## TOWN OF HANSON, MASSACHUSETTS

March 27, 2008

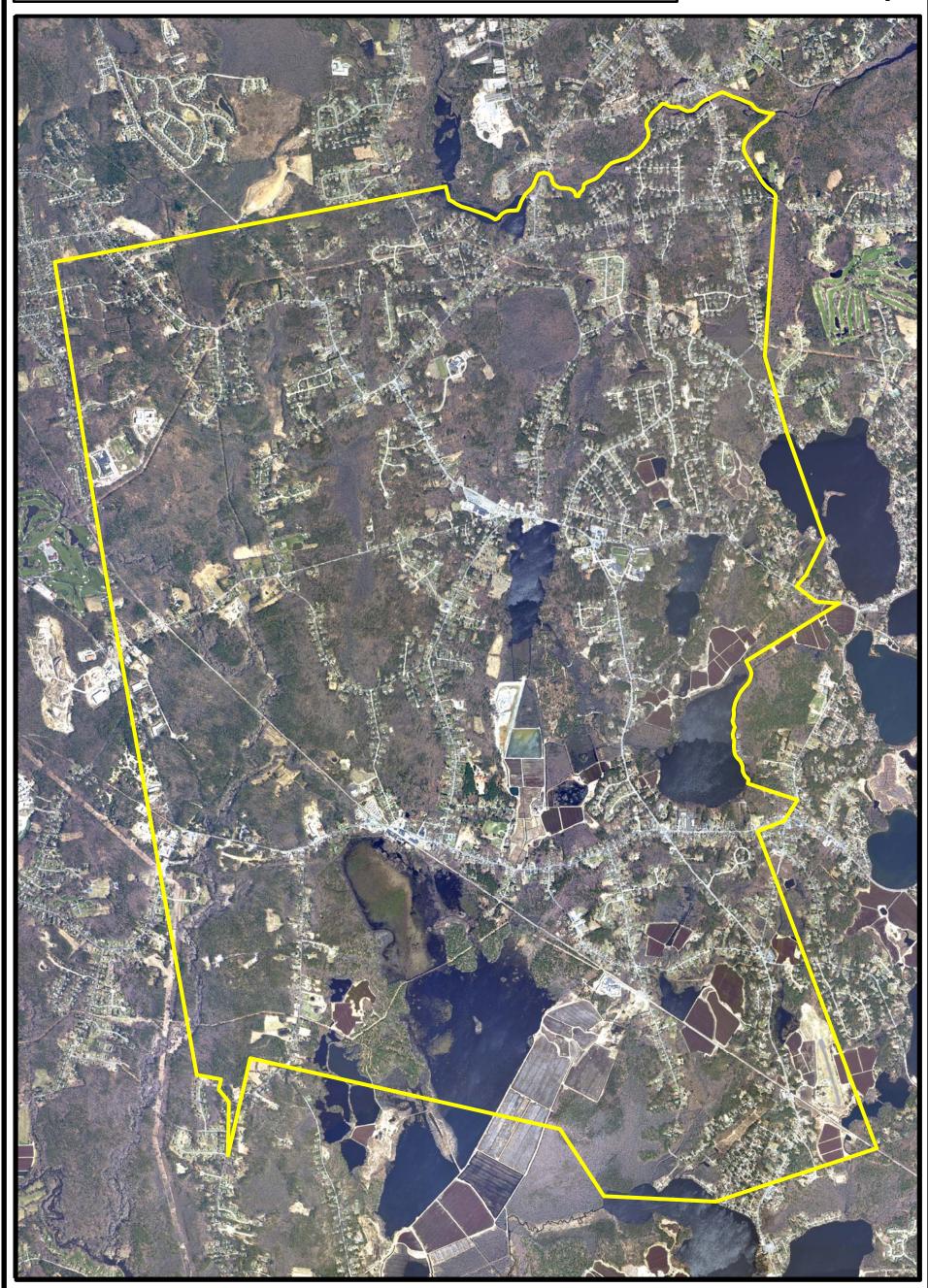


Prepared by
Thomas Planning Services, Inc.
Boston, Massachusetts
and
The Old Colony Planning Council
Brockton, Massachusetts



# **AERIAL PHOTO OF THE TOWN OF HANSON**



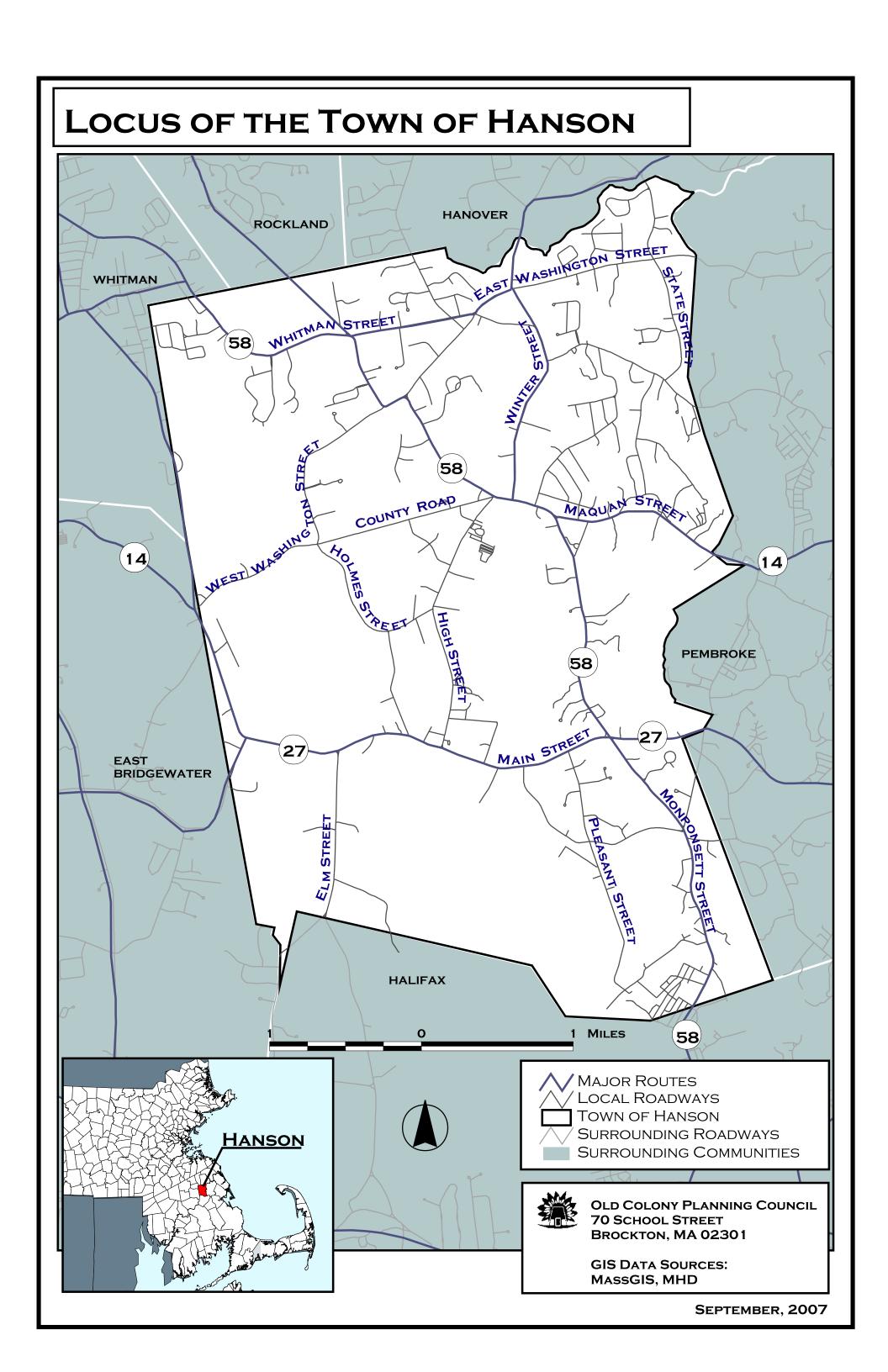






OLD COLONY PLANNING COUNCIL 70 SCHOOL STREET BROCKTON, MA 02301 GIS SOURCES: MASSGIS







This **Hanson Master Plan** was prepared by Thomas Planning Services in association with the Old Colony Planning Council, which wrote the transportation section and supplemented material in other sections. It was done under the direction of the Hanson Planning Board, the Master Plan Committee, and Town Planner Noreen O'Toole.

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## I INTRODUCTION

#### Hanson Vision

Hanson is known by its citizens and neighbors as a 'very nice town,' where the serenity, green appearance, open space and aesthetic characteristics, which contribute to the quality of life, are maintained and enhanced for future generations;

Its residents recognize that they are the Town's most important asset, and, therefore, diversity, quality education, access to the arts, lifelong recreation, and learning are emphasized in planning for the future;

The citizens will work together to improve Town government and provide safe circulation and convenient access to recreation areas and open space for all age groups;

and

The citizens will develop a Master Plan and implement it with tools that support their Vision and Goals for Hanson.

## A. TOWN PROFILE

Hanson is a pleasant community with community spirit and the opportunity to preserve and enhance its character for future generations. The Town of Hanson, in Plymouth County, was incorporated in 1820. It is 16.07 square miles in size. Located 25 miles southeast of Boston, it is accessed by routes 58, 27 and 14. Originally agricultural, today Hanson consists of several small centers and residential subdivisions. It is semi-rural in nature, with little industry and few businesses. Bordered on the east by Pembroke, on the south by Halifax, on the west by East Bridgewater, on the north and west by Whitman, and on the north by Rockland and Hanover, Hanson continues to evolve into an increasingly residential community as a result of the continuing suburbanization of the Boston and Brockton metropolitan areas.

