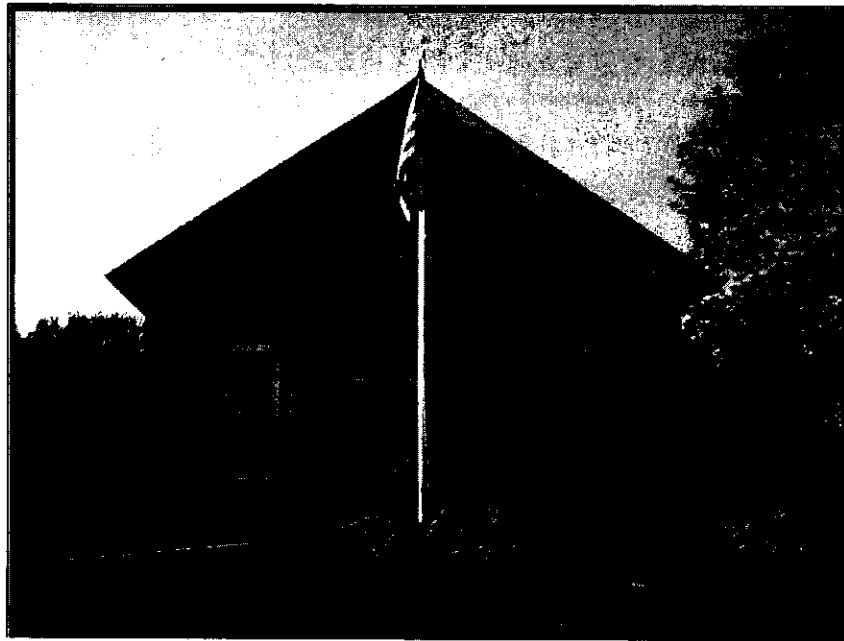
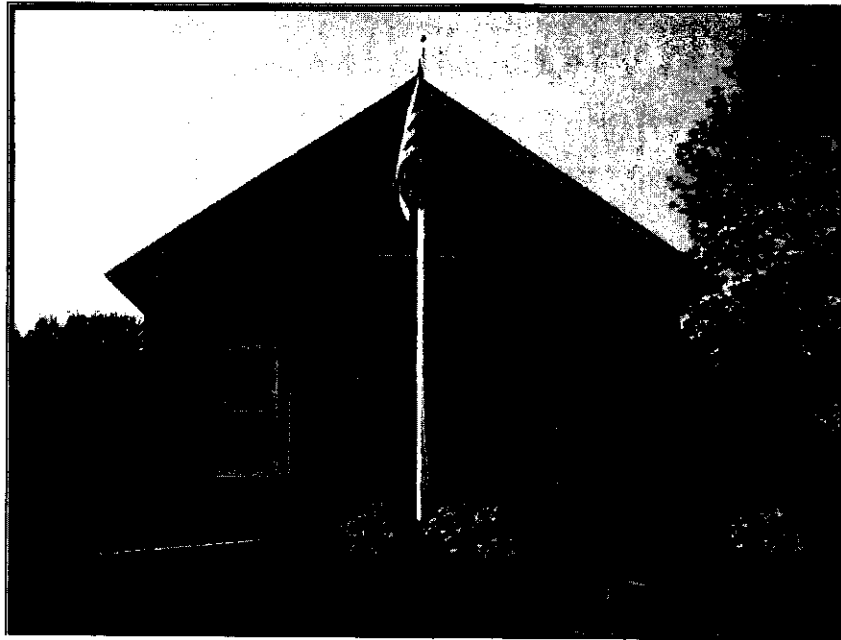


# **BUNKER HILL TOWNSHIP MASTER PLAN**



# **BUNKER HILL TOWNSHIP MASTER PLAN**



## BUNKER HILL TOWNSHIP BOARD OF TRUSTEES

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Margaret McCann, Commissioner  
Leanne Barnett, Commission and Board Representative



The Master Plan was prepared by the  
Bunker Hill Township Planning Commission  
With assistance from:

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The Bunker Hill Planning Commission  
recommended approval of the Master Plan on:  
September 25, 2003  
Revision approval on:  
Month, Day ,2010

The Bunker Hill Township Board  
adopted the Master Plan on:  
October 21, 2003  
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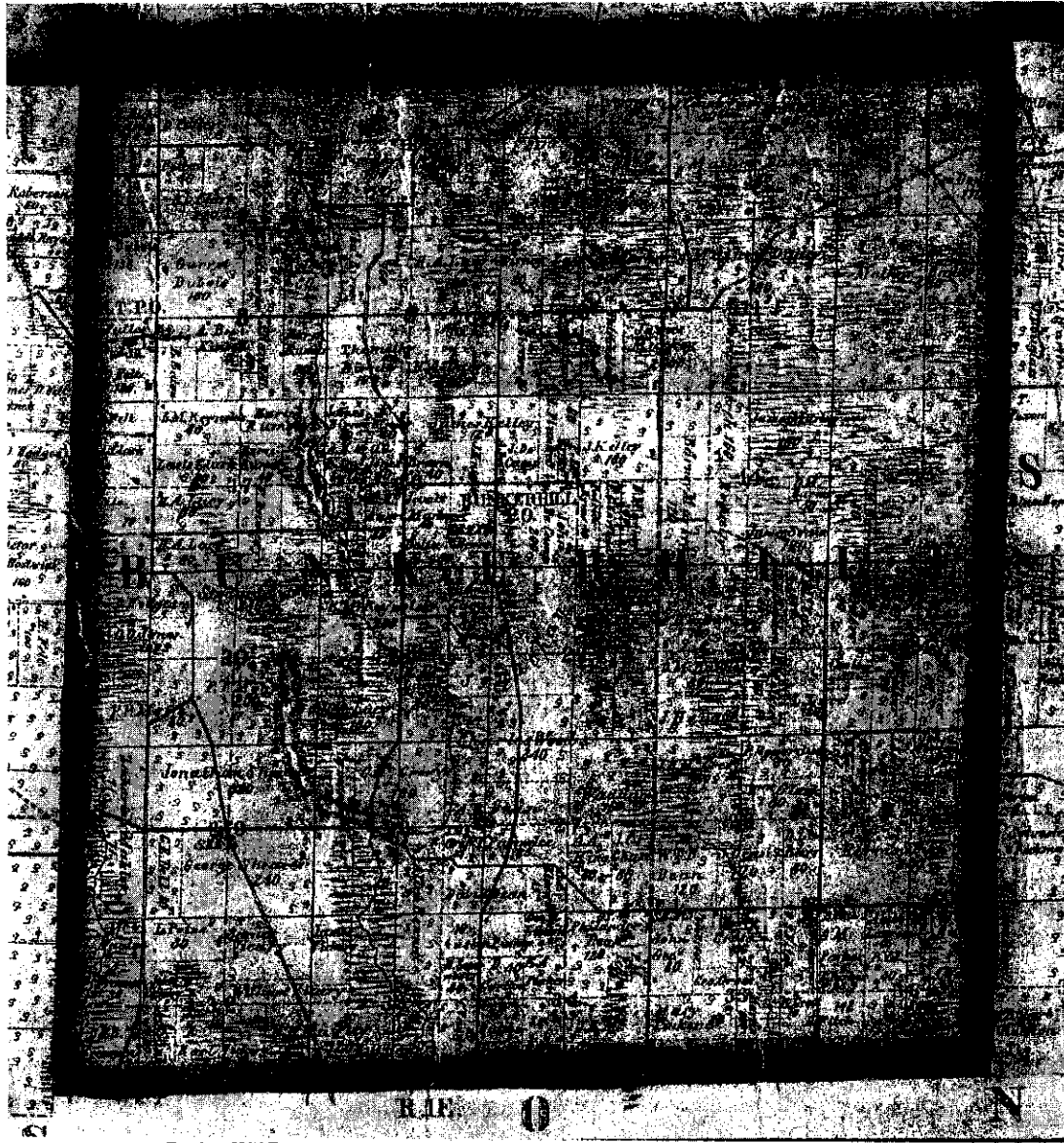
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# I. INTRODUCTION

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Bunker Hill Township circa 1859, Map Provided by Ingham County Historic Commission

## **Purpose of the Master Plan**

Planning is a process that involves the conscious selection of policy choices relating to land use, growth, and physical development of the community. The purpose of the Bunker Hill Township Master Plan is to state the goals and identify the policies and strategies regarding land use and development that the Township will pursue to attain those goals.

## **How Is the Plan to be Used?**

The Master Plan is used in a variety of ways:

1. Most important, the Plan is a general statement of the Township's goals and policies and provides a single, comprehensive view of the community's desires for the future.
2. The Plan serves as an aid in daily decision-making. The goals and policies outlined in the Plan guide the Planning Commission, Township Board and other Township bodies in their deliberations on zoning, subdivision, capital improvements and other matters related to land use and development. The Plan provides a stable, long-term basis for decision-making providing for a balance of open space, agricultural lands, housing, recreational and commercial land uses.
3. The Plan provides the statutory basis upon which zoning decisions are made. The Michigan Zoning Enabling Act, PA 110 of 2006 requires that the zoning ordinance be based upon a plan designed to promote the public health, safety and general welfare. It is important to note that the Master Plan and accompanying maps do not replace other Township Ordinances, specifically the Zoning Ordinance and Map.
4. The Plan attempts to coordinate public improvements and private developments. For example, public investments such as road or sewer and water improvements should be located in areas identified in the Plan as resulting in the greatest benefit to the Township and its residents.
5. Finally, the Plan serves as an educational tool and gives citizens, property owners, developers and adjacent communities a clear indication of the Township's direction for the future.

In summation, the Bunker Hill Township Master Plan is the only officially adopted document that sets forth an agenda for the achievement of goals and policies. It is a long-range statement of general goals and policies aimed at the unified and coordinated development of the Township of Bunker Hill that compliments the goals of nearby governmental units, wherever possible. It helps develop a balance of orderly change in a deliberate and controlled manner that permits controlled growth. As such, it provides the basis upon which zoning and land use decisions are made.

### How is the Master Plan different from Zoning?

**The Master Plan is not a Zoning Ordinance.** The Master Plan is the long-range policy guide for the physical arrangement and appearance of the Township. The Zoning Ordinance more specifically regulates the manner in which individual properties are used. The Zoning Ordinance is only one of a number of tools used to implement the Master Plan. However, the Master Plan itself does not change the Zoning Ordinance or the zoning of any property. Formulating a Master Plan is the first step in providing a sound and legal basis for revising the Zoning Ordinance and other regulatory Ordinances, investing in public capital improvements, and guiding private land use decisions.

