City of Marysville, approximately 10 miles south of the Township.

**Figure 2: Location of St. Clair County in Southeastern Michigan**



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## Regional Access

Burtchville Township can be reached from the north and south via State Trunkline M-25, which runs completely through the Township along the east side of the Township. M-25 also connects the Township to the eastern termini of Interstate 94 (the expressway link between Detroit and the Port Huron/Sarnia area) and Interstate 69 (the expressway link between Flint and the Port Huron/Sarnia area), located just six miles south of the Township in the City of Port Huron.

Additionally, North Road, a paved County Primary road, provides access from the south, as does State Road, a paved County Secondary road. Burtch Road and Jeddo Road, both paved County Primary roads, provide access to the Township from the west.

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## Regional Influences

There are three major regional influences on the growth and development of Burtchville Township. These regional influences are:

1. The Southeastern Michigan Council of Governments
2. The St. Clair County Metropolitan Planning Commission
3. The Port Huron Urban Area

Descriptions of these regional influences are as follows:

### **SOUTHEASTERN MICHIGAN COUNCIL OF GOVERNMENTS**

St. Clair County is in the Southeastern Michigan Council of Governments (SEMCOG) region. SEMCOG plays an active role in providing planning-related data, transportation modeling and regional planning to its member municipalities. SEMCOG also reviews local applications for federal and state funding, to ensure that the local projects for which funds are applied are consistent with regional planning efforts.

### **ST. CLAIR COUNTY METROPOLITAN PLANNING COMMISSION**

The St. Clair County Metropolitan Planning Commission (SCCMPC) also carries out planning functions, of which the most important are: coordinating local planning efforts and providing planning assistance to local units of government. To fulfill its coordination function, the SCCMPC prepared the *St. Clair County Comprehensive Development Plan* in 1974. Although the Plan may be somewhat dated and not necessarily reflect current development policies or trends, it shows

how Burtchville Township is related to the rest of the County in terms of anticipated development trends.<sup>3</sup>

The 1974 Plan anticipated low-density residential development occurring in the eastern part of the Township along the Lake Huron shoreline and in the settlements of Lakeport and North Lakeport. The rest of the Township was planned for agricultural uses.

## PORT HURON URBAN AREA

Burtchville Township is part of a larger urban area which, for the purposes of this analysis, includes the City of Port Huron, Port Huron Township, Fort Gratiot Township, the City of Marysville, Kimball Township, and Clyde Township. The population and household growth characteristics of the Township, therefore, need to be considered in relationship to trends that are occurring within this larger geographic setting.

During the 30-year period of time between 1960 and 1990, the Port Huron urban area population increased by a total of 11,994 persons, for a growth rate of just over 19%. Over this same time period, Burtchville Township experienced a population increase of 1,833 persons, for a growth rate of over 106%. Only Clyde Township and Marysville had higher growth rates during this same period.

**Table 1: Port Huron Urban Area Population Growth 1970–1990**

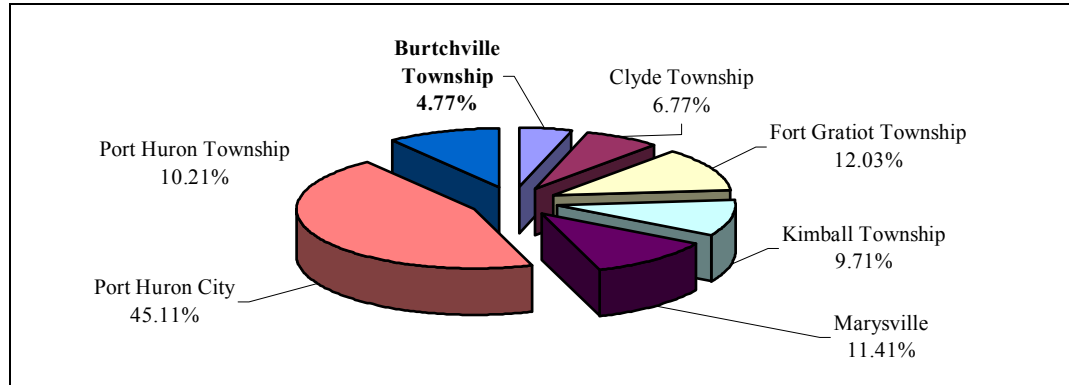
	1960	1970	1980	1990	1960–1990	% Change
<b>BURTCHVILLE TOWNSHIP</b>	1,726	2,037	3,069	3,559	1,833	106.20%
<b>Clyde Township</b>	1,886	2,980	4,632	5,052	3,166	167.87%
<b>Fort Gratiot Township</b>	5,588	7,075	8,496	8,981	3,393	60.72%
<b>Kimball Township</b>	6,266	6,152	7,180	7,247	981	15.66%
<b>Marysville</b>	4,065	5,610	7,345	8,515	4,450	109.47%
<b>Port Huron City</b>	36,084	35,794	33,981	33,681	-2,403	-6.66%
<b>Port Huron Township</b>	7,047	7,635	7,886	7,621	574	8.15%
<b>TOTAL</b>	62,662	67,283	72,589	74,656	11,994	19.14%

SOURCE: U.S. Bureau of the Census; SEMCOG

Current population estimates indicate that just under 5% of the urban area's population resides in Burtchville Township. The Township's share of the total urban area population base is the lowest of all the communities in the urban area. However, given the Township's relatively high growth rate, it can be reasonably expected that in the future, the Township will have a higher proportion of the urban area's population.

<sup>3</sup> At the time of this writing, the SCCMPC was working on an update to the 1974 plan, which was scheduled to be completed by the beginning of 1999. However, details regarding proposed planned land use changes were not yet available.

**Figure 3: Port Huron Urban Area Population Proportions—1990**



Although population increases have traditionally been used as the popular method of assessing community growth trends, this particular measure of growth has become less important in recent years. Decline (or stability) in population levels do not necessarily imply a lack of growth altogether. The decline in household size has become an important factor accounting for declining population levels. Because of this trend, the rate of new household formation is gaining acceptance over absolute population increases as a useful measure of community growth. For marketing purposes, the individual household is considered the basic spending unit that is critical to any assessment of a community's economic growth potential. It is, therefore, important to consider this demographic variable as it relates to Burtchville Township and the Port Huron urban area as a whole.

Between 1970 and 1990, the Port Huron urban area experienced an increase of 7,322 new households, for a growth rate exceeding 35%. The greatest number of new households during this period was formed in the City of Marysville, followed by the City of Port Huron and Fort Gratiot Township. More than 730 new households were created in Burtchville Township over this 20-year period, representing an increase of slightly less than 118%. This exceeds the household growth rate for the urban area as a whole. No other community in the urban area experienced a more rapid growth rate during this period. Overall, Burtchville Township ranks last in the total number of urban area households at 4.85%. Again, however, given the Township's relatively high growth rate, the Township's share of total urban area households should increase.

Based on the preceding analysis of these population and household trends, two conclusions appear to be evident:

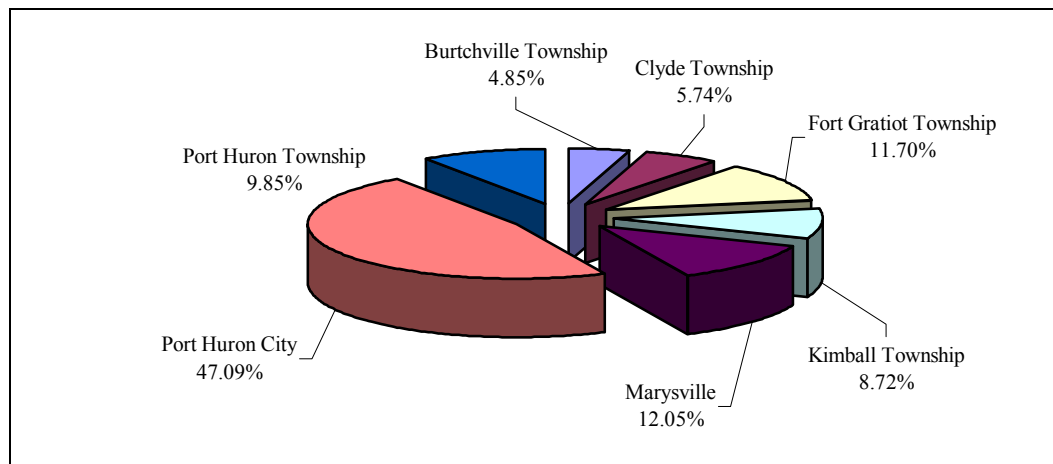
1. While the City of Port Huron retains a dominant position relative to overall population and total households, growth to an increasing degree is migrating out to the surrounding suburban communities that comprise the urban area;
2. Burtchville Township is fully participating in this growth.

**Table 2: Port Huron Urban Area Household Growth 1970–1990**

	1970	1980	1990	1970–1990	% Change
<b>BURTCHVILLE TOWNSHIP</b>	621	1,097	1,353	732	117.87%
<b>Clyde Township</b>	777	1,376	1,603	826	106.31%
<b>Fort Gratiot Township</b>	2,060	2,820	3,266	1,206	58.54%
<b>Kimball Township</b>	1,671	2,209	2,435	764	45.72%
<b>Marysville</b>	1,677	2,580	3,363	1,686	100.54%
<b>Port Huron City</b>	11,632	12,782	13,143	1,511	12.99%
<b>Port Huron Township</b>	2,151	2,591	2,748	597	27.75%
<b>TOTAL</b>	<b>20,589</b>	<b>25,455</b>	<b>27,911</b>	<b>7,322</b>	<b>35.56%</b>

SOURCE: SEMCOG

**Figure 4: Port Huron Urban Area Proportion of Households—1990**



## Planning in Neighboring Communities

In addition to the wider Regional influences given above, planning and zoning efforts in neighboring communities can influence the Township’s growth and development. For example, if land in a neighboring community were zoned/used for light-industrial purposes, it would be advisable for the Township to designate its land that abuts such an area as a compatible use, as opposed to an incompatible use (i.e., for commercial rather than, say, for residential use). As noted above, there are four communities that share a common boundary with Burtchville Township: Worth Township to the north, Grant Township to the west, and Clyde Township and Fort Gratiot Township to the south.

### CLYDE TOWNSHIP

The *Clyde Township Land Use Plan* [dated 1985] calls for agricultural uses along the entire one-mile boundary with Burtchville Township.

## **FORT GRATIOT TOWNSHIP**

The *Charter Township of Fort Gratiot Master Plan*, dated 1990, shows that primarily recreation/open space uses, rural residential uses and single family residential uses along Metcalf Road, which forms the border with Burtchville Township. Part of the planned recreation/open space area is taken up by the Detroit Water Department property east of State Road. A small convenience commercial area is also planned for the intersection of M-25 and Metcalf Road.

Fort Gratiot Township is currently in the process of updating its Master Plan, but as of this writing, no details on proposed planned land use changes were available.

## **GRANT TOWNSHIP**

The *Grant Township Land Use Plan* [dated 1994] calls for agricultural uses along the entire boundary with Burtchville Township.

## **WORTH TOWNSHIP**

A land use plan for Worth Township could not be obtained, however, the existing land uses along the north side of Fisher Road between Babcock Road and M-25 consist entirely of agricultural uses, with residential uses east of M-25.

# Existing Land Use

A survey of existing land use is an essential beginning in the preparation of the Master Plan for Burtchville Township. The information from this survey provides much of the basic data upon which the proposals for residential, commercial, industrial and public uses of land will be made. The existing land use of any given parcel will influence, or possibly restrict, any future land use for that parcel and for adjacent parcels. For example, vacant land in a currently residential area would probably only be suitable for residential development. Likewise, land currently used for industrial purposes may not be suitable for other kinds of development in the future (if the industrial use is abandoned) due to possible site contamination.

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## Existing Land Use Survey

The planning consultant undertook a field survey of Burtchville Township in May 1998. Prior to the commencement of the field survey, the following materials were obtained:

- Recent aerial photographs (1995) of the Township (source: SEMCOG)
- A base map of the Township prepared by the planning consultant.
- The tax roll book of the Township with property descriptions.
- Parcel maps of the Township at 1" = 200' (source: St. Clair County Lands & Graphics Department)
- A 1995 Land Cover Map of the Township (source: SEMCOG)

The survey team drove along every street in the Township and noted land uses on the applicable parcel maps. Business locations, as well as closed or abandoned businesses, were also confirmed and noted. Upon completion of the fieldwork, the

information gathered by the survey team was compared with the tax roll book, air photos and the parcel maps to insure that uses noted in the field were plotted in the correct locations. This information was used to prepare a draft Existing Land Use Map with the plotted land use categories (described below) shown in color. The Existing Land Use Map was completed in June 1998.

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## Land Use Categories

For mapping and analysis purposes, the various land uses noted in the field were divided into thirteen land use categories:

1. Single-Family Residential
2. Two-Family Residential
3. Multi-Family Residential
4. Mobile Home Park
5. Commercial
6. Office
7. Public, Quasi-Public & Institutional
8. Light Industrial
9. Heavy Industrial
10. Recreation
11. Agriculture
12. Vacant
13. Right-of-way

These land use categories are described as follows:

### **SINGLE-FAMILY RESIDENTIAL:**

Includes all areas where single-family homes on individual lots are located. Also includes single-family mobile and manufactured housing units on individual lots.

### **TWO-FAMILY RESIDENTIAL:**

Includes all lands where duplex housing structures (or other structures containing two residential units) are located. These structures may either be located on individual lots or within condominium developments.

**MULTI-FAMILY RESIDENTIAL:**

Includes all areas containing triplex and/or quad housing structures, apartment buildings and complexes and apartment lofts. These may either be condominium units or rental units.

**MOBILE HOME PARK**

Includes single-family mobile and manufactured housing units grouped within mobile home park developments.

**COMMERCIAL:**

Includes all areas where products, goods and/or services are sold, leased or otherwise provided such as retail business establishments, shopping centers, banks, and restaurants.

**OFFICE:**

Includes business and professional offices.

**PUBLIC, QUASI-PUBLIC & INSTITUTIONAL:**

Includes lands devoted to: governmental facilities and offices; public, parochial and private schools; churches, cemeteries, and other quasi-public and private institutions.

**LIGHT INDUSTRIAL:**

Includes all lands devoted to small scale manufacturing, processing, warehousing, storage of raw materials and intermediate and finished products and the provision of services of an industrial nature, as well as industrial parks and industrial research activities.

**HEAVY INDUSTRIAL:**

Includes all lands devoted to large-scale manufacturing, processing, warehousing, storage of raw materials and intermediate and finished products and the provision of services of an industrial nature.

**RECREATION:**

Includes all public and private park land, public and private golf courses, and public marinas.

**AGRICULTURE:**

Includes cultivated land, pasture and grazing lands, fallow lands available for future cultivation, barns and other agricultural-type buildings, and farmsteads.

**VACANT:**

Includes lands not appearing to be put to any active use, that are devoid of man-made structures or features or discernible agricultural uses.

**RIGHT-OF-WAY:**

Includes public street rights-of-way (both improved and unimproved) and railroad rights-of-way.

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## Land Use Patterns & Trends

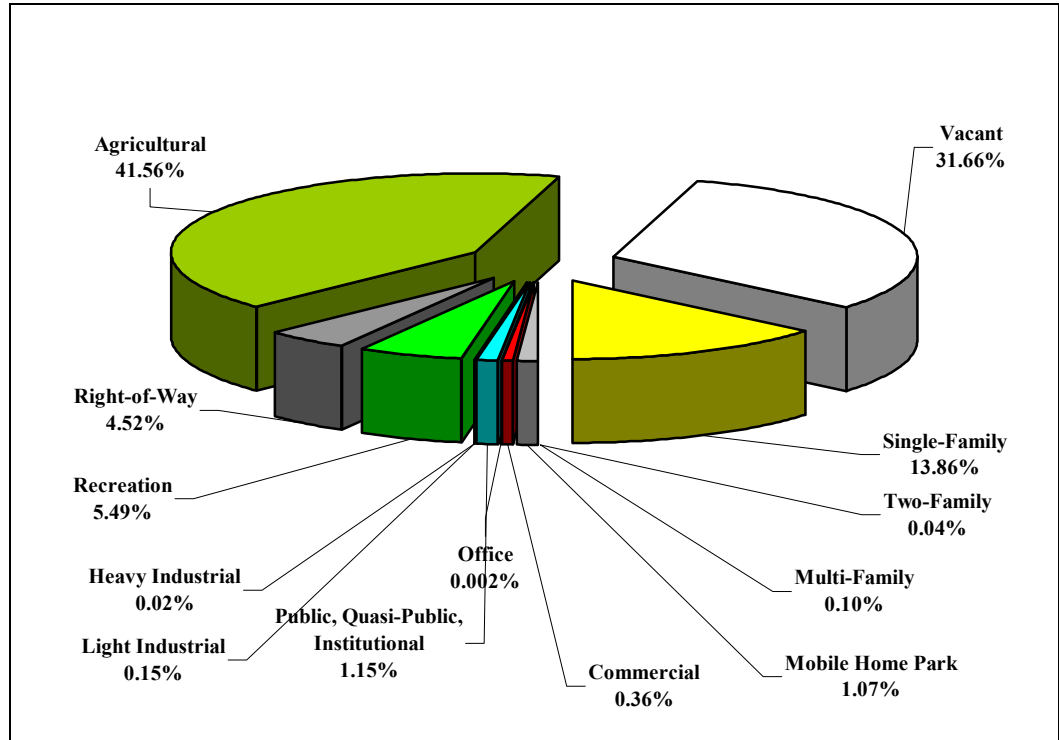
The areas of the various land uses (in terms of the above land use categories) identified and located by the survey team were measured from the Existing Land Use Map. The total land area of Burtchville Township is 10,080.87 acres, or approximately 15.75 square miles. Measurements indicate that approximately 27% of this total land area is developed. The land use category measurements and a comparison with a 1968 land use survey are summarized in the following tables and graphs:

**Table 3: Burtchville Township Existing Land Use - 1998**

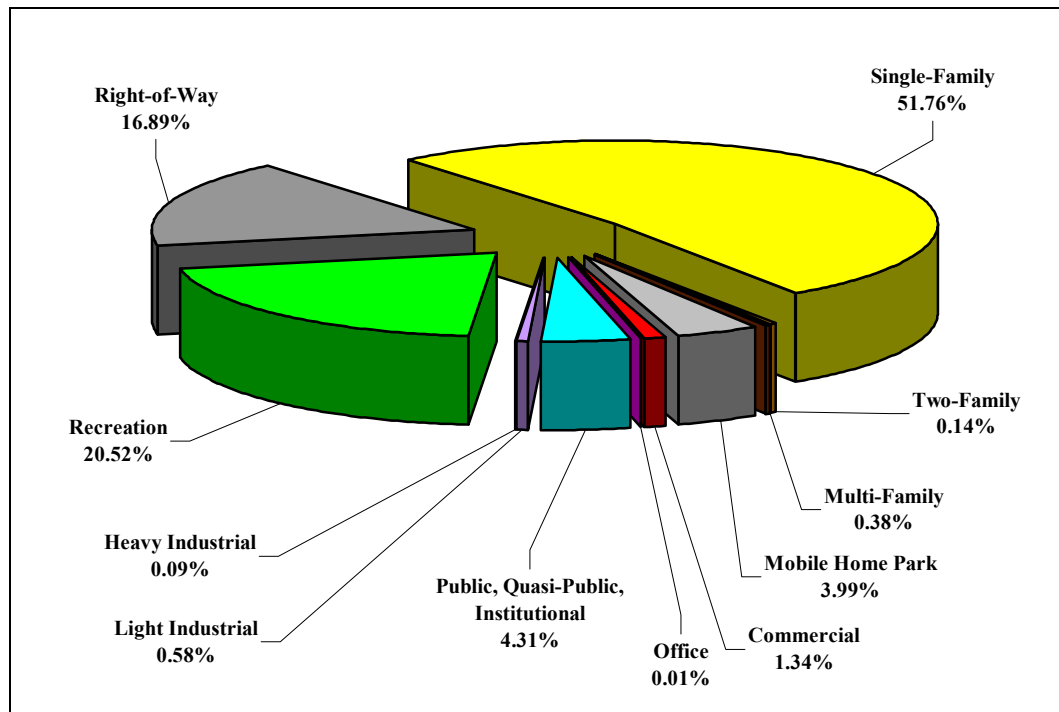
Land Use Category	Acreeage	% of Total	% of Developed
Single-Family Residential	1,397.08	13.86%	51.76%
Two-Family Residential	3.74	0.04%	0.14%
Multi-Family Residential	10.24	0.10%	0.38%
Mobile Home Park	107.76	1.07%	3.99%
Commercial	36.29	0.36%	1.34%
Office	0.19	<0.01%	0.01%
Public, Quasi-Public, Institutional	116.29	1.15%	4.31%
Light Industrial	15.54	0.15%	0.58%
Heavy Industrial	2.37	0.02%	0.09%
Recreation	553.71	5.49%	20.52%
Right-of-Way	455.78	4.52%	16.89%
<b>Total Developed Land:</b>	2,698.99	26.77%	100.00%
Agriculture	4,190.05	41.56%	—
Vacant	3,191.83	31.66%	—
<b>TOTAL:</b>	10,080.87	100.00%	—

SOURCE: Field Survey, 1998

**Figure 5: Existing Land Use—1998**



**Figure 6: Developed Land Use—1998**



**Table 4: Comparative Land Use—1968 & 1998**

Land Use	1968	1998	Change '68-'98	
Residential	385.80	1,518.82	1,133.02	293.68%
Commercial/Office	15.21	36.48	21.27	139.84%
Industrial	5.03	17.91	12.88	256.06%
P/Q-P/Institutional/Rec.	778.32	670.00	-108.32	-13.92%
Right-of-Way	375.49	455.78	80.29	21.38%
<b>Total Developed Land:</b>	1,559.85	2,698.99	1,139.14	73.03%
Agricultural/Vacant	8,527.95	7,381.88	-1,146.07	-13.44%
<b>TOTAL:</b>	10,087.80	10,080.87	-6.93	—

*SOURCES: Field Survey, 1997;*

Please note that for comparison purposes in the above Table 4 (so that the categories in both the 1968 and 1998 land use surveys would match), the Residential and Mobile Home Park categories have been merged, as have the Public/Quasi-Public/Institutional and Recreation categories and Agricultural and Vacant categories. Also, please note that the decrease in total land area of the Township from 1968 to 1998 is due to differences in the base maps used to calculate the land use areas in each survey, in particular, differences in the way the Lake Huron shoreline is drawn.

Analysis of the above summary information and the detailed information gathered in the survey (and shown on the Existing Land Use Map) yields the following descriptions of the individual land use patterns and trends within the Township:

## **RESIDENTIAL**

Residential land uses, including single-family homes, two- and multi-family dwellings and mobile home parks, collectively occupy just over 1,518 acres in the Township, accounting for approximately 15% of the total land area and approximately 56% of the developed land area of the Township. Since 1968, the amount of acreage devoted to residential use has increase by approximately 1,133 acres, a rate of approximately 294%.

Single-family homes comprise the largest of the residential uses, accounting for over 92% of the Township's residential development. Most of the single-family residential development can be found in platted subdivisions along the Lake Huron shoreline and in the unincorporated settlements of Lakeport and North Lakeport. The rest of the Township's single-family residences are built on unplatted lots along the section line roads in the western two-thirds of the Township.

Two-family residential development occupies 3.74 acres of land, or 0.14% of the Township's developed land (0.04% of the total land area). This acreage is

confined to two parcels, one on Lakeshore Road in Lakeport, the other on Old Lakeshore Road in North Lakeport.

Multi-family units occupy 10.24 acres of land, or 0.38% of the Township's developed land (0.10% of the total land area). These units are concentrated in four developments: a condominium complex near the intersection of Second St. and Milwaukee St. in Lakeport, an apartment complex on M-25 in North Lakeport, a converted farmhouse on Burtch Road in Section 19, and a converted church at the corner of Burtch Road and North Road.

One mobile home park currently exists in the Township, containing a total of over 107 acres, accounting for 1.07% of the total land area and 3.99% of the developed land area of the Township. This mobile home park, called Indian Trails North, is a modern mobile home park and is located on Metcalf Road west of M-25.

### **COMMERCIAL/OFFICE**

Commercial uses in Burtchville Township occupy 36.48 acres (a 140% increase over 1968 acreage), accounting for 1.35% of the Township's developed land area and 0.36% of the total area. The greatest concentration of this commercial development is located along M-25 in Lakeport and North Lakeport. Most of these businesses have developed in response to vacation and resort activities in the area. However, some of the newer businesses are intended to meet the needs of the increasing permanent residences in the Township, although most of the Township's purchasing power is still directed toward the Port Huron/Fort Gratiot Township commercial areas.

### **PUBLIC, QUASI-PUBLIC, INSTITUTIONAL/RECREATION**

Public, Quasi-Public, Institutional and Recreation uses represent 670 acres (or over 6.6% of the total land area and almost 25% of the developed land area) within the Township. Most of this acreage is occupied by the Lakeport State Park, with the balance spread among several churches, two campgrounds, an elementary school, the Township Hall, the Township Library/DPW Building (the old Township Hall) and the Township-owned property leased by the Lions Club.

### **INDUSTRIAL**

Collectively, industrial uses occupy only about 18 acres of land, which is less than 1% of both the total and developed land areas in the Township (but more than triple that of 1968). This acreage consists of: two factories on M-25 in Section 33, a warehouse near the corner of M-25 and Harris Road, a warehouse on Burtch Road in Section 19, and a trucking company on Burtch Road near North Road in Section 24.

## **RIGHT-OF-WAY**

There are 455.78 acres of public right-of-way in Burtchville Township, taking up 16.89% of developed land area in the Township and 4.52% of the total land area. All of this consists of rights-of-way for streets and roads. The amount of land used for right-of-way purposes has increased over 20% since 1968, due to the increasing permanent residential development over the last thirty years.

## **AGRICULTURE & VACANT**

Currently, there are approximately 4,190 acres of land used for farming activities and farmsteads, which is over 41% of the total area of the Township. Most of this is concentrated in the western two-thirds of the Township, west of M-25 and west of State Road. Most of this farmland is fragmented and is interspersed with vacant land and large lot residential development.

The 1968 land use survey did not have a separate agricultural land use category (agriculture was included with the “vacant” category), so the change in the amount of agricultural land cannot be readily determined. However, with the vacant and residential land in and around the agricultural area, it could be reasonable to expect that there will be increasing pressure to develop agricultural lands, resulting in a loss of agricultural acreage in the future.