The Town has a great history, human capital, open space, some developable land and access to regional rail services. It is also a community that is seeing growth, that will be confronted by infrastructure capacity questions trying to meet the needs of this new growth, and which is not well tied in to the regional road network.

## 1. A Brief History of the Community

In 1662, Major Josiah Winslow purchased territory around what was a Native American crossway between two small Algonquin settlements. In 1712 a new Town of Pembroke was "set aside" from Duxbury. This included most of the Hanson area. The General Court of Massachusetts granted the incorporation petition of Hanson as an individual Town in 1820.

The area's abundant natural resources attracted early settlers. Throughout the 18<sup>th</sup> and 19<sup>th</sup> centuries wood lots and cedar swamps provided wood products, meadows were drained for hayfields, and one of the first fishways in the colonies was built in the area now known as Wampatuck Pond. The introduction of wetlands cranberry cultivation in the early 20<sup>th</sup> century reinforced the agricultural orientation of the Town. A number of small industries were active in the early centuries including several sawmills, an iron forge, and later a manufacturer of porcelain parts used in electrical appliances.

Residents of the town established a preserve for the native population of the area on 100 acres of land in 1662 when they purchased the land on which the town is situated. Early settlers farmed and lumbered, setting up the first saw mill in 1695 on the Indian Head Brook near the present Town Hall. There were some early 19th century textile mills in Hanson, as well as shoemakers and lumber mills. Lumbering, shingle making. and the cranberry industry dominated the Town's economy in the 19th century.

In 1912, a huge cranberry packing house was built in Hanson. This, with many later additions, eventually became the national Ocean Spray Corporation. By 1915 there were 21 cranberry growers and 20 poultry farms in the town.

In 1845 the Old Colony Railroad first came through Hanson, followed in 1900 by the electrified Brockton and Plymouth Street Railway. However, the increasingly popular automobile spelled an early demise for the electric railway. Eventually, native trails became the region's highways. The primary east-west road developed into Bridgewater Path, now Main Street (Route 27), and Maquan-Liberty-County-West Washington Streets (Route 14). Passenger service on the Old Colony Line, discontinued in 1959, has been restored by the MBTA in 1997.

## 2. Public Buildings and Sites

Hanson boasts a number of distinguished churches. The oldest is the Second Congregational Church of Pembroke, established in 1748. The first Baptist Church was established in 1812 and its current church dates from 1820. The St. Joseph the Worker Roman Catholic Church was originally built in 1939 and was recently greatly expanded. These three edifices are recommended for inclusion on the *National Register of Historic Places*.



1748 Congregational Church on High Street



Church of Saint Joseph the Worker, Maquan Street, 1939 building to right, recent addition to left rear



Fern Hill Cemetery Gate – North of Congregational Church

## 3. School Buildings

When the Town was the west parish of Pembroke (1746) there were two schools. By 1820 there were five school districts, and 10 years later the number expanded to nine districts. Schoolhouse #4, constructed in the Greek Revival Style, is a well-preserved example of a one-room district school. In use from 1845 through 1962, it now serves as the headquarters of the Hanson Historical Society and was listed in both the State and National Register of Historic Places in 2006. Three others, the South Grammar School (former Grange Hall) (1907), the Washington Street School (1924), and the L. Z. Thomas School (1929), have been recommended for listing on the National Register of Historic Places

#### 4. Architecture

Hanson is rich in historic sites, which contribute to the Town's distinct New England heritage. Surviving architecture from the Colonial to the Early Federal to Early and Late Industrial Periods reflects not only residences but institutional buildings. Among the most prominent are The Cobb House, the Town Hall, the South Hanson Train Depot, the United Cape Cod Cranberry Central Packing House buildings and the A. C. Burrage "model village" on Reed and Pleasant Streets, and the Hanson Grange.



1845 Schoolhouse #4, Now Hanson Historical Society; note boys and girls doors

Hanson is now a residential community with commuter rail service to Boston. The station is in South Hanson, an area which has been marked for study in the 1963 Master Plan and in the 2004 Ch. 418 Community Development Plan<sup>1</sup> and the current Master Plan. It was recently studied in the Vision 20/20-funded 2006 South Hanson Transit Oriented Development Study. The area has buildings of historic significance, some small businesses and moderate density multi-family development, a former industrial building, and a small industrial park, as well as the train station.

The Town has long recognized the potential of the area as a neighborhood and in the 1963 Master Plan considered ways to maintain and improve the area. The advent of the train station changed the focus to a transit-oriented area, where small businesses might thrive and residential density be increased to encourage commuting by rail.

## **B. ASSETS**

<u>Developable land (2500 acres)</u>. Hanson still has developable land zoned for both housing and commercial use. This asset is diminished by access problems created by wetlands and existing developments.

<sup>&</sup>lt;sup>1</sup> The 418 plan was prepared in 2004 under Executive Order 418 by the Hanson Planning Board, Thomas Planning Services and the Old Colony Planning Council. The findings and recommendations are repeated in this Master Plan or incorporated by reference, as appropriate, in Chapters II, III, IV and V.



1820 First Baptist Church



A. C. Burrage's "Model Village" housing on Reed Street, remodeled over time

<u>Natural resources and open space.</u> Approximately 50 percent of the Town is open space, wetlands or cranberry bogs. Although these lands sometimes separate neighborhoods, they contribute to the serene character of the Town.

<u>Schools and public services.</u> The Town has excellent schools, senior housing, a fine library and renovated Town Hall, dedicated citizens serving on many boards and committees, good Town employees, and emergency and maintenance services. These Town facilities and services are studied in Chapter VI, Town Facilities.

<u>Train service</u>. Regular rail service connects Hanson to downtown Boston.

<u>People.</u> Hanson residents are well educated (95% of the population over 25 years of age have completed high school or higher). Many citizens enthusiastically participate in local government, serving on Boards and Committees and voting regularly.

#### C. LIABILITIES

Town Liabilities for development include:

<u>Regional Road Pattern.</u> Hanson has local numbered highways, but no direct access to major regional highways, limiting its desirability for industries dependent on over-road or air transport.

<u>Growth.</u> The rate of growth has not been excessive, but is accelerating. In the last decade the Town averaged 35 new housing units per year. Past development has been single family housing. Current development will not be all single family, but will include apartments and town houses of which 243 are in three developments: Depot Village, Dunham Farms and Stonebridge Commons. The Mass GIS study estimates the **potential** buildout as 6980 dwelling units, which at the present rate of growth will take decades.

<u>Lack of Sewers.</u> The lack of sewers inhibits growth in many parts of the Town. Many soils in the town cannot be built upon for housing or any other use without sewers and public water. Utilities are addressed in this report in Chapter VI.

Wetlands, especially south of the railroad in South Hanson. The extensive wetlands in the eastern and southern part of the Town limit development and separate the Town from its neighbors. Thus much of the large amount of buildable land has access problems caused by existing development or wetlands.

#### D. POPULATION

At the time of Hanson's incorporation on February 22 1820, the population was reported at 917. Growth was slow and steady, increasing by about 100 persons every decade.



Hanson Grange

The state census of 1865 provides us with a picture of population statistics of the time: the 1,195 residents were in 294 families, indicating an average family size of four. The 272 houses in town at that tine suggest a small number of multi-family occupancies. Towards the end of the 19<sup>th</sup> century, growth slowed, reaching 1,265 in 1875 and then 1,490 in 1905.<sup>2</sup> In the 20<sup>th</sup> century, the pattern has been similar. The rate of growth since 1980 has been moderate, going from 8617 in 1980, to 9028 in 1990, and to 9495 in 2000, with an average increase in population of 439 persons each decade.

By 2000 Hanson had an average household size of 3.04, well below the 3.40 of 1980, and below the 3.18 of 1990. The 2005 figure is an even lower 2.86. [See Table 3-1] The overall 1980-2000 decrease in household size reflects nationwide trends, as the numbers of single-person and single parent households have grown with the increase in overall life span and the shrinking number of children per family. This trend has affected the Town, indirectly increasing demand for elderly services, increasing per capita land consumption, and slightly lowering school costs in relation to tax revenues.

The rate of growth in the Town of Hanson is not as rapid as for many of its neighbors. This can be attributed to zoning, greater accessibility, and more vacant buildable land

<sup>&</sup>lt;sup>2</sup> Hanson Historical Commission Report, Narrative History by Dempsey and Driemeyer, July 31, 1996

available in the faster growing towns. Hanson's population increase, in percentage, was slower than all but one of its neighbors - Whitman - which lost population. In total numbers Hanson's increase was greater than only Plympton and Whitman. This may be attributed to the town's recent rail accessibility being offset by the quality and location of its limited buildable land.

Table 3–1 Hanson Population and Household Growth 1980–2005						
Year	Population	Increase in Population	Number of Households	Persons per Household		
1980	8,617		2,538	3.40		
1990	9,028	4.81%	2,838	3.18		
2000	9,495	5,17%	3,123	3.04		
2005	9,772	8.24%	3,414	2.86		
2010	9,920 (projected)	3.4%				

*Sources*: Massachusetts Department of Revenue 6/4/2000, Massachusetts Institute for Social and Economic Research (M.I.S.E.R.), University of Massachusetts, 1994, and the US Bureau of the Census.