#### Master Plan vs. Zoning Ordinance

Master Plan	Zoning Ordinance
Provides general policies, a guide	Provides specific regulations, The law.
Describes what should happen over the next 20 years, with updates required every 5 years.	Describes what uses are and are not allowed today.
Revised under the Michigan Planning Enabling Act, Public Act 33 of 2008	Adopted under the Michigan Zoning Enabling Act, Public Act 110 of 2006, as amended
Flexible to respond to changing conditions	Fairly rigid, requires formal amendment to change

### How has the community been involved?

The Master Planning Program has relied on the involvement of and input from various stakeholder groups including civic groups, citizens-at-large, non-residential property owners, and farm owners, outside planning consultants, Township staff, Township Board, and Planning Commissioners. Public input was obtained through a visioning workshop session conducted at the Township Hall on September 21, 2002. The public input process is described more fully in the Section entitled "Visioning and Public Participation."

## Who is responsible for Planning and Zoning?

The Township of Bunker Hill has a number of bodies that are actively involved in the planning and zoning decision-making process:

- Township Board - The Township Board is the chief governing body of the Township. By Michigan Statute, the Township Board approves rezoning requests, zoning and text amendments, and subdivision plats.
- Planning Commission - The Planning Commission is the principal recommending body to the Township Board on matters pertaining to the planning and development of the community. The Planning Commission approves site plans and special land uses and makes recommendations to the Township on rezoning requests, zoning text amendments, and subdivision plats. Michigan statutes require a Planning Commission to prepare and adopt a Master Plan.
- Zoning Board of Appeals - The Board of Appeals serves to interpret provisions of the Zoning Ordinance when requested and determine when variances should be granted when practical difficulties with property make it impossible to meet the strict provisions of the Zoning Ordinance.

## Historic Context

Because of the growth of the community in the 1990's, the Township decided that they needed to develop a basic vision and land use implementation program for Bunker Hill Township. Prior to the adoption of this document the Township Planning Commission based decisions on the Zoning Ordinance, State and Federal Planning Laws and their own individual knowledge of the community.

In 2003 the first Master Plan for Bunker Hill Township was adopted. The Township derives its authority for the preparation of a Master Plan from The Michigan Township Planning Act, P.A. 168 of 1959.

In 2008 the Michigan Planning Enabling Act, P.A. 33 of 2008 replaced The Michigan Township Planning Act, P.A. 168 of 1959.

In 2010 Bunker Hill Townships Planning Commission undertook the process of reviewing and revising the townships Master Plan. This updated document was prepared under the authority, requirements, and guidelines set forth in the Michigan Planning Enabling Act, P.A. 33 of 2008 which states in Sec. 45 (2):

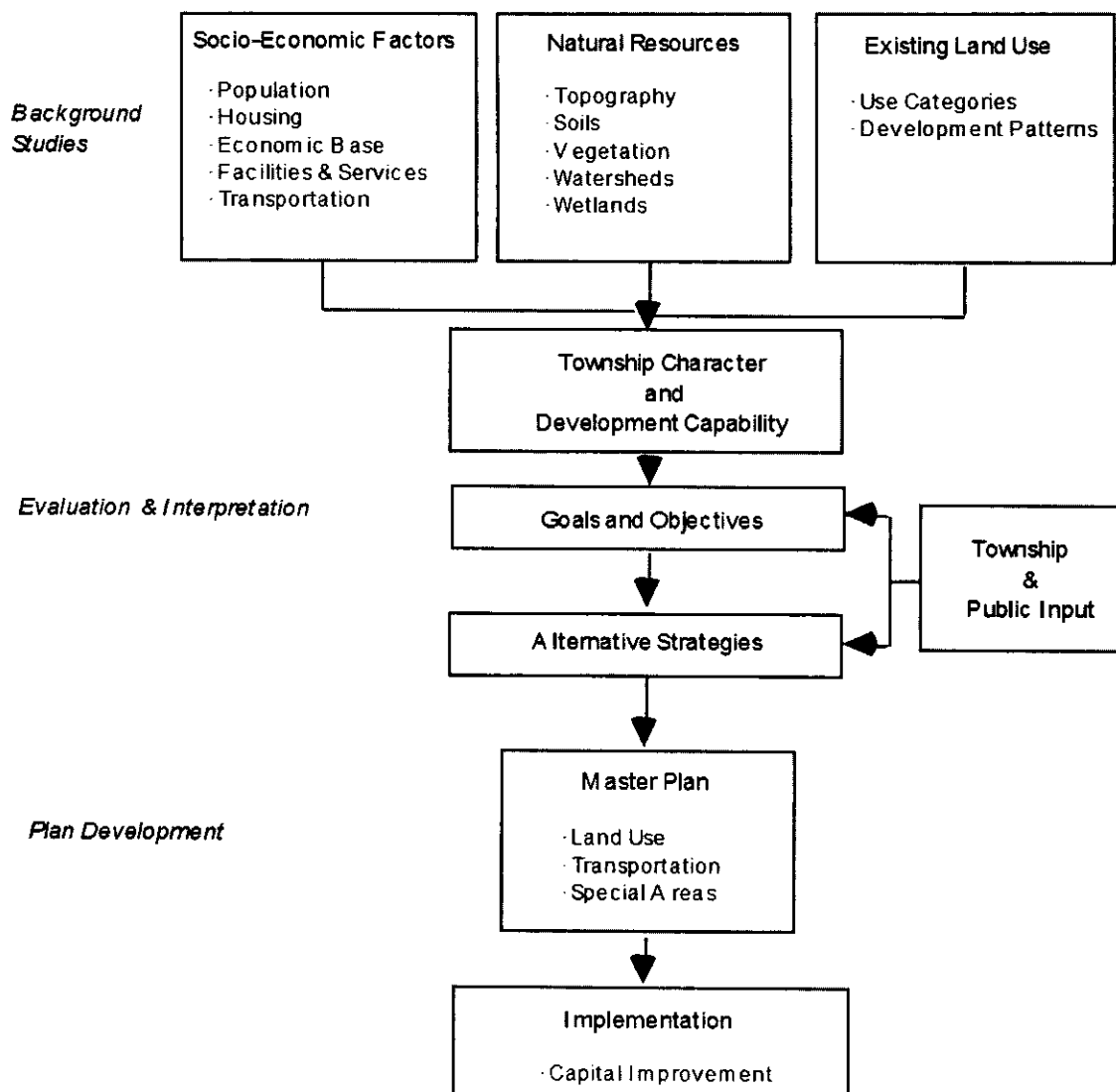
*At least every 5 years after adoption of a master plan, a planning commission shall review the master plan and determine whether to commence the procedure to amend the master plan or to adopt a new master plan.*

This document represents the first amendment to the Master Plan of 2003.

## Planning Process

The process used to generate the Plan consisted of four phases: background studies; evaluation of Township character and development capability; identification of goals, objectives, and policies; and plan development.

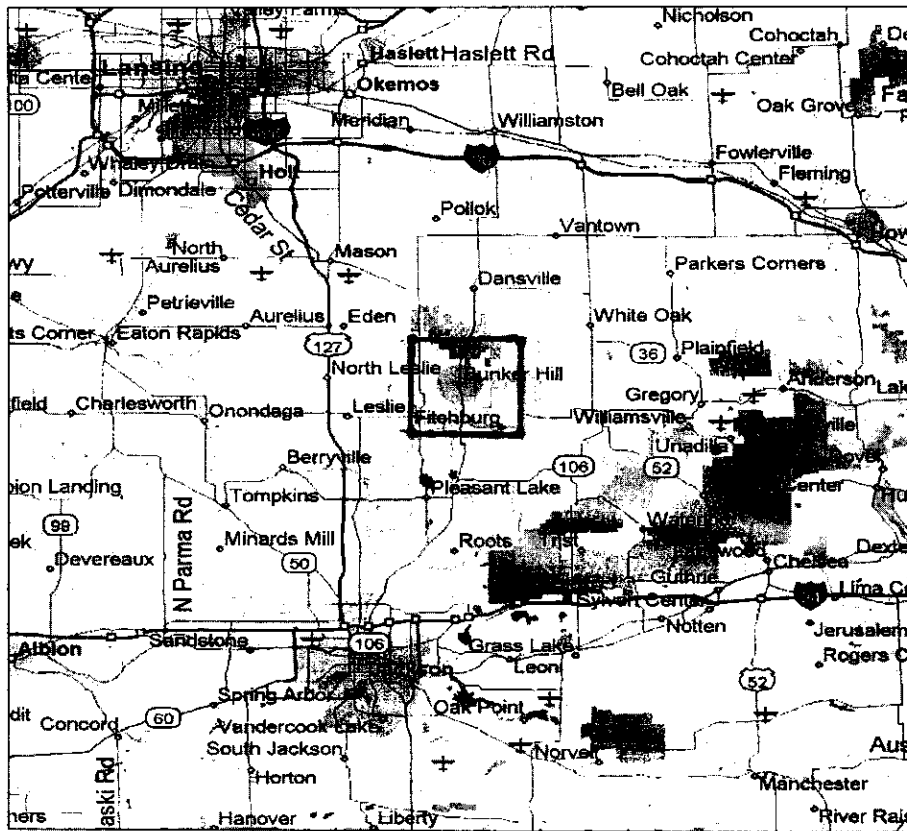
Background studies involving data inventory and analysis from Census data, existing reports, and field surveys were gathered. Sound community planning cannot take place in a vacuum. Many factors, which exist, must be taken into account when formulating plans for the future. This process is illustrated in the following diagram.



## Regional Setting

Primarily rural communities surround Bunker Hill Township. The appropriate planning across borders will help facilitate compatible land use patterns between communities. Bunker Hill Township is about twenty (20) miles North of Jackson, Michigan and about twenty-five (25) miles South of Lansing, Michigan. These two (2) cities are the largest nearby municipalities.

**Map 1**  
**Regional Location Map**



Bunker Hill Township, itself, is located in the southernmost tier of Townships in Ingham County. (See Map 2). Jackson County and more specifically, Henrietta Township exist to the south. The Village of Stockbridge exists a few miles to the east.

**Map 2 LOCATION WITHIN INGHAM COUNTY**

## Geology

### Michigan Geology

The state of Michigan has a great variety of geological formations. The earliest geological activity occurred during the Pre-Cambrian Era, well over a billion years ago, in the Upper Peninsula. The Lower Peninsula began to take shape during the Lower Pennsylvanian Period, about 235 million years ago, late in the Paleozoic Era. It began as a basin, which accumulated with sediment and marine organisms. It was submerged in essentially salty water. Under pressure, the coral-like shells formed a porous limestone. Oil and gas formed from an uncertain organic source, and seeped into the pores. The end of the Pennsylvanian Period left the Lower Peninsula in layers of limestone, gypsum, and salt. The surface was swampy and rich in plant life that later formed thin layers of coal. The ice age brought glaciers, which advanced and receded numerous times. They pulverized and polished the rock, carrying and depositing the soil that resulted. The retreat of the glaciers 10,000–12,000 years ago left the moraines, kames, eskers, and drainage ways that characterize the Lower Peninsula landscape.

### Soils

Soil associations throughout the Township bear out the Township's flat relief. All four (4) soil associations are described as existing in areas that are flat to nearly flat. Only one (1) area is described as steep, the Marlette-Oshtemo-Capac area in the northwest corner and another as hilly, the Oshtemo-Houghton-Riddles association, located throughout the center of the Township. However, the topography betrays the soils description, revealing these areas as no steeper or flatter than other areas of the Township.