# Population Projections

The Land Use Plan is directly related to the Year 2020 population projections of Burtchville Township, making these projections one of the most significant steps in the planning program. The historical growth of the Township provides a basis for future estimates. Although generators of growth such as new highways and utilities are considered in the population forecast, they do not have significant impact on the historical growth. These projections should be viewed as a guide for the development plan and not as the ultimate goal. Thus, as Burtchville Township examines its total population growth, the development plan of the community can be accelerated or decelerated as the level of growth determines. For example, if the level of population expected in Burtchville Township in the Year 2020 occurs by 2010, the development plan must be accelerated to meet the transportation and community facility needs of the population.

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## Methodology

Population projections can be determined by many varying methods. The four methods that are most appropriate for a community such as Burtchville Township are the following:

### **ARITHMETIC PROJECTION**

This simple method involves computing the average numerical population change per decade in the past and then projecting this numerical increase into the future. This procedure produces the same result as a straight-line graphic projection on plain coordinate paper.

### **GEOMETRIC PROJECTION**

This method involves computing the average rate of change per decade in the past

and then projecting this average rate (or percentage change) into the future. This corresponds to a straight-line graphic projection on semi-logarithmic coordinate paper.

Both the arithmetical and geometric techniques are founded on the assumption that the factors and conditions that produced population growth or decline in the past will continue unchanged and will have the same effects in the future, or that they are derived from an assumed curve of population growth.

## **SHARE OF COUNTY METHOD**

This is one of two *apportionment* methods used for this study. This method assumes that population growth in a community is often closely related to or affected by economic and population changes in the county in which it lies. Future population changes in the larger area may have an important influence on growth and decline in the smaller area. Therefore, past relationships between population growth in an area or community and that of its county are valuable guides for projection of the local population. If logically founded population projections for the county are available, projections for the community can be derived directly by apportioning part of the county's population to the community.

This apportionment is accomplished by a two-step process. In the first step, the ratio of the community's population to the county's population in the base year (often the base year is the last census year or the year with the most recent population estimates) is calculated. Then, in step two, this ratio, which is assumed to hold constant during the forecast period, is multiplied by the forecasts of the county population to derive the forecasts of the community's population.

In some cases, a definite trend can be seen in the ratio of the community's population to the county's population. For example, the community's share of county population may be either steadily growing or shrinking over time. When such a trend occurs, it is often desirable to calculate a *projected* ratio of community population to county population, instead of using a constant base year ratio.

## **SMALL AREA FORECAST**

This kind of apportionment method, utilized by the Southeast Michigan Council of Governments as a part of its Regional Development Forecast, attempts to forecast the township's share of the projected population of Southeastern Michigan. Small area forecasts consider variables such as: the relative suitability throughout the region of soils for on-site sewage disposal systems; existing and planned sewerage areas; agricultural land that is required to be preserved; the existing and planned highway networks; the relative demands for development of residential, commercial and industrial uses throughout the region. Updated small area Forecasts for the years 2000 through 2020 were released by SEMCOG in March 1996.

## Background

In the 30 years from 1960 to 1990 the population of Burtchville Township increased by 1,833 persons for an overall growth rate of approximately 106%. The largest portion of this growth took place during the 1970's when the population grew by 1,032 persons, which translates to a growth rate of 50.66% for that decade. During the 1960's, however, the Township went through its slowest period of growth, with the population growing by only 311 persons (a growth rate of 18.02% for that decade). The average population growth per decade for the Township is 611 persons, for an average growth rate per decade of 27.28%. These last two numbers will be used for the arithmetic and geometric population projections given below.

**Table 5: Population of Burtchville Township from 1960 to 1990**

Year	Population	Change	
1960	1,726	—	—
1970	2,037	+311	18.02%
1980	3,069	+1,032	50.66%
1990	3,559	+490	15.97%
<b>Average Change per Decade:</b>		+611	27.28%

*Source: U.S. Bureau of the Census*

**Table 6: Burtchville Township's Share of County Population**

ST. CLAIR COUNTY		BURTCHVILLE TOWNSHIP	
Year	Population	Population	% Of County
1940	76,222	669	0.88%
1950	91,599	1,080	1.18%
1960	107,201	1,726	1.61%
1970	120,175	2,037	1.70%
1980	138,802	3,069	2.21%
1990	145,607	3,559	2.44%
2000	167,639	4,640	2.77%
2010	182,967	5,635	3.08%
2020	199,345	6,778	3.40%

*Source: U.S. Bureau of the Census; Southeastern Michigan Council of Governments*

In 1990, the Burtchville Township population of 3,559 amounted to 2.44% of the population of St. Clair County, which in 1990 was 145,607. This ratio appears to have increased over time, so projected ratios of 2.77% in the year 2000, 3.08% in 2010, and 3.40% will be used instead of assuming that the 1990 ratio will hold constant. The Southeastern Michigan Council of Governments (SEMCOG) 2020 Regional Development Forecast indicates that in the year 2000 the population of the County is expected to be 167,639, in 2010 the population should be 182,967

and in 2020, 199,345. These three County population forecasts will each be multiplied by the corresponding projected shares of the County population to calculate the share of county population projections given above.

## Population Projections

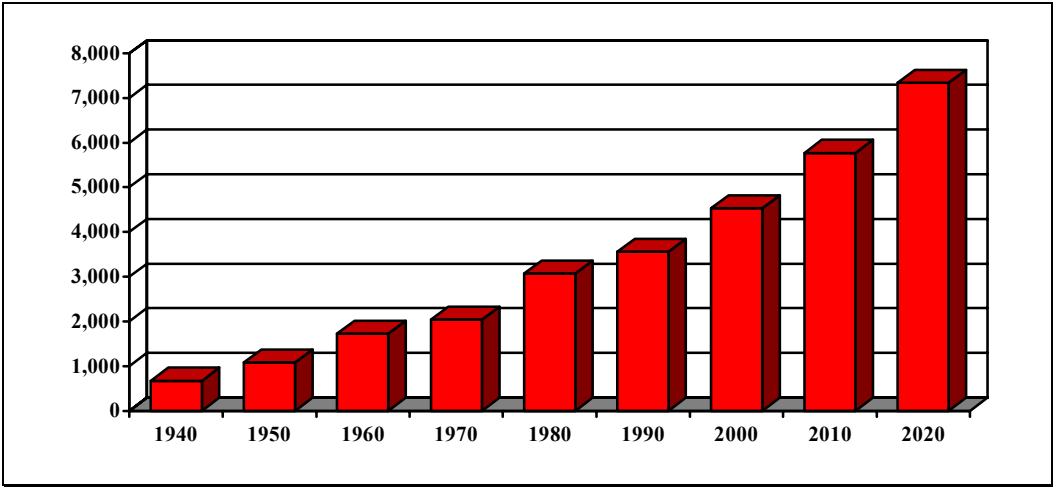
There are many factors that may modify population projections such as: the extension of public water or sewer facilities into the Township; establishment of a single large residential development such as a mobile home park or planned unit development, a war, the locating of a very large employer, or numerous other natural and man-made occurrences.

A summary of the results of the four methods of population projection is set forth below. Given the uncertainty generally associated with population projections, the most likely projection of the population of Burtchville Township would normally be obtained by averaging the results of the four methods. However, in 1997, public water lines from the City of Detroit water system were extended into much of the eastern half of the Township. The new water lines will likely result in much higher population growth in the Township. Thus, the most optimistic of the population projections, the Geometric method, in this case, will be used. According to these projections, the population of the Township in the year 2000 will be approximately 4,530 persons, in the year 2010 there will be approximately 5,766 persons, and in 2020 there will be approximately 7,339 persons residing in the Township.

**Table 7: Burtchville Township Population Projection Summary**

Year	Arithmetic	Geometric	Share Of Co.	Small Area	Average
2000	4,170	4,530	4,640	4,059	4,350
2010	4,781	5,766	5,635	4,434	5,154
2020	5,392	7,339	6,778	4,782	6,073

**Figure 7: Burtchville Township Population - 1940 to 2020**



## Growth of Households

In addition to forecasts of Burtchville Township population in its Regional Development Forecast/Small Area Forecast process, SEMCOG also issues forecasts of average household size for the Township. These forecasts, when used with the population projections derived above, allow us to project the number of households to be found in the Township. The resulting figures are presented in the following table.

**Table 8: Burtchville Township Households–Projected Size & Number**

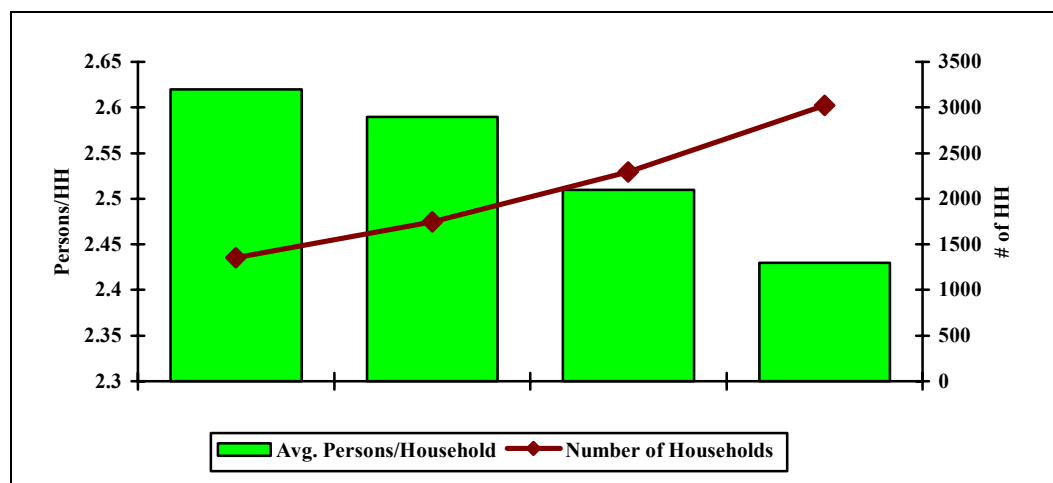
	1990	2000	2010	2020
<b>Avg. Persons/Household</b>	2.62	2.59	2.51	2.43
<b>Number of Households</b>	1,353	1,749	2,297	3,020

*SOURCE: Southeastern Michigan Council Of Governments; Montgomery Assoc., Inc.*

It is anticipated that the rate of growth of households will exceed the growth rate of population. This is because of the continuing trend toward a smaller household size. In 1990 Burtchville Township had 1,353 households with an average of 2.62 persons per household. In 2000 it is expected that there will be 1,749 households with 2.59 persons per household. By the year 2010 the average household size will have declined to 2.51 persons, resulting in a total of 2,297 households. In the year 2020 the average persons per household will decline further to 2.43, occupying 3,020 households. Thus, from 1990 to 2020 there will be an increase of 1,667 households, or an overall increase of 123%.

This household growth will be reflected in the construction of new dwelling units. It is expected that an average of 56 new dwelling units per year will have to be constructed to accommodate this growth. This does not include dwelling units that have to be replaced because of demolition.

**Figure 8: Projected Households vs. Household Size**



# Population Profile

A profile of the current population of the Township is just as important to the planning process as are the projections of the Township's population into the future. Such a profile can help determine whether or not the current pattern of land uses within the Township and the facilities of the Township are sufficient to meet the needs of the population as currently composed. Any "deficiencies" in the current land uses or facilities can then be addressed by this Master Plan. For example, if the population profile indicates a large number of "senior citizens" and the inventory of community facilities indicates a lack of senior citizen facilities in the Township, then there probably is a deficiency in this kind of facility.

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## Methodology

This profile will look at five aspects of the population of the Township:

1. The general composition of the population, including age, sex and race.
2. The income and poverty levels of the population.
3. The labor force status of the population, as well as the occupations and industries that employ the population.
4. The education and school enrollment levels of the population.
5. The age, value, condition, composition and amenities of the housing stock.

In addition to the current (for the purposes of this plan the term "current" will refer to 1992, 1990 or 1989 as necessary) population figures for the Township, current data for the State of Michigan and for St. Clair County, as well as 1980

data for the Township will be provided for comparison purposes (whenever possible). All data in this section, except as otherwise noted, is taken from the *US Bureau of the Census - Census of Population, 1990* & the *US Bureau of the Census - Census of Population, 1980*.

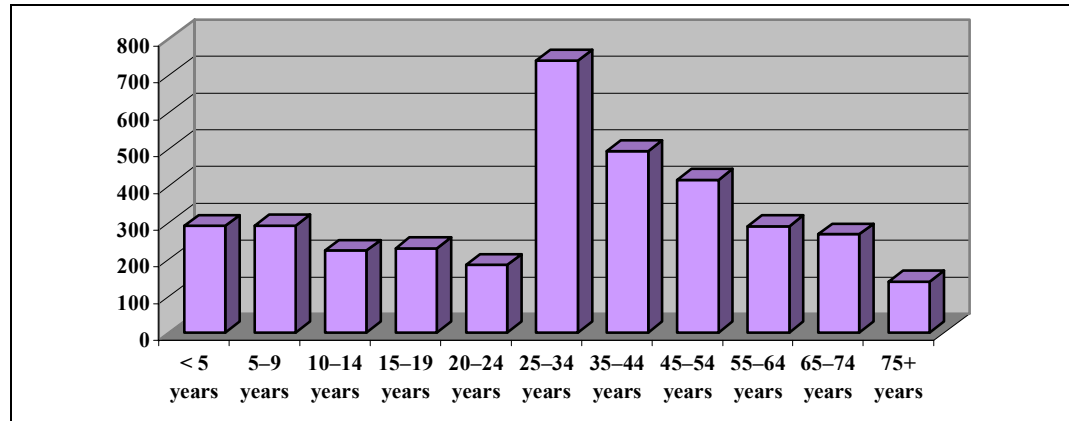
## Population Composition

**Table 9: Population by Age**

	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
< 5 years	7.56%	7.58%	290 (8.1%)	277 (9.0%)	13 (4.7%)
5-9 years	7.45%	7.87%	291 (8.2%)	234 (7.6%)	57 (24.4%)
10-14 years	7.17%	7.72%	223 (6.3%)	278 (9.1%)	-55 -(19.8%)
15-19 years	7.50%	7.56%	229 (6.4%)	264 (8.6%)	-35 -(13.3%)
20-24 years	7.59%	6.69%	184 (5.2%)	316 (10.3%)	-132 -(41.8%)
25-34 years	16.94%	16.18%	740 (20.8%)	520 (16.9%)	220 (42.3%)
35-44 years	15.13%	15.03%	493 (13.8%)	340 (11.1%)	153 (45.0%)
45-54 years	10.20%	10.53%	415 (11.7%)	270 (8.8%)	145 (53.7%)
55-64 years	8.55%	8.52%	289 (8.1%)	290 (9.4%)	-1 (-0.3%)
65-74 years	7.06%	7.24%	267 (7.5%)	203 (6.6%)	64 (31.5%)
75+ years	4.87%	5.07%	138 (3.9%)	77 (2.5%)	61 (79.2%)
<b>Median Age</b>	32.6	32.9	32.6	28.7	13.6%

In 1990, approximately 21% of Burtchville Township's population were between the ages of 25 and 34, making that age group the largest in the Township. The next largest was the 35 to 44 age group, accounting for almost 14% of the population, followed by the 45 to 54 age group, with approximately 12% of the population. The other age groups contained between 4% and 9% (approximately) of the Township's population each. This pattern is somewhat similar to the populations of St. Clair County and the State of Michigan, where the two largest age groups were the 25 to 34, 35 to 44, and 45 to 54 age groups, respectively.

**Figure 9: 1990 Township Population by Age**



Between 1980 and 1990, the number of persons 75 years of age and over increased at a rate of 79.2%, faster than any other age group in the Township. The 45-54 age group had the second greatest increase (53.7%), followed by the 35-44 age group (45.0%), the 25 to 34 age group (42.3%) and the 65 to 74 age group (31.5%). Except for those under 9 years of age (whose numbers increased approximately 5–25%), the number of persons under the age of 34 decreased during the 1980's. The number of persons of age 55-64 also decreased slightly (0.3%). These trends are reflected in the change in the median age of the population of the Township, which from 1980 to 1990 increased from 28.7 to 32.6 years of age.

**Table 10: Population by Sex**

	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
<b>Male</b>	48%	49%	1,710 (48.1%)	1,540 (50.2%)	170 (11.0%)
<b>Female</b>	52%	51%	1,849 (51.9%)	1,529 (49.8%)	320 (20.9%)

From 1980 to 1990, the proportion of males in Burtchville Township went from just over 50% of the total population of the Township to just over 48% of the total population, whereas the proportion of females increased from 49% to 52%. This is because the female population of the Township grew almost twice as fast as the male population.

**Table 11: Population by Major Age Group**

	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
<b>Pre-School</b>	7.56%	7.58%	290 (8.1%)	277 (7.0%)	13 (4.7%)
<b>School</b>	29.70%	29.85%	927 (26.0%)	1,092 (27.8%)	-165 (-15.1%)
<b>Labor Force</b>	50.82%	50.26%	1,937 (54.4%)	1,420 (36.1%)	517 (36.4%)
<b>Family Formation</b>	32.07%	31.21%	1,233 (34.6%)	860 (21.9%)	373 (43.4%)
<b>Seniors</b>	11.92%	12.31%	405 (11.4%)	280 (7.1%)	125 (44.6%)

Sometimes a clearer view of the age composition of a population can be seen when the population is broken down into the following major age groups:

- **Pre-School (age 0–4)**
- **School (age 5–24):** the age levels usually enrolled in school or college.
- **Labor Force (age 25–64):** the age levels usually in the labor force.
- **Family Formation (age 25–44):** the age levels that usually start a family.
- **Seniors (age 65 and above)**

Here again we see an increasingly adult/elderly population, with the Seniors, Family Formation, and Labor Force major age groups containing most of the Township’s population and having the greatest growth rates in the 1980’s. Of these, the Seniors group increased the fastest, growing at a rate of almost 45% for the decade. Furthermore, the School group declined over 15% and the Pre-School group grew less than 5% during the 1980’s. However, the presence of a relatively large and growing Family Formation group may lead to a reversal, or at least a slowing, of those trends in the future, depending on the number of children these families in the Family Formation group will have.

**Table 12: Population by Race**

	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
<b>White</b>	83.44%	96.35%	3,527 (99.1%)	3,036 (98.9%)	491 (16.2%)
<b>Black</b>	13.90%	2.05%	5 (0.1%)	4 (0.1%)	1 (25.0%)
<b>Amer. Indian, Eskimo &amp; Aleut</b>	0.60%	0.51%	5 (0.1%)	13 (0.4%)	-8 (-61.5%)
<b>Asian &amp; Pacific Islander</b>	1.13%	0.33%	8 (0.2%)	9 (0.3%)	-1 (-11.1%)
<b>Other</b>	0.93%	0.76%	14 (0.4%)	7 (0.2%)	7 (100.0%)
<b>Hispanic</b>	2.17%	1.76%	29 (0.8%)	16 (0.5%)	13 (81.2%)

As with the population of St. Clair County, that of Burtchville Township is composed mostly of whites. Blacks, Hispanics, American Indians, Eskimos, Aleuts, Asians, Pacific Islanders and all other races combined account for less than 2% of the Township’s population, a proportion far less than in either the County or the State. These same general proportions existed in 1980 and are not expected to change appreciably in the future.

**Table 13: Population by Disability—1990**

	Michigan	St. Clair Co.	Burtchville Twp.
<b>Persons age 16 to 64 years:</b>	5,924,922	91,217	2,295
<b>With a mobility or self - care limitation:</b>	10.92%	11.02%	48 (2.1%)
—with a mobility limitation	81.59%	85.23%	27 (56.3%)
—with a self - care limitation	30.42%	27.66%	39 (81.3%)

<b>With a work disability:</b>	9.04%	9.55%	158 (6.9%)
<b>—in labor force</b>	38.05%	40.48%	67 (42.4%)
<b>—prevented from working</b>	51.51%	49.05%	71 (44.9%)
<b>Persons age 65 years and over:</b>	1,054,579	17,223	280
<b>With a mobility or self - care limitation:</b>	37.10%	34.22%	41 (14.6%)
<b>—with a mobility limitation</b>	89.60%	89.24%	28 (68.3%)
<b>—with a self - care limitation</b>	31.63%	33.00%	34 (82.9%)

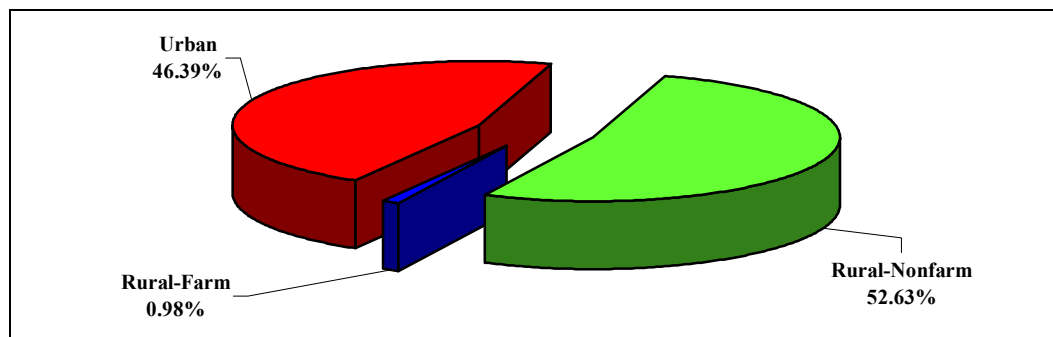
Of the 2,295 persons in Burtchville Township who were between the ages of 16 and 64 in 1990, 2.1% have a disability that results in either a mobility and/or self-care limitation and 6.9% have some sort of work-related disability. Approximately 45% of those with a work-related disability have been left unable to work because of that disability. Over 14% of the 280 persons aged 65 or older have a mobility and/or self-care disability. These proportions are much lower than the proportions of persons with disabilities in the County and the State.

**Table 14: Urban & Rural Populations — 1990**

	Michigan	St. Clair County	Burtchville Twp.
<b>Urban</b>	70.52%	55.57%	1,651 (46.39%)
<b>Rural-Nonfarm</b>	28.18%	42.97%	1,873 (52.63%)
<b>Rural-Farm</b>	1.30%	1.46%	35 (0.98%)

In Burtchville Township, approximately 46% of the total population lives within the urbanized area of the Township. Just over 52% of the population lives within the rural areas of the Township, but not on any kind of farm. Just less than 1% of the population of the Township lives on a farm. The Township has a higher proportion of its population living in rural areas than does the State and the County. However, the proportion of farm population in the Township is less than that of the State and the County.

**Figure 10: Township Urban & Rural Populations—1990**



## Income & Poverty

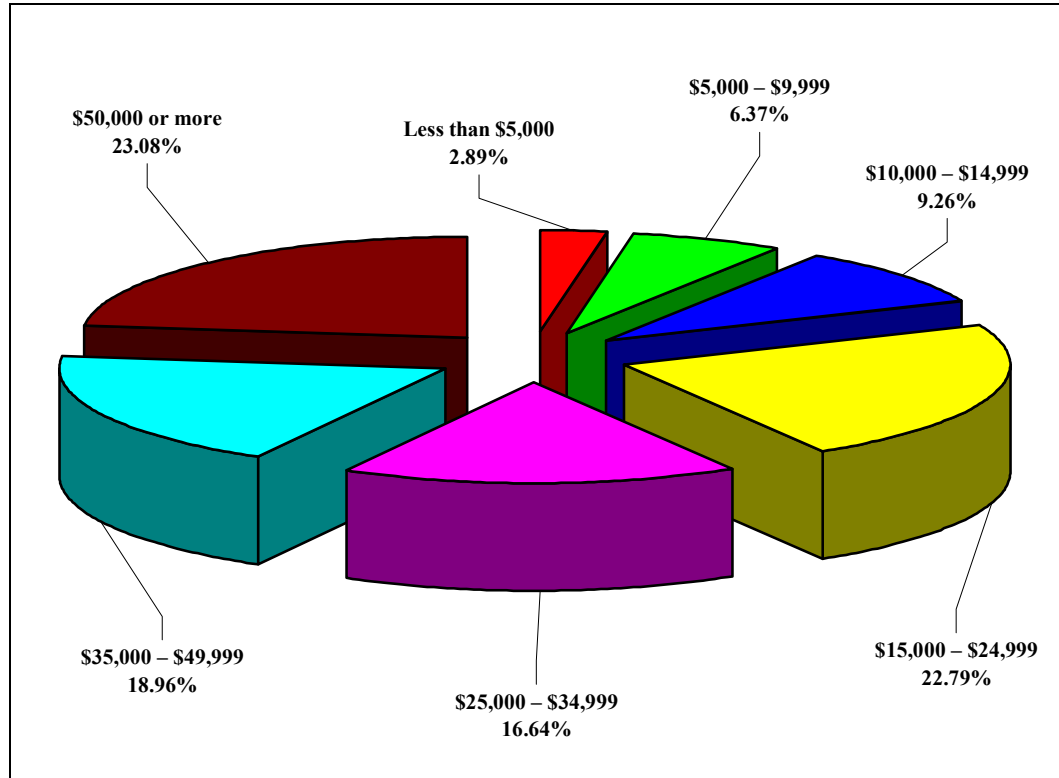
**Table 15: Households by Income**

	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
<b>Less than \$5,000</b>	5.95%	5.46%	40 (2.9%)	105 (9.5%)	-65 (-61.9%)
<b>\$5,000 – \$9,999</b>	9.63%	9.53%	88 (6.4%)	154 (13.9%)	-66 (-42.9%)
<b>\$10,000 – \$14,999</b>	8.58%	8.50%	128 (9.3%)	177 (16.1%)	-49 (-27.7%)
<b>\$15,000 – \$24,999</b>	16.41%	16.68%	315 (22.8%)	368 (33.3%)	-53 (-14.4%)
<b>\$25,000 – \$34,999</b>	15.34%	16.71%	230 (16.6%)	204 (18.5%)	26 (12.7%)
<b>\$35,000 – \$49,999</b>	18.66%	19.34%	262 (18.9%)	78 (7.1%)	184 (235.9%)
<b>\$50,000 or more</b>	25.43%	23.77%	319 (23.1%)	18 (1.6%)	301 (1672.2%)
<b>Median household income</b>	\$31,020	\$30,692	\$29,564	\$27,316 ('90\$)	\$2,248 (8.2%)
<b>Per capita income</b>	\$14,154	\$13,257	\$15,381	\$10,362 ('90\$)	\$5,019 (48.4%)

In 1990, 319 households (23.1% of all households in the Township) had incomes of \$50,000 or more, more than in any other income bracket. The next most populous bracket was the \$15,000–\$24,999 income bracket, with 315 households (22.8%), followed by the \$35,000–\$49,999 income bracket, with 262 households (18.9%). In 1980, almost three-quarters of all households had incomes under \$25,000. From 1980 to 1990 the fastest growing income brackets were the \$50,000 or more and the \$35,000–\$49,999 and \$25,000–\$34,999 brackets, increasing at rates of 1,672.2%, 235.9% and 12.7%, respectively. All other income brackets declined in the last decade.