Table 3-2: Hanson and Its Immediate Neighbors Population Growth Rate 1970 – 2000								
Municipality	Actual 4/1/70	Actual 4/1/80	Actual 4/1/90	Actual 4/1/00	Change 1980-2000	Percent of Population Change 1980-2000		
East Bridgewater	8,347	9,945	11,104	12,094	+2149	+21.6.%		
Halifax	3,537	5,513	6,526	7,500	+1987	+36.04%		
Hanover	10,107	11,358	11,912	13,164	+1806	+15.9		
Hanson	7,148	8,617	9,028	9,495	+878	+10.19.		
Pembroke	11,193	13,487	14,544	16,927	+3440	+25.5		
Plympton	1,224	1,974	2,384	2,637	+663	+33.58%		
Rockland	15,674	15,695	16,123	17,670	+1975	+12.58%		
Whitman	13,059	13,534	13,240	13,382	-152	+-1.12%		

Source: US Census Bureau, population figures released April 2001.

## **Changing Demographics**

As reported in the 2000 Census, the median age of Hanson residents was 36.1 years. This figure was up 40% from 1970, when the median age was 25.8 years. This increase in median age follows the trend in the rest of the country, which can be attributed to a number of factors also affecting many other communities. One factor is that families are having fewer children than in the past, and these children are born to parents who, on average, are older. In addition, residents are remaining in their homes until later in life than formerly, and they are living longer and families are moving in after having their children.

In the decade between 1990 and 2000, Hanson's elderly population continued to rise, to 8.6 percent of the total population, up from 8.2 percent a decade earlier. At the same time, the percentage of the population under age 18 also grew by eight-tenth of one percent.

As the result of continuing changes in demographics, the needs of residents can be expected to change in relation to transportation, public facilities and services, economic development, and recreation as well as housing.

## E. THE MASTER PLAN

A Master Plan is defined by Massachusetts General Laws as a "Statement, through text, maps, illustrations, or other forms of communication, which is designed to provide a basis for decision-making regarding the long-term physical development of the municipality." [Chapter 41, Section 81-D]. The Planning Board of a town is charged with developing the Master Plan and maintaining it in an updated state. The statute lists the parts of a Plan as consisting of Goals that are created through an interactive public process, chapters on Land Use, Housing, Economic Development, Natural Resources, Open Space, Services, and Circulation, and a final section presenting recommendations for Implementation of the Plan.

Hanson's first master plan was prepared in 1963. The Planning Board has been preparing this Master Plan over several years' time, assisted by its planning consultant. The Planning Board also established committees to help it to update the Plan. The 2004 Ch. 418 Community Development Plan updated portions of the earlier plan. The findings are incorporated in this Master Plan.



An important resource for the older population - the Donald F. Ferguson Community Building at the Meetinghouse Lane Housing for the elderly

#### 1. The Visioning Process

The Vision is the community consensus or 'perception' of the kind of Town it desires to be. Goals and related objectives are the means to attain this Vision and provide a sense of direction towards attaining it. Policies are guidelines and principles that are used to achieve these Goals.

Hanson citizens have recognized the beauty of their Town and the attributes that make it a pleasant place to live. As early as 1961, the Planning Board articulated residents' concern "to minimize the impact of residential development on the remaining rural character of the Town". Since then, residential growth has continued steadily, accompanied by increasing commercial development. This growth has led to several efforts to clearly define Hanson's Vision for the future, as well as its Goals and Policies. These Goals and Policies will serve as the basis for all Town plans. The Hanson Planning Board held several Forums in order to develop Hanson's Vision, Goals, and Policies. Residents attending the Visioning Forums represented all sections of the Town, and many differing interests.

<sup>&</sup>lt;sup>3</sup> A Plan for Hanson's Future, op.cit.

The Goals articulated in the 1963 Master Plan were reviewed and revised slightly when the 1989 Growth Management Plan was developed.<sup>4</sup> This reinforced the previous Goals and Policies and set the framework for the updated Master Plan.

## 2. Planning Goals

The following Planning Goals and Policies were adopted by the Planning Board. The Planning Board reviewed these Goals and Policies in 2003 and in 2004. The Planning Board is continuously working toward implementing its Policies so that the Town may achieve its Goals.

## **Goals and Policies**

# GOAL – Wise management of land use to assure the maintenance and enhancement of the quality of the Town

Policy: Improve the villages and protect their character through land use regulations that encourage sound and appropriate development.

Policy: Revitalize South Hanson through public/private cooperation.

Policy: Improve the commercial areas through public/private cooperation.

Policy: Reinforce the character of the Town through Town procedures that encourage good design and through regulations that discourage sprawl.

Policy: Respect the historical and cultural heritage of the Town.

Policy: Encourage maintenance of the open space and the quiet atmosphere of the Town.

## GOAL – Broaden the economic base of the Town to keep in balance with population needs.

Policy: Encourage existing business centers by making commercial and industrial property attractive, and provide appropriate incentives to encourage development with architectural variety that is consistent with the Zoning Bylaw.

Policy: Encourage appropriate use of industrial zoned land.

Policy: Encourage effective and appropriate customary and innovative home occupation opportunities.

Policy: Actively support utility/cable efforts to improve communication infrastructure.

Policy: Work with Regional Planning Agencies to support regional economic growth.

Policy: Work with existing businesses to help them survive and expand.

#### GOAL - To protect natural resources and preserve Town's characteristic.

Policy: Protect natural and cultural resources and open space natural systems and recreation areas, and link these tracts by greenways and a trail system, thereby connecting passive and active recreational areas.

Policy: Preserve the serenity, green appearance, open space and aesthetic characteristics of the Town, which contribute to the quality of life for future generations.

<sup>4</sup> Growth Management Plan, Thomas Planning Services, Boston, MA, 1989

Policy:	Plan and	control	commercial	and	residential	growth	with	the	objective	of	improving	the
	appearance	e of the	e Town.									

These goals articulated by the Town provide a sound base for this Master Plan and for decision making.

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## II LAND USE

The land use plan is the foundation for achieving the Town's vision. The 10,000 thousand acres within the boundaries of Hanson are finite. It is highly unlikely that there will ever be additions of land to Hanson through purchase or annexation. Only one third of the existing land area is unused and buildable. The decisions made about the use of the remaining land will determine the ability of the Town to achieve its vision and goals and will reinforce the character of the Town. Moreover, use of the available land and reuse of land currently in use must be planned wisely, as mistakes are very difficult to correct.

The land use plan is the framework for all of the other elements of the plan, which cannot stand alone. Housing and business locations will be predicated on the plan; open space plans will be an extension of the plan; Town services, streets, and utilities will be planned to serve the land use plan; and financial decisions will be made to implement the plan.

## A. LAND USE GOALS AND POLICIES

The following housing goal and housing policies were developed by the Planning Board and Master Plan Committee after the Visioning Session was conducted.

#### 1. Overall Land Use Goals

Wise management of land use to assure the maintenance and enhancement of the quality of the Town.

## 2. Land Use Policies/Objectives

- **a.** To improve the villages and protect their character through land use regulations that encourage sound and appropriate development.
- **b.** To revitalize South Hanson through public/private cooperation.
- **c.** To improve the commercial areas through public/private cooperation.
- **d.** To reinforce the character of the Town through town procedures that encourage good design and through regulations that discourage sprawl.
- **e.** To respect the historical and cultural heritage of the Town.
- **f.** To encourage maintaining Hanson's open space and quiet atmosphere.

## **B. EXISTING CONDITIONS**

Hanson has slowly changed from a two-center Town to a suburban community with residential areas scattered in new subdivisions town-wide. These generally are not directly connected to one another by local roads or sidewalks as discussed in the Transportation Chapter. The lack of interior connectors increases the dependency on the automobile. This is typical of suburban sprawl. Nevertheless, the two centers remain, as well as an older residential development in southeast Hanson. See Maps II-1, 1965 Land Use, and II-9, 2005 Land Use.



Low-density new subdivision on 40,000 square foot lots in AA District-Stonewall Estates

For the most part commercial uses serve the residents of the Town. Industrial and distribution firms, who serve a larger area, have decreased in recent years. *See Chapter 4 Economic Development*.

Considerable wetlands and waterways divide the town north to south, and much of the land east of Elm Street and south of the railroad track is wetlands. See Figures II-5 and II-6 and Chapter V Open Space, Recreation, Cultural, Historical and Natural Resources for detailed descriptions of the natural features of the Town.

The existing development and the potential for new development in Hanson was determined in 1999 by a Build Out study for the Massachusetts Executive Office of Environmental Affairs, drawing on the Massachusetts Geographic Information System. (MassGIS). Three maps prepared for that study follow in reduced form as Figures II-3 to

II-7 and are discussed below. Larger copies are in the office of the Planning Board. They are:

- Zoning and Absolute Development Constraints Town of Hanson
- Developable Lands and Partial Constraints Town of Hanson
- Composite Development Town of Hanson.