### Climate

The climate of this area is typical of that of the rest of the State of Michigan and other Midwestern states. There are four distinct seasonal changes in the climate, with a moderate growing season from late April to early October. The temperature ranges from an average maximum of 82° Fahrenheit in July to an average minimum of 16° Fahrenheit in January, with an annual mean temperature of 48° Fahrenheit. Annual precipitation averages about 30 inches, with February averaging the lowest monthly precipitation at 1.49 inches and June averaging the highest monthly precipitation at 3.16 inches.

## History and Social Settings

### Early History

- The first settler in what is now the Township of Bunker Hill was David FULLER, a Baptist deacon, who located in the West part in 1837 or 1838. His son Henry, who came with him, was married in 1841 to Miss Lovina WHITTEMORE, and his was one of the earliest marriages in the Township, occurring in January.

- The second settler was probably a man named BUNKER, who located in the Northwest portion of the Township, and for whom the Township is said to have been named. His daughter, Mary BUNKER, was one of the first settlers born in the Township. The date of her birth is not known.
- In the 1800's in the North and East portions of the Township settled large numbers of natives of Ireland. The first of the Irish nationality who came was James MARKEY, who arrived with a large family in the neighborhood of 1840, and settled near the Center. He was a prominent citizen, and several of his sons were afterwards chosen to various Township offices. They erected a Catholic church northeast of the center of town, and its congregation numbered two hundred (200) or more. This was the third religious organization in the Township.
- In 1848 there was one post-office, named Bunker Hill, located in the Western part of the Township, operated by a man named TUTTLE. After several years the name of the Bunker Hill post-office was changed to Bunker Hill Center. Later on a post-office was established in the Northwest part of town, named Felt, while in 1855 an office was established at Fitchburg, with Hubbard FITCH as postmaster. Fitchburg contained three (3) stores, two (2) blacksmith-shops, a wagon-shop, a shoe-shop, and a Methodist Church. Source: Early History of Ingham County

#### Education

The Township is part of three (3) school districts: Dansville Schools, serving nine hundred and five (905) students, Leslie Public Schools, serving one thousand three hundred and ninety-two (1,392) students and Stockbridge Community Schools, serving one thousand six hundred and fifty (1,650) students. The combined student population of all three (3) districts is three thousand nine hundred and forty-seven (3,947) students. According to the U.S. Bureau of the Census, in the year 2000 there were 560 school age children living in the Township from the ages of 5 to 17.

#### Recreation

Although no major lakes or rivers are within the Township the Dansville State Game area encompasses more than one thousand (1,000) acres. This public land managed by the State of Michigan includes most of sections 2, 3 and 4 and is utilized primarily for hunting and recreation.

#### Police and Fire Services

Police protection is provided for Bunker Hill Township by the Ingham County Sherriff's department. Fire Protection for the Township is provided by the Stockbridge Area Emergency Services Authority (S.A.E.S.A.).

## BACKGROUND STUDIES

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Prior to developing a Master Plan and Land Use Plan for Bunker Hill Township, a comprehensive inventory of cultural and natural resources must be conducted. Information gathered through this process is critical to the accurate projection of future development patterns and the establishment of management policies. *Note: The 2010 U.S. Census was not completed at the time of the Master Plans revision. Therefore no data sets could be incorporated in to this document.*

## Population Characteristics

### Historical Population Trends

Table 1 depicts population trends for Ingham County, Bunker Hill Township and surrounding communities from 1970 to 2000. Since 1970, Bunker Hill's population has increased by five hundred fifteen (515) people or 35.2%.

**Table 1**  
**Population History**  
**1970-2000**

	1970	1980	1990	2000
<b>State of Michigan</b>	8,871,700	9,262,078	9,295,297	9,938,444
<b>% Increase</b>		4.40%	4.00%	4.00%
<b>Ingham County</b>	261,039	275,520	281,912	279,320
<b>% Increase</b>		5.5%	2.3%	-1.0%
<b>Bunker hill Township</b>	1,464	1,794	1,888	1,979
<b>% Increase</b>		22.5%	5.2%	4.8%
<b>Ingham Township</b> (Includes Village of Dansville)	1,498	1,974	1,942	2,061
<b>% Increase</b>		31.7%%	-1.6%	6.1%
<b>Leslie Township</b> (Does not include the City of Leslie)	3,612	2,190	2,436	2,327
<b>% Increase</b>		-39.3%	11.2%	-4.5%
<b>Stockbridge Township</b> (Includes Village of Stockbridge)	2,526	2,914	2,971	3,485
<b>% Increase</b>		15.4%	2.0%	17.3%
<b>Henrietta Township</b> (Jackson County)	3,594	3,814	3,858	4,483
<b>% Increase</b>		6.1%	1.2%	16.2%

Source: U.S. Bureau of the Census, 1970, 1980, 1990, and 2000

## Population Projections

Table 2 illustrates future population projections that indicate very modest but stable growth for the Township. Table 2 indicates that between 2000 and 2035 Bunker Hill Township will experience a growth rate of 8.4% or one hundred sixty-seven (167) people. By comparison the growth rate by 2010, the next census year, the Township will have grown by one hundred and nine (109) persons or 5.5%. This leaves 2.9% of the growth for the last fifteen (15) years of the projection period through 2035. In viewing the data contained in Table 2, one must remember that demographers find it easier to predict the future population in the short term rather than the long term. Therefore, the later years of the projection period are more conservative in terms of growth. At the decennial census year of 2010, Ingham Township's population will have increased by 9.0%, Leslie Township's by 11.0%, Stockbridge Township's by approximately 100% and Ingham County's by approximately 8.0%.

**Table 2  
Population Projections  
2000-2035**

Community	2010	2015	2020	2025	2030	2035	2040	2045	2010-2045 % Growth
<b>Bunker Hill Township</b>	2,052	2,052	2,066	2,094	2,127	2,167	2,214	2,268	10.5%
<b>Ingham Township</b>	1,608 #1(2,043)	1,626 (2,061)	1,664 (2,101)	1,706 (2,147)	1,736 (2,181)	1,763 (2,213)	1,788 (2,243)	1,812 (2,273)	12.6% (11.2%)
<b>Leslie Township</b>	2,192	2,192	2,198	2,209	2,222	2,238	2,255	2,275	3.8%
<b>Stockbridge Township</b>	2,361 #2(3,636)	2,388 (3,662)	2,444 (3,724)	2,505 (3,795)	2,550 (3,852)	2,589 (3,904)	2,626 (3,957)	2,675 (4,023)	13.3% (10.6%)
<b>Ingham County</b>	273,660	275,577	279,954	284,977	288,894	292,483	296,072	299,661	9.5%

Source: Tri-County Planning Commission

Note #1: Number in parenthesis includes the Village of Dansville.

Note #2: Number in parenthesis includes the Village of Stockbridge

## Age and Sex

As depicted in Tables 3 and 4, Bunker Hill Township exhibits a typical population distribution, smaller in earlier and later years, with the bulk of the population in the middle years. As the baby boom generation moves through the age cohorts, the percentage of people within the later years will be larger. The baby boom generation is defined as a period between 1946 and 1964, when seventy-six million (76,000,000) American's were born.

**Table 3**  
**General Population and Age Characteristics**  
**Bunker Hill Township, Ingham County, State of Michigan**

	Bunker Hill Township		Ingham County		State of Michigan	
	1990	2000	1990	2000	1990	2000
<b>Population</b>	1,888	1,979	281,912	279,320	9,295,297	9,938,444
<b>Median Age</b>	30.8	36.0	28.4	30.4	32.6	35.5
<b>Under 18 years</b>	611	560	68,395	54,417	2,463,253	2,595,767
<b>Percent of Total</b>	32.4%	28.3%	24.3%	19.5%	26.5%	26.1%
<b>65 years and over</b>	135	154	24,376	26,251	1,106,140	1,219,018
<b>Percent of Total</b>	7.2%	7.8%	8.6%	9.4%	11.9%	12.3%

Source: U.S. Bureau of the Census, 2000

**Table 4  
Bunker Hill Township  
Age and Sex**

Age Group	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Under 5	121	6.11	75	3.79	46	2.32
5 to 9	153	7.73	84	4.24	69	3.49
10-14	187	9.45	105	5.31	82	4.14
15 to 17	99	5.00	53	2.68	46	2.32
18 and 19	55	2.78	31	1.57	24	1.21
20	17	0.86	12	0.61	5	0.25
21	24	1.21	16	0.81	8	0.40
22 to 24	48	2.43	26	1.31	22	1.11
25 to 29	115	5.81	59	2.98	56	2.83
30 to 34	140	7.07	68	3.44	72	3.64
35 to 39	180	9.10	88	4.45	92	4.65
40 to 44	203	10.26	98	4.95	105	5.31
45 to 49	167	8.44	87	4.40	80	4.04
50 to 54	134	2.17	74	3.74	60	3.03
55 to 59	103	6.77	54	2.73	49	2.48
60 and 61	36	5.20	22	1.11	14	0.71
62 to 64	43	1.82	29	1.47	14	0.71
65 and 66	25	1.26	10	0.51	15	0.76
67 to 69	36	1.82	18	0.91	18	0.91
70 to 74	39	1.97	18	0.91	21	1.06
75 to 79	23	1.16	10	0.91	13	0.66
80 to 84	20	1.01	8	0.40	12	0.61
85 and over	11	0.56	7	0.35	4	0.20
<b>Median Age</b>	36		35		37	

Source: U.S. Bureau of the Census, 2000

## Race and Ethnic Origin

Not unlike most rural communities, Bunker Hill Township is primarily white in terms of racial makeup. Race and Hispanic Origin are depicted in Table 5. From Table 5 it can be observed that most minority racial groups, as a percentage of the Township's population, are under 1%. Hispanics, an ethnic category that is primarily composed of white and black races, comprised 2.1% of the Townships population in the year 2000.

**Table 5**  
**Bunker Hill Township**  
**Population by Race and Hispanic Origin**

RACE	Total	% Of Total	Hispanic	% Of Total	Non-Hispanic	% Of Total
White	1,923	97.20%	41	2.10%	1,938	97.90%
Black or African American	6	0.30%	0		0	
American Indian and Alaskan Native	5	0.25%	0		5	100%
Asian, alone	5	0.25%	0		5	
Native Hawaiian and Other Pacific Islander	1	0.05%	0		1	100%
Some other race	15	0.75%	15	100%	0	100%
Two (2) or more races	24	1.20%	5	20.80%	19	79.20%

Source: U.S. Bureau of the Census, 2000

## Housing Characteristics

### Housing Occupancy

Table 6 illustrates the fact that housing occupancy is relatively high in Bunker Hill Township. Out of seven hundred nineteen (719) housing units, six hundred and ninety (690) or 96% are occupied, while only twenty-nine (29) or 4% were vacant at the time the 2000 Census Data was collected. In addition, household size or population in relationship to owner occupied housing units is also high, still near 3.0 persons per household.