From 1980 to 1990, median household income rose 2%, adjusted for inflation and per capita income rose 24%, also adjusted for inflation. In 1990, per capita income in Burtchville Township was greater than in the County and in the State, but median household income was lower than in the County and in the State.

**Figure 11: 1990 Township Households by Income**



As shown in the following table, in 1990, 6.9% of all persons in Burtchville Township had incomes below that year's poverty level income. The poverty rate in 1980 was almost 11%, and in absolute terms the number of persons living below poverty level decreased 26.3% from 1980 to 1990. The 1990 poverty rate in the Township was much lower than in the County and just over one-half that of the State. For persons age 65 and over, the poverty rate in 1990 was only 5.9%, down from 6.4% in 1980 (but still, an increase in absolute numbers of 33%). The poverty rate for this group was just over half the rates for the County and the State.

**Table 16: Population Below Poverty Level**

	Michigan	St. Clair County	Burtchville Twp. - '90	Burtchville Twp. - '80	Change '80-'90
<b>All persons</b>	13.10%	10.90%	247 (6.9%)	335 (10.9%)	-88 (-26.3%)
<b>Persons 65 years and over</b>	10.80%	9.10%	24 (5.9%)	18 (6.4%)	6 (33.3%)
<b>Related children under 18 years</b>	18.20%	14.70%	114 (12.1%)	137 (14.7%)	-23 (-16.8%)
<b>Related children under 5 years</b>	22.10%	19.30%	30 (10.3%)	40 (14.5%)	-10 (-25.0%)
<b>Related children 5 to 17 years</b>	16.70%	12.90%	84 (12.9%)	90 (13.7%)	-6 (-6.7%)
<b>Unrelated individuals</b>	25.90%	24.20%	46 (13.7%)	49 (15.8%)	-3 (-6.1%)

## Labor

**Table 17: Labor Force Status**

Total population – 16 years and over:	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
<b>in labor force</b>	64.10%	64.00%	1,865 (69.1%)	1,358 (61.1%)	507 (37.3%)
<b>civilian labor force</b>	63.93%	63.87%	1,865 (69.1%)	1,356 (61.0%)	509 (37.5%)
– employed	91.80%	91.69%	1,727 (92.6%)	1,195 (88.1%)	532 (44.5%)
– unemployed	8.20%	8.30%	138 (7.4%)	161 (11.9%)	-23 (-14.3%)
<b>Armed Forces</b>	0.19%	0.16%	0 (0.0%)	2 (0.1%)	-2 (-100.0%)
<b>not in labor force</b>	35.88%	35.97%	835 (30.9%)	863 (38.9%)	-28 (-3.2%)

Of the 1,635 persons in the Burtchville Township civilian labor force in 1990, just over 7% were unemployed, down from almost 12% in 1980 (a decrease in absolute numbers of approximately 14%). The 1990 unemployment rate in the Township was lower than the unemployment rates in the County and the State. Overall, the percentage of persons aged 16 years and over participating in the labor force in the Township in 1990 is higher than for the County and the State. Also, the size of the Township's labor force increased approximately 37% since 1980. Much of this increase is probably due to larger numbers of women entering the work force in the 1980's.

In 1990, the industries that employed the most persons (16 years of age or over) overall in the Township were: retail trade (21.89% of the Township's employed population), durable goods manufacturing (18.59%), health services (8.92%) and educational services (7.93%). In the County, most of the citizens are employed in durable goods manufacturing (20.84%), retail trade (18.86%), health services (8.24%) and nondurable goods manufacturing (7.96%). For the State, the top four most populous industries were: durable goods manufacturing (19.03%), retail trade (17.97%), health services (8.90%) and educational services (8.60%).

**Table 18: Population by Industry—1990**

	Michigan	St. Clair Co.	Burtchville Twp. 1990
<b>Agriculture, forestry &amp; fisheries</b>	1.74%	1.83%	23 1.33%
<b>Mining</b>	0.26%	0.17%	0 0.00%
<b>Construction</b>	4.93%	6.60%	78 4.52%
<b>Manufacturing, nondurable goods</b>	5.59%	7.96%	102 5.91%
<b>Manufacturing, durable goods</b>	19.03%	20.84%	321 18.59%
<b>Transportation</b>	3.35%	3.47%	58 3.36%
<b>Communications &amp; public utilities</b>	2.12%	3.73%	85 4.92%
<b>Wholesale trade</b>	4.01%	2.62%	38 2.20%
<b>Retail trade</b>	17.97%	18.86%	378 21.89%
<b>Finance, insurance &amp; real estate</b>	5.44%	4.46%	47 2.72%

<b>Business &amp; repair services</b>	4.68%	3.46%	49	2.84%
<b>Personal services</b>	2.65%	2.17%	44	2.55%
<b>Entertainment &amp; recreation services</b>	1.18%	0.90%	20	1.16%
<b>Health services</b>	8.90%	8.24%	154	8.92%
<b>Educational services</b>	8.60%	6.71%	137	7.93%
<b>Other professional &amp; related services</b>	5.80%	4.67%	119	6.89%
<b>Public administration</b>	3.75%	3.31%	74	4.28%

## Education & Enrollment

**Table 19: Educational Attainment**

	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
<b>Less than 9th grade</b>	7.75%	7.78%	130 (5.5%)	204 (12%)	-74 (-36.3%)
<b>9th to 12th grade</b>	15.47%	17.42%	316 (13.5%)	323 (19%)	-7 (-2.2%)
<b>H. S. graduate</b>	32.30%	37.06%	820 (35.1%)	697 (41%)	123 (17.6%)
<b>Some college</b>	27.12%	27.09%	490 (20.9%)	289 (17%)	201 (69.5%)
<b>Associate Degree</b>	6.72%	6.99%	250 (10.7%)	n/a	n/a
<b>Bachelor Degree</b>	10.92%	6.58%	200 (8.5%)	170 (10%)	30 (17.6%)
<b>Graduate Degree</b>	6.43%	4.08%	136 (5.8%)	n/a	n/a
<b>At least H.S. grad.</b>	76.80%	74.80%	1,896 (80.9%)	1,156 (68%)	740 (64.1%)
<b>Bachelor's degree or higher</b>	17.40%	10.70%	336 (14.3%)	170 (10%)	166 (97.6%)

In 1990, over 80% of persons age 25 and over in Burtchville Township have earned at least a high school diploma, up from 68% in 1980 (an absolute increase of 64%). Only 14% of persons age 25 and over have earned a Bachelor's degree or higher. Both of these 1990 rates are higher than those in the County are, but only the high school graduation rate is higher than in the State.

As can be seen in the table on the next page, for persons age 3 and over in Burtchville Township enrolled in school, 61.2% were enrolled in public school, grades K through 12, and 10.5% were enrolled in pre-primary school, both of which are decreases of over 9% from the 1980 figures. However, the number of persons enrolled in private (K through 12) school increased by 128.6% from 1980 to 1990. Also, the numbers of persons enrolled in college increased 65.2%.

**Table 20: School Enrollment**

	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
<b>Pre-primary school</b>	7.71%	8.96%	96 (10.5%)	106 (12.1%)	-10 (-9.4%)
<b>Elementary or High School</b>	64.42%	71.65%	562 (61.2%)	620 (70.6%)	-58 (-9.3%)
<b>Private school</b>	10.10%	5.40%	32 (3.5%)	14 (1.6%)	18 (128.6%)

College	27.87%	19.39%	228 (24.8%)	138 (15.7%)	90 (65.2%)
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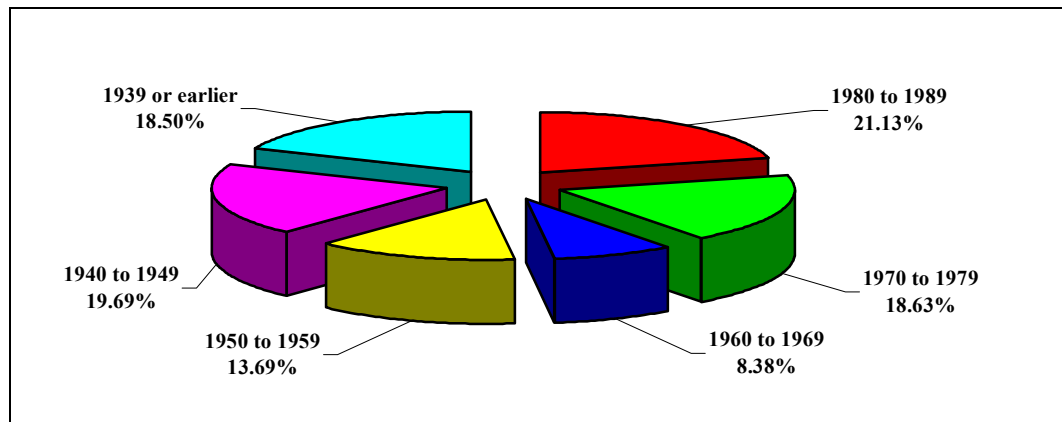
## Housing

**Table 21: Year When Housing Structure Built**

	Michigan	St. Clair County	Burtchville Twp.	
1980 to 1989	13.57%	15.98%	338	21.13%
1970 to 1979	20.42%	21.21%	298	18.63%
1960 to 1969	16.18%	12.59%	134	8.38%
1950 to 1959	17.91%	13.57%	219	13.69%
1940 to 1949	11.14%	10.88%	315	19.69%
1939 or earlier	20.78%	25.76%	296	18.50%

In Burtchville Township, almost 60% of the total number of housing structures still standing were built during or after 1950 and almost one-half were built after 1960. Less than 20% of the existing housing stock was built before 1939. The Township has a much higher proportion of newer housing (post 1980) than both the State and the County.

**Figure 12: Year When Township Housing Built**

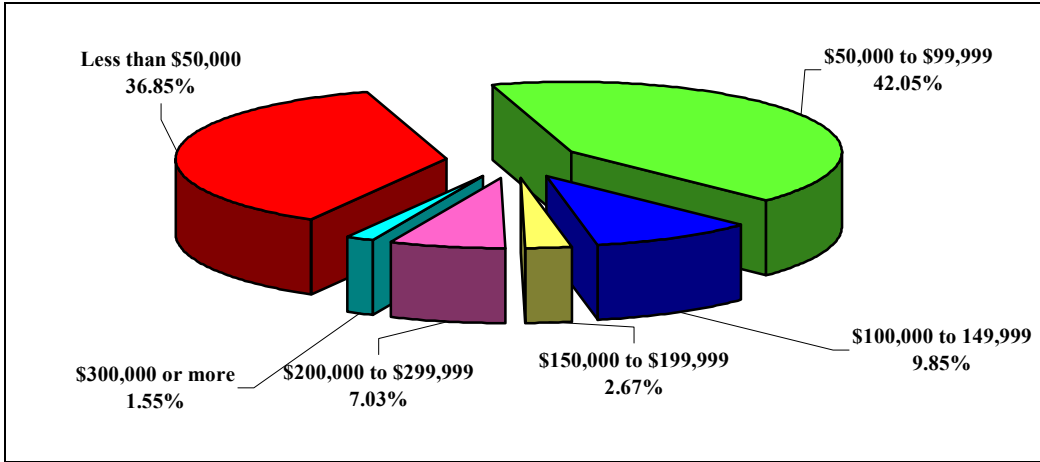


**Table 22: Value of Owner-Occupied Housing Units**

	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
Less than \$50,000	38.47%	38.01%	262 (36.8%)	423 (68.3%)	-161 (-38.1%)
\$50,000 to \$99,999	42.51%	46.03%	299 (42.1%)	166 (26.8%)	133 (80.1%)
\$100,000 to \$149,999	11.44%	10.06%	70 (9.8%)	19 (3.1%)	51 (268.4%)
\$150,000 to \$199,999	4.14%	3.29%	19 (2.7%)	8 (1.3%)	11 (137.5%)
\$200,000 to \$299,999	2.40%	1.93%	50 (7.1%)	3 (0.5%)	47 (1566.7%)
\$300,000 or more	1.04%	0.69%	11 (1.5%)	0 (0.0%)	11 —
Median value	\$60,600	\$59,400	\$59,400	\$61,386	-\$1,986

Overall, most of the owner-occupied housing in the Township in 1990 was valued at less than \$100,000 per unit, with only 21% of all units in the Township being worth more than \$100,000. The median value of housing in Burtchville Township was \$59,400 in 1990, less than in the State, the same as that of the County and down approximately \$1,986 (in 1990 dollars) from the 1980 figure of \$61,386 (in 1990 dollars).

**Figure 13: Twp. Housing Values — 1990**

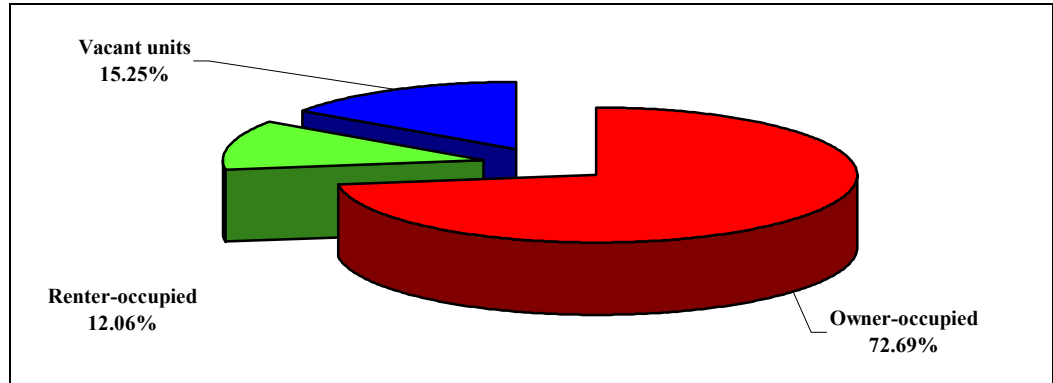


**Table 23: Housing Occupancy & Tenure**

	Michigan	St. Clair County	Burtchville Twp. 1990	Burtchville Twp. 1980	Change '80-'90
<b>Total units</b>	3,847,926	57,494	1,600	1,625	-25 (-1.5%)
<b>Owner-occupied</b>	63.09%	69.60%	1,163 (72.7%)	925 (56.9%)	238 (25.7%)
<b>Renter-occupied</b>	25.77%	22.38%	193 (12.1%)	172 (10.6%)	21 (12.2%)
<b>Vacant units</b>	11.14%	8.02%	244 (15.2%)	528 (32.5%)	-284 (-53.8%)
<b>Persons/unit</b>	2.8	2.84	2.66	2.80	-0.14 (-4.9%)

Of the 1,600 housing units in the Township reported existing in 1990 (a decrease of 25 housing units since 1980), approximately 73% were owner-occupied, a higher percentage than in the County and in the State. The percentage of renter-occupied housing in the Township, 12%, was lower than in the State and the County. As the Township's housing stock continues to age, the proportion of renter-occupied housing should increase. The vacancy rate in the Township was only 15% in 1990, much higher than in the County and in the State but less than one-half the vacancy rate in 1980. This decrease in vacant units reflects the conversion of seasonally occupied units (vacation cottages) into year-round housing units. In 1990, there were fewer persons per housing unit in Burtchville Township than in 1980.

**Figure 14: Twp. Housing Occupancy & Tenure — 1990**



**Table 24: Source of Water & Sewer—1990**

	Michigan	St. Clair County	Burtchville Twp.
<b>Public water system</b>	70.46%	69.13%	335 (20.94%)
<b>Individual drilled well</b>	27.65%	25.79%	1,037 (64.81%)
<b>Individual dug well</b>	1.48%	2.81%	222 (13.88%)
<b>Some other source</b>	0.41%	2.28%	6 (0.38%)
<b>Public sewer</b>	70.80%	67.34%	260 (16.25%)
<b>Septic tank or cesspool</b>	28.34%	31.95%	1,309 (81.81%)
<b>Other means</b>	0.86%	0.71%	31 (1.94%)

Only 20% of the 1,600 housing units in the Township reported existing in 1990 were serviced by public water, compared with approximately 70% in the State and less than 70% in the County. Almost 80% obtained potable water through some sort of well. Approximately 16% of the units in the Township were on public sewer and approximately 84% utilized septic tanks, cesspools or some other means of disposal. These proportions are roughly the opposite of those for the State and the County.

NOTE: As mentioned previously in the Population Projection section of this Plan, water lines from the City of Detroit water system were extended into the much of the eastern half of the Township in 1997. Therefore, the number of housing units in the Township currently served by public water is much higher than was reported in the 1990 Census.

# Economic Base

The economic resources of a community are often just as important as a community's natural resources. In fact, certain natural resources, such as prime farmland (for the agriculture industry) and woodlands (for the logging and recreation industries) can be economic resources as well. Furthermore, as with natural resources, the economic resources of a community can help to determine the kinds of land uses that are possible within the community, both currently and in the future. For example, communities with large numbers of high income households could be expected to attract retail businesses (such as shopping centers, etc.) to serve the needs of those households, thus creating a demand for commercial land. Other communities with large tax bases are generally able to afford to provide the kinds of public services, such as public water, sewer and paved roads, which make the community an attractive place for persons and industries to locate. Also, the number and kinds of employment opportunities (present and future) that a community can offer will affect the demand for residential land in that community. The various economic resources of a community, along with those of the surrounding county or region (since no community is truly self-sufficient) form the community's **economic base**. It is the purpose of this section to delineate the various economic resources that make up the economic base of Burtchville Township.

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## Methodology

We will attempt to identify the various elements of Burtchville Township's economic base by:

1. Reviewing employment, payroll and business establishment data for St. Clair County from the *1989 Michigan County Business Patterns* book.

2. Analyzing employment, population and household income forecasts for the County and the Township generated by the SEMCOG *2020 Regional Development Forecasts*.
3. Examining the State Equalized Value of property within the Township for each class of real property.
4. Comparing the Township's property tax rate with those of neighboring communities.
5. Listing and classifying the businesses that are located in the Township.

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## St. Clair County Business Patterns

The *1989 Michigan County Business Patterns* book contains data for every county of the State on the employment<sup>4</sup>, payroll and business establishments of industries located in each county. Data from the *Business Patterns* book for St. Clair County is presented here.

**Table 25: Employees, Payroll & Establishments by Industry 1989**

	Employees		Annual Payroll		Establishments	
<b>Agriculture, Forestry &amp; Fishing:</b>	161	0.46%	\$1,838,000	0.27%	36	1.31%
<b>Mining:</b>	100	0.28%	\$1,947,000	0.28%	11	0.40%
<b>Construction:</b>	1,648	4.66%	\$36,271,000	5.26%	298	10.88%
<b>Manufacturing:</b>	10,523	29.78%	\$249,752,000	36.23%	248	9.05%
<b>Transportation &amp; Public Utilities:</b>	2,590	7.33%	\$87,177,000	12.65%	125	4.56%
<b>Wholesale Trade:</b>	1,518	4.30%	\$42,362,000	6.15%	143	5.22%
<b>Retail Trade:</b>	8,914	25.23%	\$96,162,000	13.95%	715	26.10%
<b>Finance, Insurance &amp; Real Estate:</b>	1,578	4.47%	\$30,372,000	4.41%	166	6.06%
<b>Services:</b>	8,050	22.78%	\$139,390,000	20.22%	834	30.45%
<b>Unclassified:</b>	249	0.70%	\$4,038,000	0.59%	163	5.95%
<b>Total:</b>	35,331	100%	\$689,309,000	100%	2,739	100%

In terms of employees, the leading industry in St. Clair County is the Manufacturing industry, with 10,523 employees in the County (29.78% of all employees in the County). The Retail Trade industry is second in the County with 8,914 employees (25.23%) and in third place is Services, with 8,050 employees (22.78%).

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<sup>4</sup>Here we refer not to the employment of the population of the County (as in the socio-economic section of this Plan, but rather the **employment positions existing** in the County.

The Manufacturing industry also leads in annual payroll, with \$249,752,000 in payroll (36.23% of the total annual payroll in the County). In this category, Services moves up to second place in the County, with \$139,390,000 in annual payroll (20.22%). Retail Trade drops to third place, with an annual payroll of \$96,162,000 (13.95%) and the Transportation and Public Utilities industries are a close fourth, with an annual payroll of \$87,177,000 (12.65%).

In terms of the number of business establishments, Services lead with 834 establishments (30.45% of all establishments in the County). Retail Trade is in second place with 715 establishments (26.10%) and Construction is in third place, with 298 establishments (10.88%).

Despite the relative rural character of much of the County, the Agriculture industry only accounts for less than 1% of all employees and annual payroll in the County and only 1.31% of the business establishments in the County.

**Table 26: Industry Establishments by Employment-Size Class, 1989**

	1-9	10-19	20-49	50-99	100-499	500-999	1,000+
<b>Farming, Forestry &amp; Fishing:</b>	34	1	0	1	0	0	0
<b>Mining:</b>	9	1	0	1	0	0	0
<b>Construction:</b>	250	33	14	0	1	0	0
<b>Manufacturing:</b>	105	38	51	25	28	1	0
<b>Transportation &amp; Public Utilities:</b>	92	13	11	4	4	1	0
<b>Wholesale Trade:</b>	107	23	14	3	1	0	0
<b>Retail Trade:</b>	465	129	87	28	6	0	0
<b>Finance, Insurance &amp; Real Estate:</b>	131	17	12	5	1	0	0
<b>Services:</b>	689	85	41	10	7	0	1
<b>Unclassified:</b>	158	3	1	0	0	0	0
<b>Total:</b>	2,036	343	231	77	48	3	1
<b>Percentage:</b>	74.33%	12.52%	8.43%	2.81%	1.76%	0.11%	0.04%

Most industry establishments in St. Clair County are quite small, with 74.33% having only 1 to 9 employees per establishment. Both the Transportation & Public Utilities and Manufacturing industries have establishments with as many as 500 to 999 employees per establishment and Services has an establishment with over 1000 employees.

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## Regional Development Forecasts

Periodically the Southeastern Michigan Council of Governments (SEMCOG) makes forecasts of population, households and employment for the entire seven-county SEMCOG region. These Regional Development Forecasts are apportioned to the various counties, cities and townships of the SEMCOG region using the Apportionment Method similar to the Share of County method described earlier in the *Population Trends & Projections* section of this Plan. The projections

apportioned to St. Clair County and Burtchville Township are presented on the following pages.

## ST. CLAIR COUNTY

**Table 27: St. Clair County Population 1990 - 2020**

	1990	1995	2000	2005	2010	2015	2020	1990–2020	
<b>Total</b>	146,333	158,921	167,478	175,050	182,766	191,525	199,160	52,827	36.10%
<b>Persons/HH</b>	2.73	2.73	2.71	2.68	2.66	2.63	2.61	-0.12	-4.40%

The total population of St. Clair County is expected to increase by 52,827 persons from 1990 to 2020, which translates to an overall growth rate of approximately 36%. Much of this growth will likely come from persons moving into the County from the Detroit area.

The number of persons per household is expected to continue its declining trend, dropping 4.4% from 1990 to 2020.

**Table 28: St. Clair County Total Households (By Income Quartile) 1990 - 2020**

<b>Without Children:</b>	1990	1995	2000	2005	2010	2015	2020	1990–2020	
<b>1<sup>st</sup> Quartile</b>	10,407	10,591	11,054	11,622	12,170	12,796	13,397	2,990	28.73%
<b>2<sup>nd</sup> Quartile</b>	9,429	10,387	11,299	12,401	13,535	14,681	15,631	6,202	65.78%
<b>3<sup>rd</sup> Quartile</b>	6,877	7,962	8,885	9,899	10,910	11,794	12,454	5,577	81.10%
<b>4<sup>th</sup> Quartile</b>	5,352	6,333	7,274	8,202	9,140	9,854	10,336	4,984	93.12%
<b>subtotal:</b>	32,065	35,273	38,512	42,124	45,755	49,125	51,818	19,753	61.60%
<b>With Children:</b>									
<b>1<sup>st</sup> Quartile</b>	3,835	4,025	3,845	3,579	3,381	3,284	3,205	-630	-16.43%
<b>2<sup>nd</sup> Quartile</b>	6,179	6,904	7,281	7,223	7,072	7,068	7,142	963	15.59%
<b>3<sup>rd</sup> Quartile</b>	6,404	6,736	6,916	7,008	7,105	7,411	7,796	1,392	21.74%
<b>4<sup>th</sup> Quartile</b>	4,384	4,745	4,816	4,860	5,016	5,393	5,823	1,439	32.82%
<b>subtotal:</b>	20,802	22,410	22,858	22,670	22,574	23,156	23,966	3,164	15.21%
<b>Total Households:</b>	52,867	57,683	61,370	64,794	68,329	72,281	75,784	22,917	43.35%

In this table, total households equal the total number of occupied housing units.<sup>5</sup> The households with children group is those households with one or more persons under 18 years of age. A household not containing any person under 18 is in the households without children group. Household income quartiles consist of four income classes. Each class contains ¼ of the SEMCOG region’s total households. Households are arranged in order of income, from lowest to highest. In terms of

<sup>5</sup> Please note that the 1990 total households figure is based on sample Census data and may differ slightly from the 100 percent count total.

1989 income, as reported in the 1990 Census, the quartile boundaries are as follows:

- Quartile 1:** Less than \$16,717
- Quartile 2:** \$16,717 to \$34,302
- Quartile 3:** \$34,302 to \$55,585
- Quartile 4:** More than \$55,585

Because future dollar values of income quartiles cannot be projected accurately, forecast households are simply reported as households by quartile, with no dollar value specified.

The total number of households in St. Clair County is expected to increase approximately 43% from 1990 to 2020, with 22,917 additional occupied housing units. 19,753 of these will be households without children, for a growth rate of approximately 62%. Households with children will increase by 15 %, for 3,164 additional housing units.

In terms of household income quartiles, most of the growth in households with and without children will occur in the 2<sup>nd</sup> through 4<sup>th</sup> income quartiles, with the highest growth rates in the 4<sup>th</sup> quartile (33% and 93%, respectively). However, for households without children, the greatest absolute increases will occur in the 2<sup>nd</sup> and 3<sup>rd</sup> quartiles. Furthermore, only the 1<sup>st</sup> quartile of households with children is expected to decline from 1990 to 2020.