#### C. TRENDS AND INFLUENCES

Table II-1 shows the dramatic change in Hanson's land use. Note that the categories are only approximately matched. Those used or added from the 1999 MassGIS data are in parentheses. Thus the 2005 Swamp figure maybe overstated since not all forest is wooded swamp, and 2005 Industry figure may be overstated by the inclusion of waste disposal which was not distinguished in 1965. Similarly the 2005 streets figure appears low, probably because the 2005 item "Transportation" may only include tracks and facilities; not the ever growing area in roads. In any case the great increase in single-family housing is clear, since the table shows it growing from 1036.0 acres to 5588.02 acres. The overall growth in agriculture, primarily cranberry growing, has seen an increase from 229.2 acres to 735.35 acres, though this figure probably masks the industry's greater growth in the 1980s and early 1990s, and its abrupt decline with falling prices, and current partial recovery.

These overall changes can be seen in Figures II-1, II-2, II-6, and II-7 showing the land use patterns from 1966 through 1985, and 1999, to 2005. The rate of growth has been relatively steady and has not put an undue burden on the Town in any one year. This is the result of a number of factors, e.g., access to the Town, minimum number of large parcels for sale and fewer properties coming on the market in any one year.

Table II-1: Land Use Trends							
Land Use in Acres	1965	1999					
	(Original Master Plan)	(MassGIS data)					
Single family	1036.0	5588.02					
Two family and multi-family	8.5	51.62					
Business	30.5	69.30					
Industry (and Waste Disposal)	39.0	106.94					
Public and semi-public (Open	379.0	393.4					
Land, Urban Open, Recreation)							
Streets (Transportation )	161.9	59.7					
Sand and Gravel	11.0	15.8					
Agriculture (Cropland; Pasture;	229.2	735.35					
Orchard, Nursery and Bogs))							
Swamp (Forest, Open Wetland)	2765.0	5572.47					
Water	540.1	480.74					



A recent pattern, a large new house on a retreat lot behind a traditional house on High Street

#### **Protected Lands**

There were 1,206 acres of Town-owned land in 2004, in addition to over 800 acres partially protected under M.G.L. Chapters 61, 61A, and 61B. (Some of the land under chapters 61, 61A and 61B land is probably in the swamp category.) These statutes provide for a lower tax assessment program reflecting the land's forest, agricultural or recreation uses so long as that use remains. This protection does not assure that the land will not be developed at some time. In contrast, a comparable amount of land has been permanently protected by the State for wildlife management and passive recreation. See Open Space, Recreation, Cultural and Natural Resources Element.

## 1. Description of Maps

The following pages contain a series of land use maps as follows:

#### Map II-1 1966 Land Use Map

This map of existing land uses is reproduced from the original 1966 Plan, completed by Thomas Planning Associates. Important features of the map include north-south open space corridors, low-density residential areas across the north of the Town, a potential industrial area along the railroad, and a defined Town center at the present center. (*Note: unlike the following MassGIS maps based on aerial photography, this map is based on USGS maps and a field survey.*)

## Figure II-2 1985 Mass GIS land Use

This shows a major amount of change in 19 years.

## Figures II -3 to II-5 Buildout Map Series<sup>1</sup>

In 1999 and 2000 the Executive Office of Environmental Affairs worked with Regional Planning Agencies to complete a buildout analysis for every community in the Commonwealth. The buildout analysis consists of a series of geographical information system (GIS)-based maps as well as charts and text. This analysis is an important tool in the creation of a Community Development Plan or Master Plan.

The GIS maps illustrate the amount of development theoretically possible based on maximum development permissible under existing zoning regulations and resource protection bylaws. In other words, what the town would look like if every piece of available land were actually developed under the current zoning. The analysis then explores the potential impact in terms of population, demands on public services, and consumption of resources.

Each GIS map illustrates a different aspect of development potential and constraints. The maps function as a series of layers of information; together they make up a composite picture of how current conditions and regulations might affect future development.

Note: the difference between a partial constraint and an absolute constraint is that an absolute constraint means that no additional growth is possible because the land is already developed, permanently protected, or regulated, whereas a partial constraint means that future growth is possible, but will be limited by regulations, geography, or other factors.

#### **Zoning and Absolute Development Constraints** Figure II-3

This map shows land that is already developed or absolutely constrained (shown in color). Colors indicate different types of constraints, such as permanent open space restrictions and environmental regulations. Different colors are also used to represent land that is already developed, and other lands unavailable for development, e.g. utility corridors. Land that is left white is available for growth and development subject to community zoning and other development regulations. This maps indicates which land is already developed/protected, the relative proportion of land zoned for housing vs. land zoned for commercial uses, and where recent (e.g. in the last ten years) development has been occurring.

## Figure II-4 Developable Lands and Partial Constraints

<sup>1</sup>] This section draws on the E.O. 418 Community Development Plan Guidebook, *Building Vibrant* Communities, Chapter A.

This map shows developable areas (shown in color). Colors indicate different land uses permitted by zoning (residential, commercial, industrial, etc.). Another layer of information (lines and bars) illustrates partial constraints arising from environmental protection and other considerations. This map indicates which land has development potential and how much development can take place, as well as the relative proportion of land currently available for new housing vs. land available for new commercial uses.

## Figure II-5 Composite Map

This map shows developable areas (in purple), lands that are partially constrained (in a red stipple pattern), land that is unavailable for new growth because it is already developed, permanently protected, or unavailable due to regulations (in yellow). This map indicates location of undeveloped pockets within developed areas that might be targeted for new public open space or new infill development, and helps to answer the question of whether development is occurring where it makes sense (i.e. adjacent to existing development, where infrastructure is available, etc.).

The map series came with an analysis of how much additional housing and how much commercial/industrial space could be built, based on current zoning, and identified by type

## Figure Map II-6 1999 MassGIS Land Use Map

The most recent MassGIS map of existing land uses

## Figure II-7 2005 Existing Land Use Map from CD Plan

The town's current existing land use map based on the updated 1999 map in the Community Development Plan

## Figure II-8 Area of Proposed Zoning Change Map

The Area of Proposed Zoning Change Map comes later at the end of the chapter. This is a conceptual map created by the community's Master Plan Committee and the Town Planner and adapted by OCPC.

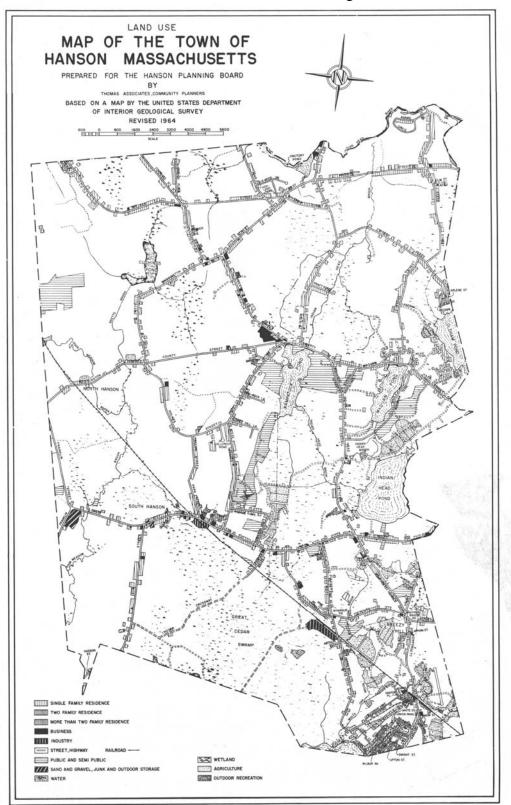
#### 2. Land Use Patterns

The tables and show Hanson's evolving land use pattern. This reflects historic settlement patterns and the influence of terrain, soil conditions, transportation corridors, the roadway system. market forces, and local and state policies and regulations.

Like most Massachusetts towns, Hanson has continued to grow in population over the last three decades, from 7,145 inhabitants in 1970 to 9,495 inhabitants in 2000.

Historically, most residential development occurred on relatively high ground along existing roads, largely on the east side of the town near the Pembroke line, with the