**Table 6  
Bunker Hill Township  
Housing Occupancy**

HOUSING OCCUPANCY	Number	Percent	Population	Average Household Size
<b>Total housing units</b>	*719	100	1979	2.75
<b>Occupied housing units</b>	690	100	1,979	2.87
Owner	631	91.4	1,825	2.89
Renter	59	8.6	154	2.61
<b>Vacant housing units</b>	29	100		
For rent	1	3.4		
For sale only	8	27.6		
Rent or sold, not occupied	0	0.0		
Seasonal, recreational, Or occasional use	5	17.2		
For Migrant Workers	0	0.0		
<b>Other</b>	15	51.7		

Source: U.S. Bureau of the Census, 2000

\* According to the U.S. Bureau of the Census Office in Detroit, this number (719) is derived from both the short and long census form and does not match the number of total housing units in Table 12 (736). It is calculated by using both sets of data (long and short form data) and is considered the most accurate.

## Household Type

Table 7 depicts households by type: family households, married couple families, female-headed households, and non-family household, etc. In the year 2000, the percentage of family households within the Township was 79.4. Having a majority of family households has long been a benchmark of stability in American culture and still is. However, over the several decades since World War II trends have begun to emerge that may challenge the pre-eminence of the family as a hallmark descriptor of American society. These trends are compared in Table 8.

**Table 7  
Bunker Hill Township  
Households by Type**

<b>HOUSEHOLDS BY TYPE</b>	<b>Number</b>	<b>Percent</b>
<b>Total households</b>	690	100
<b>Family households (families)</b>	548	79.4
<b>With own children under 18 years</b>	266	38.6
<b>Married-couple family</b>	476	69.0
With own children under 18 years	231	33.5
<b>Female householder, no husband present</b>	51	7.4
With own children under 18 years	25	3.6
<b>Non-family households</b>	142	20.6
Householder living alone	105	15.2
Householder 65 years and over	27	3.9
<b>Households with individuals under 18 years</b>	287	41.6
<b>Households with individuals 65 years and over</b>	110	15.9

Source: U.S. Bureau of the Census, 2000

The examination of household types, such as family households, non-family households, married couple families and female-headed households, depicted in Table 8, reveal some common sociological trends. Three of the above household types in the Township follow a national trend: decreasing family households, decreasing married couple families, and an increase in the number of non-family households.

Table 8, illustrates that while the number of family households and married couple families increased in the number of households, their percentage of the whole dropped from 86.3% in 1990 to 79.4% in 2000. In addition, the number of non-family households increased from 13.7% to 19.0%. Two good signs revealed by this data, is the fact that female headed households decreased from 9.2% to 7.4 % and the number of elderly living alone, a part of non-family households, increased by only one (1) person.

**Table 8**  
**Bunker Hill Township**  
**Trends in Household Types**  
**1990-2000**

	1990		2000	
	Number	Percent	Number	Percent
<b>Family Households</b>	509	86.3%	548	79.4%
<b>Married Couple Families</b>	431	73.0%	476	69.9%
<b>Female Headed Households</b>	54	9.2%	51	7.4%
	81	13.7%	124	19.0%

Source: US Bureau of the Census, 1990, 2000

## Household and Family Size

Both, persons per occupied household, and persons per family, in Bunker Hill Township, as illustrated in Tables 9 and 10 below, mirror national patterns of decline. The decreases in these data categories reflect a slow or no-growth scenario, coupled with lower births rates among women of childbearing age. The result of this is that population growth is now tied to housing growth rather than the number of births.

**Table 9**  
**Persons Per Household, Owner Occupied**  
**For Bunker Hill Township and**  
**Surrounding Communities**  
**1980-2000**

Community	1980	1990	2000
Bunker Hill Township	3.28	3.16	2.87
Ingham Township	3.27	3.0	2.85
Leslie Township	3.05	2.95	2.72
Stockbridge Township	2.95	2.95	2.76
Henrietta Township (Jackson County)	2.72	2.87	2.76
Ingham County	2.32	2.55	2.42
State of Michigan	2.84	2.66	2.56

Source: US Bureau of the Census, 1980, 1990, and 2000

**Table 10**  
**Family Size for**  
**Bunker Hill Township and**  
**Surrounding Communities**  
**1990-2000**

Community	1990	2000
<b>Bunker Hill Township</b>	3.42	3.23
<b>Ingham Township</b>	3.35	3.18
<b>Leslie Township</b>	3.23	3.03
<b>Stockbridge Township</b>	3.27	3.16
<b>Henrietta Township (Jackson Courty)</b>	3.21	3.07
<b>Ingham County</b>	3.11	3.04
<b>State of Michigan</b>	3.16	3.10

Source: U.S. Bureau of the Census, 1990 and 2000

The pattern of decreasing household and family size has been occurring for several decades. While the decreases are relatively small every decade, and even though Bunker Hill Township's household and family size have remained relatively high, the Township will eventually experience structural changes in household and family makeup that will drive the amount and type of housing that will need to be built.



## Housing Value

Table 11, indicates that housing is affordable in Bunker Hill Township. Approximately 75% of the owner-occupied homes that responded to this census question have a value of between \$50,000 and \$149,000 with a median value of \$112,000.

**Table 11  
Bunker Hill Township  
Housing Value**

	Number	Percent
<b>Owner Occupied Units--*Specified Units</b>	<b>*339</b>	<b>100.0</b>
<b>Value</b>		
Less Than \$50,000	14	4.1
\$50,000 to \$99,999	119	35.1
\$100,000 to \$ 149,999	135	39.8
\$150,000 to \$199,999	60	17.7
\$200,000 to \$299,999	11	3.2
\$300,000 to \$499,999	-	-
\$500,000 to \$999,999	-	-
\$1,000,000 or more	-	-
<b>Median (dollars)</b>	<b>\$112,200</b>	<b>(X)</b>

Source: U.S. Bureau of the Census, 2000.

\*There were only 339 responses to this question on the census questionnaire.

## Units in Structures

As depicted in Table 12, five hundred fifty-six (556) single-family detached housing units, or 75.5% of the total represents the largest percentage of total housing units. Mobile homes come in second at one hundred sixty-one (161) units or 21.9% of the total, with two (2) unit structures coming in a distant third with thirteen (13) units, for 1.8% of the total.

**Table 12**  
**Bunker Hill Township**  
**Units in Structures**

	Number	Percent
<b>Total Housing Units</b>	<b>*736</b>	<b>100.0</b>
1-unit, detached (single family)	556	75.5
1-unit, attached (townhouse)	1	0.1
2 units	13	1.8
3 or 4 units	-	-
5 to 9 units	-	-
10 to 19 units	-	-
20 or more units	-	-
Mobile home	161	21.9
Boat, RV, van, etc.	5	0.7

Source: U.S. Bureau of the Census, 2000

\* This number (736) is derived from the data collected on the long census form at a 50% sample rate.

## Year Structures Built

Table 13, indicates that the greatest period of residential growth, for the Township, was between 1970 and 1979 when one hundred sixty-three (163) housing structures were built, followed by the decade of the 1980's when one hundred eighteen (118) structures where built. The period of time from 1970 through 1989 account for 38% of the housing structures in Bunker Hill Township. One indicator of housing stock condition is the fact that approximately fifty (50) percent of the structures in the Township were built after 1974 when the State of Michigan adopted a national code known as BOCA. Structures built after this date had to conform to a national code that made construction codes more uniform.

**Table 13**  
**Bunker Hill Township**  
**Year Structures Built**

	Number	Percent
1999 to March 2000	39	5.3
1995 to 1998	62	8.4
1990 to 1994	37	7.7
1980 to 1989	118	16.0
1970 to 1979	163	22.1
1960 to 1969	88	12.0
1940 to 1959	66	9.0
1939 or earlier	143	19.4

Source: U.S. Bureau of the Census, 2000

## Household Projections

Bunker Hill Township and its neighboring communities, with the exception of Stockbridge Township and Village, will experience very modest housing growth according to the housing projections in Table 14. Between the year 2000 and 2035 the Township will experience less than 1% growth in households per year. Stockbridge Township on the other hand will experience 5.2% per year in housing growth for the same period.

By the year 2010, the next decennial census year, the following growth in households is projected to occur: Bunker Hill Township, 9.0%, Ingham Township, 14.0%, Leslie Township, 16.0%, Stockbridge Township, over 100%, and Ingham County by 83%.

**Table 14**  
**Household Projections**  
**Bunker Hill and Selected Surrounding Communities**

Community	2000	2005	2010	2015	2020	2025	2030	2035	2000-2035 % Growth
<b>Bunker Hill Township</b>	643	683	701	717	731	744	756	767	19%
<b>Ingham Township</b>	539 #1(672)	585 (728)	614 (764)	634 (789)	653 (812)	670 (833)	686 (853)	701 (871)	30% (30%)
<b>Leslie Township</b>	801	877	926	956	986	1,011	1,034	1,057	32%
<b>Stockbridge Township</b>	693 #2(1,180)	1,157 (1,708)	1,600 (2,190)	1,732 (2,340)	1,856 (2,487)	1,888 (2,524)	1,917 (2,558)	1,944 (2,591)	181% (120%)
<b>Ingham County</b>	105,849	183,362	193,307	201,684	210,165	217,579	223,982	231,066	118%

Source: Tri-County Planning Commission.

Note #1: Number in parenthesis includes the Village of Dansville.

Note #2: Number in parenthesis includes the Village of Stockbridge

## Employment by Occupation and Industry

Table 15, reveals that the top occupations of residents in the Township are: Production, Transportation, and Material Moving at 24.7%, followed by Management and Professional Related at 23.7%, and finally, Sales and Office Occupations at 22.3%.

Employment by industry reveals that the top industries employing residents of the Township are: Manufacturing at 23.2%, Education, Health and Social Services at 17.8%, with Construction trades coming in third highest at 11.5%.

**Table 15**  
**Bunker Hill Township**  
**Employment by Occupation and Industry**

<b>OCCUPATION</b>		
	<b>NUMBER</b>	<b>PERCENT</b>
<b>EMPLOYED CIVILIAN POPULATION 16 YEARS AND OVER</b>	<b>989</b>	<b>100.0</b>
PRODUCTION, TRANSPORTATION AND MATERIAL MOVING	244	24.7
MANAGEMENT, PROFESSIONAL AND RELATED	229	23.2
SALES AND OFFICE	221	22.3
SERVICE	143	14.5
CONSTRUCTION, EXTRACTION, MAINTENANCE	141	14.3
FARMING, FISHING, FORESTRY	11	1.1
<b>INDUSTRY</b>		
MANUFACTURING	229	23.2
EDUCATIONAL, HEALTH, SOCIAL SERVICES	176	17.8
CONSTRUCTION	114	11.5
RETAIL TRADE	98	9.9
PUBLIC ADMINISTRATION	72	7.3
PROFESSIONAL, SCIENTIFIC, MANAGEMENT, ADMINISTRATIVE, WASTE MANAGEMENT SERVICES	57	5.8
OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)	39	3.9
TRANSPORTATION, WAREHOUSING, UTILITIES	38	3.8
WHOLESALE TRADE	38	3.8
ARTS, ENTERTAINMENT, RECREATION, ACCOMMODATION AND FOOD SERVICES	37	3.7
AGRICULTURE, FORESTRY, FISHING, HUNTING AND MINING	36	3.6
FINANCE, INSURANCE, REAL ESTATE, RENTAL/LEASING	29	2.9
INFORMATION	26	2.6

Source: U.S. Bureau of the Census, 2000

## Un-employment Rates

Un-employment rates, as illustrated in Table 16, follow the ups and downs of the State and National economies. Bunker Hill Township and its surrounding neighbors experienced the lowest un-employment rates in the year 2000.