**Table 29: St. Clair County Total Employment (By Industry) 1990 - 2020**

	1990	1995	2000	2005	2010	2015	2020	1990–2020	
<b>Agriculture, Mining &amp; Nat. Resources:</b>	2,533	2,535	2,462	2,412	2,491	2,522	2,546	13	0.51%
<b>Manufacturing:</b>	10,565	11,044	11,270	11,502	11,449	10,864	10,226	-339	-3.21%
<b>Transportation, Comm. &amp; Utilities:</b>	3,984	4,353	4,567	4,819	5,005	5,062	5,063	1,079	27.08%
<b>Wholesale Trade:</b>	1,657	1,808	1,945	2,175	2,314	2,333	2,327	670	40.43%
<b>Retail Trade:</b>	13,121	14,864	15,697	16,793	17,646	17,829	17,932	4,811	36.67%
<b>Finance, Insurance &amp; Real Estate:</b>	3,038	3,251	3,266	3,569	3,944	4,249	4,469	1,431	47.10%
<b>Services:</b>	19,440	21,217	23,744	26,255	27,643	28,595	29,798	10,358	53.28%
<b>Public Administration:</b>	1,392	1,484	1,690	1,868	1,970	2,022	2,037	645	46.34%
<b>Total Employment:</b>	55,730	60,556	64,641	69,393	72,462	73,476	74,398	18,668	33.50%

The total employment offered in the County is predicted to increase by 18,668 positions between 1990 and 2020 (33.5%). These positions may be held either by County residents or by non-residents who commute into the area. The fastest growing employment group in the County (in terms of employment) should be the Services sector, which is anticipated to grow by 10,451 positions, or 53.3%. This

is followed by the Finance, Insurance & Real Estate sector, which should grow by 47.1%, adding 1,431 jobs, the Public Administration sector, growing by 46.3% (but adding only 645 positions), the Wholesale Trade sector, with an expected growth of 40.4% (670 jobs) and the Retail Trade sector, with an expected growth of 36.7% (4,811 jobs). The number of jobs in Manufacturing is expected to decrease approximately 3.2%, resulting in the loss of 339 positions.

## BURTCHVILLE TOWNSHIP

**Table 30: Total Population 1990 - 2020**

	1990	1995	2000	2005	2010	2015	2020	1990–2020	
<b>Total:</b>	3,559	3,798	4,059	4,248	4,434	4,622	4,782	1,223	34.36%
<b>Persons/Household:</b>	2.62	2.63	2.59	2.55	2.51	2.47	2.43	-0.19	-7.25%

The population projections for the Township prepared by SEMCOG are much more conservative than the figure of 7,339 for the year 2020, as given in the Population Projections section of this Plan. Here, SEMCOG forecasts a population increase of only 1,223 persons, resulting in a 2020 population of 4,782. Accordingly, the forecast growth rate of approximately 34% is slightly less than the rate reported for the County.

As mentioned earlier in the Plan, the average household size is expected to drop from 2.62 persons per household to 2.43 persons per household. This will be a decrease of 7.25% between 1990 and 2020, which is almost double the decrease in household size projected for the County.

**Table 31: Total Households (By Income Quartile) 1990 - 2020**

	1990	1995	2000	2005	2010	2015	2020	1990–2020	
<b>Without Children:</b>									
<b>1st Quartile (lowest)</b>	201	189	192	202	214	229	245	44	21.89%
<b>2nd Quartile</b>	320	347	390	427	467	508	544	224	70.00%
<b>3rd Quartile</b>	162	166	171	189	209	229	249	87	53.70%
<b>4th Quartile</b>	160	208	263	310	356	390	413	253	158.13%
<b>subtotal:</b>	843	910	1,016	1,128	1,246	1,356	1,451	608	72.12%
<b>With Children:</b>									
<b>1st Quartile (lowest)</b>	119	112	97	80	67	56	47	-72	-60.50%
<b>2nd Quartile</b>	145	149	154	150	142	135	129	-16	-11.03%
<b>3rd Quartile</b>	131	122	116	107	100	99	103	-28	-21.37%
<b>4th Quartile</b>	115	151	182	199	212	227	239	124	107.83%
<b>subtotal:</b>	510	534	549	536	521	517	518	8	1.57%
<b>Total Households</b>	1,353	1,444	1,565	1,664	1,767	1,873	1,969	616	45.53%

The total number of households in Burtchville Township is expected to increase approximately 45% from 1990 to 2020, with 616 additional occupied housing units. 608 of these will be households without children, for a growth rate of

approximately 72%. Households with children will increase by less than 2%, resulting in only 8 additional housing units. These rates in household growth are only slightly higher than those for the County, despite greater decline in household size in the Township.

In terms of household income quartiles, most of the growth in households without children will occur in the 2<sup>nd</sup> through 4<sup>th</sup> income quartiles, with the highest growth rates in the 4<sup>th</sup> quartile (approx. 158%). However, for households with children, the only increase will occur in the 4<sup>th</sup> quartile (approx. 108%). Furthermore, the 1<sup>st</sup> through 3<sup>rd</sup> quartiles of households with children are expected to decline from 1990 to 2020 (approx. 60%, 11% and 21%, respectively).

**Table 32: Total Employment (By Industry) 1990 - 2020**

	1990	1995	2000	2005	2010	2015	2020	1990-2010	
<b>Agriculture, Mining &amp; Natural Resources:</b>	157	155	125	101	94	91	88	-69	-43.95%
<b>Manufacturing:</b>	15	15	25	34	42	49	56	41	273.33%
<b>Transportation, Comm. &amp; Utilities:</b>	0	0	11	19	26	28	29	29	-
<b>Wholesale Trade:</b>	21	21	26	31	35	36	37	16	76.19%
<b>Retail Trade:</b>	113	99	109	131	148	160	169	56	49.56%
<b>Finance, Insurance &amp; Real Estate:</b>	13	17	17	19	25	29	33	20	153.85%
<b>Services:</b>	81	93	133	184	207	222	236	155	191.36%
<b>Public Administration:</b>	0	0	2	4	4	4	4	4	-
<b>Total Employment:</b>	400	400	448	523	581	619	652	252	63.00%

A net total of 252 employment positions (which may be held either by Township residents or by non-residents who commute into the area) are expected to be created in Burtchville Township between 1990 and 2020, amounting to a growth rate of 63%, approximately double the County job creation rate for the same period. This job creation will come primarily from the Services sector, which will add 155 new positions (an increase of approximately 191%), the Retail Trade sector, which will add 56 new positions (an increase of approximately 50%) and the Manufacturing sector, which will add 41 new positions (an increase of approximately 273%). The Agriculture, Mining & Natural Resources industry will be the only employment sector to experience a decrease, losing 69 positions between 1990 and 2020 (a decrease of approximately 44%).

## SUMMARY

Both the County and Township populations should provide a good market for the burgeoning services and retail trade sectors, particularly with the growing number of households in each population. The services sector should provide a large number of moderate-income jobs (on average) to the area, reflected in the projected increase in moderate-income households in the County and in the Township.

## Taxable Value & Property Tax Rates

Taxable value is a measure of the portion of property (both real and personal) in a municipality subject to property taxes. In Michigan, taxable value is no greater than the State Equalized Value (S.E.V.) which is equal to 50% of the actual, or sales value of property (the value of property if sold).

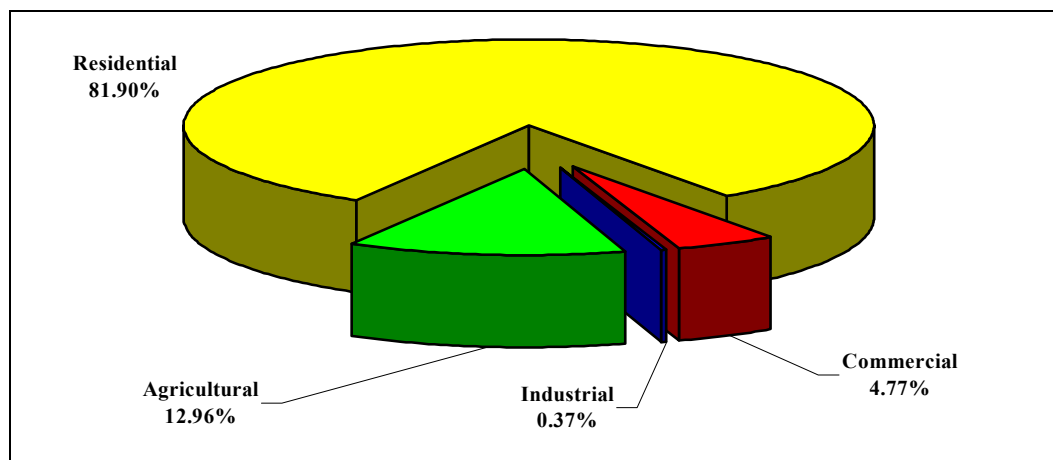
The total taxable value in a municipality is multiplied by the municipality's tax millage rate to calculate the total amount of property tax revenue available in the municipality. In Burtchville Township, the total taxable value, \$71,374,646 for real property in 1997(also known as the "tax base"), multiplied by the Township millage rate (\$2.28 per \$1,000 of Taxable Value in 1997), plus revenues from fees (for licenses, reviews, appeals, services to other communities and other services), interest on investments, grant income (if any) and income and other taxes (such as personal property), is that which could be spent for municipal facilities, services and personnel.

**Table 33: Burtchville Township S.E.V. & Taxable Value - 1997**

Property Class	S.E.V.	Taxable Value
RESIDENTIAL	\$70,541,743	\$58,452,782
COMMERCIAL	\$3,833,303	\$3,403,433
INDUSTRIAL	\$279,918	\$267,041
AGRICULTURAL	\$10,939,220	\$9,251,390
<b>Total:</b>	<b>\$85,594,184</b>	<b>\$71,374,646</b>

SOURCE: St. Clair Co. Equalization Dept.

**Figure 15: Burtchville Township Taxable Value by Class 1997**



SOURCE: St. Clair Co. Equalization Dept.

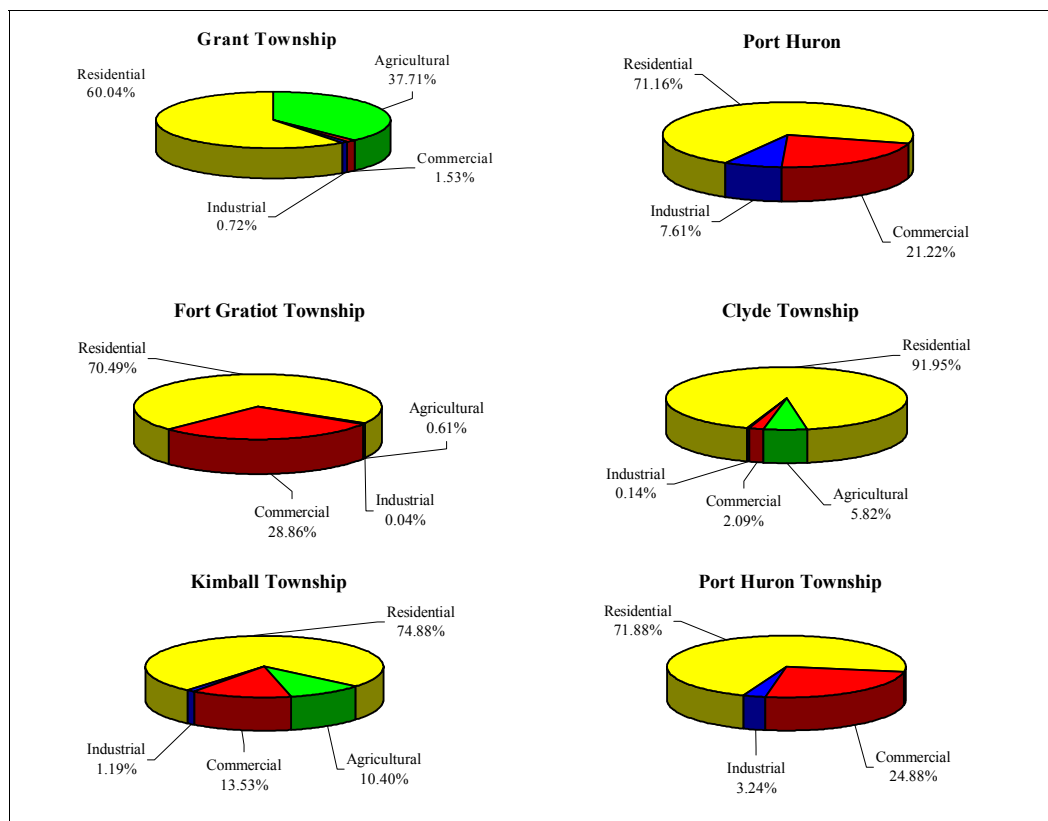
The property tax base in the Township has been generally maintained at relative taxable valuations of 81.90% residential, 4.77% commercial, 0.37% industrial and 12.96% Agricultural. The 1997 Township millage rate of \$2.28 per \$1,000 of State Equalized Value is \$0.0243 less than the rate in 1996.

**Table 34: 1997 Property Taxes  
Burtchville Township & Nearby Communities**

Community	Millage Rate	Taxable Value	Real Property Taxes
<b>BURTCHVILLE TOWNSHIP</b>	\$2.28	\$71,734,646	\$163,554.99
<b>Port Huron</b>	\$16.82	\$420,082,279	\$7,065,783.93
<b>Clyde Township</b>	\$0.77	\$92,504,867	\$71,228.75
<b>Fort Gratiot Township</b>	\$1.38	\$243,713,245	\$336,324.28
<b>Grant Township</b>	\$5.23	\$25,035,899	\$130,937.75
<b>Kimball Township</b>	\$0.86	\$100,817,944	\$86,703.43
<b>Port Huron Township</b>	\$5.28	\$139,014,635	\$733,997.27

SOURCE: St. Clair Co. Equalization Dept.

**Figure 16: 1997 Taxable Value by Class—Nearby Communities**



SOURCE: St. Clair Co. Equalization Dept.

Burtchville Township has one of the lowest millage rates of the seven communities in the area. It is over 14 mills less than the rates for the City of Port Huron, which, as a city, is allowed much higher millage rates than townships. Further, it is 2 mills less than the rate for Port Huron Township and Grant Township. Only Fort Gratiot Township, Clyde Township and Kimball Township have lower millage rates. Also, the Township, because of its small land area, has one of the lowest tax bases in the area.

With regard to taxable value by class, the percentage of taxable value classified as agricultural in Burtchville Township is the one of the highest in the area, second

only to Grant Township. 12.96% of the Township's taxable value is classed as agricultural, compared with 37.71% in Grant Township, 10.40% in Kimball Township and 5.82% in Clyde Township.

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## List of Businesses Located in Burtchville Twp.

Through field studies, examination of telephone directories and examination of a list of businesses within the 48059 zip code, the following list of business establishments was produced. Each business establishment was classified as to the type of business or service that it primarily conducts. A six-digit code number corresponding to the *Standard Industrial Classification System of the United States* (SIC) was assigned to each business. These code numbers were then sorted by major classification (indicated by the first two digits of the SIC code number) in order to obtain a listing of business establishments by the following categories:

- Agriculture, Forestry and Fishing
- Construction
- Manufacturing
- Transportation and Communications
- Wholesale Trade
- Retail Trade
- Finance, Insurance and Real Estate
- Services
- Public Administration
- Nonclassified Establishments

Several significant conditions and trends become obvious upon a thorough review of Burtchville Township's business list. These findings are as follows:

- Approximately 60% of the business establishments in the Township are in the Retail Trade and Services sectors. Thus, any recession or economic downturn involving these industry sectors could have a disproportionate effect on the economy of the Township as a whole.
- Only two businesses in the Township (just over 3% of the total number of 65 business establishments in the Township) are in the Manufacturing sector.
- Approximately 84% of the business establishments in the Township employ from 1 to 9 persons. Thus, the failure of any single business establishment would have a relatively minor impact on the economy of the Township as a whole.

## AGRICULTURE, FORESTRY AND FISHING

S.I.C. #	Business Name	Address
074201	Animal Hospital of Lakeport	7269 Lakeshore Rd.
075212	Setter's Sitter's	3750 Washington St.
078206	Lawn Ranger Grounds Specialist	6220 State Rd.
078206	Turf Tender Lawn Service	3800 Myrtle Rd.

## CONSTRUCTION

S.I.C. #	Business Name	Address
152103	Designed Construction	8683 Lakeshore Rd.
154213	D L Custom Builders	8157 Kimball Dr.
154213	Huron Homes & Development	7585 Huron Shores Dr.
171105	M & J Plumbing	4420 Norman Rd.
171105	Mark's Plumbing & Heating	7141 State Rd.
174203	Williams & LaBadie Dry Wall	4987 Jeddo Rd.
175103	Blue Water Woodworks	6191 Lakeshore Rd.
175103	Custom Concepts	8565 Lakeshore Rd.
176111	Siding Specialist	3917 Burtch Rd.

## MANUFACTURING

S.I.C. #	Business Name	Address
272101	Towing & Equipment Magazine	8734 Lakeshore Rd.
371410	PCI Truck Accessories	4710 Burtch Rd.

## TRANSPORTATION, COMMUNICATIONS & PUBLIC UTILITIES

S.I.C. #	Business Name	Address
421210	George D Hill Trucking, Inc.	6388 North Rd.

## WHOLESALE TRADE

S.I.C. #	Business Name	Address
506309	Service Physical Testers	6169 Lakeshore Rd.
508426	Stepco, Inc.	4010 Harris Rd.
508453	Bitner Brothers Tool Co.	6165 Lakeshore Rd.
519112	Feeds, Inc.	3752 Burtch Rd.
519910	Atlantic Brass Co.	3640 Milwaukee Rd.

## RETAIL TRADE

S.I.C. #	Business Name	Address
526104	Northland Gardens	7269 Lakeshore Rd.
527102	Great Lakes Homes, Inc.	8032 Kimball Dr.
541105	Lakeport Market	7096 3 <sup>rd</sup> St.
541105	Lakeport State Park Store	7610 Lakeshore Rd.
562104	Bernice's Bridal Shoppe	4380 Harris Rd.
569917	Greg Lashbrook	4756 Burtch Rd. # 69
571236	Clare Dunkel & Associates	6091 Wild Rose Lane
581208	Duffy's Bar & Restaurant	7140 Lakeshore Rd.
581208	Stavros Restaurant	7870 Lakeshore Rd.
581208	Table Top Restaurant	7116 Lakeshore Rd.
581222	Pizzas & Cream	7161 Lakeshore Rd.
581301	Tally-Ho Inn	7933 Lakeshore Rd.
592104	Hillman's Par-T-Port	6695 Lakeshore Rd.
594131	Nick & Mac's Party & Bait Shop	7086 4 <sup>th</sup> St.
594143	Northpoint Bait Archery & Barber Shop	7125 Lakeshore Rd.
594716	Vinny's Mart	6011 Lakeshore Rd.

## FINANCE, INSURANCE AND REAL ESTATE

S.I.C. #	Business Name	Address
602101	Eastern Michigan Bank	7090 Lakeshore Rd.
616201	Web Consultants	7196 2 <sup>nd</sup> St.
651501	Indian Trails North	3650 Metcalf Road

## SERVICES

S.I.C. #	Business Name	Address
701111	Cozy Cabins	7992 Lakeshore Rd.
701111	Lakeport Resort	7052 Lakeport Dr.
701111	North Shore Resort	6996 Lakeport Dr.
701111	Dimick's Cabins	8017 Lakeshore Rd.
703203	Lake Huron Methodist Camp	8794 Lakeshore Rd.
723106	Tattle Tails Ltd.	7077 Lakeshore Rd.
734916	Mastersweep Chimney Care	7780 Babcock Rd.
738902	Ed Schwanz's Interiors	7770 Rest Haven Ct.
738988	Harmer Enterprises	8086 Lakeshore Rd.
764105	Antique Workshop	7077 Lakeshore Rd.
791101	Dance Arts Studio	8180 Kimball Dr.
799935	St. Edward's On the Lake	6962 Lakeshore Rd.
799951	Lakeport State Park	7452 Lakeshore Rd.
804101	Advance Back Care	7147 Lakeshore Rd.
811103	Alandt & Alandt	6406 Lakeshore Rd.
821103	Lakeport Elementary School	3835 Franklin St.

<b>S.I.C. #</b>	<b>Business Name</b>	<b>Address</b>
821103	St. Edward's School	6995 Lakeshore Rd.
835101	St. Edward's Extended Daycare	6995 Lakeshore Rd.
866107	Central Lakeport United Methodist Church	3597 Milwaukee Rd.
866107	Church of Christ Restored	6335 State Rd.
866107	North Lakeport Wesleyan Church	3871 Harris Rd.
866107	St. Edward's On the Lake Rectory	6945 Lakeshore Rd.
871105	Armstrong Technical Engineering	4308 Norman Rd.

### **PUBLIC ADMINISTRATION**

<b>S.I.C. #</b>	<b>Business Name</b>	<b>Address</b>
912104	Township Hall	4000 Burtch Rd.

### **NONCLASSIFIED ESTABLISHMENTS**

<b>S.I.C. #</b>	<b>Business Name</b>	<b>Address</b>
999977	Lakeport Properties, Inc.	7256 Lakeshore Rd.

# Natural Resources

The optimum arrangement of land uses in a community is that which properly utilizes the natural resources and physical features of that community, so that any given land use is located only in an area where the natural resources and physical features of the area are best suited for that particular use. For example, areas in a community that have soils that are considered “prime agricultural soils” and are relatively flat and free of wetlands are best suited for farming uses. Other areas that contain woodlands may be better suited for recreation uses. Still other areas may have natural features best suited for residential development. Thus, it is very important to make a thorough inventory of the natural resources and features in the Township.

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## Topography

The topography of Burtchville Township is generally characterized by very gently rolling terrain throughout the entire area. There is a slight west to east downslope that provides for drainage to Lake Huron, with elevations ranging from 660 feet above sea level in the west to less than 590 feet along the lakeshore.

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## Soils

Soil characteristics are an important determinant of land use potential. Not only do soils influence the suitability of land for agricultural purposes, they also help to determine whether or not a parcel is suitable for more urban forms of development such as housing, business, industry, roads and utilities (water, gas & sewer).

## SOIL ASSOCIATIONS

There are twelve major soil associations found in St. Clair County, according to the *Soil Survey of St. Clair County*. These soil associations are areas with a distinctive and/or proportional pattern of one or more major soils and/or soil complexes and at least one minor soil. The soils in one association may occur in another, but in a different pattern. Of the twelve major soil associations, three can be found in Burtchville Township and they are as follows:<sup>6</sup>

### **Lando-Avoqa Association**

The most prominent soils in this association are somewhat poorly drained and have high water tables which require drainage prior to development. These soils occur in areas that are largely cleared and cultivated. They are further characterized by low natural fertility and may be droughty in mid-summer. These soils are mainly concentrated in the western portion of the Township.

### **Wainola-Deford Association**

The soils that constitute the major portions of this association are somewhat poorly drained. Some minor soil categories in this larger group, however, have better drainage characteristics. Some areas within this association have been cleared and cultivated, while others are either urbanized or are idle. The major soils in this group have low fertility and low available water capacity. Further, they have a high seasonal water table and require drainage. These soils are confined to the northwestern portion of the Township, north of Burtch and east of North Roads.

### **Eastport-Wainola-Tobico Association**

This association occurs on glacial-like beaches along the shoreline of Lake Huron in a landscape characterized by a pattern of ridges and troughs. The prominent soils in this association range from well-drained to poorly-drained soils. Also included in this association are Alluvial land and the sandy lake beaches of Lake Huron. These areas are generally poorly drained and occur on the floodplains. Most of the area occupied by these soils were either cleared or cut over. In many cases, the soils have been developed for summer cottages or more fully urbanized. These soils occur in Burtchville Township along the Lake Huron shoreline, extending west to a depth of approximately  $\frac{3}{4}$  mile.

## LIMITATIONS OF SOILS FOR SEPTIC FIELDS

The *Soil Survey for St. Clair County* also classifies individual soils by the degree of limitations for use in septic tank disposal fields.<sup>7</sup> In determining these limitations, the factors considered are depth to the water table, permeability rates,

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<sup>6</sup>Please see the *Soil Survey of St. Clair County, Michigan*, p. 2 -6: 1974, USDA Soil Conservation Service

<sup>7</sup> Please see the *Soil Survey of St. Clair County, Michigan*, p. 103: 1974, USDA Soil Conservation Service

hazard of flooding, and topography. The rating of the soils is based on the limitations of the soils to absorb effluent from septic tanks. Soils are rated for three degrees of soil limitations:

1. **Slight**, where the soil is relatively free of limitations or limitations are easily overcome.
2. **Moderate**, where soil limitations need to be recognized but can be overcome with good management and careful design.
3. **Severe**, where soil limitations are severe enough to make use questionable.

Generally, urban and residential development beyond existing public sewer areas should be limited to those areas having soils with only slight or moderate limitations for septic use.

Most of the soils found within the Township are classified as having severe limitations for septic field use. A narrow (up to ½-mile wide) band of soils with moderate limitations can be found along the Lake Huron shoreline, and smaller, isolated areas of moderate and slight limitations can be found in the western parts of the Township.

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## Wetlands

Wetlands serve a number of important environmental functions that need to be considered during the community planning process. The most important functions of a wetland are to serve as a natural filtration device, by trapping and storing nutrients from upland runoff in plant tissue and to serve as a settling basin for silt generated from upland erosion. These functions can be seriously damaged and possibly destroyed by poor land use practices. Since every wetland has a unique tolerance for filtering runoff from the uplands surrounding it, development in those adjacent areas can create more nutrient and sediment inflow than the wetland can handle. Such an overload can damage the wetland to the point where it can turn into a settling basin of polluted, foul water, destroying the area's ecological health and possibly posing a threat to the physical health of the area's population.

Even more serious is the removal of wetlands. The removal of these natural features by dredging or filling will have an immediate impact on the water quality of streams and lakes below them in the watershed system. Preserved wetlands improve water quality, moderate flooding, and stabilize water supplies, thereby providing for overall environmental health and stability.

### WETLANDS PROTECTION

In recognition of the importance of wetlands, the State of Michigan enacted the *Goemaere-Anderson Wetlands Protection Act* (Act No. 203 of the MI Public Acts

of 1979), authorizing regulation by the DNR of development in and around wetlands. This legislation defines wetlands as “land characterized by the presence of water at a frequency and duration sufficient to support and that under normal circumstances does support wetland vegetation or aquatic life” and generally regulates the development of wetlands over five acres in size, or which are contiguous to the Great Lakes or to a river, stream, pond or inland lake. Permits are required for the following activities:

- depositing or placing fill material in a wetland;
- dredging or removing soil from a wetland;
- constructing, operating or maintaining any use or development in a wetland;
- draining surface water from a wetland.

The issuance of permits for these activities depends on whether or not the activity in question is in the public interest and whether or not it is otherwise lawful (that is, permitted by the zoning ordinance and/or other ordinances of the community).