Figure II-1 1966 Land Use

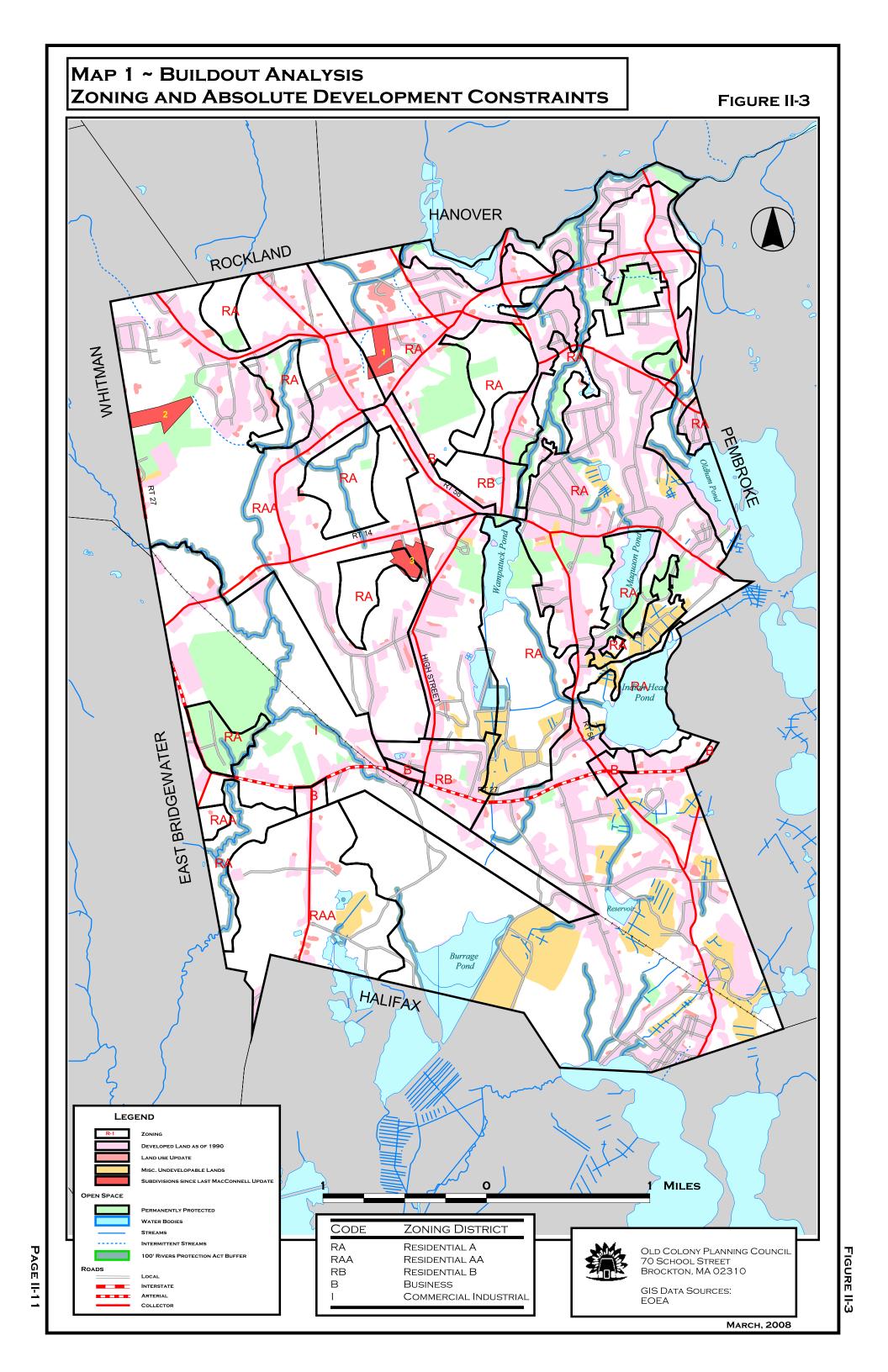


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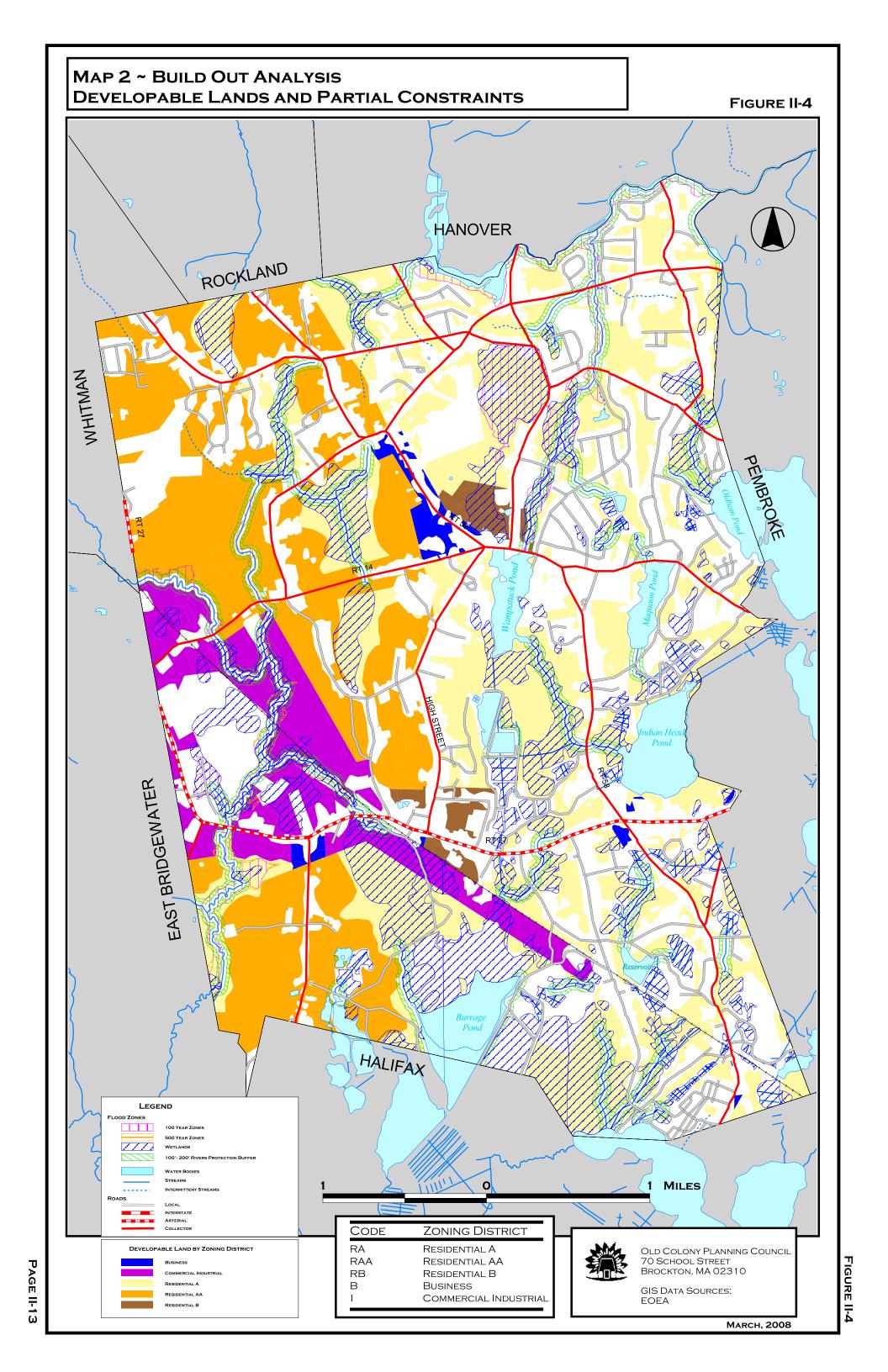
# 1985 LAND USE IN THE TOWN OF HANSON **OCPC REGION MAJOR HIGHWAYS LOCAL ROADWAYS** 1 MILES **LAND USE 1985** RESIDENTIAL MULTI-FAMILY RESIDENTIAL COMMERCIAL INDUSTRIAL **RECREATION URBAN OPEN** AGRICULTURE **FOREST** OLD COLONY PLANNING COUNCIL **ABANDONED & MINING 70 SCHOOL STREET TRANSPORTATION** BROCKTON, MA 02301 **WASTE DISPOSAL** GIS DATA SOURCES: WETLANDS MassGIS, EOTPW **SURFACE WATER SURROUNDING COMMUNITIES** March, 2008

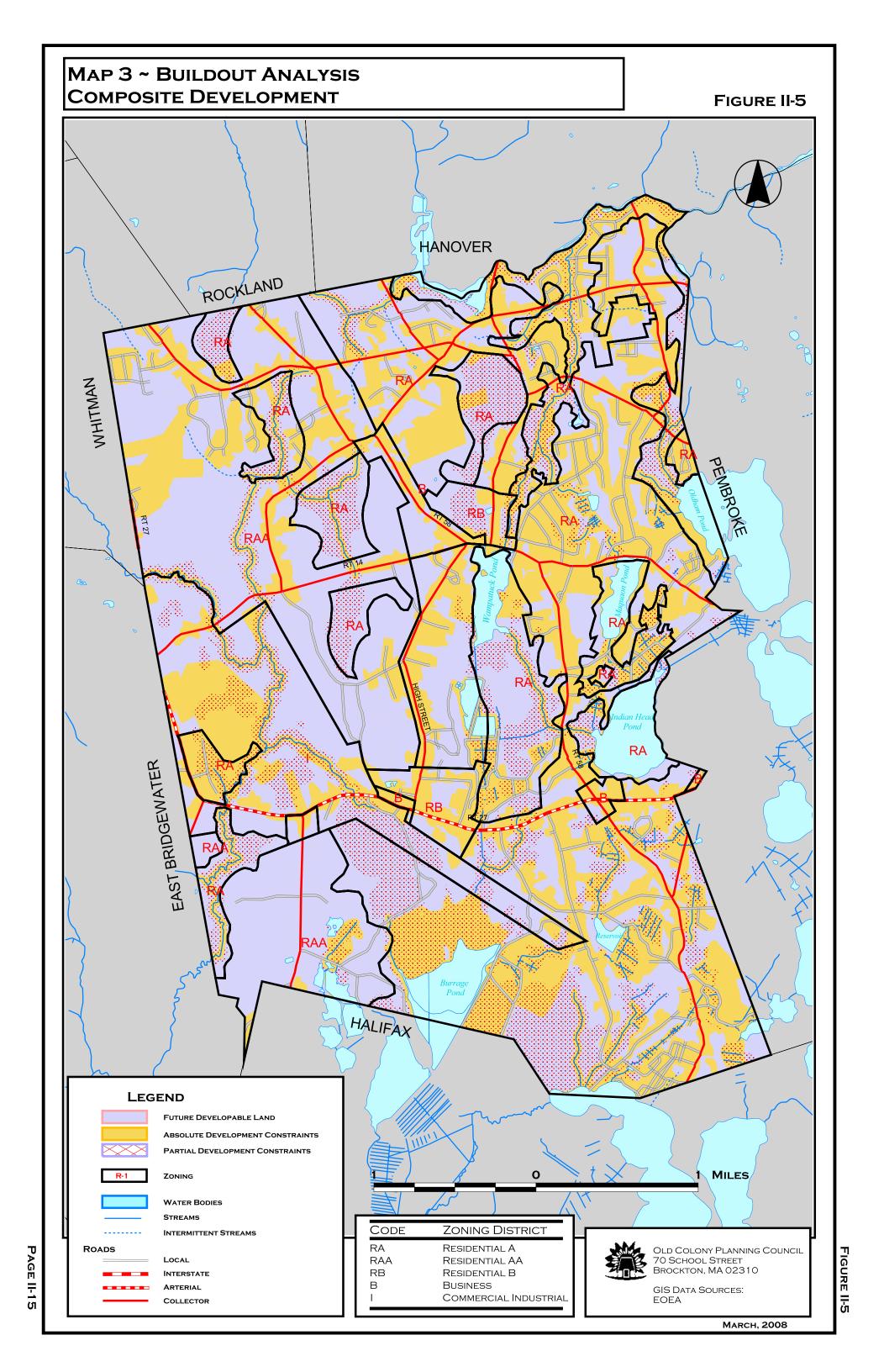
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# 1999 LAND USE IN THE TOWN OF HANSON **OCPC REGION** MAJOR HIGHWAYS **LOCAL ROADWAYS** 1 MILES **LAND USE 1999 RESIDENTIAL** MULTI-FAMILY RESIDENTIAL COMMERCIAL INDUSTRIAL **RECREATION URBAN OPEN** AGRICULTURE **FOREST ABANDONED & MINING** OLD COLONY PLANNING COUNCIL **70 SCHOOL STREET TRANSPORTATION** BROCKTON, MA 02301 **WASTE DISPOSAL** FIGURE II -**WETLANDS GIS DATA SOURCES:** MassGIS, EOTPW **SURFACE WATER SURROUNDING COMMUNITIES** March, 2008