**Table 16**  
**Bunker Hill Township and Surrounding Communities**  
**Un-employment Rates**  
**1995-2002**

	*'02	'01	'00	'99	'98	'97	'96	'95
<b>Bunker Hill Twp.</b>	6.6%	5.4%	3.9%	4.1%	4.8%	4.7%	5.7%	5.7%
<b>Ingham Township</b>	3.9%	2.8%	2.1%	2.1%	2.6%	2.5%	3.0%	3.1%
<b>Leslie Township</b>	4.8%	3.5%	2.6%	2.7%	3.1%	3.1%	3.7%	3.7%
<b>Stockbridge Township</b>	3.0%	2.1%	1.6%	1.6%	1.9%	1.9%	2.3%	2.3%
<b>Henrietta Township (Jackson Courty)</b>	4.9%	4.0%	2.3%	2.6%	2.8%	3.4%	3.8%	4.0%
<b>Ingham County</b>	4.4%	3.6%	2.6%	2.8%	3.3%	3.2%	3.8%	3.9%
<b>State of Michigan</b>	6.7%	5.3%	3.6%	3.8%	3.9%	4.2%	4.9%	5.3%

Source: State of Michigan, Bureau of Labor Statistics, 2002

\* Through June of 2002

## Retail Employment Projections

The retail employment projections illustrated in Table 17, indicate large growth in percentages but small growth in numbers through the year 2035. By 2035 Bunker Hill Township will add fourteen (14) retail jobs. By comparison Ingham Township will add twenty-nine (29) jobs, Leslie Township, fifty-four (54) and Stockbridge Township one hundred ten (110). All communities combined will experience an increase of two hundred and seven (207) new retail positions, the majority of which will occur in Ingham Township and Stockbridge Township that contain Dansville and the Village of Stockbridge respectively.

**Table 17**  
**Bunker Hill and Selected Surrounding Communities**  
**Retail Employment Projections**

Community	2010	2015	2020	2025	2030	2035	2040	2045	2010-2045 % Growth
<b>Bunker Hill Township</b>	26	26	26	26	26	26	26	27	3.8%
<b>Ingham Township</b>	25 #1(70)	25 (70)	25 (70)	25 (70)	25 (70)	25 (70)	25 (70)	25 (71)	0% (1.4%)
<b>Leslie Township</b>	63	63	63	63	63	63	63	63	0%
<b>Stockbridge Township</b>	45 #2(163)	44 (162)	45 (163)	45 (163)	45 (163)	45 (163)	45 (164)	46 (165)	2.2% (1.2%)
<b>Ingham County</b>	35,131	35,475	35,465	35,221	35,166	35,387	35,610	35,834	20%

Source: Tri-County Regional Planning Commission

Note #1: Number in parenthesis includes the Village of Dansville.

Note #2: Number in parenthesis includes the Village of Stockbridge

## Non-Retail Employment Projections

Non-retail employment is slated for even lower growth rates than retail employment. Bunker Hill Township is projected to increase its non-retail employment by a total of six (6) positions by 2035 from one hundred thirty-three (133) jobs to one hundred thirty-nine (139) jobs, an increase of 4.5%. Four (4) of the six (6) positions are projected to occur by the year 2010. Stockbridge Township, including the Village, will experience the majority of non-retail growth (87.0%) in the area, with nine hundred and six (906) positions to be added by 2035.

**Table 18  
Bunker Hill and Selected Surrounding Communities  
Non-Retail Employment Projections**

Community	2010	2015	2020	2025	2030	2035	2040	2045	2010-2045 % Growth
<b>Bunker Hill Township</b>	109	122	120	120	122	124	126	126	15%
<b>Ingham Township</b>	152 #1(346)	170 (368)	168 (368)	168 (370)	170 (374)	174 (383)	177 (390)	179 (396)	17.8% (14.5%)
<b>Leslie Township</b>	678	687	691	695	701	710	720	729	7.5%
<b>Stockbridge Township</b>	181 #2(526)	189 (540)	192 (546)	194 (548)	198 (560)	201 (570)	203 (579)	205 (589)	13.3% (12%)
<b>Ingham County</b>	171,173	174,117	174,779	175,661	177,216	179,487	181,787	184,116	7.6%

Source: Tri-County Planning Commission

Note #1: Number in parenthesis includes the Village of Dansville.

Note #2: Number in parenthesis includes the Village of Stockbridge

## Income

Table 19, depicts both household and family incomes compared for 1999 and 1989. Income data is collected in the year before the decennial census year and reported in that year (1990 and 2000). The most significant fact that both data sets reveal is that the median household and family incomes increased by 51% from \$32,600 to \$49,345 and 54% from \$34,750 to \$53,571 respectively.

**Table 19  
Bunker Hill Township  
Household and Family Income**

Household Income	1999		1989	
	Number	Percent	Number	Percent
<b>Households</b>	707	100%	598	100%
Less than \$10,000	23	3.3	54	9.0
\$10,000 to \$14,999	26	3.7	53	9.0
\$15,000 to \$24,999	71	10.0	104	17.0
\$25,000 to \$34,999	85	12.0	112	19.0
\$35,000 to \$49,999	154	21.8	143	24.0
\$50,000 to \$74,999	203	28.7	91	15.0
\$75,000 to \$99,999	89	12.6	28	5.0
\$100,000 to \$149,999	47	6.6	11	2.0
\$150,000 to \$199,999	2	0.3	2	*0.0
\$200,000 or more	7	1.0	0	0.0
<b>Median household Income</b>	<b>\$49,345</b>	<b>(X)</b>	<b>\$32,600</b>	<b>(X)</b>
			*Less than 1/2%	
<b>Family Income In 1999</b>				
<b>Families</b>	564	100.0	521	100%
Less than \$10,000	20	3.5	33	6.3
\$10,000 to \$14,999	5	0.9	38	7.3
\$15,000 to \$24,999	39	6.9	87	17.0
\$25,000 to \$34,999	60	10.6	105	20.2
\$35,000 to \$49,999	135	23.9	137	26.2
\$50,000 to \$74,999	173	30.7	89	17.0
\$75,000 to \$99,999	82	14.5	26	5.0
\$100,000 to \$149,999	43	7.6	6	1.0
\$150,000 to \$199,999	2	0.4	0	0.0
\$200,000 or more	5	0.9	0	0.0
<b>Median Family Income</b>	<b>\$53,571</b>		<b>\$34,750</b>	<b>(X)</b>

Source: U.S. Bureau of the Census, 2000, 1990

## Educational Attainment

Table 20, illustrates educational attainment of the population twenty-five (25) years and older. Table 20, reveals that 18.2% of the population has no high school diploma, 38.3 percent are high school graduates, 43.5 percent have additional education beyond a high school diploma, while 9.5% have a bachelors degree or higher. In total, approximately eighty-two (82) percent of the population twenty-five (25) years or older have a high school diploma or higher.

**Table 20**  
**Bunker Hill Township**  
**Educational Attainment**

EDUCATIONAL ATTAINMENT		
	NUMBER	PERCENT
<b>POPULATION 25 YEARS AND OVER</b>	<b>1,283</b>	<b>100.0</b>
LESS THAN 9 <sup>TH</sup> GRADE	65	5.1
9 <sup>TH</sup> TO 12 <sup>TH</sup> GRADE NO DIPLOMA	168	13.1
HIGH SCHOOL GRADUATE (INCLUDES EQUIVALENCY)	492	38.3
SOME COLLEGE, NO DEGREE	339	26.4
ASSOCIATE DEGREE	97	7.6
BACHELOR'S DEGREE	90	7.0
GRADUATE OR PROFESSIONAL DEGREE	32	2.5
PERCENT HIGH SCHOOL GRADUATE OR HIGHER	81.8%	(X)
PERCENT BACHELOR'S DEGREE OR HIGHER	9.5%	(X)

Source: U.S. Bureau of the Census, 2000

### III. NATURAL RESOURCES

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Photograph taken in north central location of township, Williamston and Ewers roads.

## **Michigan Resource Information System (MIRIS)**

The following maps contained in this section have been compiled from the State of Michigan's MIRIS data system, known as the Michigan Resource Information System. Most of the land use and land cover data for the majority of the State was compiled from aerial photos flown in 1978, while data for several counties in Southeast Michigan was compiled from aerial photographs flown in the mid 1980's.

### **Existing Land Use/Land Cover/Landmarks**

Generalized Existing Land Use as depicted on Map 3 and Landmarks on Map 4 are both a combination of what is called land cover (agricultural fields, open land, woodlands, wetlands, lakes and stream) and land use, which is traditionally the use that man has made of the land. Examples of man-made features are: residential and commercial structures and uses and cultural landmarks such as cemeteries, churches, schools, parks, and government buildings etc.

### **Lakes/Streams/Drains**

Lakes, streams and drains are depicted on Map 5, the primary of which are drains. As one can tell from Map 5, there are few bodies of water located in the Township.

### **Topography/Soils**

The Township's topographic relief is best described as flat and is illustrated on Map 6. The elevation of nine hundred fifty-one (951) feet above sea level is most predominant, while the low point of nine hundred eighteen (918) feet of above sea level is located in the Township's southwest corner.

Soil associations throughout the Township bear out the Township's flat relief. All four (4) soil associations are described as existing in areas that are flat to nearly flat. Only one (1) area is described as steep, the Marlette-Oshtemo-Capac area in the northwest corner and another as hilly, the Oshtemo-Houghton-Riddles association, located throughout the center of the Township. However, the topography betrays the soils description, revealing these areas as no steeper or flatter than other areas of the Township.

## Development Potential of Soils

The Marlette and Owosso soils have good potential for sanitary facilities and building sites. The Houghton, Palms and Edwards soil types are considered poor for sanitary facilities and building sites, while the Capac soils are also considered poor for most engineering uses. Final determination as to the on-site conditions of any soil type is determined by on-site inspection and soil perc testing by the local environmental health department.

## Woodlands

Woodlands, depicted on Map 7, serve mankind as an aesthetic entity, a source of fuel, building materials, and a home for many types of insects, birds and animals. Trees are a natural slope stabilizer, water purifier, air conditioner, and a buffer for wind, noise, and unsightly views. Woodlands are an important environmental component. The American Heritage Dictionary defines woodland as "land having a cover of trees and shrubs."