## **IDENTIFYING WETLANDS**

As important as wetlands are, it can sometimes be very difficult to properly identify and define a wetland. Often, the only sure way to determine if a particular parcel is a wetland or not is to do on-site surveys. This is because (physically & legally) land does not have to be wet all of the time in order to be defined as a wetland. Repeated site surveys can show if water is present frequently enough for the parcel to qualify (legally) as a wetland. Also, wetlands normally contain unique forms of plant life, which, again, are best identified by on-site surveys.

### **Hydric Soils**

However, for planning purposes, extensive on-site surveys are rather impractical (too time consuming and often too expensive), so other sources of wetland information must be used to help us determine what areas of the Township contain wetlands. One possible source is the list of “hydric soils”—those soils deemed likely to support wetlands—developed by the Soil Conservation Service (SCS) of the U.S. Dept. of Agriculture. This list is keyed to the SCS Modern Soil Survey maps, thus making it possible to show where such soils can be found, and hence, what areas are likely to be wetlands.

There are three limitations to using the soil surveys and the list of hydric soils. First, the soil maps can not show smaller occurrences of soil types, particularly those smaller than two acres. Also, the presence of a wetland soil does not legally define an area as a wetland, so this information can not be used as a legal guide. Finally, as with all information sources, there are occasional errors.

## **National Wetland Inventory**

Another source of information on wetlands is the National Wetland Inventory (NWI) maps. These maps are created by interpretation of aerial photographs and overlaying apparent wetland areas onto standard topographic maps.

Again, there are limitations to using this kind of information. Since they are produced by mass scale aerial photograph interpretation, there is a significant source of error. Some areas have been interpreted from black & white photographs, others from infrared color photographs that are easier to interpret. Most areas have not been verified by field checks. Due to scale, small areas might be missed. Finally, an aerial photograph reflects a specific time and condition and may not reflect a “typical” condition.

## **BURTCHVILLE TOWNSHIP WETLANDS**

For this plan, the National Wetlands Inventory map of Burtchville Township will be used. According to this map, there are approximately 475 acres of wetlands in the Township. Most of these are found in Sections 6, 7, 17, 18, 20, 29, 31 and 32.

NOTE: Actual on-site inspection of these areas by the Michigan Dept. of Natural Resources is necessary to precisely determine the characteristics and extent of these wetlands.

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## **Floodplains**

Floodplains are areas where floodwaters spread when the natural stream or river channel overflows its banks because it cannot accommodate runoff from storms or melting snow. Dissipation of flood waters into the floodplain helps reduce the amount of damage incurred by flooding. In addition to providing natural buffers for floods, floodplains provide critical functions as groundwater recharge areas and wildlife habitat.

When the floodplain is altered by grading, filling, or the erection of structures, its flood-dissipating functions are reduced. Oftentimes, changes to the natural system aggravate flooding and damages. Factors that increase flooding problems include:

- Removing vegetation that stabilizes banks of streams and rivers and slows flood waters.
- Erecting structures that deflect or inhibit flow of floodwaters can increase flood elevations and modify flow paths, shifting flooding problems and increasing erosion.
- Constructing bridges, culverts, building, or other structures that encroach on the floodplain and reduce the storage area available for floodwaters.
- Building drainage systems that quickly feed stormwater into the receiving body.

- Channelizing streams (straightening meandering watercourses to expedite drainage) which transfers flooding problems downstream alters wildlife habitat.
- Filling and dumping in floodplains, which can cause a considerable amount of damage as floodwaters rise and transport debris that can interfere with the movement of floodwaters.

## **NATIONAL FLOOD INSURANCE PROGRAM**

In response to widespread life and property loss associated with flooding, and to help those affected by floods, the federal government has promoted local floodplain management strategies through education programs and enactment of the National Flood Insurance Program (NFIP). The insurance program is basically the only source of flood insurance and is only available to property within communities participating in the NFIP. It is administered by the Federal Emergency Management Agency (FEMA). In order to participate in the subsidized insurance program, communities are required to adopt and enforce regulations regarding development in flood-prone areas. Participation in the program is voluntary and relies heavily on state and local involvement. However, there is a strong incentive to participate, as FHA, VA, and other federally insured mortgages are prohibited in identified floodplains, unless flood insurance is carried.

## **STATE FLOODPLAIN PROTECTION**

Augmenting federal protection measures, the State of Michigan has implemented rules that require a permit to occupy, fill, or grade lands in a floodplain, streambed or channel of a stream. FEMA flood insurance studies, rate maps and other state data are used to determine floodplain boundaries. The flood area within the jurisdiction of state and federal programs is the 100-year floodplain. A 100-year flood (which results from approximately 5 inches of rainfall in 24 hours) has a one percent chance of occurring in any given year. This means that a structure in the 100-year floodplain has a 26% chance of being flooded before the average mortgage is paid off, if it is not properly elevated.

## **BURTCHVILLE TOWNSHIP 100-YEAR FLOODPLAIN**

According to the National Flood Insurance Program rate map for the Township, the 100-year floodplain is located in the following areas:

- Within a narrow strip along the Lake Huron shoreline
- Along Burtch Creek from Lake Huron to M-25
- Along Milwaukee Creek from Lake Huron to State Road
- Along the Meadow Lawn Drain from Lake Huron to Norman Road

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# Woodlands

Wooded areas also serve significant environmental functions that need to be recognized and acknowledged. These functions include watershed protection, air quality protection, noise abatement and weather protection. There are also many less quantifiable, but highly important benefits provided by woodlands.

## **WATERSHED PROTECTION**

A wooded area can be of great value to a watershed area. The canopy of trees aid in breaking the force of precipitation, thereby decreasing erosion. Erosion is further inhibited by the fibrous root system of the understory plants, as well as the layer of leaf or needle litter. Woodlands can also reduce the volume of stormwater runoff. Clear-cut lands can produce excessive runoff unless trees are replaced by other vegetation with comparable water retaining capacity. With no soil and vegetation to moderate runoff from precipitation, flooding may result, in addition to a loss of precipitation ordinarily retained and recharged into groundwater reserves by the woodland.

## **AIR QUALITY PROTECTION**

Woodlands improve air quality and afford protection from wind and dust. Leaves and branches moderate the strength of winds and, when moistened with dew or rainwater, reduce suspended particles in the air, which are later washed off with rainwater. Plants also serve to moderate the effect of chemical pollutants in the air by absorbing some ozone, carbon dioxide, and sulfur dioxide.

## **NOISE ABATEMENT**

A dense stand of trees can significantly cut noise from adjacent factories or highways by six to eight decibels per 100 feet of forest. Moreover, the moderating effects of forests on temperature and wind can significantly cut the sound-carrying capacity of the atmosphere.

## **WEATHER PROTECTION**

The resilience of woodlands creates a microclimate around the tree stand itself. Woodland qualities that moderate and buffer temperature, precipitation, runoff, wind and noise are features of this microclimate effect. The benefits of this microclimate effect to surrounding urban and suburban areas can be significant. An urban area devoid of vegetation is the exact opposite of the forest microclimate. It increases the range of temperature fluctuations much like the climatic extremes of a desert.

The sun's energy striking streets and buildings is changed into heat, further increasing the temperature on a hot day; at night, the buildings lose heat and offer no protective cover from night chill or winter winds. Thus, if woodlands are interspersed among built-up areas, the effects of their microclimates can be felt in

adjacent urban areas, moderating fluctuations in temperatures by keeping the surrounding air cooler in the summer and daytime and warmer in the winter and evening.

### **OTHER BENEFITS OF WOODLANDS**

The significance of woodlands is given added weight by the less quantifiable benefits that they provide to the public. Not only are woodlands important buffers, they also add aesthetic values and provide attractive sites for recreational activities such as hiking, camping, and other passive recreational pursuits.

Continued stability of good real estate values is a secondary benefit offered by woodlands. Since people choose to live in and around woodlands, providing for woodland protection in the planning of development projects will maintain favorable real estate values.

### **WOODLANDS IN BURTCHVILLE TOWNSHIP**

Burtchville Township is fortunate inasmuch as extensive portions of the community are occupied by large, woodland areas. These are located throughout the community. The most extensive wooded areas are located in the northern, central and eastern portions of the Township. While the variety and quality of existing trees obviously vary from location to location, the extent of this woodland coverage offers ample opportunities to incorporate existing vegetation into future development activities.

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## **Agricultural Lands**

Soil data is the principal source of information used by the U.S. Department of Agriculture Soil Conservation Service (SCS) to determine those areas of the Country that have the greatest potential for long-term agricultural production. St. Clair County includes a considerable amount of land (over 294,000 acres) that has been designated by the SCS to be either prime or unique farmland. Prime farmland, because of characteristics such as level topography and soil characteristics (fertility, moisture levels, depth, and texture) is the land most suitable for row crops. Unique farmlands are lands other than prime lands that have a special combination of characteristics (e.g., soil qualities, location, topography, and growing season) that make them ideally suited for specialty crops like vineyards, orchards, and vegetables. Much of this prime and unique farmland is confined to the western portions of the County.

### **PRIME FARMLAND IN BURTCHVILLE TOWNSHIP**

A relatively small proportion of the County's prime agricultural land is located in Burtchville Township. These areas are confined primarily to the western portions of the Township, in particular, Sections 13, 24, 25, 31, 36, the north ½ of Section

19, the east ½ of Sections 7 and 18, and the west ½ of Sections 1, 12, 29 and 32. No unique farmland is found in Burtchville Township.

The long-term use of this land for agricultural purposes will be influenced by factors other than just soil characteristics. These factors include land speculation activity, increasing land values, taxation and assessment practices, and general economic trends. The desirability of preserving land for long-term agricultural purposes and to accommodate the demand for a range of urbanized uses are situations that will be addressed during the planning process.

## **PUBLIC ACT 116 LANDS**

The Public Act 116 program (P.A. 116) is an attempt by the State of Michigan to preserve and protect farmland from development into higher intensity uses. In the P.A. 116 program, the State enters into contracts with owners of agricultural land that is deemed threatened by development, whereby the landowner agrees to keep the land in question as agricultural for at least ten years, in exchange for an income tax credit. Also, the property in question will be exempt from any special assessments.

There are five parcels in the Township currently enrolled in the P.A. 116 program, containing a total of approximately 564 acres. The first parcel is located in the west ½ of Section 19, and the agreement for this parcel is scheduled to expire on December 31, 2001. The second and third parcels are located in the southeast ¼ and west ½ of Section 25 respectively, with agreements that will expire on December 31, 2005 and December 31, 2004. The fourth parcel is located in the west ½ of Section 13, and the agreement for this parcel is scheduled to expire on December 31, 2004. The fifth parcel is located in the west ½ of Section 12, with an agreement that will also expire on December 31, 2004. With the exception of the first parcel, these parcels appear to contain significant amounts of prime farmland.

# Community Facilities & Services

The facilities, services and programs offered by the Township to its residents and businesses are essential to maintaining an adequate standard of living and are a key factor in determining whether or not a community can thrive and grow. Without quality recreation facilities, adequate sewer and water capacity, convenient refuse pick-up and sufficient police and fire protection, a community will find it difficult to attract new businesses and residents, let alone retain existing businesses and residents.

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## Township Hall

The Burtchville Township Hall is located on a 26-acre parcel at the northeast corner of Burtch Road and State Road. The Township Hall houses the Township administration and the Township Fire Department.

### CIVIC CENTER

The concept of a civic center as a community focal point is not new. The advantages of this locational feature have been well known for many years. The location of a civic center at or near the area of greatest use in a community serves to strengthen the economy of the area and brings a public awareness and economic vitality to that area of the community.

The benefits of a civic center can be both functional and aesthetic. By creating a grouping of essential public facilities, such as administrative offices, police station, fire station, and parking, people will be drawn to the uses surrounding the civic center. If properly designed, nearby commercial enterprises will attract people from the civic center. This will add to the economic vitality of the community because people are placed within easy access of many of their daily and

weekly activities. It also decreases the time and distance residents must travel to complete their trips.

The existing Township Hall property should be large enough to accommodate a reasonably sized Civic Center.

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## **Public Safety**

Among the most important services provided by local government are the public safety services of police and fire protection. Police and fire fighting facilities are important because they protect residents, businesses, and industries from financial loss and personal injury, and because they can substantially reduce the cost of property insurance.

### **POLICE**

Police protection for the Township is provided by the St. Clair County Sheriff's Department and Michigan State Police as part of their regular patrols and service.

As the Township continues to grow, so will the need for police protection. Thus, it may become necessary for the Township to establish its own police department, especially if the cost of doing so becomes less than the cost of contracting for increased Sheriff's Department patrols. Furthermore, the Township could defray the cost of its own police department by contracting with neighboring communities to provide police protection in those communities.

### **FIRE DEPARTMENT**

In the Township Hall site, the Township operates a volunteer fire department. The facilities and equipment available to the fire department appear to be adequate to meet future demands. However, as the population of the Township grows, it may be necessary to add full-time professional staff.

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## **Parks & Recreation**

Burtchville Township, Port Huron Area School District and the State of Michigan are the three principal providers of public recreation facilities to Township residents. The range of both recreation facilities available within the Township are described as follows:

### **TOWNSHIP FACILITIES**

Burtchville Township operates one existing park site and owns land for two other sites. The existing park site is located just east of Lakeshore Road in Section 17 and contains one 1.86-acre parcel on the Lake Huron shoreline and one 14-acre parcel adjacent to the west. Facilities at this site include:

- Swimming beach;
- Picnic shelter w/ tables and a barbecue grill;
- Playground equipment (swing set, teeter-totter, merry-go-round, slide);
- Softball diamond;
- Two tennis courts;
- Toilet/shower building;
- Campground office and storage buildings (the 14 acre parcel was formerly used as trailer campground);
- Parking lot.

The second site is a 5 acre, heavily wooded, undeveloped parcel in the Dixie Park Plat in Section 29. This parcel was dedicated to the public when the area was platted in 1921.

The third site is located at the southwest corner of Harris Road and Lakshore Road. This site contains one building which is rented out to the Lakeport Lions Club as a meeting place. The remainder of the 2.4 acre parcel is wooded and undeveloped.

## **SCHOOL FACILITIES**

The Port Huron Area School District operates one school site in Burtchville Township, Lakeport Elementary School. This elementary school includes three baseball diamonds used for the Burtchville Township Little League, a softball diamond, a soccer field, a full range of playground equipment and a large open play area.

## **STATE FACILITIES**

In Burtchville Township, the State of Michigan operates the Lakeport State Park, which is located on two parcels immediately north and south of Lakeport. This 565-acre park has 314 campsites with electricity, swimming beaches, hiking trails and boating and fishing access.

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## **Dept. of Public Works**

The Township Public Works Department is responsible for the upkeep and maintenance of the water and sewer system and the Township cemetery. This department is located at 7097 Second St., in Lakeport.

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## **Schools**

A wide range of educational opportunities and services are available to Township residents. They are described as follows:

### **PORT HURON AREA SCHOOL DISTRICT**

The southern one-half of the Township is served by the Port Huron Area School District. The district has one existing school site located within the Township, Lakeport Elementary School. On a system wide basis, elementary school enrollment has been maximized for the current school year.

### **CROSWELL-LEXINGTON COMMUNITY SCHOOL DISTRICT**

The northern one-half of the Township is served by the Crosswell-Lexington Community School District. The district does not have any school sites within the Township. The closest district facility is the Meyer Elementary School in Lexington, approximately seven miles north of the Township.

### **INTERMEDIATE SCHOOL DISTRICT**

The Intermediate School District of St. Clair County (ISD) provides adult education services, vocational programs and special education services to eight school districts in the County, including the Port Huron Area School District. These services are provided by facilities at the ISD Educational Service Center, located at 499 Range Road in Kimball Township.

One such facility is the Technical Education Center (TEC), which offers job training and placement opportunities for nearly 1,200 high school and adult students. These programs are competency based, allowing students to progress according to individual ability and experience.

As part of the ISD Educational Service Center complex, severely and profoundly mentally impaired students are provided training, education and enrichment opportunities at the Woodland Development Center.

Curriculum development, media, instructional materials and training for teachers and volunteers are other ISD supportive services designed to strengthen area school programs.

### **ST. CLAIR COUNTY COMMUNITY COLLEGE**

St. Clair County Community College, located at 323 Erie Street in Port Huron, is a comprehensive community college offering associate degrees in both transfer and occupational areas. The college provides the freshman and sophomore courses needed to fulfill requirements for transfer to a senior college or university. The occupational curriculum is designed for those who plan to enter directly into business or industry from community college.

The Community and Business center of the Community College works closely with business to schedule seminars and classes for employee upgrading and training on campus as well as in the work place.

## **PAROCHIAL SCHOOLS**

There is one parochial school located in the Township, St. Edward's on the Lake Catholic School. This school, located on M-25 just south of Washington St., serves Pre-school through Grade 5 students and has an enrollment of 120.

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## **Sewer & Water**

The population capacity of a community is directly related to the availability and capacity of the public sanitary sewer and water systems. As the community grows, increased demands are placed on these systems to provide the necessary infrastructure required for commercial, industrial and residential development.

### **SEWER**

Currently there are no sewer facilities available in the Township. Residences and businesses in the Township are served by individual septic tanks.

### **WATER**

Public water lines were extended from the Detroit Water Department facility in Fort Gratiot Township into Burtchville Township in 1997. These new water lines follow along State Road from Metcalf to Burtch Road and along the entire length of M-25 in the Township. The Township water service area covers most of the area between M-25 and the Lake Huron shoreline, and most of the area between M-25 and State Road south of Burtch Road. Residences and businesses outside the water service area are served by individual on-site wells.

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## **Transit**

Since 1976, the Blue Water Area Transit system has provided bus service to Port Huron, Port Huron Township, Burtchville Township, and Fort Gratiot Township residents. Blue Water Area Transit has seven regularly scheduled fixed bus routes operating in Port Huron, Port Huron Township, and Fort Gratiot Township. All fixed-route buses are equipped with wheelchair lifts. Dial-A-Ride service is also available in Port Huron, Fort Gratiot Township and Burtchville Township.

The Blue Water Area Transit system is operated by the Blue Water Area Transportation Commission, an independent public agency. The Commission is financed in part by an operating millage levied in Port Huron, Port Huron Township, Fort Gratiot Township, and Burtchville Township.

# Thoroughfare Plan

An important element of the Master Planning process is the development of a plan for the over-all system of streets and roads in a community. This system provides for the movement of people and goods to and from places both inside and outside the community. Also, the right-of-ways of roads provide places for various public utilities such as: water lines, gas lines, sanitary and storm sewers, cable television lines, electrical power and telephone lines, in addition to the actual roadway surface. Because of these functions of roads, the system of roads in a community can impact on economic conditions, environmental quality, energy consumption, land development and the overall quality of life in a community.

With the implementation of the Thoroughfare Plan, strength will be lent to the development of the Township in the pattern envisioned by the Future Land Use Plan. Because of the close relationship between transportation and land use, improvements to the system of thoroughfares will increase the development possibilities for the Township.

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## Principles

To be effective, a Thoroughfare Plan must adhere to certain principles. The principles associated with developing an effective thoroughfare plan are as follows:

- The Thoroughfare Plan must provide for a road system in the Township that will be safe, convenient and efficient in the movement of people and goods.
- The Thoroughfare Plan must effectively integrate local roads with regional thoroughfares, but segregate through traffic from local residential streets.

- The Thoroughfare Plan must ensure adequate ingress and egress for all land uses.
- The Thoroughfare Plan must ensure right-of-way dedications and reservations consistent with local, county and state proposals.
- There must be coordination of the Thoroughfare Plan with the existing and proposed patterns of land use.
- The Thoroughfare Plan must be developed to accommodate all types of traffic expected in the Future Land Use Plan.
- The Thoroughfare Plan must facilitate governmental and private development of streets and thoroughfares through an orderly and progressive Capital Improvement Program for the Township.
- Modern design standards must be used in planning rights-of-way, pavement width and other characteristics of streets.

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## Functional Classification of Streets & Roads

The first step in creating a thoroughfare plan is to inventory the Township road network by classifying each road by planned function/right-of-way categories. The four categories used in this plan will be:

1. Major Thoroughfares
2. Secondary Thoroughfares
3. Collector Thoroughfares
4. Local Thoroughfares

These functional classifications are defined as follows:

### **MAJOR THOROUGHFARES:**

These roads have a planned right-of-way of at least 150' and are intended to carry high volumes of through traffic both within the Township and to or from the surrounding region. Major thoroughfares also can provide access to larger abutting properties and large commercial or business areas, such as shopping centers, factories and industrial parks.

### **SECONDARY THOROUGHFARES:**

These roads have a planned right-of-way of 120' and serve many of the same functions as major thoroughfares (carrying through traffic and providing access to large scale abutting uses), but at somewhat lower traffic volumes and speeds.

Furthermore, secondary thoroughfares primarily only carry through traffic within the Township, not to or from the surrounding region.

### **COLLECTOR THOROUGHFARES:**

These roads have a planned right-of-way of 86' and have three purposes. First, they collect traffic from local streets and distribute that traffic to local destinations or major and secondary thoroughfares. Second, they funnel through traffic from major and/or secondary thoroughfares to local destinations. Third, collector streets can provide internal circulation and access to major shopping centers and industrial parks.

### **LOCAL THOROUGHFARES:**

These roads have a planned right-of-way of 66' and are intended to provide access to adjacent land uses, such as residential neighborhoods. Generally, these roads carry relatively small volumes of traffic.

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## **County Road Classifications**

The St. Clair County Road Commissions also uses, for maintenance purposes, a classification system based on the source(s) of funding for repairs and upgrades. This classification system has two categories:

### **COUNTY PRIMARY:**

These are roads for which the County is responsible for providing funds for maintenance and upgrades.

### **COUNTY LOCAL:**

These are roads for which the County and the local community share in the maintenance and upgrade costs.

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## **Cross-Section Standards**

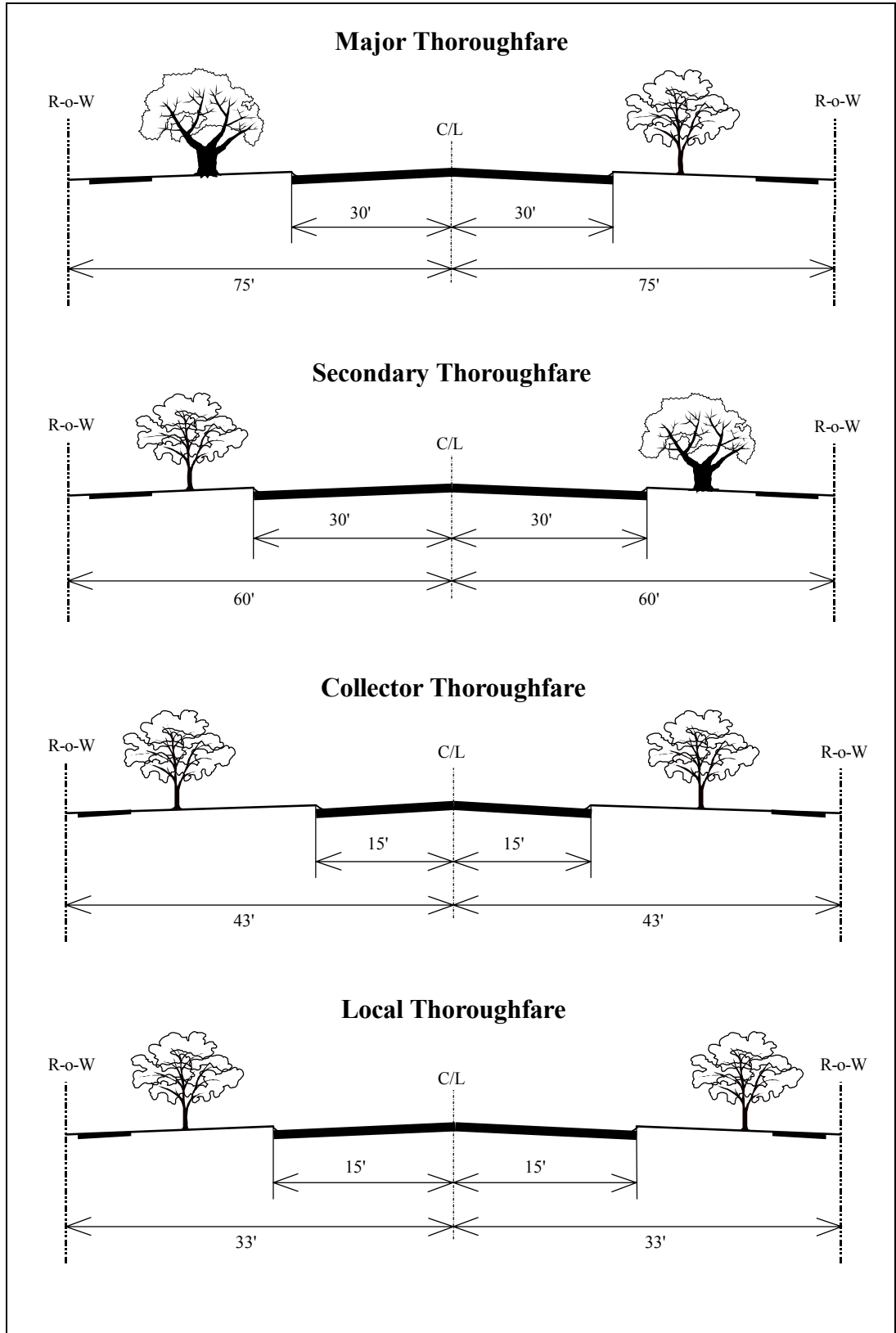
To aid local communities in implementing thoroughfare plans, the St. Clair County Road Commission has established cross-section standards (showing the arrangement of the road surface, shoulders, median strips and utilities/drainage located within the various widths of road right-of-way) for the four road classifications given above (as well as for expressways).<sup>8</sup> According to these standards, local and collector thoroughfares (66' & 86' planned right-of-way) are

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<sup>8</sup>*St. Clair County Thoroughfare Planning Guide*, p. 33

limited to two lanes of traffic and major and secondary thoroughfares (150' & 120' planned right-of-way, respectively) can accommodate up to four lanes of traffic (two lanes in each direction) plus a left-turn lane. Major thoroughfares can also be divided with a 60' wide median.

Figure 17: Typical Cross-Sections



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## Existing Road Network

An effective thoroughfare plan can only be prepared after a study of the existing road network is complete.

### COUNTY & STATE ROADS

The layout of Burtchville Township was influenced by the Land Ordinance of 1785, which established a land survey system that divided the land into six-mile square **townships** (containing 36 square miles). Each square mile in a township is called a **section**.