# 2005 LAND USE IN THE TOWN OF HANSON **OCPC REGION** MAJOR HIGHWAYS **LOCAL ROADWAYS** 1 MILES LAND USE 2005 RESIDENTIAL MULTI-FAMILY RESIDENTIAL COMMERCIAL INDUSTRIAL **RECREATION URBAN OPEN** AGRICULTURE **FOREST** OLD COLONY PLANNING COUNCIL **ABANDONED & MINING 70 SCHOOL STREET TRANSPORTATION** BROCKTON, MA 02301 WASTE DISPOSAL **GIS DATA SOURCES: WETLANDS** MassGIS, EOTPW **SURFACE WATER SURROUNDING COMMUNITIES** March, 2008

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greatest concentration in the Monponsett neighborhood. See Figure II-1, the 1966 Land Use map. Over the last 30 years residential development has spread to other areas: in particular, it has increased both in the northeastern corner and in the central part of the town, while intensifying in the already-developed eastern edge. (In contrast Figure II-2, the General Land Use Plan from the same 1966 Town Plan shows the overall eventual future pattern intended then as is discussed at the end of this chapter.

The increase in the eastern portion of the town is evident on Figure II-3, the 1971 Mass GIS Land Use Map.. The more extensive, less linear, residential areas indicates that an increasing amount of development was in subdivisions, not just along existing roads.

The 1999 and 2005 land use maps (Figures II-8 and II-9) show the continued spread of residential development on relatively buildable land (as discussed below) town-wide while the less buildable areas remain open.

Commercial and industrial development has always been limited in Hanson. By 1971 business was concentrated in the present shopping center and small scattered nearby sites along Liberty Street (Route 58) and along Main Street (Route 27) in South Hanson. This pattern continues through 2005 with the greatest concentration in the Center, and increased amounts of retail and service activity along local roads with a slight concentration at the junction of Route 27 and Union Street/Mattakeesett Street in Bryantville on the Pembroke line. Very few commercial uses are shown in the Business-zoned strip of Monponsett Street in the Monponsett neighborhood on the Halifax line.

There continue to be few industrial and heavy commercial uses though they are spreading particularly on the western border of the Town. The 1971 map also shows two concentrations; the cranberry processing facilities on Main Street by the railroad tracks in South Hanson and the larger complex on Hawks Avenue next to tracks in the Burrage area to the south. The 1999 and 2005 maps now show further industrial and heavy commercial activity in the Hanson Commerce Park off Route 27 near Route 14; along Route 27 itself; in the smaller Hanson Industrial Park in South Hanson, and nearby along Route 27. (See the discussion in the Economic Development chapter.)

In summary, Hanson's land use pattern remains one of low density "sprawling" residential development along existing roads and in small subdivisions relieved by two nodes, the Commercial / Civic center along Liberty Street, and the smaller concentration of businesses near the train station in South Hanson. Present opportunities to intensify these node consist of an extensive 55 + development between Winter Street and Liberty Street north of the center, and existing and planned multi-family developments East and West of the South Hanson train station. These are the planned Depot Village and the 55+ Dunham Farm project now under construction. Further efforts to diversify and intensify mixed-use development near the South Hanson station, perhaps through use of the new Chapter 40R, are discussed in the South Hanson Transit Oriented Development Study, and later in this report.

A major consideration in intensified development is soil conditions. These affect crucial sewage disposal needs in unsewered areas like Hanson, and the basic buildability of a site given extensive wetlands. These factors are discussed below.

#### 3. Significance of Soils for Development.

Soils influence development by affecting the feasibility of on-site sewage disposal and the land's suitability for constructin or other uses. The following Table II-2 from the Extended Open Space Plan on file at the Planning Board suggests these influences. The complexity of these patterns with the very different soils that can be found in one Soils Association suggest that the relatively homogeneous soils on the following map of General Soils (Figure II-10) is a better guide to probable or appropriate development than a map of Soil Associations.

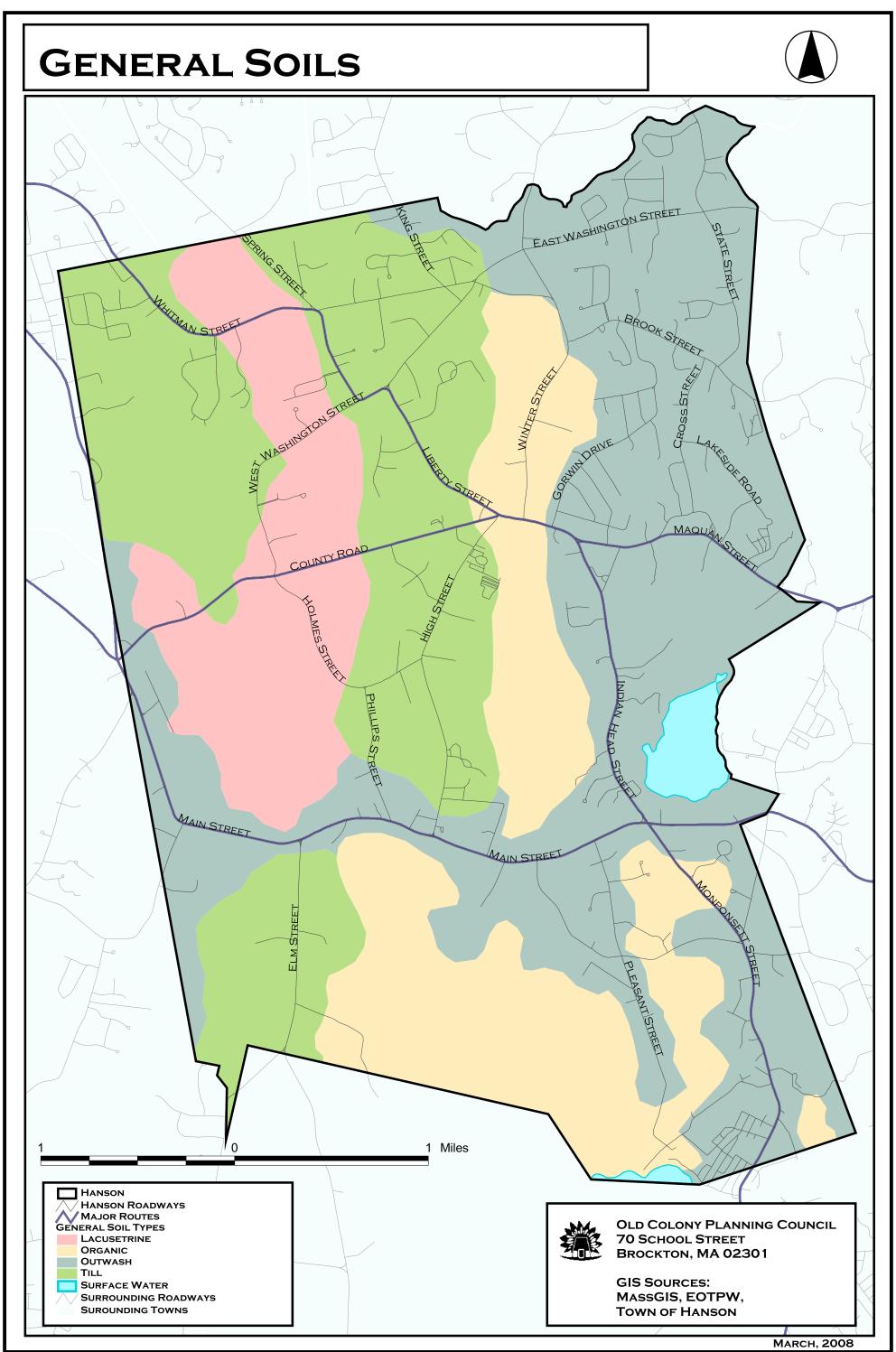
The soils labeled outwash are typically full of sorted sand and gravel and are quite permeable, like the Hinkley-Merrimac association on the table. These allow development using septic systems, though treatment may be limited due the rapid movement through the porous soils. The mapped street pattern and comparison with the land use maps indicates that the outwash areas support the most intense development, especially in the northwestern portion of the town.