Dangers exist in the indiscriminate removal of woodlands. The cutting of forests can lead to the following environmental problems: increased erosion, siltation, lessening of water quality, loss of landscape diversity, increased flood dangers, and eventual decreased land values. Removal of forestland also changes the interaction and habits of wildlife in a given area.

## Wetlands

Wetlands in Bunker Hill Township are depicted on Map 7. Wetlands are unique and varied ecosystems that are too wet to be considered upland and too dry to be considered "deep water" habitats. An old farm adage, "Too thick to drink and too thin to plow," gives a hint both at the nature of wetlands as a transitional zone between upland and aquatic habitats, and lack of value attributed to them in the past. Michigan is fortunate to contain a diversity of wetland types ranging from broad expanses of coastal marsh to small isolated bogs. Although each wetland is unique, wetlands are typically differentiated from upland areas by three common characteristics:

- ♦ The presence of water at or near the land surface for a frequency and duration long enough to exert a controlling influence on the type of vegetation that can grow there (wetland hydrology);
- ♦ The presence of plants adapted to living in saturated soil conditions (hydrophytic vegetation); and
- ♦ The presence of distinctive soil types that develop under saturated conditions (hydric soils).

Source: Michigan Wetlands—Yours to Protect: A citizen's guide to wetland protection (3rd Edition), Draft, Tip of the Mitt Watershed Council, Michigan Wetland Action Coalition.

**Map 3 GENERALIZED EXISTING LAND USE**

**Map 4 LANDMARKS**

**Map 5 LAKES STREAMS AND DRAINS**

**Map 6 TOPOGRAPHY/SOILS**

**Map 7 WOODLANDS, WETLANDS**

## IV. CIRCULATION

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The transportation system within Bunker Hill Township consists primarily of paved Ingham County Roads. Over sixty (60) miles of paved public roads meander through the Township.

**Circulation**

Table 21 contains information related to road type, road mileage and pavement type. According to Table 21 all roads in the Township are paved, with the exception of one (1) mile of gravel road. Paved local roads are comprised of 29.10 miles, while paved primary roads account for 30.00 miles.

**Table 21  
Status of Road Mileage for  
Bunker Hill and Selected Communities  
As of January 1, 2002**

Township	Primary Roads			Local Roads			Non-Sub-division		Streets			Local Road Total	Primary and Local Total
	Bitumen	Concrete	Total	Bitumen	Gravel	Total	Bitumen	Gravel	Concrete	Total			
Bunker Hill	30.00	0	30.00	29.10	1.00	30.10	0.40			0.40	30.50	60.50	
Ingham	19.54	0	19.54	22.40	12.48	34.88	0.44			0.44	35.32	54.86	
Leslie	25.03	0	25.03	43.97	8.45	52.42				0.00	52.42	77.45	
Stockbridge	21.80	0	21.80	17.80	11.30	29.10	0.24			0.24	29.34	51.14	

Source: Ingham County Road Commission

**County Primary Roads In Bunker Hill Township**

- Catholic Church
- Dexter Trail
- Fitchburg
- Meridian
- Williamston
- Parman
- Freiermuth
- DeCamp
- Fogg
- Baseline

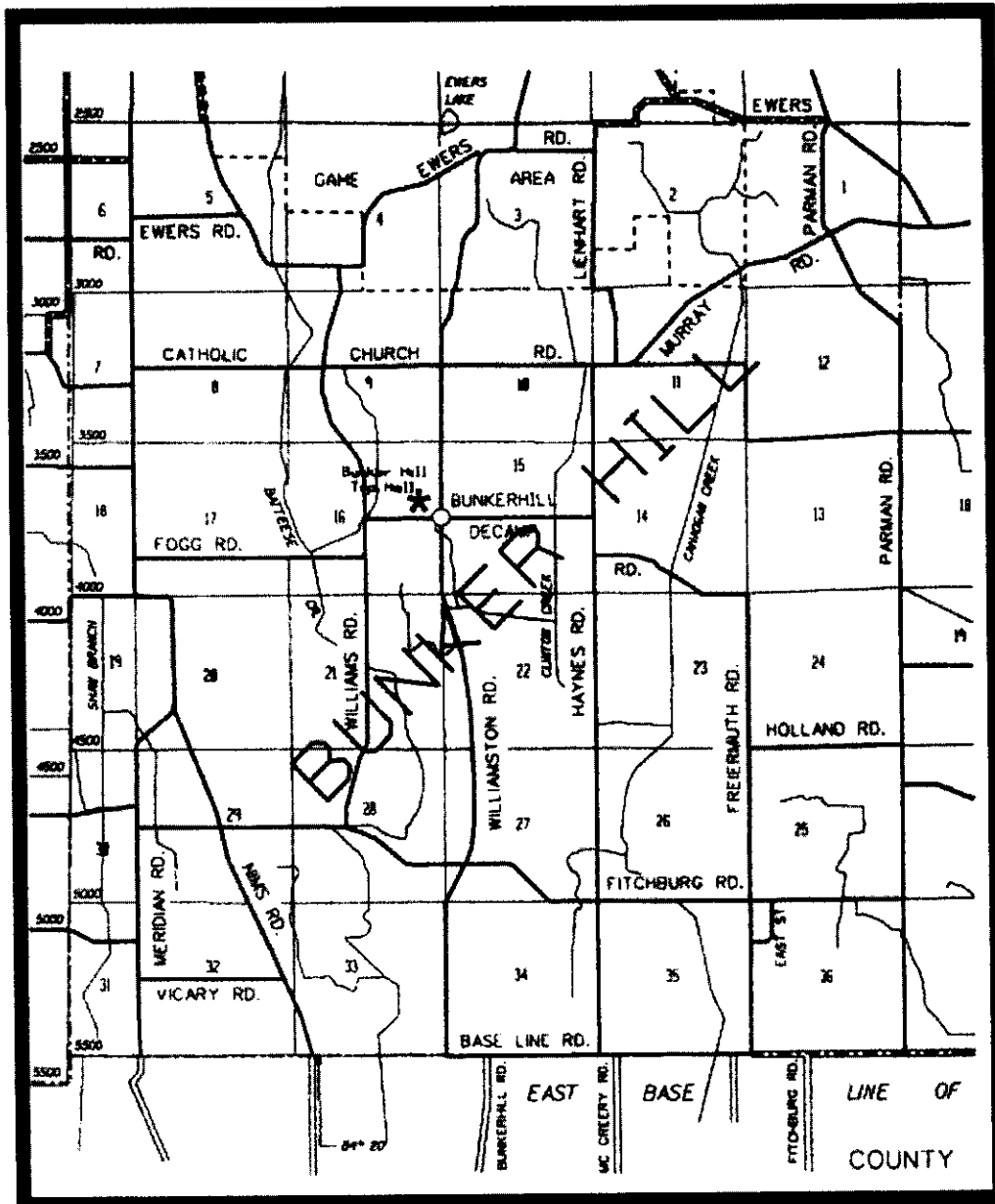
**Gravel Kelly**

**County Local Paved Road In Bunker Hill Township**

- Nims
- Potter
- Ewers
- Lienhart
- Murray
- Williams
- Haynes
- Freiermuth
- East St.
- Baseline
- Holland
- Vicary
- DeCamp
- Lumber Jack
- Covert

- Scofield
- Plairs
- Vaughn
- Olds
- Kinneville

**Map 8**  
**Ingham County Road Commission Map of Bunker Hill Township**



Source: Ingham County Road Commission

## Traffic Count Samples

Table 22 contains traffic counts for selected roads in Bunker Hill Township. Traffic on Township roads appears to be light according to available counts. Several of the intersections checked for traffic data had none, due to the lack of traffic.

**Table 22**  
**Traffic Counts**  
**Selected Roads**  
**Bunker Hill Township**

Road	Count Location	Years Vehicle Trips 2001 - 2007	Change Vehicle Trips # - %	
<b>Catholic Church</b>	Between Haynes and Williamston	833 - 833	0	0.0%
<b>Fitchburg</b>	Between Freiermuth and Haynes	559 - 422	- 137	- 24.5%
<b>Baseline</b>	Between Freiermuth and Earl Rd. (Jackson Co.)	699 - 547	- 152	- 21.7%
<b>Williams</b>	Between Catholic Church Ewers	105 - 120	15	14.3%
<b>Williamston</b>	Between Catholic Church and DeCamp	650 - 878	228	35.1%
<b>Decamp</b>	Between Haynes and Williamston	511 - 369	- 142	- 27.8
<b>Meridian</b>	North of Jackson County Line	1,100 - 1,100	0	0
	North of Kinneville Road	1,700 - 1,400	-300	-17.6
	North of Catholic Church	2,300 - 1,900	-700	-30.4%
	South of Catholic Church	1,600 - 1,900	-300	-18.7%

Source: Ingham County Road Commission, July 2010.

## V. AGRICULTURAL

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## Tracts in PA 116

Farmland and Open Space Preservation, Public Act 116 was designed to give farmers a tax credit based on the amount of land they cultivated, their total income (both on and off farm) and other criteria. Soil productivity is not a criterion for participation in the program. Currently the Township has thirty-two (32) parcels participating in the farmland preservation program, totaling approximately 3,055 acres.

## Agricultural Potential – Soil Suitability

While Bunker Hill Township contains thousands of separate areas dedicated to a specific soil type, the Township is divided into three major soil associations:

<i>Oshtemo-Houghton-Riddles:</i>	Nearly level to hilly, well drained and very poorly drained, sandy, loamy and muck soils.
<i>Marlette-Capac-Owosso:</i>	Nearly level to rolling, well drained to somewhat poorly drained loamy soils.
<i>Houghton-Palms-Edwards:</i>	Nearly level, poorly drained muck soils.
<i>Marlette-Oshtemo-Capac:</i>	Nearly level to steep, well drained to somewhat poorly drained, loamy and sandy soils.

The Oshtemo-Houghton-Riddles Association is described as having fair potential for cropland, while the Marlette-Capac-Owosso and Houghton-Palms-Edwards Associations are described as having good to fair and poor potential respectively. The Soil Survey for Ingham County gives each specific soil type a capability classification based upon how much agricultural management is needed to improve the soils agricultural capability; therefore, in any specific area of the Township a farmer could increase the soils potential by increasing the amount of agricultural management. The Marlette-Oshtemo-Capac association is mainly used for cropland, with some areas used as pasture and woodland. This association has a fair to poor potential for agriculture.

## **Agricultural Census, 2007**

The 2007 Agricultural Census reported the following data for Ingham County:

Number of Farms: 947

Land in Farms: 186,209 acres.

The Agricultural Census does not publish data by Township, but does by Zip Code. The following Zip Codes contained 290 farms:

<b>Zip Code</b>	<b>Community</b>	<b>Number of Farms</b>
48819	Darsville	60
49251	Leslie	138
49285	Stockbridge	131

Source: Agricultural Census, 2007

## VI. GENERAL GOALS AND POLICIES

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The following page outlines goals and policies of Bunker Hill Township. Goals are the general statements that define the direction and character of future development. Policies set forth the framework for action and form the basis upon which more detailed development decisions are made. Adoption of policies does not commit the Township to any particular recommendation, but does commit it to take actions that are consistent with the policy guidelines.