The establishment of townships and sections has created a logical system for the provision of County roadways along the mile-grid section lines. East-west mile roads in the Township include:

- **Metcalf Road** – a County Primary road which is paved between M-25 and State Road and gravel west of State Road to the Township border;
- **Norman Road** – a gravel County Local road that traverses the width of the Township;
- **Myron Road** – a gravel County Local road that runs from State Road to Babcock Road;
- **Harris Road** – a County Local road which is paved between Lakeshore Road and State Road and gravel west of State Road to the Township border;
- **Jeddo Road** – a paved County Primary Road that traverses the width of the Township;
- **Fisher Road** – a gravel County Local road that traverses the width of the Township;

One other east-west road lies parallel to, but not on a section line. Myrtle Road, a paved County Local Road, runs west from M-25 to State Road

North-south mile roads in the Township include:

- **Babcock Road** – a gravel County Local road that runs from Norman Road to Fisher Road;
- **State Road** – a County Local road that is paved from Metcalf Road to Harris Road and is gravel from Harris Road to Fisher Road.

One other north-south road lies parallel to, but not on a section line. North Road runs north from Metcalf Road to Harris Road. Between Metcalf and Burtch Road,

North Street is a paved County Primary road; between Burtch Road and Harris Road, North Road is gravel County Local road.

Three roads in the Township are not located on the mile-grid section lines. State Highway M-25 runs generally northwest along the Lake Huron shoreline from Metcalf Road to Fisher Road. Burtch Road, a paved County Primary road, runs in a generally westward direction from the village of Lakeport to the western Township border at Babcock Road. Lakeshore Road, a paved County Local Road, runs between M-25 and the Lake Huron shoreline through North Lakeport.

All county and state roads in the Township are two- and three-lane (with center left turn lanes) roads. Existing right-of-way widths for major county and state roads range from 66 ft. to 200 ft.

## **COLLECTOR & LOCAL ROADS**

The remaining roads in the Township are collector and local roads. Most of these are paved public roads with right-of-way widths of 66 to 86 feet for collector roads and 30 to 66 feet for local roads. There are a few private local roads, mostly in the eastern part of the Township, generally found near the M-25–State Road corridors. Most of these roads are gravel, with right-of-way widths of 20 to 66 feet.

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## **Problem Intersections**

Several intersections in the Township could be identified as **problem intersections**. Problem intersections are defined in three ways:

### **1. Two or more intersections falling closely together:**

When this happens, the number of turning movements required of motorists will rise, thus increasing congestion and traffic hazard. There are many instances in the Township of intersections in this category, particularly where residential areas access M-25 and Lakeshore Road.

### **2. Intersecting roads that meet at angles other than 90 degrees:**

These kinds of intersections limit horizontal sight visibility between roads (making it difficult to see traffic approaching on the intersecting road) and can create odd shaped lots that can be difficult to develop. Again, there are many instances in the Township of intersections in this category, especially where the east-west mile roads (and local roads parallel to these) and intersect with M-25, which runs from southeast to northwest parallel to the Lake Huron shoreline. Other intersections of this type include: State Road and Burtch Road; State Road and Harris Road; Burtch Road and Babcock Road; Lakeport Drive and M-25; Lakeshore Road and M-25.

### **3. More than two roads intersecting in one spot:**

These kinds of intersections create additional turning movements and increased driver confusion, thus increasing congestion and traffic hazard. At this time, there is only one intersection of this kind in the Township, the intersection of 2<sup>nd</sup> St., M-25 and Washington St.

Generally, problem intersections can be corrected by realigning one or more of the roads in the intersection(s). If that is not possible due to space or geographic limitations, the addition of special signalization (and possibly channelization) can help to mitigate hazards associated with such problem intersections. Furthermore, future subdivisions, residential areas, and other local uses with access roads must be carefully planned so as not to create new problem intersections.

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## **Thoroughfare Plan Map**

In formulating the Thoroughfare Plan, it must be understood that St. Clair County owns, maintains and has jurisdiction over all of the public roads in the Township. Thus, the Township Thoroughfare Plan must take into account any plans made by the St. Clair County Road Commission.

### **COUNTY THOROUGHFARE PLAN MAP**

The most recent thoroughfare plan map was prepared for Burtchville Township in the early 1970's by the St. Clair County Road Commission in accordance with the Inter-County Highway Plan developed by the Inter-County Highway Commission of Southeastern Michigan (ICHC)<sup>9</sup>. The purpose of the ICHC (of which St. Clair County was a member) was to coordinate and acquire rights-of-way of inter-county highways on the ICHC Plan. No adoption date is shown on the map prepared by the Road Commission, however, this map is similar to the thoroughfare plan map found in the 1967 St. Clair County Thoroughfare Planning Guide. The County thoroughfare plan map divided the County Thoroughfares of the Township into three of the four function/right-of-way categories described above. The County's planned designations are as follows:

#### **Major Thoroughfares (150' R-o-W):**

- Metcalf Road
- Burtch Road
- North Street, between Metcalf and Burtch Road
- M-25

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<sup>9</sup>Established in May 1956 under the Inter-County Highway Commission Act of 1925, as amended by Act 195 of 1955.

**Secondary Thoroughfares (120' R-o-W):**

- Fisher Road
- Jeddo Road
- Harris Road
- Myron Road
- Norman Road
- Babcock Road
- State Road

**Collector Thoroughfares (86' R-o-W):**

- North Street, between Burtch Road and Harris Road
- Myrtle Road
- Lakeport Drive
- Milwaukee St.
- Lakeshore Road

Please note that Campbell Road, which is shown as a collector thoroughfare on the County Thoroughfare Plan Map, has been de-certified by the Road Commission.

**BURTCHVILLE TOWNSHIP THOROUGHFARE PLAN MAP**

The Burtchville Township Thoroughfare Plan divides the existing roads in the Township into all four of the function/right-of-way categories described previously. Generally, the Township Thoroughfare Plan map is based on the County map, with changes, if any, noted in the list below in *Italics*. In addition, proposed local and collector routes are shown on the map.

**Major Thoroughfares (150' R-o-W):**

- Metcalf Road
- Burtch Road
- North Street, between Metcalf and Burtch Road
- M-25

NOTE: M-25 from the northern property line of the Township Cemetery north to the Township limits at Fisher Road has a right-of-way of 200 feet.

**Secondary Thoroughfares (120' R-o-W):**

- Fisher Road
- Jeddo Road
- Harris Road

- Myron Road
- Norman Road
- Babcock Road
- State Road

The Township Thoroughfare Plan Map also shows an extension of Myron Road from State Road east to M-25. This proposed extension is shown as a Secondary Thoroughfare.

**Collector Thoroughfares (86' R-o-W):**

- North Street, between Burtch Road and Harris Road
- Myrtle Road
- Lakeport Drive
- Milwaukee St.
- Lakeshore Road

In sections 18, 30 and 32, proposed collector routes are laid out along the quarter-section lines where feasible. The purpose of these collector routes is to help open up the interior portions of that section for development, improve traffic circulation and lessen congestion on section line roads.

**Local Thoroughfares (66' R-o-W):**

All remaining streets, not previously listed otherwise, are local thoroughfares. Many of these local thoroughfares are paved. Those that are unimproved should be improved with some or all of the cost being assessed against the adjacent property owners. Those existing public and private roads that have right-of-way widths of less than 66 feet should be upgraded wherever feasible.

The Thoroughfare Plan also shows proposed local streets that are intended to allow proper access to residential and other local uses. The exact location and layout many of these streets will vary with development. Those shown on the Plan are just one of many acceptable possibilities.

## Proposed Improvements

In addition to the above recommendations, the following road improvements are suggested for County roads within the Township:

**COUNTY PRIMARY SYSTEM**

- Pave Metcalf Road from State Road to the western Township Limits.

## **COUNTY LOCAL SYSTEM**

Pave the following County Local roads located within the boundary of the proposed urbanized area:

- Norman Road from M-25 to a point one mile west of State Road, at the western boundary of the planned urban area;
- Harris Road from State Road to a point one-eighth mile west of State Road, at the western boundary of the planned urban area;
- Fisher Road from M-25 to a point approximately 325 feet west, at the western boundary of the planned urban area;
- The proposed Myron Road extension.

# Future Land Use Plan

The goal of land use planning is the improvement of the general welfare of the people of Burtchville Township through the proper development of vacant land and where necessary, the redevelopment of existing areas for new uses that create a better community in which to live, work and recreate. In general this land use plan is a guide for locating private and public uses in Burtchville Township.

The land use plan is intended to be long range, comprehensive, generalized, flexible and regional, with the following broad objectives:

- Long range planning for land development to the year 2020.
- Comprehensive planning to provide for a variety of types of land uses, bearing a relationship to the land capability and transportation system.
- Generalized planning based upon broad principles of land use allocations and relationships.
- Flexible planning that is able to accept changes, yet not detract from the total plan.
- Regional planning transcending arbitrary boundaries and which is an integrated part of the regional system.

The land use plan is more than just a graphic presentation. Behind the graphics and maps are spatial distributions and relationships reflecting the specific goals and objectives described in the “*Goals & Objectives*” section of this Master Plan.

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## Concept Plan

The possible physical arrangements of the various land uses on vacant ground are infinite in number. Regional consideration, roads, existing land use, soils, topography, population growth and economic potential each are constraints on the

number of possible arrangements. The goals and objectives set out earlier in this Master Plan direct the possible array to a narrow band of alternatives. These possibilities are developed into a concept of the preferred general arrangement of land uses.

The long range land use plan for Burtchville Township is based on analysis of the basic data presented in this Master Plan of trends in the Township and the surrounding areas. The recommendations for the separate land uses are graphically and statistically presented in eleven classifications:

1. Agriculture & Rural Residential
2. Single-Family Residential
3. Two-Family Residential
4. Multiple Family Residential
5. Mobile Home Park
6. Commercial
7. Public, Quasi-Public, Institutional
8. Recreation
9. Open Space
10. Light Industrial
11. Right-of-Way

The future land use plan for Burtchville Township is designed so as to derive the maximum benefit for the residents of the Township. The land use plan illustrates the arrangement of land uses to meet the goals, capacity and trends in the Township.

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## **Urban-Rural Boundary**

In developing the land use plan, evaluations were made of locations in the Township and adjacent communities in regard to where development will and should occur. To aid in these evaluations, an “urban-rural boundary” has been laid out, dividing the Township into planned urban and rural areas. The location of this urban-rural boundary is based on an examination of the existing land uses, natural resources, and public services of the Township.

The planned urban area is that part of the Township that is expected be fully served by public sewer and water by the year 2020, that contains the existing urban uses of the Township, and that contains natural resources and natural features that are more compatible with urban uses (or at least are less impacted by urban uses). The planned rural area is that part of the Township that contains most of the existing agricultural uses in the Township, that contains the bulk of prime

agricultural land in the Township, and that will not be served by public sewer and water by the year 2020.

The planned land use classifications have been arranged within the land use plan in part according to the urban-rural boundary.

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## Land Use Plan Map

A Land Use Plan Map has been prepared and is a part of this document. Following is a description of the general locations of the Plan's land use classifications:

### **AGRICULTURE & RURAL RESIDENTIAL**

On the Land Use Plan Map, over 5,482 acres have been designated for agricultural and rural residential use, which is just over 54% of the total land area of the Township. All of this acreage is confined to the aforementioned planned rural area in the western part of the Township. This area contains most of the prime agricultural land in the Township, has many existing farms, and will not be serviced by public water and sewer within the time frame of this Plan. Thus, this part of the Township is best suited to agricultural and rural residential uses. Here rural residential refers to single-family homes on relatively large lots, lots that are larger than typically found in suburban residential developments, but smaller than would be practical for normal agricultural use (but could be used for small "hobby" farms). Residential unit densities in this area should be 0.8 units per acre or less. Rural residential development should be (in so far as is practical) limited or directed toward areas where the soils have only slight or moderate limitations for septic system use.

### **SINGLE-FAMILY RESIDENTIAL**

The second largest land use classification within the Township is and will probably continue to be single-family residential, with approximately 2,889 acres planned for this use (approx. 29% of the land area of the Township). Over one-half of this acreage is currently vacant and undeveloped. It is expected that the development of this acreage will take two forms:

1. Infill development of vacant parcels in existing subdivisions in the Township;
2. The creation of new subdivisions with the construction of new residential streets and the linking of those streets to the existing street system.

The Land Use Plan provides for both of these situations as follows:

#### **Infill Development:**

There are many vacant lots scattered throughout the existing subdivisions along the lakeshore and in the southern part of the Township. These lots are already serviced by water, gas and electric utilities; thus they should be given priority over the development of new subdivision plats. Development of these lots in most

cases should follow the pattern (size and density) of neighboring residential lots. However, there are also several small and odd-shaped lots (particularly along and near the lakeshore) that may be more difficult to build on. In these cases, some flexibility may be needed in order to utilize these lots. For example, many of these lots would be ideal locations for smaller-sized inexpensive start-up housing for younger families (perhaps even acceptable kinds of manufactured housing).

### **Creation of New Subdivisions:**

There are several large vacant tracts of land in the western parts of the Township, some adjacent to existing subdivisions, which would be suitable for future development as single-family residential subdivisions (or site condominiums). These new subdivisions should be linked to adjacent subdivisions (whenever possible) and the surrounding road network to provide proper access to new home sites. Also, because some of these sites may contain wetland areas and other interesting natural features (especially toward the south and east), the Township should encourage the use of cluster development and planned unit development concepts to preserve the natural features on these sites and provide for more buildable lots than would otherwise be possible with conventional platting. Conversely, the westerly parcels along the edge of the planned urban area should be developed at relatively lower densities, in order to provide a smoother transition from the planned urban area to the planned rural area.

### **Neotraditional Neighborhoods**

Another alternative to standard subdivision development is the “neotraditional neighborhood” development. This kind of development, like the planned unit development, involves a mixture of commercial, office and residential uses on one large parcel. However, the neotraditional neighborhood is developed similar to the neighborhoods found in the second half the 19<sup>th</sup> Century and the first half of the 20<sup>th</sup> Century. Typical elements of a neotraditional neighborhood include:

- Houses and commercial/office uses setback close to the street, with garages and parking oriented to the rear of the buildings;
- Rear alleys to provide access to businesses and homes;
- Storefront commercial districts with easy pedestrian access;
- A formal town square;
- Parks, churches and schools within easy walking distance.

A suitable area for this kind of development might be the planned single-family residential area generally bounded by M-25 on the west, Harris Road to the south, Lakeshore Road to the east, and Jeddo Road to the north.

## **TWO-FAMILY RESIDENTIAL**

In keeping with the objectives for providing opportunities for medium density housing, approximately 108 acres are shown on the Land Use Plan Map as

planned for two-family residential use. This acreage is divided among one existing site, located on the east side of M-25 in Lakeport, and four planned sites. The four planned two-family residential sites are located as follows:

1. West of M-25 and north of Metcalf Road in Section 32;
2. The east side of State Road between Metcalf Road and Norman Road;
3. The south side of Norman Road (Mary St.) west of M-25;
4. The intersection of M-25, Lakeshore Road and Jeddo Road;

In most of these locations, the planned sites have been placed to help provide a transition between higher density uses and adjacent single-family residential uses.

### **MULTIPLE FAMILY RESIDENTIAL**

Also in keeping with the objectives for providing opportunities for medium density housing, approximately 52 acres are shown on the Land Use Plan Map as planned for multiple-family residential use. This includes the apartment complex on M-25 north of Harris Road and the Milwaukee Creek Condominiums in Lakeport. Three new multiple-family residential sites are shown on the Land Use Plan Map. One is adjacent to the east of the Indian Trails Mobile Home Park, the second is at the corner of State Road and Burtch Road and the third is at the intersection of Washington Street and Main Street in Lakeport.

### **MOBILE HOME PARK**

The Land Use Plan Map shows 106 acres planned for mobile home parks. All of this acreage is located within the existing Indian Trails North property on Metcalf Road between State Road and M-25. No additional acreage for mobile home parks is planned for because Burtchville Township already has a greater percentage (25.7%) of its total housing units comprised of mobile homes in licensed mobile home parks than the county average (7.6%). Thus, the Township has more than its “fair share” of mobile homes in mobile home parks.

### **COMMERCIAL**

Approximately 108 acres of commercial uses (e.g. stores, banks, restaurants, service stations, and offices) are planned for the Township. Ten general commercial sites are shown on the Land Use Plan Map and are located as follows:

1. Along the west side of M-25 north of Metcalf Road;
2. Along both sides of M-25 in Lakeport;
3. The northeast corner of M-25 and Lakeshore Road in North Lakeport;
4. The east side of M-25 between Lakeshore Road and Harris Road; in North Lakeport;
5. The northeast corner of M-25 and Harris Road in North Lakeport;

6. The west side of Lakeshore Road south of Harris Road in North Lakeport;
7. The north west corner of Lakeshore Road and Harris Road in North Lakeport;
8. The east side of M-25 north of Harris Road in North Lakeport;
9. The west side of M-25 north of Harris Road in North Lakeport;
10. The northwest and southwest corners of M-25 and Jeddo Road;

It is expected that general commercial uses in Burtchville Township will be of a smaller scale than typically found in most communities. Large strip malls, “big box” retailers and other similar uses would be discouraged from locating in the Township.

NOTE: The specific level of commercial uses allowed will be determined by the zoning ordinance.

### **PUBLIC, QUASI-PUBLIC, INSTITUTIONAL**

Over 103 acres are designated for public, quasi-public and institutional uses. This acreage includes Lakeport Elementary School, St. Edward’s church and school, the Township cemetery, that part of the Township Hall property south of Milwaukee Creek, other existing churches, the Lions Club property, the Methodist Camp, the Grace Bentley Camp and other institutional camp properties. No additional acreage for future uses has been designated.

### **RECREATION**

The Land Use Plan Map allocates 564 acres for recreational uses. This includes both the Lakeport State Park properties in Section 20 and Section 29 and the Township Park property on Lakeshore Road in Section 17. No other sites in the Township are designated for recreation.

### **OPEN SPACE**

An additional 140 acres of land are proposed to be held as open space on the Land Use Plan Map. Much of this is on parcels that are believed to contain either extensive wetlands or extensive woodlands, such as Dixie Park and that part of the Township Hall property north of Milwaukee Creek. The rest of the open space area consists of most of the beaches on the Lake Huron shoreline, except for those that are part of lakefront residential lots and those belonging to the State Park.

### **LIGHT INDUSTRIAL**

In order to provide some balance to the Township’s tax base, over 30 acres have been designated for light industrial use, located in two areas. The first area is an existing 3.71-acre site located on Harris Road just west of M-25. The second area is a pair of vacant parcels, totaling 26.87 acres, located in Section 32. The kinds of uses envisioned for this vacant area are small-scale manufacturing, processing,

warehousing, and research facilities, uses that do not result in nuisances or negative environmental impacts. It is further envisioned that these uses will be located entirely within a planned industrial park.

**RIGHT-OF-WAY**

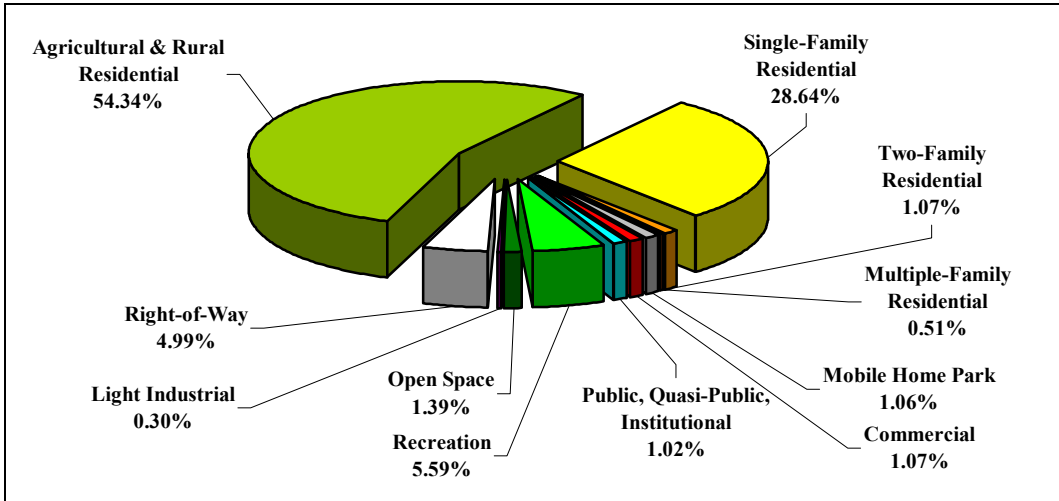
Approximately 503 acres of right-of-way have been designated for existing roads (at existing right-of-way widths) and proposed roads (at proposed right-of-way widths) in the Township. These existing and proposed roads are described in the Thoroughfare Plan section of this document.

**Acresage Allocations & Expected Capacity**

**Table 35: Planned & Existing Acresage Comparisons**

Land Use Category	Planned Acresage		Existing Acresage		Change	
Agricultural & Rural Residential	5,482.20	54.34%	4,190.05	60.84%	1,292.15	30.84%
Single-Family Residential	2,888.96	28.64%	1,397.08	20.29%	1,491.88	106.79%
Two-Family Residential	108.36	1.07%	3.74	0.05%	104.62	2797.33%
Multiple-Family Residential	51.90	0.51%	10.24	0.15%	41.66	406.84%
Mobile Home Park	106.46	1.06%	107.76	1.56%	-1.30	-1.21%
Commercial	108.35	1.07%	36.48	0.53%	71.87	197.01%
Public, Quasi-Public, Inst.	103.34	1.02%	116.29	1.69%	-12.95	-11.14%
Recreation	564.21	5.59%	553.71	8.04%	10.50	1.90%
Open Space	140.41	1.39%	0.00	0.00%	140.41	—
Light Industrial	30.58	0.30%	15.54	0.23%	15.04	96.78%
Right-of-Way	503.03	4.99%	455.78	6.62%	47.25	10.37%
<b>TOTAL:</b>	<b>10,087.80</b>		<b>6,886.67</b>		<b>3,201.13</b>	<b>46.48%</b>

**Figure 18: Acresage Allocations**



The areas allocated to the various planned land use categories were measured from the Land Use Plan Map. The planned land use category measurements and a comparison with the existing land use categories are summarized in the table and graph on the previous page (Table 35 and Figure 18).

**EXPECTED CAPACITY**

By using the change in acreage figures for the various planned residential land uses shown in Table 35, it is possible to determine the expected population of the newly planned areas of the Township. In Table 36, the new acreage amounts for single-family, two-family, multiple-family and mobile home park residential uses are multiplied by the respective allowed dwelling units per acre to determine the expected numbers of dwelling units. In turn, the expected numbers of dwelling units for each land use are multiplied by the number of persons per dwelling unit, as given by the Census, to calculate the additional expected population. This expected population figure then is added to the amount of the existing population of the Township to determine the total expected population capacity of the Township.

**Table 36: Expected Population Capacity**

<b>Land Use Category</b>	<b>New Acreage</b>	<b>DU/Acre</b>	<b>Dwelling Units</b>	<b>Persons/DU</b>	<b>Population</b>
Single-Family	1,491.88	2.5	3,730	2.22	8,281
Two-Family	104.62	4.3	450	2.22	999
Multiple-Family	41.66	5.0	208	2.22	462
Mobile Home Park	-1.30	6.5	-8	2.22	-19
<b>Additional Expected Population</b>					9,723
<b>Existing Population</b>					4,132
<b>Total Expected Population Capacity</b>					13,855

As can be seen in Table 36, the total expected population capacity of Burtchville Township is 13,855 which is greater than the projected population for 2020 of 7,339. Therefore, the amount of land allocated for residential purposes in the Land Use Plan is more than adequate for the projected population of the Township.

# Capital Improvements Programming

Each type of land use has different degrees of need for local public facilities. For example, a community will need different levels of water and sewer system improvements if the comprehensive plan recommends certain densities of residential development or commercial use for a certain location. These and other possible changes in land use policies necessitate a Capital Improvements Program (CIP).

The public improvement investments expressed in a CIP can also be used to permit or control phasing of land developments, since public facilities investment decisions directly influence the location, intensity and rate of land development.

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## Purpose and Uses

In its basic form, a CIP is a complete list of all proposed public improvements over the next six- (6) year period, including costs and operation expenses. The CIP outlines the projects that will replace or improve existing facilities or that will be necessary to serve current and projected land use development in Burtchville Township.

Proper management of municipalities today requires not only that a CIP be developed, but that it be updated annually. Advanced planning for public works projects ensures more effective and economical capital expenditures, as well as the provision of public works in a timely manner. Since municipalities face ongoing expenses, the development of a CIP makes it possible to strike a balance between maintenance and operational expenses for the construction of public works.

Recommendations presented in the CIP can serve to guide Burtchville Township investments in public facilities to provide necessary services to all land uses. Furthermore, with a CIP the Township can monitor its balance of borrowing power and municipal credit rating, which in turn affects the interest rates the Township must pay when it borrows for public works construction.

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## CIP Preparation

The CIP process includes the following:

- Determining the type, scale and level of service of public improvements.
- Establishing the timing and beginning date for recommended public improvements
- Determining the method of financing the public improvements, including the capability of paying operational expenses once the facility is finished.

The Burtchville Township Planning Commission has as one of its primary responsibilities, the preparation of a viable and fiscally responsible program of capital improvements. Keep in mind that, even though the Planning Commission may be responsible for preparing the CIP, the Burtchville Township Board of Trustees is always the final authority when it comes to allocating and spending money. Therefore, it is crucial that the Planning Commission work closely with the Board of Trustees and other Township officials every step of the way.

There are six major steps in the preparation of the CIP. The Planning Commission should:

1. Identify public capital facilities needed in the next six years to meet basic public service demands of Township residents.
2. Conduct special studies to further define specific public facility needs in advance of appropriating any funds for such a facility.
3. Provide Township residents with the opportunity to participate in the CIP process through public hearings.
4. Coordinate capital improvements with the Burtchville Township Comprehensive Plan.
5. Reconcile capital improvement costs of the Burtchville Township CIP with anticipated financial resources of the Township; identify all possible sources of revenues to aid in the financing of recommended public improvements.
6. Seek coordination of the Burtchville Township CIP with similar programs of neighboring units of government and public utility companies that provide services in the Township.

The scope and extent of a CIP will vary greatly among municipalities. In small population, slowly growing municipalities, the need for financial planning of public improvements may seem minimal, whereas in larger population, more rapidly growing municipalities the CIP may be a very sophisticated document. Regardless of the size of the municipality, the CIP must be based on realistic financing. Therefore, a working knowledge of the Township's financial position—budget revenues, annual operating expenses, debt costs and cash reserves—is necessary.

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## Financing a CIP

The capital improvements program provides an overview of what elected officials and policy makers within the Township foresee both as short and long term issues with respect to public investments, public facility needs and the ability of the Township to meet the investment requirements.