The organic soils are like the peat and muck described on the chart. They are often found in wetlands, have a high water table and very poor drainage, and are the least-appropriate for development and therefore remain open without extensive alteration, as shown on the 1999 land use map.

The lacustrine (lake bottom) soils often coincide with modern wetlands and can range from sand to fine silt to muck, with sigificant limitations for septic systems. Thus the 1999 land use map shows these areas as still largely open.

The extensive areas of glacial till are quite varied, combining reasonably well-drained sandy loams with relatively impermeable underlying fragipans, and occasional very tight clay lenses. At the same time tills are often found in north-south running drumlins (shallow hills) rising above the less buildable wetlands, and are sites of early roads and development like that along Hanson's High Street. This pattern is shown on even the earliest land use maps.

Contemporary innovative and alternative sewage treatment and disposal systems can make some marginal land more developable by requiring less depth to the water table and removing far more nutrients and nitrates. Extensive use of these systems or of town sewering would allow better sewage treatment in porous outwash areas, and allow more development in till and lacustrine soils, except for those in wetlands.



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FIGURE II - 8

Table II-2 Soil Types and Recommended Land Uses					
Soil Association/ Character	Percent of Town	Characteristics	Best Uses	Correction Needed For Other uses	Suggested Minuimum Lot Size
Peat-Muck Ridgebury Whitman	41%	Poorly drained, high watertable, generally level	Wildlife, Recreation	Costly drainage, foundations and utilities	Generally not feasible
Hinkley- Merrimac (Commonly Outwash)	35%	Permeable, sloping	Less sloping areas: residence, commerce, industry, market gardening, sand & gravel	Irrigation for high yields	40,000 without water or sewer  20,000 without sewer  15,000 or less with water and sewer
Essex- Scituate (Till)	19%	Well and moderately drained; gentle hills underlain by hardpan; some water saturation	Woodland, wildlife, recreation	Remove stones for agriculture  Sewer for urban uses, except low density  Water for industry	40,000 without sewer 20,000 with sewer
Hinckley (Outwash)	5%	Hilly, drouthy (thirsty), slope	Sand and gravel	Expensive construction	40,000 because of site limitations

#### 4. Buildable Land

The buildable land in Hanson is primarily in the north of Town, the centers, and in South Hanson. The lack of much buildable land in other areas is a limitation to more intensive development elsewhere. The non-buildable land separates potential buildable areas and inhibits orderly or intensive development in the town at the same time that it preserves an open, semi-rural feeling.

The following table lists factors which are important in determining appropriate land use and evaluates the importance of each factor for major land use categories. Overcoming a

deficiency is possible, but expensive. For example, increasing the size of a site is often impossible because of adjacent land uses, but it may be possible to provide utilities, albeit expensive.

TABLE II-3 LAND USE CRITERIA					
<b>Land Use Category</b>	Soils	Utilities	Access	Size	Topography
Agriculture	***	*	*	**	***
Single Family Residences	**	***	**	**	**
Town Houses	*	***	**	**	**
Enclosed retail	*	***	***	**	**
Drive-in, gas stations	*	**	***	**	**
Office	*	**	**	**	**
Light Industry	*	**	***	**	***
Heavy Industry - not applicable			Not applicab	le	
Recreation	**	*	***	**	***
Outdoor	**	*	**	**	***
Enclosed	*	**	***	**	**
*** - very important		•	•		•

<sup>\*\*\* =</sup> very important

# D. BUILD OUT; THE STATE'S BUILDOUT STUDY

### 1. Findings

The State's Buildout Study tests what would happen at some time in the future if all buildable land in Town were developed to the maximum intensity allowed by the present zoning. At buildout there would be no vacant buildable land. The projected new development is added to current development to determine the buildout figures. For example, the projected housing units (3907) when added to existing number of houses (3178) equals the buildout figure for dwellings, a total of 7,085 units. (Note: the study, based on 1999 figures, projects 6980 units.)

The figure is theoretical as zoning may change, some lots may remain oversized, and some owners may not elect to build on their land or to build to the maximum allowed; however, the figure provides a guideline for the Town. Land use regulations reducing intensity or limiting the amount of residential land can reduce buildout. Conversely increasing density and encouraging more intensive residential development will increase buildout. (This retains the expected addition of 3907 new units despite recent post-1999 growth probably already including some of those units, so it implicitly assumes increased neighborhood densities.)

<sup>\*\* =</sup> important

<sup>\* =</sup> not very important

Table II-4 below summarizes the buildout projections made by the Regional Planning Agency under the State's Buildout program. Table II-5 on the next page shows the impact of the projected buildout on Town services. It should be noted that although the State's buildout analyses have followed a common methodology, many communities have expressed concern that these figures predict far more growth than can ever be reasonably expected; indeed, it might be better to refer to them as "maximum buildout," as they represent a hypothetical scenario in which every parcel of land is developed to its theoretical maximum under current zoning and environmental protections.

Table II-4: Current Demographics and The State's Buildout Projections				
	2005	Buildout		
Population	9,772	21,494		
Students	1,472	3,425		
Households	3,414	6,980		
Water use (gallons per day)	784,000	5,151,159		

Because buildout may not be reached for these and other reasons, it is useful for planning purposes to examine impacts of growth in the next eight or ten years. Based on the average number of new dwelling units a year in the past decade (35), the impacts projected and shown on Table II-5, below, are substantially lower than impacts at buildout.

TABLE II-5 Summary of State's Buildout Impacts	
Additional Developable Land Area (square feet)	152,895,600
Additional Developable Area (acres)	3,510
Additional Lots	3,907
Additional Residents	11,721
Additional Commercial/Industrial Buildable Floor Area (square feet)	48,054,828
Additional School Children	1,953
Additional Water Demand (gallons/day)	4,483,159
Additional Residential Water Demand	879,047
Additional Commercial and Industrial Water Demand	3,604,112
Additional Municipal Solid Waste (tons/year)	3,085
Additional Non-Recyclable Solid Waste (tons)	2,195
Additional Recyclable Solid Waste (tons)	890
**Additional Roadways (Miles)	44
Notes/Assumptions: (1) assumes that the number of lots is equal to the number of	units: (2) assumes

Notes/Assumptions: (1) assumes that the number of lots is equal to the number of units; (2) assumes that all lots require a 100 foot frontage. Source: Community Preservation Initiative, Executive Office of Environmental Affairs

Furthermore, the Buildout Study assumed an average yield of 1.5 units per acre in Residence A and B, and of 1.1. in Residence AA. Other studies have indicated a lower yield, e.g., .7 for 40,000 square-foot zoning. An adjustment to this lower figure will reduce the yield listed by the Buildout Study. On the other hand, development of town houses would increase densities and possible development while saving land.

The following table suggests the near future (ten-year) impact of the potential build out.

Table II- 6 Ten Year Growth Impacts				
Factor	<b>Growth Measure</b>	<b>Impact After Ten Years</b>		
Dwelling Units	35/year	350 units		
Land Use	1.43 acres per unit	500 acres		
Population	2.6 persons per unit	910 persons		
Traffic	11 per day per unit	3850 trips per day		
School Classrooms	4 per 100 families	14 rooms		
Recreation	1 acre per 100 families	3.5 acres		
Water Use	75 gallons per day per	68,250 gallons per day		
	person			

Other: 2.5 police officers, 1.5 firemen, 1.5 other Town employees, and approximately 26,000 feet of street and water main (almost five miles).

#### 2. Measures to Reduce Buildout

In order to achieve the Vision of the Town and the Land Use Goals it will nonetheless be necessary to either reduce the total buildout figure, or to redirect some of the construction from new-single family subdivisions at the present permitted lot size to a higher density in selected areas, such as the proposed South Hanson TOD area, the former Plymouth County Hospital, and the Town Center area at the intersection of Route 14 and Route 58.

Under present zoning allowable densities are:

Table II-7 Zoning Districts and Minimum Lot Sizes				
DISTRICT	MINIMUM AREA			
Agricultural, Recreation and Residence AA	40,000 square feet of land area per dwelling unit			
Residence A and Residence B	30,000 square feet of land area per dwelling unit, except for units on special permit*			
Flexible Zone	35,000 square feet of land area per dwelling unit with exceptions for some uses on special permit*			

<sup>\*</sup> Multi-family on special permit: 60,000 square feet for the first four units and 5,000 square feet for each additional unit to a total of eight units.

Residence AA is in the western portion of Town, and is the least developed area. Residence B is north of the commercial area in Hanson Center and north of the railroad in South Hanson. Most of the remainder of the Town, which is zoned for residence, is zoned Agriculture-Recreation or Residence A. See the Figure II-9 Zoning, Town of Hanson on the next page.

#### **Zoning and Land Use**

The town's zoning controls what may be done on a given parcel of land as-of-right and what may be done through discretionary special permits. However, it cannot make anything happen except by eliminating alternatives. At the same time, many "grandfathered" older uses precede the zoning and may remain indefinitely. Thus scattered conflicting non-residential uses may be found in residentially-zoned areas though this is rare in Hanson. The significance of such remaining depends on whether the grandfathered uses are compatible with their allowed neighbors.