The following statements reflect the primary goals of the Township, as stated in the most general terms:

- Goal: Maintain the abundance and quality of natural resources and agricultural land within the Township, and acknowledge the resulting limitations to development.
- Goal: Retain the unique rural residential character and the desirability of the Township as a place to live, work, and play, maintaining and promoting the abundance of outdoor recreational opportunities.
- Goal: Consider the Township's position in Ingham County and near Jackson County and recognize that certain intensive land uses may be more suitably located in areas outside the Township with available infrastructure and support services.
- Goal: Allow for a range of housing choices within the limitations in the community. Maintain primarily low-density residential communities due to natural features, limiting soil conditions for on-site septic systems, lack of sewer and water and other urban services, and the capacity of the existing road network.
- Goal: Allow only those commercial activities, which are compatible with the existing conditions within the Township and in cooperation with surrounding communities.
- Goal: Develop and promote a positive and identifiable community image for Bunker Hill Township.

## Residential Goal

To guide the development of the Township in a manner in which to maintain the townships rural character, and for the protection of quality agricultural land. Which will create, preserve and enhance the living environment of the existing and future residential areas of the community?

### *Policies*

- 1) Promote the development of a variety of housing types and residential living environments based on a sound balance within the community.
- 2) Promote quality single-family housing at a low density throughout the Township in order to maintain the rural character of the community.
- 3) Limited medium and high density residential development should be explored in areas where it would be compatible with adjacent land uses and adequate infrastructure is available.
- 4) Encourage a high percentage of home ownership and permanent housing types.
- 5) Discourage mobile home parks unless carefully reviewed, planned and seen as necessary on region wide basis. In addition, any mobile home parks must fairly and equitably provide for the services that they will require.
- 6) Discourage haphazard lot splits which result in long narrow parcels or parcels with substantial amounts of undeveloped land to the rear unless the low-density residential development is consistent with other standards and ordinances of the community. A maximum lot length to lot width ratio of 3:1 is recommended.
- 7) Propose low-density land uses in areas where natural resource conditions are least capable of supporting development.

## **Natural Resource Goal**

The protection of water resources and woodlands is essential to preserve water quality, to stabilize stormwater runoff, recharge groundwater, and maintain the Township's aesthetic qualities.

### *Policies*

- 1) The Township shall promote efforts to preserve and improve natural vegetation buffers around watercourses (streams and drainage ways) to reduce erosion, cleanse stormwater and promote groundwater recharge.
- 2) The Township shall review all proposed development in light of potential impact upon waterways, wetlands, woodlands and natural resource areas.
- 3) The Township shall promote preservation of the balance of woodlands, watercourses and open spaces in the Township that creates the rural/agricultural aesthetic which is central to the community's character.

## **Agricultural Goal**

The Township shall maintain the rural character and preserve the local characteristics that contribute to a viable, stable, agricultural industry. It shall be the Township's responsibility to encourage the retention of the best soils and farmstead in agricultural production and encourage new agricultural economic opportunities within the community.

### *Policies*

- 1) The Township shall identify prime agricultural lands and prime agricultural soils.
- 2) The Township shall discourage non-agricultural development of important farmlands through the Master Land Use Plan and Zoning Map.
- 3) The Township shall promote the enrollment of Public Act 116, Farmland Agreements, Purchase of Development Rights (PDR), Conservation Easements, or other means to maintain the viability of agriculture and open space in the community.

### **Commercial / Light Industrial Goal**

Manage high quality commercial and light industrial development necessary to provide adequate services, employment, and tax base to support Bunker Hill Township and its rural character.

#### *Policies*

- 1) Encourage commercial enterprises to locate in areas planned for commercial use.
- 2) Provide adequate zoning and infrastructure for the expansion of agriculturally based industry and limited commercial development.
- 3) Discourage the introduction of new commercial development beyond the scope outlined in the Township Master Plan. Specifically Fitchburg and Bunker Hill Town Centers.
- 4) Provide a balance and variety of land uses including commercial, office and industrial, which will complement existing residential areas and not adversely impact the living environment of the Township.
- 5) Encourage clustered ("nodes") commercial development at selected locations. Cluster Commercial would take the form of either a small shopping center or a group of commercial buildings, which share a common access, architectural style and design elements.
- 6) Any commercial uses should be ones which serve the traveling public and/or meet the needs of Township residents rather than the region.
- 7) Promote attractive and clean light industrial uses within the township along the Fitchburg road corridor.

### **Government Services Goal**

Provide for timely, functional, safe and efficient governmental services. Emphasizing the goal to provide the best quality service possible to the Township residents.

#### *Policies*

- 1) Coordinate road improvements with the Ingham County Road Commission. Encourage the County to initiate road improvement projects in key areas.
- 2) Consider improved traffic control measures.

- 3) Explore police and fire protection consistent with community needs.
- 4) Ensure that there are adequate cemetery facilities to serve the current and future needs of the Township.
- 5) Explore a parks and recreation system to meet the current and future needs of the Township.
- 6) Coordinate with the local school districts to provide recreation and educational needs.
- 7) Support mutual aid and partnerships with adjacent communities in providing service.
- 8) Limit and/or prohibit the development of public water and sewer systems in order to preserve the rural character of the Township.

### **Transportation Goal**

Provide a public transportation system, which facilitates the orderly, safe, and efficient flow of traffic and also provides alternatives such as facilities for pedestrians and bicycles.

#### ***Policies***

1. Road improvement should be based upon the function each road serves. No attempt will be made to propose costly road relocations or alterations of basic road patterns, which have been established for years.
2. Consider providing local funding to accelerate road maintenance and improvements.
3. Consider a pedestrian and bikeway plan linking destination points throughout the Township.
4. Assist in the improvement of services for senior citizens and disabled population.

## VII. MASTER PLAN

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## Land Use Plan

The Land Use Plan is based on consideration of a number of locational factors. Such factors include:

- Population Projections
- Roadway Access and Adequacy
- Availability of Utilities
- Compatible Uses
- Community Goals and Objectives
- Citizen Opinions
- Existing Land Use
- Existing Zoning

In consideration of the locational factors and land use policies, various land use categories can be established. The following land use classifications and residential densities are used in developing the land use plan for Bunker Hill Township. This Land Use Plan is graphically depicted on Map 9.

### Residential Land Use Classifications and Corresponding Zoning Designations

Residential Land Use Category	Applicable Zoning District(s)
Recreation-Conservation	Recreational/Conservation RC
Agricultural-Residential	Agricultural A2
Rural Residential	Low Density Residential R1
Settlement Residential	Moderate Density Residential R2
Multiple-Family	Moderate Density Residential R2

#### Recreation-Conservation

These areas are intended as public and private conservation areas for the development, protection and conservation of open space, watersheds, and water, soil, forest and wildlife resources. It is also intended to provide recreational opportunities in the form of a public or private forest preserve, game refuge, golf course, park, camping grounds, or other recreational purpose. In some instances these areas may be used for specialized and general farming activities including the growing of crops, livestock, poultry and other farm animals, products and foodstuffs. Minimum suggested lot size is two (2) acres.

### **Agriculture-Residential**

The land use plan identifies agricultural lands in several areas of the Township. These lands incorporate many parcels of large lots containing over forty (40) acres. These lands are important in order to preserve the rural character of Bunker Hill Township as well as to preserve the economic mainstay for the agricultural economy. The designation of agriculture continues the policy of recognizing important farmsteads and the maintenance of established rural agricultural activities.

The designation of these agricultural lands is based upon several considerations. These include, but are not limited to the existence of large agricultural parcels (greater than 40 acres), contractual arrangements under Public Act 116, and farmlands under active farm production.

The densities for these agricultural lands are recommended as one (1) dwelling unit per two (2) acres. The large lot size is recommended in order to discourage haphazard lot splits and is also designed to help protect the rural character of the Township. To this end, rampant lot splits of less than five (5) acres along prime road frontage are discouraged. It is further intended that the areas maintain an agricultural characteristic.

### **Rural Residential**

Low density residential areas noted on the land use plan include lot splits and acreage properties at a suggested lot of one (1) dwelling unit per one (1) acre. While agricultural activities would be allowed within this area, the low density residential uses are primarily for rural residential activities. The intent is to preserve the rural characteristics of the Township and to provide sufficient land area available for low density residential usage.

### **Settlement Residential**

Settlement residential land use incorporates proposed residential uses at an average lot area of twenty thousand (20,000) square feet per residential unit. A maximum of two (2) dwelling units per acre would be allowed within this area. The medium density residential areas are located in close proximity to the early settlement areas of Bunker Hill and Fitchburg.

### **Multiple-Family**

The Multiple Family designation is intended to address the varied housing needs of Township residents by providing locations for development of multiple family housing at a level of density higher than that permitted in the other residential designation, but limited to a density that does not create a negative impact on the natural and social environment of Bunker Hill Township. The designation will enable various types and sizes of residential accommodations for ownership or rental, to meet the needs of the different age and family groups in the Township. In this designation are all two-family (duplex), apartments and multi-plex type of units where two or more separate residential units occupy a single building on a lot.

## Commercial

The large Cities and smaller villages nearby will remain the primary focal points for commercial land use within the region. The proposed local commercial land uses are intended to primarily serve residents within the immediate area. The proposed land uses would include a mixture of retail, office and service uses.

Because of the rural characteristics of the Township and because of the sparse development patterns, the Township lacks a strong community focus or identity. It is suggested that the Township consider the development of a focal point or town center for the Township. This would help create a sense of belonging and identity for the community and at the same time provide important commercial land business service needs to the residents. A logical location for this civic center area would be in Bunker Hill, near the Township Hall.

It is recommended, therefore, that this area be set aside as a possible area for a community town center. The intent is not to create a commercial strip mall or intensive commercial facility but rather a focal point for the Township consisting of a cluster of commercial stores, recreation land and governmental buildings, which will provide a focus and identity. The cluster of local service commercial buildings could include a bank, general store, hardware store, restaurant and medical office building. A small town village atmosphere could be promoted within this area.



An example of a town center.

## Light Industrial

Key conditions in the location of light industrial lands are the accessibility to adequate roads, availability of adequate water supply and wastewater disposal, and compatibility with neighboring land use. Light industrial areas are designed to accommodate uses enclosed mainly within a building whose external effects are not experienced beyond their own property lines.

**Map 9 Future Land Use Plan**

## VIII. AGRICULTURAL PRESERVATION PLAN

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## VIII. AGRICULTURAL PRESERVATION PLAN



A primary focus of this Master Plan document is the preservation of agriculture and the rural character of the Township. The importance of farming and open space is reflected in the Goals and Policies section of this Plan.

This section of the Plan is designed to identify the areas within the Township, which are essential to the conservation of the agricultural and rural character of Bunker Hill Township. This analysis provides supporting documentation to the importance of agricultural lands.