At this point, then, it is necessary to obtain a listing of all the sources of revenue available to the Township for financing public improvements. Among the financial sources that should be considered are: cash payments from general fund revenues, revenues from other operating funds, special assessments, general obligation (full faith and credit) bonds, revenue bonds, grants, loans or gifts.

In order to prepare a realistic set of capital project recommendations, however, it is also necessary to obtain a listing of the expenditures of the Township. This would include costs for all operations, maintenance, equipment and debt service.

Of all the expenditures a municipality incurs, debt service, of course, has priority, since it represents the Township's committed obligation to pay. Therefore, the real balance of CIP expenditures must be struck between the cost of operation and maintenance activities and capital expenditures. In short, the Township should not build that which it cannot afford to maintain.

If the Township is going to depend upon general fund revenues to finance the CIP, it will be necessary to analyze the sources of revenues for the general fund. These sources generally include property taxes, state and federal shared revenues, license and permit fees. The revenues for the life of the CIP will have to be projected from past and current general-fund revenues.

It may be possible to finance some public improvements, at least in part, from separate operating funds or voted special millage. Many public utilities operated by municipalities have special purpose funds designed to finance, operate, maintain and improve the utility system. These funds are, by law, separately accounted for and segregated from the general fund. The operating income for these funds comes from customer service bills and connection fees. Such funds should be evaluated in the same manner as recommended for the general fund.

In order to make use of the other possible sources of funding, the Planning Commission will need some specialized help. A planning commission, of course, cannot simply declare a special assessment or commit a community to bonding. If these sources of revenue are to be tapped, it will be necessary to work closely with the Board of Trustees and Township Attorney. Permission to sell full faith and credit bonds must be given by the electorate. If the Township uses bonding to finance its CIP, it will be necessary to include the debt service costs in each year's operating budget.

Regardless of how the CIP is financed, only part of the work is done when revenues have been estimated. It is then necessary to estimate projected expenses for the next six years. Each year as the CIP is updated, it is necessary to add another year's revenues and expenses.

Projecting expenses, especially those to be incurred by the general fund, is neither easy nor precise. The need for services, maintenance operating costs and increases in personnel cannot be precisely predicted six years in advance. Furthermore, it is necessary to make predictions for every department in the Township, as well for all those functions operated jointly with other units that draw from the Township's general fund. Some allowances must also be made for inflation.

Once revenues and expenses have been evaluated for the next six years, the two must be compared to determine how much the Township can afford, at least from these sources, for capital improvements. If the revenues the Township has calculated do not cover the expenses expected, the CIP may have to be scaled down, unless some additional means of financing can be found or cuts in operation expenses can be made.

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## **Classification of Proposed Capital Improvement Projects**

Once the evaluation of future revenues and expenditures is complete, the Planning Commission should make an inventory of all proposed public improvement projects. Quite likely, the cost of all the projects will far exceed anticipated financial resources. Therefore, it will be necessary to develop a system of project classification and priority selection that will balance the cost of the projects with the available money.

The procedure should ensure that the projects are judged objectively. The system should coordinate and time public projects to afford maximum public benefit and to ensure an adequate level of public service to developing neighborhood areas. One way to classify projects is to divide them into three categories:

## **PHYSICAL CAPITAL IMPROVEMENT PROJECTS**

These are projects for land acquisition or for the development of physical assets in the Township. They include buying land for a new park, improving sidewalks, utilities, storm drains or public roads.

## **CAPITAL REPLACEMENT/MAINTENANCE PROJECTS**

These projects include the replacement or major repair of a fixed tangible asset owned and used by the Township. Includes replacement of an automobile, fire truck or construction of a replacement garage. Examples of capital maintenance would be resurfacing a public street or renovating a Township owned building.

## **CAPITAL PROJECT FEASIBILITY/NEEDS STUDY**

Sometimes studies are necessary to clarify and define proposed projects. Often there is a general awareness of the need for projects of a particular type, but there is insufficient information available to demonstrate the scale, time, feasibility or cost of such a project. Such studies provide a firmer information base for future capital improvements which more accurately reflect existing and expected needs.

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## **Setting Priorities**

When the projects have been identified and classified, they must be placed in order of priority. At this point, the goals and policies of Township development contained in the comprehensive plan should be carefully reviewed. These goals, general as they may be, can serve as a guide to setting priorities for public improvements.

Some of the important factors that should be considered in judging the CIP proposals are:

- Protection of life.
- Maintenance or improvement of public health.
- Protection of property.
- Conservation of resources.
- Maintenance of physical property.
- Provision of necessary and basic public services.
- Replacement of obsolete facilities.
- Public comfort and convenience.
- Reduction in operating costs.

- Recreation value.
- Economic value.
- Social, cultural or aesthetic value.
- Potential effect on future developments.
- Relative value with respect to other services.

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## **CIP Process in Detail**

1. The Planning Commission requests all publicly supported agencies to submit a CIP budget form for every proposed project for at least the next six years. Each proposal form for each project should include:
  - Name and description of the project.
  - Estimated cost.
  - Proposed method of financing.
  - Agency assigned priority for the project if more than one is submitted.
  - How the project conforms to the Township's comprehensive plan and zoning ordinance.
  - Beneficiaries of the project.
  - Estimated increase (decrease) in personnel, equipment, material and supply costs that will have to be added to the annual operating budget if the project is approved.
2. The Planning Commission summarizes the projects and forms the agencies of the total listing, along with the cost estimates of each project. This summary includes CIP proposals prepared by the Planning Commission itself.
3. The Planning Commission reviews each project individually as to the agency's need and priority.
4. The Planning Commission evaluates each of the projects, including its own; sets some preliminary priorities; and prepares a tentative Township CIP.
5. The Planning Commission meets individually and collectively with the agencies and Township officials to resolve differences and come to some general agreement on projects.
6. The Planning Commission convenes a public hearing.
7. The Planning Commission prepares the final CIP and recommends it to the Board of Treaties.

8. The Board of Trustees reviews the CIP, accepts and adopts it, or returns it to the Planning Commission with recommendations for amending.
9. If the CIP has been returned, the Planning Commission reviews and deals with the Board of Trustees' recommendations and returns it to the Commission for adoption.
10. The Board of Trustees makes the final determination on the CIP. Upon adoption, the first year of the CIP becomes the capital budget portion of that year's annual Township budget.
11. The CIP must be reviewed and updated annually. Priorities may be rearranged from one year to the next; funding may change; etc. Both the Commission and Board of Trustees must be alert to changes within the Township so that the CIP remains useful and current.

# Implementation Strategies

It should be realized that the Comprehensive Master Plan represents what is felt to be the best future use of land based upon today's knowledge and trends. The Plan is not a rigid, unchanging document. Changes will be necessary and should be made not only to adjust to new trends as they become apparent, but also to allow flexibility in cases where an alternative use may be as desirable as the one shown on the Plan. Timing is a very important aspect. Some proposals should be carried out as soon as possible, especially those which require acquisition of land that will eventually become more expensive as development occurs. Other proposals, however, should be delayed until the need arises as the land use relationships indicated on the Plan begin to materialize.

The Comprehensive Master Plan should also serve as the guide for future zoning action. The zoning map will not necessarily reflect existing land uses to a considerable extent. The Plan illustrates what would be most desirable and shows the direction which future zoning changes should take.

If the Plan is to be eventually realized, planning must be established and worked at on a continuing basis. The Planning Commission should continue to take an active role in reviewing proposed developments in the light of the Township's long range goals. Certainly the Plan must not be regarded as a "straight jacket" for growth. Changing conditions and technology will necessitate revision in the future. The Comprehensive Master Plan should instead be thought of as a flexible framework within which public and private action may take place, thus producing a Township in which the citizens are afforded a maximum of convenience and enjoyment.

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## Implementing the Plan

There are three primary forms of action through which the policy recommendations of the Comprehensive Master Plan can be implemented:

- 1. Land Use Controls**
- 2. Public Action**
- 3. Public/Private Action**

Within each form of action there are specific activities that will aid in the implementation of the Master Plan. The following is a brief discussion of these various activities.

## **LAND USE CONTROLS**

There are three land use control activities that the Township should consider undertaking:

1. Review and Update the Zoning Ordinance
2. Site Plan Review
3. Code Enforcement

### **Review and Update the Zoning Ordinance:**

The Township upon adoption of the Comprehensive Master Plan should thoroughly review its zoning ordinance. The zoning ordinance may be thought of as a very short range plan that is designed to protect existing development from encroachment by incompatible uses and where possible, promotes future land use in accordance with the Comprehensive Master Plan. The zoning ordinance is probably the most important tool available for implementing the land use policies of the Comprehensive Master Plan. Thus, the zoning ordinance should be reviewed in relation to the Plan. Certain changes in the zoning ordinance, both in the Zoning Map and the text of the ordinance, may be desirable to better reflect policies set forth in the Plan.

Alternatively, given the age and limited scope of the existing Burtchville Township Zoning Ordinance, it may be better for the Township to adopt a completely new zoning ordinance, rather than just amending the existing one. Often, old zoning ordinances that have been amended over the years end up being incomplete, contradictory, and therefore, difficult to enforce. A new zoning ordinance is more likely to be comprehensive, consistent, continuous, and easier to enforce.

### **Site Plan Review**

Site plan review is a process by which documents and drawings specified in the zoning ordinance are reviewed to ensure that a development proposal complies with local, state and federal regulations. As defined by Michigan law, a site plan is a plan, drawn to scale, showing the layout of proposed uses and structures. Unlike a plat—which only depicts the subdivision of a parcel into smaller lots along with

necessary roads and easements—the site plan includes lot lines, streets, building sites, existing structures, reserved open space, landscaping, utilities, and any other required information. Site plans should be prepared and sealed by licensed professionals including land surveyors, engineers, architects, or landscape architects.

Site plan review can be applied to all development projects. State enabling legislation requires local site plan review for subdivision plats, planned unit developments (PUDs), cluster housing and special or conditional uses specified in the zoning ordinance. For other types of permitted uses to be subject to site plan review, the procedures and standards must be specified in the zoning ordinance. Such permitted uses may include:

- Multiple family residential;
- Site condominiums;
- Commercial and industrial uses;
- Institutional uses;
- Public projects, such as utilities.

Site plan review should also be required for any changes to existing development, such as expansions, demolition, moving of structures, etc. Individual single-family homes are usually exempt from site plan review, requiring only a plot plan, which may include drainage provisions for a building permit.

Site plans are reviewed to assure:

- Compliance with applicable zoning standards;
- Public facilities are adequate to serve the site;
- The layout is compatible with the topography and natural features of the site;
- Structures are appropriately sited and the property landscaped to reduce impacts on adjacent properties;
- Compliance with applicable local, state and federal regulations.

The following elements should also be covered in the site plan regulations and standards contained in the zoning ordinance:

- Safe traffic flow, parking, ingress and egress, emergency vehicle access;
- Loading and unloading of goods;
- Topography and soils;
- Stormwater management;
- Sanitary sewer and water (if applicable);
- On-site septic systems and wells;
- Gas, electric, and other utilities;

- Landscaping/buffering/screening/fencing;
- Trash and dumpsters;
- Signage;
- Open space;
- Natural hazards;
- Historic structures;
- Lighting;
- Accessory structures;
- Hazardous Waste Removal;

Site plan review can be an effective and powerful land use decision-making tool. Any deficiencies in compliance can result in denying the proposed use for the land. From the community's perspective, site plan review can be used to ensure that development projects are consistent with the goals, objectives and policies of the Master Plan and that standards of the zoning ordinance are met. Site plan review also works well to ensure that the development has a good physical design, that it relates to the presence of the community's infrastructure, that it is compatible with adjacent land uses and it will not have an adverse effect on the natural environment. It is a tool that can help a community achieve and maintain its desired character.

### **Code Enforcement**

No matter how up-to-date the zoning, subdivision, or other land use ordinances may be, they are of little value unless the community has an effective code enforcement program. In order to provide an effective enforcement program, the community must have: a code enforcement officer with the financial and political backing to consistently enforce the ordinances; consistent procedures for dealing with code violations.

#### **Code Enforcement Officer**

State statutes (MCL §764.9c and §41.183) implicitly allow Townships to establish by ordinance, the position of Code Enforcement Officer. The ordinance establishing the position must designate the official or other person to serve as the Code Enforcement Officer and the scope of his or her authority.

The state statutes also do not specify any specific official or other person as the Code Enforcement Officer, nor are the specific duties laid out, other than to state that the officer may issue appearance tickets for misdemeanors or citations for civil infractions. Most communities, however, may assign such duties to the Zoning Administrator or the Building Inspector. Currently one person in the Township handles building inspection, zoning administration and code enforcement of zoning and planning related ordinances on a part-time basis. As the Township continues to grow, additional positions will need to be added to this department.

## Code Enforcement Procedures

The following is a listing of the typical steps involved in code enforcement:<sup>10</sup>

1. The zoning ordinance (or subdivision, etc.) violations are “discovered” when the community becomes aware of their existence. The two primary means of discovery are active enforcement and complaint. Active enforcement occurs when the enforcement official seeks out violations by frequently monitoring properties in the community. For example, the enforcement official may periodically drive through residential areas looking for non-conforming uses. Complaint-based discovery occurs when an individual reports a possible violation to the Township. For example, someone reports that a neighbor is using a garage as an auto repair business.

No matter what form of discovery is involved, photographs or videotape recordings, if appropriate, showing the violation should be taken when an ordinance violation is discovered. These should always be dated and the location and time of day noted.

2. The property owner is notified in writing of the violation. The written notice should indicate: the nature of the violation, including the appropriate ordinance reference or a copy of the ordinance or provision; the name and address of the property owner (who is ultimately responsible for the violation); the date the violation was discovered and by whom; actions necessary to bring the situation into compliance; potential penalties, and a date by which the violation must be corrected.

A reasonable time limit should be given that is related to the effort needed to correct the violation. If the violation is a clear safety hazard, it should be corrected immediately. Shortly after the date given for correcting the violation, the enforcing officer should recheck the situation to ensure compliance has been achieved. However, note that the violator may also appeal a zoning ordinance violation to the zoning board of appeals or request a variance.

If the recheck finds that the violation is still present, the enforcement officer may either proceed directly to legal action, or send a second notice. The second notice, which should be more strongly worded than the first, should be sent by return receipt mail. This notice may be prepared by either by the Township attorney or by the enforcement officer. If written by the enforcement officer, a copy should be sent to the Township attorney. The second notice should have the same information as the first, but will normally have a shorter completion date.

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<sup>10</sup> *The Township Guide to Planning and Zoning*, pp. 186-189: 1998, Michigan Townships Association

3. When written notices fail to produce compliance, the last step in the enforcement process is any legal action necessary to produce compliance. Depending on how the township zoning ordinance treats the violation, the violation may be enforced as a misdemeanor, a municipal civil infraction, or a Circuit Court injunction.

Until 1994, a violation of any township ordinance, including the zoning ordinance, could only be punishable as a criminal misdemeanor, subject to fines not exceeding \$500 and/or 90 days in jail. For violations involving misdemeanors, a notice to appear before the district court is served on the violator. If the violator fails to appear, a complaint and warrant for the violator's arrest and arraignment before the district court is issued.

Effective May 1, 1994, townships are authorized to decriminalize all or some of their infractions by amending ordinance penalty clauses to provide for civil infractions. PA 24 of 1994 amended the Township Zoning Act to either impose a penalty for violating an ordinance or designate the violation as a municipal civil infraction and impose a civil fine. Also, townships are authorized by the Municipal Civil Infractions statute (MCL §600.8701, *et seq.*) to establish by ordinance a municipal ordinance violations bureau to accept admissions of responsibility for municipal civil infractions and to retain the fines and costs received on such matters for the township. The bureau must use a fee schedule adopted by the township board designating the prescribed fines and costs for each violation.

The civil infractions process is similar to that used by police for speeding tickets and other moving violations. Township officials can write civil infractions tickets with little or no involvement by the township attorney. A district court judge makes the final decision if a defendant challenges a civil infraction ticket. The court has much more discretion in setting fines for civil infractions than misdemeanors, including the possibility of ordering the defendant to reimburse the township for its attorney fees, engineering fees or other associated costs. The court also has some equitable jurisdiction where a civil infraction is involved, with the authority to issue an order requiring the violator to cease and desist or correct the situation, a power which is generally not present with a criminal misdemeanor.

In some situations, equitable relief such as an injunction or a mandatory order is more desirable. This may be accomplished more directly in Circuit Court by a written complaint and summons served on the violator. The township attorney will guide the actions of the enforcement officer in cases such as these. It is essential that all notes, pictures, videotape, copies of notices, copies of relevant ordinance provisions and any other materials related to the violation should be gathered and protected from loss. The enforcement officer should be aware of the legal process, including knowledge of depositions, testifying, and other relevant requirements.

## **PUBLIC ACTION**

There are four other kinds of public action besides land use controls that the Township might consider to implement the Master Plan:

1. Capital Improvements Budgeting
2. Tax Increment Financing
3. Special Assessments
4. Urban Renewal

### **Capital Improvements Budgeting:**

The Capital Improvements Budget is basically a financial plan. It is guided by and includes improvements indicated as needed in the Capital Improvements Program of the Comprehensive Master Plan. Improvements such as roads, sewer and water lines, parks, parking lots, etc. are included. The first step must be to determine the priority in which the improvements are to be provided. The Capital Improvements Budget covers a five or six year period and indicates the year in which a particular improvement is scheduled and the means of funding. At the end of the period, a new Capital Improvements Budget should be prepared. Sources of funds for improvements include:

- The general fund of the Township.
- Proceeds from the sale of bonds (general obligation, building authority or revenue bonds).
- Special assessment districts.
- Tax increment finance districts.
- Federal & State grants.

### **Tax Increment Financing:**

Tax increment financing (TIF) is a method of funding public investments in an area slated for development by capturing, for a time, all or a portion of the increased tax revenue that may result if the development stimulates private investment. As private investments add to the tax base within the development area the increased tax revenues are placed in a special fund that can only be used for public purposes permitted by law.

Public purposes and/or public improvements associated with a development program include the acquisition and clearance of buildings and land, relocation of residents, site improvements necessary to make land usable for new construction, street and utility construction or upgrading and planning and engineering. It is important to note that tax increment revenues can only be used for public purposes and not as a direct loan to any private individual or company.

The act requires that a community establish a Tax Increment Finance Authority (TIFA) to serve as the organization responsible to oversee the planning and implementation of the tax increment plan in conjunction with the development

program. If the community currently has an economic development corporation, a downtown development authority<sup>11</sup> (where applicable) or an urban renewal agency already in effect the same members of that active development organization can serve as the board of the Tax Increment Finance Authority. This section of the law allows for a community to take advantage of tax increment financing as a new development tool without necessarily having to appoint new members to the board of directors, thus ensuring coordination and continuity with an existing development program.

Once established a Tax Increment Finance Authority has the responsibility to plan, arrange, finance and implement its development program in a variety of ways enumerated in the law. The Tax Increment Finance Authority can issue both revenue bonds and tax increment bonds necessary to finance the eligible activities of the development program.

The following is a brief outline of the procedure to establish a Tax Increment Finance Authority district.

**Procedure for establishing Tax Increment Finance Authority Districts:**

1. Determine the necessity and establish the boundaries of the district. The necessity is determined by the governing body to be in the best interest of the public.
2. The governing body holds a Public Hearing. After the Public Hearing, the governing body may create the Authority and designate the District by resolution.
3. A development plan is prepared and approved by the Authority and governing body after the Public Hearing. The development plan shows the Tax Increment Financing District that the plan pertains to. Also, the plan shows the assessed valuation of the district *before any new developments are built*, what the assessed valuation is expected to be *after the new private development occurs*, and what the *difference of the old and new assessed valuation is*. The difference is known as the **captured assessed value**. It is important to estimate the amount of captured assessed value that will be available each year. The available amount determines what type of public improvements and to what extent they can be made to aid in the development of the district.
4. A base year is declared following adoption of the plan.

**Example of Tax Increment Financing:**

To determine the actual amount of tax increment revenue available in any one year, simply multiply the captured assessed value of the proposed new

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<sup>11</sup> For General Law Townships with a population less than 20,000 persons, tax increment financing may only be used in conjunction with downtown development authority.

development, here given as the equalized value of the relative market value of new development (i.e. the difference between the old and new market values of the district), by the total tax rate of the municipality. The calculation on the next page shows that \$120,000 per year is available to make necessary public improvements for development in the tax increment financing district.

**Figure 19: Tax Increment Revenue Available**

Relative Mkt. Value of New Development	\$4,000,000
* Equalized Value	50%
= Captured Assessed Value	\$2,000,000
* Tax Rate	60 mills
= Tax Increment Revenue	\$120,000

When the Tax Increment Financing Authority is planning on extensive construction activities such as buying property, demolition and clearance and constructing roads, sewers and water mains, \$120,000 is barely adequate to pay for the planning and engineering studies necessary to undertake the development program. Therefore, it is likely that some type of bond with longer payback terms will be needed to adequately finance the program. Eighty percent of tax increment revenues available in any one year can be used as principal and interest to retire or pay off the bond. In this example that figure is \$96,000.

**Figure 20: Debt Retirement Revenue**

Available Tax Increment Revenue	\$120,000
* Maximum Percent for Bond Retirement	80%
= Tax Increment Revenue Available for Annual Debt Retirement	\$96,000

The municipality must then sell a general obligation bond that will be financed by principal and interest payments of \$96,000 each year. The bond is further backed by the municipality’s tax base so that the debt payments could still be made if for some reason the tax increment revenue was not enough to make the payment.

Using the hypothetical bond terms of eight percent for thirty years, we find that \$96,000 per year will finance a bond of approximately \$1.1 million dollars. In other words, the TIFA and the Township can directly finance over \$1 million worth of land purchases and development, public facility

construction and other improvements within the development area from the new tax dollars that are generated by the new private investment of \$4 million.

### **Special Assessments**

Special assessment is a financing mechanism used to secure funds for capital improvements in residential, commercial and industrial areas. Special assessment districts (SADs) are unique because they are based on the premise that where there are limited number of properties in the community benefiting from an improvement, such properties should pay the total cost of that improvement, rather than the entire community. When a capital improvement is needed, a special assessment district is established with boundaries encompassing all benefiting property owners. Each property owner is then assessed for his/her fair share of the total improvement cost. SADs are widely used in Michigan to finance drains, sidewalks, curbs and gutters, road improvements, and sanitary and storm sewer improvements.

Benefits of special assessment districts include:

- Special assessment districts offer local units of government flexibility in raising revenue. If only a portion of the property owners in the community desire certain capital improvements, SADs enable the community to only charge those properties which will specifically benefit from the improvement.
- SADs, unlike general property taxes, can be levied against all real property in a district.
- Special assessment statutes do not designate limits on the rate or duration of the levy. Some statutes allow the community to adjust the levy on an annual basis to meet operational costs and capital expenditures without public approval. However, a public hearing is required.

Limitations of special assessment districts:

- SADs increase administrative costs.
- SADs can be politically controversial and easily misused.
- Because special assessments are not taxes, property owners are not allowed to deduct them on their federal income taxes.

Special assessment districts may be initiated by the local governing body or by a citizen petition of not less 50% of the property owners of the proposed district. Once a district has been proposed, it takes five basic steps for establishment:

1. The legislative body of the community refers the proposed improvement to the community administrator for a preliminary report.
2. The legislative body reviews the material submitted and sets the date for a public hearing of necessity.
3. After a public hearing, the legislative body declares the proposed improvement a necessity and directs the preparation of construction plans and

the production of the assessment roll.

4. The legislative body approves the construction plans and sets the date of the public hearing to confirm the assessment roll.
5. Final confirmation of the special assessment roll by the legislative body and authorization to proceed with the project.

### **Urban Renewal:**

Urban renewal, if applicable and desired, can be an effective tool in implementing certain aspects of a Comprehensive Plan. Land can be acquired by the Township, cleared and rebuilt. This thereby removes blight, obsolescence, helps to achieve a larger tax base and a more stable and prosperous community.

## **PUBLIC/PRIVATE ACTION**

### **Subsidized Housing**

There are a variety of methods and programs designed to provide for and encourage the construction of subsidized housing for low- and moderate-income persons. There are two main types of subsidized housing: that in which the principal subsidy is low interest financing and that in which the rents are directly subsidized by the government. For the lowest income persons there is almost always a need for direct rent subsidy in order to make it feasible for them to take advantage of subsidized housing.

There are three public agencies that operate programs for the construction of subsidized housing:

1. The U.S. Department of Housing and Urban Development (Detroit Area Office)
2. Farmers Home Administration (Fowlerville Office)
3. Michigan State Housing Development Authority (Lansing)

These agencies provide low interest, long term financing to developers of senior citizen housing and low income housing. These agencies may also supply rent subsidy funds known as "Section 8 Subsidy" together with the mortgage financing.

The construction of new subsidized housing has been drastically curtailed in recent years in an effort to control Federal spending. However, most programs are still in effect with a reduced level of funding. This tightening of funds has made the programs very competitive. Programs are designed for three types of developers: non-profit corporations (usually sponsored by a church, labor union or fraternal organization); public housing authorities; private limited-profit developers or syndicates.

### **Non-Subsidized Housing:**

For those seniors with higher incomes their need for apartments can often be met

by the private sector through the construction of unsubsidized apartments and condominiums. The role of the Township in this instance is to set aside through zoning a supply of land suited for the construction of rental apartments and condominium apartments. These sites should be located as close as possible to commercial areas, so that seniors may walk to a variety of services. The sites should be serviced by adequate roads and public water and sewer.

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## Additional Strategies

Following are a few additional strategies that the Township may want to pursue in order to encourage and control development within the Township:

### **SUBAREA PLANS & STUDIES:**

Within the Township there are certain important areas and issues that need to be examined in greater detail than the Comprehensive Master Plan is able to provide. Such areas and issues are more adequately addressed in plans and studies, often known as *subarea plans* and *subarea studies*, that focus on a specific geographic area or a specific issue. The Township should consider undertaking the following subarea plans and studies:

#### **Lakeport Development Study**

A detailed plan should be prepared for the future development of the unincorporated community of Lakeport. The area to be studied should also include lands immediately adjacent to the west in which planning needs to be done to determine compatible transitional future land use designations. Included in this study would be recommendations for improvements in some or all of the following areas:

- Street improvements;
- Parking—both on-street and off-street;
- Pedestrian circulation and safety;
- Access Management;
- Community identity;
- Sign controls;
- Landscaping, including street trees, distinctive lighting and decorative pavements;
- Storm drainage.

This study would also examine and make recommendations regarding potential funding mechanisms required to implement the identified improvements, such as, but not limited to:

- Downtown Development Authority;

- Tax Increment Financing;
- Special Assessment Districts;
- State and Federal grants.

### **Sewage Disposal Study**

As mentioned previously, all residences (except for the mobile home park) and businesses in the Township currently use individual septic systems to dispose of sewage. However, given the soil limitations on septic systems throughout most of the Township, and given the projected increase in population in the Township, the use of individual septic systems may not be feasible or desirable in the future. Thus, the Township (with the aid of an engineering consultant) needs to conduct a Sewage Disposal Study to examine other methods of sewage disposal, including (but not limited to):

- Community Lagoon
- Land Application
- Municipal Sewage Treatment Facilities (either locally-owned or in contract with a nearby community that has such facilities.)

The Study should determine which, if any, of the various alternatives would be preferable to the existing method of using individual septic systems. Furthermore, if there is a preferable alternative, the Study should indicate how to implement that alternative.

### **Recreation Plan**

Each year the Michigan Department of Natural Resources (DNR) offers recreation grants for the acquisition and development of parks and recreation facilities through the Michigan Natural Resources Trust Fund and the Land & Water Conservation Fund. Any local government unit that has a current recreation plan approved by the DNR is eligible to apply for one of these recreation grants. In order to be approved by the DNR, a recreation plan must determine the community's recreation needs and develop a five-year action plan of proposed recreation projects to meet those needs. Only those recreation projects included in the five-year action plan are eligible for recreation grant financing.

### **Industrial Development Study & Plan**

The Future Land Use Plan designates two small areas in the Township for light industrial uses such as, small-scale manufacturing, processing, warehousing, and research facilities, uses that do not result in nuisances or negative environmental impacts. However, the Plan does not indicate how light industrial uses should be developed. Thus, the Township needs to formulate an industrial development plan indicating where each of the various kinds of light industrial uses should be located. In particular, a proposal for a planned light industrial/research park should be developed for the planned light industrial area in Section 32.

Once the industrial development plan is in place, the Township will be in a better position to attract the kinds of industries that are compatible with the Township's desired identity.

## **FARMLAND PRESERVATION**

With regards to the Township's objective for preserving and protecting farmland, agricultural land uses and the rural character of the Township from development, the following tools and techniques may assist the Township in achieving those objectives:

### **Farmland Agreements (P.A. 116)**

An important tool used across the State in protecting farmland from urban development is the Farmland and Open Space Preservation Act, P.A. 116 of 1974. Under the terms of this act, an owner of certain kinds of agricultural lands may enter into a Development Rights Agreement with the State, whereby the landowner agrees to keep the land in question in agricultural use for at least ten years (or up to 99 years, as established in the agreement). In return for this Agreement, all property taxes paid in excess of 7% of the landowner's income will be refunded in the form of a State income tax credit. In addition, the property in question will be exempt from any local special assessments. If the landowner breaks the Agreement before it expires, all benefits received up to that point must be repaid to the State, plus interest (except for special cases, where repayment terms may differ). Agreements may be renewed for a minimum 7-year term. Eligible agricultural lands include:

- An operating farm of more than 40 acres in size;
- An operating farm of 5 to 40 acres with a gross annual income of \$200 per tilled and cleared acre;
- An operating specialty farm (as designated by the Michigan Department of Agriculture) of at least 15 acres with a gross annual income of at least \$2,000.

At least 51% of the land in an operating farm must be under active cultivation or in pasture. The property owner does not have to provide public access to the land and the property may be sold. New owners, however, are bound by the agreement until it expires.

Although this is a State program, local communities are responsible for processing and approving applications to enroll in the program. Furthermore, the Township can encourage owners of prime and unique agricultural land within the community (and lands designated for agricultural use in the Master Plan) to enroll in the program.

### **Purchase of Development Rights**

Development rights represent the right of a landowner to develop property to the extent allowed by law. All parcels of property have a variety of rights associated with them, such as mineral rights, access and utility easements, and development

rights. These rights may be conveyed or sold off by the property owner to other parties.

A purchase of development rights program (PDR) is a means of compensating farmers for their willingness to accept a deed restriction on their land limiting or prohibiting future development of the land for non-agricultural purposes (i.e., giving up the development rights). Generally, landowners are compensated for the fair market value of their land, based on the difference between what it could be sold for on the open market with no restrictions and what it could be sold for once an **easement** restricting development is placed on the land. An easement is a restriction on private property which is legally binding on present and future landowners (the easement “runs with the land”).

### **PDR—State Program**

Section 3611b of the Farmland and Open Space Preservation Act, authorizes the State to protect valuable farmland from future development by purchasing development rights. Under the terms of Section 3611b, the State will pay a participating landowner for that portion of the value of the property that represents the right to develop that property. After selling the development rights, the land is restricted to agricultural uses and cannot be developed in the future. The landowner retains all other rights to the property including the fee ownership of the land. The land may be farmed, rented, sold or passed on to heirs and any agricultural buildings needed may still be built on the land. The State does not acquire the development rights in order to develop the land and does not open the land to public access for fishing, hunting or other uses. The development rights value is usually the difference between the fair market value and the agricultural value, as determined by an independent certified appraiser contracted by the Department of Natural Resources. The money the State uses to pay for development rights comes from the Purchase of Development Rights Fund, which in turn comes from the repayment of tax credits when P.A. 116 Farmland Agreements are terminated.

Any farmland is eligible for consideration of development rights purchase, provided that at least 51% of the land is devoted to agricultural use. Section 36222b(3) of the Act establishes criteria to be used in the selection of property for purchase. Factors to be considered include:

- The productive capacity of the farmland.
- Whether the land is considered to be prime or unique farmland.
- Farmland that is or has been enrolled in a P.A. 116 Farmland Agreement.
- Prime farmland that is faced with development pressure that will permanently alter the productive capacity of the land.
- Farmland that would complement and is part of a documented, long-range effort or plan for preservation by a local government.

Interested landowners must apply to the Farmland Preservation Office to have their development rights purchased. Applications must first be approved by the local unit of government in order to be considered by the Farmland Preservation Office. Applications are then reviewed by the Purchase of Development Rights Review Committee and screened and scored against selection criteria found in the law and developed by the Natural Resources Commission and the Commission of Agriculture. If the application meets the selection criteria and is approved by the Director of the Department of Natural Resources and the Director of the Department of Agriculture, a request will be made to the State Legislature to appropriate the money in the Purchase of Development Rights Fund to acquire the development rights.

#### **PDR—County Program**

Some counties in Michigan have established their own PDR programs to complement that run by the State. These county-level PDR programs are often supported by a specially designated millage. Unfortunately, St. Clair County does not have such a program, and at the time of this writing, has not taken any action to establish one. Burtchville Township officials should request that the County implement a well funded PDR program with the cost being borne by all County residents.

#### **PDR—Local Program**

A local PDR program would probably not be feasible for Burtchville Township, because the urban tax base in the Township is probably not sufficient to properly support such a program. The cost of such a program must be borne by a broad cross-section of society, not just the agricultural sector.

### **Agricultural Zoning Techniques**

Various zoning techniques are available to be used by the Township for the protection of farmland from encroachment by development. However, please note that support for these measures in the agricultural community is often difficult to establish because the entire cost of preserving land which benefits all of society is unfairly put upon the individual land owner. The most common of these agricultural zoning techniques are: point/numerical zoning, sliding scale zoning, quarter/quarter zoning, exclusive use zoning and agricultural buffer zoning. The Township Planning Commission has determined that the most suitable of these techniques would be the agricultural buffer zoning technique.

#### **Agricultural Buffer Zoning**

Agricultural buffer zoning is a transition zoning technique that can be used to help protect the long-term integrity of prime or unique agricultural lands. A rural residential/agricultural zone is created in appropriate areas of the community, between more intensive development and large tracts of agricultural land. This transitional area, or buffer zone, allows for rural residential lifestyle opportunities and isolates agricultural operations from higher intensity uses. The buffer district should be placed in areas not

considered prime or unique for agriculture, and in areas with relatively smaller parcel sizes that are not well suited for agriculture.

The nature of regulations of these buffer districts will vary with each community. Minimum lot sizes typically range from 1 to 3 acres in these districts. Supplementary regulations that should be considered include:

- Minimum lot width-to-depth ratios (to prevent excessively long, narrow lots);
- Clustering options (to preserve open space and reduce cost of providing public services);
- Regulation of lot splits;
- Regulation of private roads (to prevent creation of substandard roads that the community may eventually be responsible for).

## **OPEN SPACE PRESERVATION**

With regards to the Township's objectives for preserving and protecting open space from development, the following tools and techniques may assist the Township in achieving those objectives:

### **Land Acquisition**

The most effective control over land use from the public perspective comes when the public owns the land. This is especially true when communities wish to set aside land for open space and conservation purposes. However, many communities, particularly rural ones, do not have the financial resources to purchase sufficient amounts of land.

Fortunately, there is Federal, State and County funding available to assist local communities in acquiring open space and conservation land. The Land and Water Conservation Fund, a Federal grant program, and the Michigan Natural Resources Trust Fund, a State grant program, both provide sources of funds for public acquisition of lands for recreation and conservation purposes. To qualify for funding under these two programs, communities must have a parks and recreation plan that complies with current Michigan Department of Natural Resources requirements. In addition, revenues from the St. Clair County Parks and Recreation Millage are distributed to the municipalities of the County, to be used to fund local recreation projects and programs, including land acquisition for parks.

### **Conservation Easements**

A conservation easement is a method of preserving open space without purchasing all rights to a parcel of property. Rather than obtaining **fee simple**, or complete ownership, a community (or non-profit land trust or land conservancy) can purchase (similar to the purchase of development rights programs described earlier) or acquire by gift an easement to the property. Initiation of easements by the landowner is voluntary; however, after signing, the easement is an enforceable

document binding both parties. When an owner places a conservation easement on a parcel of property, certain rights to develop all or part of the land are transferred to another person or organization. When the easement document is properly signed and recorded in the county land records, owners cannot exercise the rights that have been given up.

Under Michigan law, conservation easements may extend for a limited period (such as 10 to 20 years) or they may be permanent. However, to benefit from Federal income tax and estate tax reductions, a permanent conservation easement must be granted. Conservation easements must be donated to a government agency, a university or a non-profit organization to be eligible for tax reductions.

Furthermore, conservation easements:

- Are very flexible; the owner may restrict, limit or decide how development will proceed on the subject parcel;
- Do not remove the land from the property tax rolls;
- Do not automatically allow public access to the subject parcel, unless that is part of the easement agreement;
- Do not limit the owner's right to lease or sell the subject parcel, but because the easement runs with the land, subsequent owners/lessors are bound by the easement agreement;
- May specify what the land may be used for in future years;
- May identify where structures may or may not be placed;
- May provide access for fishing or hunting;
- May provide for future activities such as construction of trails or other recreation facilities;
- May prohibit location of commercial and multifamily structures or billboards, or other uses on the subject parcel;
- May prohibit excavation or removal of gravel, soil and/or vegetation.

Local government officials can take several steps to encourage the use of conservation easements:

1. Identify priority resource areas where conservation easements would be beneficial for the protection of water quality, wildlife habitat and environmentally sensitive lands and resources.
2. Contact landowners in the selected areas, informing them of the option of easements and related financial incentives.
3. Encourage the participation of local land trust and land conservancy organizations to promote the easement concept and to receive conservation easements if there is a high degree of citizen interest for the preservation of open space. Land trusts and land conservancies are non-profit organizations directly involved in protecting land for its natural, recreational, scenic,

historical or agricultural value. Two land conservancies that serve St. Clair County are the Blue Water Land Conservancy and the Southeast Michigan Land Conservancy.

### **Open Space Agreements**

Landowners may dedicate a portion of their development rights to either the State or the Township through the “open space” provisions in the Farmland and Open Space Act, P.A. 116 of 1974. The Act enables a landowner to enter into a development rights easement in exchange for property tax relief. The minimum time allotment for an Open Space Agreement is ten years. Agreements may be renewed if the property owner desires.

There are two open space options with which a property owner may become involved: **designated** open space lands or **local** open space lands. Designated lands are those recognized as unique or sensitive by the State and include open spaces with historic, riverfront, or shoreland areas. The program requires that the parcel be undeveloped, and recognized as either historic by Federal standards or included in areas designated for protection under State acts (e.g., area designated as a natural river per P.A. 231 of 1970, or high risk erosion area under P.A. 245 of 1970). Designated open space agreements are between the property owner and the State. There is no loss of property taxes to the local government for state designated areas.

Local open space lands are those areas approved by a local governing body to conserve natural or scenic resources, promote conservation of soils, wetlands, beaches, or preserve historic sites and idle potential farmland. Local open space agreements are between the property owner and the local unit of government. The local governing body provides a tax break to the property owner based on the difference between the value of the unrestricted land versus the restricted land under the agreement.

The property owner does not have to provide public access to the land, and the property may be sold. New owners, however, are bound by the agreement until it expires. Although the community loses taxes in the form of reduced assessments, it can avoid many of the high costs of providing public services to lands that have been prematurely developed.

The local community does have the right to place a lien on the property in an open space agreement and to collect ad valorem taxes for the last seven years of the agreement if it is sold after the agreement is expired, or if it is converted to a use prohibited by the former open space agreement.

### **Rural Clustering**

Rural clustering is a set of techniques (primarily zoning) that focus on preservation of open space in rural areas by encouraging new residential development to cluster in a few selected areas on a parent parcel, rather than being spread across the entire site. This permits large portions of the parent parcel to remain open. The dwelling units are clustered in areas that are screened from

roadway views, out of sensitive environmental areas, avoiding prime farmland (unless there is no other location), and in locations where they can be effectively provided with services. Open spaces remaining after clustering are protected in perpetuity through a range of legal mechanisms (such as conservation easements). While the development rights of open space on a parcel approved for rural clustering will have been permanently retired, the land can still be actively farmed, used for woodlots, nurseries, pasture, or recreation. Ownership typically remains with a property owners association, a condominium association, or the open space can be transferred to a conservancy or the community. Two principal variations include:

1. Clustering options that create common landscaped open space for recreation by residents of clustered units in addition to the larger, more natural (unaltered) open space, and,
2. Cluster layouts that focus more on individual lot open space that is integrated with the larger, more natural open space area.

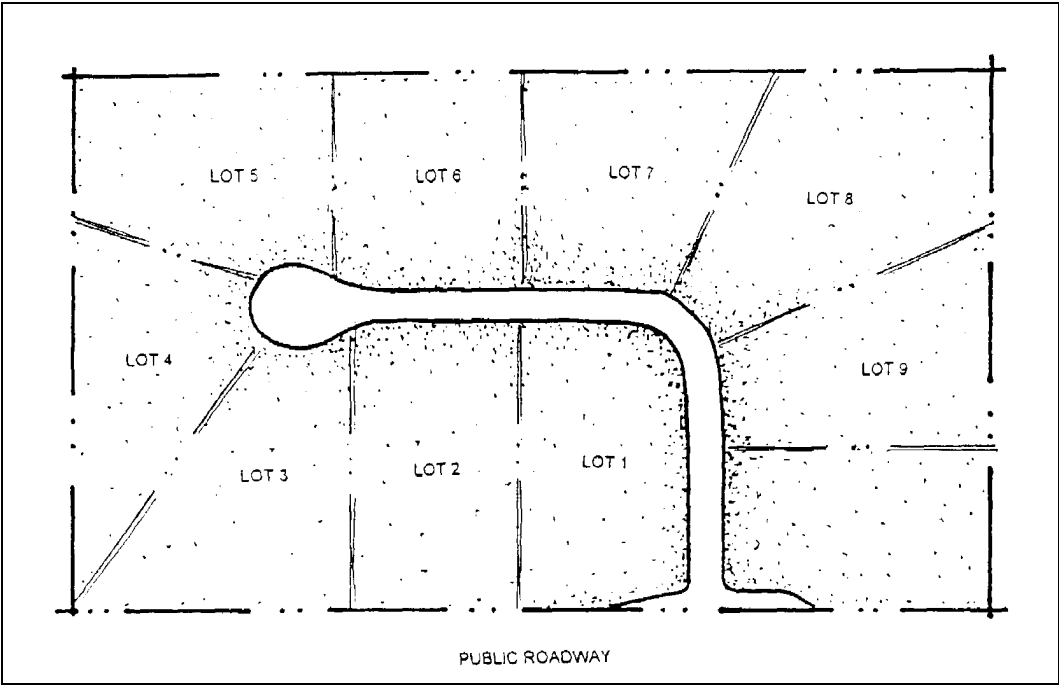
Guidelines for rural clustering recommend that:

- Rural cluster zoning is most suitable in rural-to-suburban transition areas.
- Cluster district boundaries should be consistent with the boundaries of resource production areas and natural features.
- Total development in the district should be limited by gross density restrictions.
- Cluster projects should be carefully sited to minimize impact on neighbors, infrastructure systems, and the environment.
- Procedures for review and approval should be no more difficult than for subdivisions and should have incentives to encourage their use. Where they are a necessary contribution to an open space network, they should be mandatory.
- Standards for minimum and maximum project size should be established.
- Protected open space should be large enough and usable to achieve intended purposes.
- Residential development should be confined to identified cluster areas.
- Net density should reflect rural household activities such as gardening, raising animals, etc.
- The number of homesites per cluster should be limited (such as to a minimum of four and a maximum of ten).
- Lot dimensions, building heights, and setbacks should be compatible with rural character and provide the privacy, seclusion, and access to open space that are normally expected in rural areas.

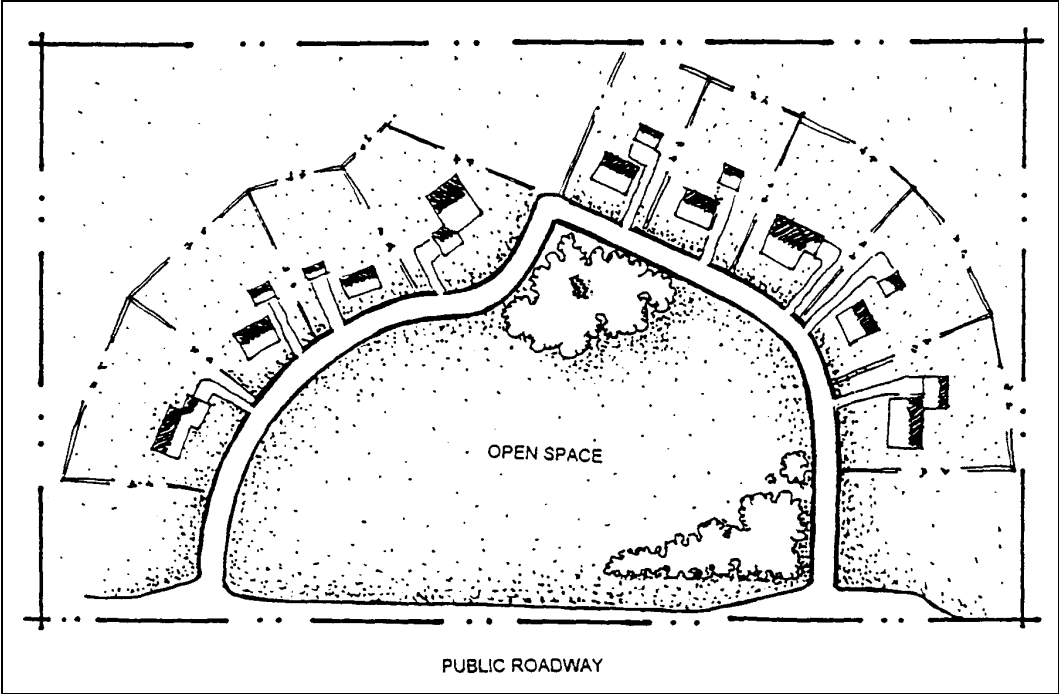
Figures 19 and 20 on the following page illustrate examples of a standard subdivision and a cluster subdivision on the same parcel. Both subdivisions

contain nine buildable lots, but the cluster development only uses a fraction of the original parcel.

**Figure 21: Standard Subdivision**



**Figure 22: Cluster Subdivision**



## ACCESS MANAGEMENT

Access management is a development management technique designed to regulate the number and proximity of access points along transportation corridors, including highways, roads and streets. Access management requires the use of various tools for providing “reasonable,” but not unlimited, access to roadways. Access control tools include a variety of policy regulations and physical considerations to be implemented at various stages of development. When there are many curb cuts located along commercially developed transportation corridors, it causes traffic congestion, vehicular and pedestrian safety problems and driver confusion. Further, there is a negative impact on the visual character of the streetscape.

Access management of transportation corridors can be addressed through encouraging the use of marginal or parallel access roads to provide shared access to parcels rather than direct access to each parcel. This can be accomplished through the use of frontage roads, rear access roads, and with driveway/curb-cut regulations. A community’s master plan could contain policies regarding the use of marginal access roads in the community and show the sections of roads and streets in the master plan map that will require marginal access drives. Such policies and delineation should be reflected in the zoning ordinance and other appropriate ordinances and regulations.

Other considerations include:

- Provide flexible zoning to accommodate changes in frontage, setbacks, parking setbacks and access management requirements.
- Obtain rights-of-way for frontage roads or rear access roads.
- Regulate the number and spacing between driveways based on the speed limit and the distance from signalized intersections to reduce traffic hazard areas.
- Provide for safe and efficient traffic movement by reducing conflicts between through traffic and local traffic.
- Coordinate efforts with adjacent municipalities for more effective corridor access controls.
- Increase coordination between land use planning and transportation planning to foster a better understanding of land use/traffic relationships.
- Improve the aesthetics of the area.
- Provide pedestrian access.

The Township should review and update its access management provisions in the zoning ordinance in terms to better reflect the policies of the Master Plan. Specifically, the Township should review the success of the existing ordinance and

study what other communities in Southeastern Michigan are doing in the area of access management.

## **URBAN SERVICE AREAS**

Urban service areas are geographic areas within a community that are designated to have public infrastructure and services sufficient to support development at urban densities. Generally, public infrastructure includes: sanitary sewer, water, drainage, and roads. Further, it may also include such services as garbage collection, fire and police protection and parks and recreation.

Urban service areas can be an effective tool in managing the location, timing and extent of development in a community. Through the use of comprehensive planning and regulatory measures, communities can manage growth and development by coordinating land use decision making with provisions for adequate infrastructure.

Communities can direct new development to areas where facilities and services already exist or are planned to be phased in and only permit development when public services are adequate to support it. For example, it is important that on-site water and sewage disposal improvements (water and sewer lines or soils that can support a septic system and potable water) are adequate before a site plan is approved. Such an approach not only results in the most efficient use of infrastructure, but it also discourages premature development in areas not ready for it. Services can be provided in a more timely and cost effective manner while at the same time protecting natural resource areas and preserving community character.

Urban service areas must be based on the comprehensive master plan. The land use plan element could contain policies calling for the coordination of development with provisions for infrastructure. The plan map would direct higher density development in areas with existing infrastructure or designated to receive infrastructure improvements within the planning horizon. Only low-density development (that does not require substantial infrastructure) would be planned for areas not having adequate infrastructure or not scheduled for such service during the planning horizon.

Regulatory measures such as the zoning ordinance, subdivision ordinance, land division ordinance and capital improvements program can implement urban service areas as follows:

- The zoning map should reflect the phased development policy in the master plan by zoning areas with existing facilities for more intensive uses and areas not having infrastructure in place for lower intensity uses.
- Subdivision regulations should tie plat approvals to provisions requiring adequate infrastructure.

- A land division ordinance that deals with lot splits not covered by the State Plat Act should include provisions to ensure that adequate access (roads) is addressed before approving lot splits.
- The capital improvements program specifies when, where and how services will be provided, and can be used to phase infrastructure and service development over a predetermined period of time. Priority infrastructure improvements contained in the CIP should coincide with those areas in the community targeted for immediate or near-term development.

These regulations should include flexibility in providing infrastructure. Development may be approved in an area currently without adequate infrastructure if the developer agrees to pay for the necessary improvements and service extensions.

## **GOVERNMENTAL STRUCTURE**

As the Township continues to increase in population, it may become difficult to keep pace with the demand for ever increasing levels of service and capital improvements. The Township should consider appointing a “blue ribbon” committee of community leaders to examine alternate forms of governmental structure that may be better suited to accommodate the needs of a growing community. Alternatives to be considered include:

- Continuation as a general law township.
- Reorganization as a charter township by popular vote. A charter township established by a vote of the people is permitted to levy a statutory millage by resolution of the Township Board. Also charter townships have greater local discretion than general law townships.
- Incorporation of all or part of the Township as a village. However, increased township powers in recent years have lessened to some extent the need for organized villages.

## **TOWNSHIP MANAGER**

As the Township continues to grow, so do the administrative duties and responsibilities of the Township Supervisor. In time, these administrative duties and responsibilities may become too complex for an elected supervisor to perform adequately. At that time it may be necessary to hire a professional township manager to handle the administration of the Township.

General law townships such as Burtchville Township have the authority to create such a position and appoint a person to it. There are no statutorily assigned duties for such a position, only those that the Township Board decides upon. However, duties that belong statutorily to another elected officer cannot be assigned to the manager position without consent of the officer involved.

For charter townships the position of a township manager is more strictly defined. Section 10 of the Charter Township Act<sup>12</sup> gives the township board the power to hire a “Township Superintendent” and to delegate to this official any or all of the following administrative duties and functions normally exercised by the Township Supervisor:

- To see that all laws and township ordinances are enforced;
- To manage and supervise all public improvements, works and undertakings of the Township;
- To have charge of the construction, repair, maintenance, lighting, and cleaning of all streets, sidewalks, bridges, pavements, sewers, and of all the public buildings or other property belonging to the Township;
- To manage and supervise the operation of all Township utilities;
- To be responsible for the preservation of property, tools, and appliances of the Township;
- To see that all terms and conditions imposed in favor of the Township or its inhabitants in any public utility franchise, or in any contract, are faithfully kept and performed;
- To attend all meetings of the Township Board, with the right to take part in discussions, but without the right to vote;
- To be a member, ex officio, of all committees of the Township Board;
- To prepare and administer the annual budget under policies formulated by the Township Board and keep the said Board fully advised at all times as to the financial condition and needs of the Township;
- To recommend to the Township Board for adoption such measures as he may deem necessary or expedient;
- To be responsible to the Township Board for the efficient administration of all departments of the Township government;
- To act as the purchasing agent for the Township, or under his or her responsibility, delegate such duties to some other officer or employee;
- To conduct all sales of personal property which the Township Board may authorize to be sold;
- To assume all the duties and responsibilities as personnel director of all Township employees or delegate such duties to some other officer or employee;
- To perform other such duties as may be prescribed by the Charter Township Act or required by ordinance or direction of the Township Board, or which are

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<sup>12</sup> Act 359 of the Public Acts of 1947, as amended ; [MCL §42.1 et seq.]

not assigned to some other official in conformity with the provisions of this Act.

The Township Superintendent holds office at the pleasure of the Township Board and must be a resident of the Township.

# Appendix