The following characteristics should be used in determining which areas should be preserved as Agriculture on the Land Use Plan.

- **Prime Farmland:** Prime farmland contains soils identified by the Soil Conservation Service as composed of the best combination of physical and chemical characteristics for producing food, forage, fiber, and oilseed crops.
- **Contiguous Farmland:** In close proximity to other parcels of existing agricultural land that when viewed as whole will provide significant acreage within the Township to maintain a viable agricultural base.
- **Major Farmsteads:** Existence of large contiguous properties, and historic large farmsteads depicted should be preserved.
- **Public Act 116 Agreements:** Properties identified through state and local records as enrolled in the farmland and open space program. Identifies farmers (or land owners) who have an interest in remaining in agricultural production or allowing their property to remain as open space.
- **Centennial Farm Registration:** Farms registered with the Historical Society of Michigan receive designation as a Michigan Centennial Farm. These farms have historical importance to the community, and should be recognized as part of an agricultural conservation program. The following is a list of Centennial Farms within Bunker Hill Township:

02/09/1882	Casper Knaut Farm	Centennial Farm certified	09/29/1987
07/01/1859	Cavender, Christopher, Farm	Centennial Farm certified	03/18/1964
09/27/1889	Daniel and Alice Frejemuth Farm	Centennial Farm certified	11/16/1989
05/01/1877	John Quinn Farm	Centennial Farm certified	03/29/1994
07/01/1855	John S. O'Brien Farm	Centennial Farm certified	08/19/1957
05/13/1836	Jonathan Shearer Farm	Centennial Farm certified	09/28/1951
05/13/1836	Jonathan Shearer Farm	Centennial farm decertified - sold	1997
03/02/1872	Joseph Hawley Farm	Centennial Farm certified	02/01/1972
04/22/1864	Mary A. Morehouse Farm	Centennial Farm certified	10/23/1992
07/01/1872	William Vicary Farm	Centennial Farm certified	01/10/1976

Source: Historical Society of Michigan, 2010

- **Transfer of Development Rights (TDR):** The Transfer of Development Rights (TDR) is a planning tool that allows landowners to transfer the right to develop one parcel of land to a different parcel of land to prevent farmland and open space development. TDR programs establish "sending areas" where land is to be protected by agricultural conservation easements and "receiving areas" where land may be developed at a higher density than would otherwise be allowed by local zoning. Landowners in the sending area sell development rights to landowners in the receiving area, generally through the private market. When the development rights are sold on a parcel, a conservation easement is recorded and enforced by the local government. In some cases, the local government may establish a "TDR bank" to buy and sell development rights.

**Advantages**

- The transfer protects wetlands, woodlands and other ecologically or agriculturally significant features of the land without curtailing development in a community;
- TDR's allow land to remain in the private sector while avoiding undesirable development,
- TDR's do not typically require the expenditure of public funds for acquisition, but have the same effect; and
- TDR's may result in a reduced property tax assessment of the "sender" land after transfer of the development credit.

SOURCE: Texas Parks and Wildlife

- **Purchase of Development Rights:** A PDR program should not be confused with a Transfer of Development Rights program. A PDR is typically identified as a transaction between a landowner and a public agency or charitable organization. Under a PDR program, a landowner voluntarily sells his or her rights to develop a parcel of land to a public agency, charitable organization interested in natural resource conservation. The landowner retains all other ownership rights attached to the land, and a conservation easement is placed on the land and recorded on the title. The buyer (often a local unit of government) essentially purchases the right to develop the land and retires that right permanently, thereby assuring that development will not occur on that particular property. The landowner is generally compensated for the value of the right to develop the land through the following formula.

**General Approach - Appraisal Method - PDR**

Appraised Value for Development	Appraised Value for Agriculture/Conservation	Appraised Value of Development Rights
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When considering where PDR fits into a community's land conservation plan, Bunker Hill Township should consider the cost involved in purchasing development rights on a

significant amount of land. In areas with high growth pressure, the cost of a PDR program can be high as the difference between development value and conservation value increases. Used strategically, however, a PDR program can be an effective tool to help maximize a community's conservation efforts. Money for PDR programs can be raised through a variety of means, including bonding initiatives, private grants, and various taxation options. Many communities have found matching dollars from state and federal sources.

SOURCE: 1000 Friends of Minnesota

- PDR's protect farmland permanently, while keeping it in private ownership.
- Participation in a PDR programs is voluntary.
- PDR's can be implemented by state or local governments, or by private organizations.
- PDR's provides farmers with a financially competitive alternative to development, giving them cash to help address the economic challenges of farming in urban-influenced areas.
- PDR programs can protect ecological as well as agricultural resources.
- PDR's limit the value of agricultural land, which helps to keep it affordable to farmers.
- PDR programs involve the non-farming public in farmland protection.

SOURCE: American Farmland Trust

If typical development patterns continue in Bunker Hill Township, there will be a gradual disintegration of agricultural farm tracts. This in turn will deface the rural character of the Township. To counter this trend, the Township emphasizes larger lots and promotes open space housing options that meet lot size requirements. The clustering of residential home sites in conjunction with agricultural preservation strategies will help maintain and preserve the Township's agricultural and rural character. The Township should formulate and enact specific land use strategies and actions. These strategies are listed below:

- Control single-family subdivision or site condominiums in agricultural areas unless allowed under state mandated open space housing provisions.
- Support and maintain Public Act 116 Farmland Preservation applications if located within areas designated agricultural uses.
- Continue support of innovative zoning approaches such as Transfer of Development Rights and Purchase of Development Rights.



## IX. IMPLEMENTATION

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The Master Plan is essentially a statement of policies, objectives, and goals designed to accommodate future growth and redevelopment. The Plan forms the philosophical basis for the more technical and specific implementation measures. It must be recognized that development and change will occur either with or without planning, and that the Plan will have little effect upon future development unless adequate implementation programs are established. This section identifies actions and programs, which will be useful if the plan is to be followed.

A variety of programs or administrative "tools" are available to help the plan succeed. These include:

### Zoning Requirements

Zoning is the development control that has been most closely associated with planning. Originally zoning was intended to inhibit nuisances and protect property values. However, zoning should also serve additional purposes, which include:

- 1) To promote orderly growth in a manner consistent with land use policies and the Master Plan.
- 2) To promote attractiveness in the Township's physical environment by providing variation in lot sizes, etc., and appropriate land uses.
- 3) To accommodate special, complex or unique uses through such mechanisms such as planned unit developments, overlay districts, or special use permits.
- 4) To guide development away from conflicting land uses (i.e. commercial uses adjacent to residential areas).
- 5) To preserve and protect existing land uses until such time as they may change in accordance with the Master Plan.
- 6) To promote the positive redevelopment of underutilized areas of the Township.

The Zoning Ordinance and Land Use Plan Map in themselves should not be considered as the major long range planning policy of the Township. Rather, the Master Plan should be regarded as a statement of planning policy, and zoning should be used to assist in implementing that policy.

## **Zoning Adjustments**

Certain areas of the Township have been designated for a land use classification in the Master Plan, which may conflict with either existing zoning or existing land uses. These designations were developed in order to guide the desired development of these areas. Certain areas may benefit from a Township-initiated rezoning in order to provide more consistency. Additionally, other areas may continue with an existing zoning designation which, although may currently conflict with the Master Plan land use designation, may be rezoned in the future once the existing use terminates or conditions change. It is at this future time that the land use recommendations will provide guidance as to the proper zoning. The Township Planning Commission should further study and make decisions in regards to which areas warrant Township initiated rezoning.

## **Capital Improvements Program**

Capital improvements programs consider the funding and timing of all municipally related capital needs including such items as roadways, utilities, parks and recreation, Township Hall expansions/development, etc. Yearly ongoing review provides the opportunity to keep the plan up to date and add new projects. The Master Plan should be used as a key reference document in the preparation of a Capital Improvements Plan to ensure public dollars are spent where the most benefit will be received.

## **Tax Increment Financing**

Tax Increment Financing (TIF) is an economic development financing tool that allows a local Government to freeze the tax base for other taxing authorities within a specific development area.

The revenues that are generated in excess of the base assessment can then be used to finance improvements within the district. This tool is most often used as an extension of the Downtown Development Authority.

## **Downtown Development Authority**

Another tool that has been widely used is the Downtown Development Authority (DDA). Some of the functions of a DDA include the levying of taxes, issuance of bonds, and captured tax dollars that can be used for improvements within the DDA boundary. This is a tool that must be coordinated with and approved by both State and County agencies prior to its implementation and it must also be coordinated with any taxing authority that falls within the DDA boundary.

### **Plan Education**

Citizen involvement and support will be necessary as the Plan is implemented. Local officials should constantly strive to develop procedures, which make citizens more aware of the planning process and the day to day decision making, which affects implementation of the Plan. A continuous program of discussion, education, and participation will be extremely important as the Township moves toward realization of the goals and objectives contained within the Master Plan.

### **Plan Updates**

The Plan should not become a static document. The Township Planning Commission should attempt to re-evaluate and update portions of it on a periodic basis. The land use portion should be updated at least once every five (5) years, and the Planning Commission should set goals for the review of various sections of this Plan on a yearly basis.

### **Other Ordinances**

The Township should also consider researching and adopting ordinances, separate from the zoning ordinance, such as a subdivision control ordinance, wetlands ordinance, and a woodlands ordinance.

# **BUNKER HILL TOWNSHIP MASTER PLAN**

## **APPENDIX**



## Introduction

On Saturday, September 21, 2002 the Bunker Hill Township Planning Commission sponsored a visioning workshop to identify current and future planning related needs and issues that must be addressed to shape the future direction of the Township. More than twenty (20) local residents, Planning Commissioners, Township Board members, and other public officials attended and provided ideas on such issues as residential and non-residential development, agricultural preservation, transportation/traffic, natural and historic resources and the future of the community. The vision statements gathered from this workshop will be used to develop community planning goals, land use programs, and policies for the creation of the Bunker Hill Township Master Plan.

This report is a summary of the process and outcome of this Township Visioning Workshop. Priority vision statements and ideas for the improvement of the Township were generated from this meeting, and will help define community planning goals and objectives for the Planning Commission.

## What is Community Visioning?

Successful communities decide the future is something they can create. These communities take the time to produce a vision of the future they want and employ a process that helps them achieve their goals. Successful communities are focusing on ways in which government, organizations, and citizens work together.

One way of achieving these goals is through *community visioning*. Such a process brings together all sectors of a community to identify problems, evaluate changing conditions, and build collective approaches to improve the quality of life in the community.

Effective collaboration requires that decisions be made by consensus. Though a consensus-based decision-making process takes more time, it can save time during the implementation phase of a visioning project. If citizens are provided a forum in which their ideas and opinions are heard, seriously considered, and perhaps even incorporated into the action plan, they will be less inclined to resist or ignore new initiatives.

Community "ownership" of a plan and willingness to help in its accomplishment often corresponds directly with the public's level of participation in the plan's development. As a result, projects can be completed in a timely fashion through the consensus-building process.