Commercial and industrial districts are commonly much larger than needed to accommodate the likely amount of intended growth. This can be seen in the relatively small amount of land in industrial uses in the Industrial land along Route 27 and the railroad; and the limited amount of retail activity in the Business District along Route 58 in the Center and along Route 58/Monponsetts Street in the Monponsett neighborhood. See figure II-12. Zoning and Land Use. (Note that Figures II-9 and II-10 omit the Business zoning along Monponsett Street from just above the tracks to the Pembroke town line, though this is shown on the map bound with the Zoning Bylaw.) Such overzoning provides many sites for the businesses, but gives the town very little influence over the location of these uses. If Hanson wants to direct such uses to the most suitable sites, and to further concentrate retail and service businesses in compact walkable centers, it should reduce this zoning and focus it in carefully chosen areas.

#### E. AREAS OF CONCERN

With respect to Land Use issues, this section describes and discusses particular areas or locations in Town worthy of special consideration. Each element mentioned below represents a unique feature in the Town, e.g., areas that distinguish Hanson from its neighbors (or could do so), and that offer the diverse and high quality land uses that residents demand.

#### 1. Town Center

The Town Center at the intersections of Routes 14 and 58 is Hanson's focal point. As such, it is important to maintain its character, to concentrate services in the area, to improve pedestrian circulation and to control unattractive intrusions. Fortunately the concerns are primarily cosmetic because the plan developed in the original Master Plan (see Figure II-13) has been largely followed. This plan emphasized Wampatuck Pond, public facilities, an attractive shopping area, a recreation area and garden apartments within waking distance of the facilities. In large part the plan has been achieved; however

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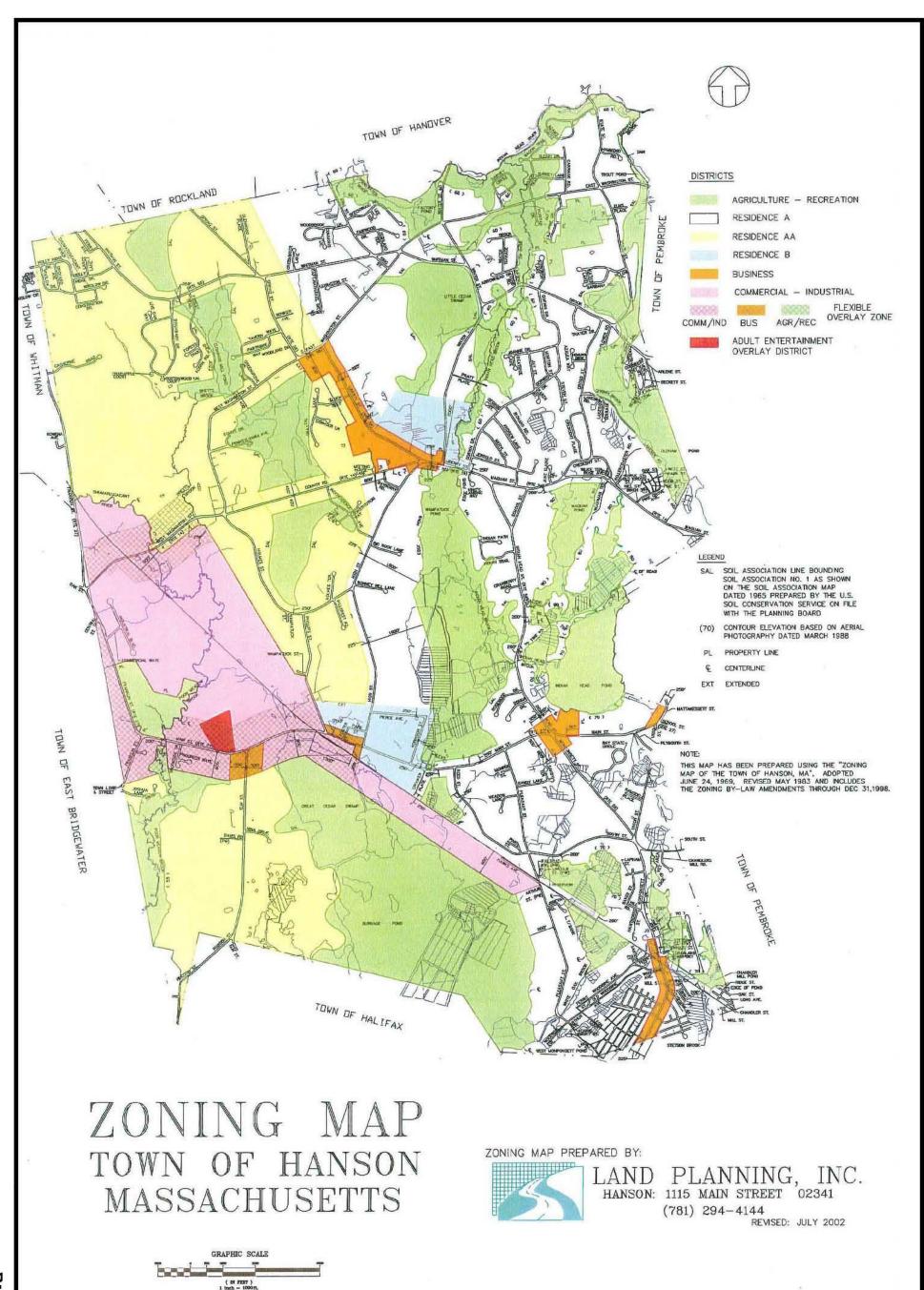


FIGURE II - 9

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the planned multi-unit housing has not been built and the appearance of the commercial areas could be improved.

The area recommended for Garden Apartments just across Liberty Street from the stores, Town Hall and Wampatuck Pond is suitably zoned to allow multi-family housing through a special permit, but it is largely in wetlands. Instead the 55+ Stonebridge Commons project under construction between Winter Street and Liberty Street is considerably farther to the north on a more buildable land.

The Center could use a greater concentration of commercial uses contiguous to the present shopping center. Such growth should be encouraged as opposed to the scattering commercial development along the highway.

#### 2. Entrances to the Town

The entrances to Hanson are marked by the usual Massachusetts municipal identifying sign, but little has been done by signage, landscaping, sidewalks or walkways to indicate to visitors entering the town that they have entered a desirable residential community with many historic sites and attractive open space corridors. Nothing distinguishes Hanson from its neighbors. In addition to the need to address the public amenities at the entrances to Town, private owners near or at the entrances need to be encouraged to upgrade properties.

#### 3. Neighborhood Needs

In addition to the Town Center, Hanson has several distinct neighborhoods or villages that were recognized in the previous Master Plan, and remain important as areas of local color and variety:

- **a. Monponsett** This neighborhood along West Monponsett Pond is the most densely developed part of Hanson. It straddles the Hanson / Halifax town line. The focal point of this area in southeast Hanson is the Pond and the recreation opportunities it provides. Many seasonal homes have been winterized and in some have been significantly expanded but paving and other improvements to the narrow, commonly unpaved streets discussed in the 1966 Town Plan are still desirable. See the 1966 plan graphic Figure II-14, below.
- **b. South Hanson** South Hanson is a historical center with mixed use, and a railroad providing commuter service. Wetlands on three sides define its center. It is discussed below in Chapter IV, Economic Development, in the 2004 Community Development Plan, and in the recent 2005/2006 South Hanson Transit Oriented Development (TOD) Study.
- **c. Burrage Industrial/Residential Area** This relatively isolated neighborhood along the railroad in southeast Hanson, west of Pleasant Street, is identified by Burrage Square. Cranberry processing has moved on and the famous adjacent Bog 18 has been acquired by the state as the Burrage Wildlife Management Area. Some of the remaining buildings house industries, notably the Lite Control Company.

85.60 [9-90) 3235 

Figure II-11 1966 Town Center Figure



Houses along West Monponsett Pond

The nearby neighborhood along Reed, Pleasant and South Streets includes some of industrialist Burrage's Model Village which combined an industrial complex and housing.

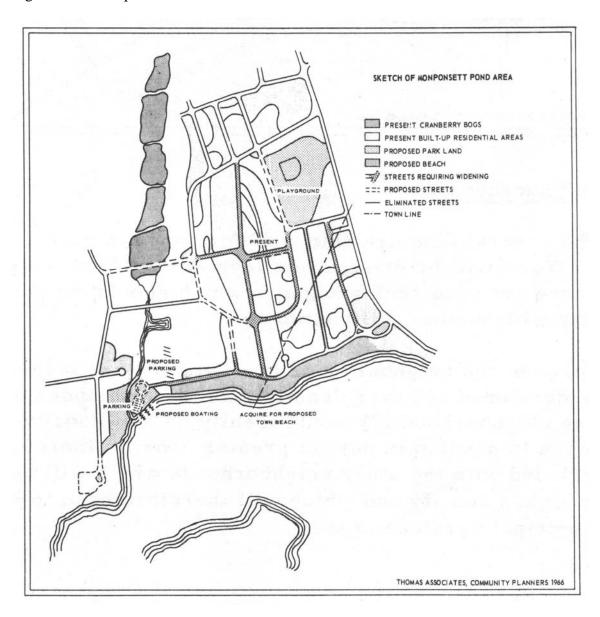
**d. Bryantville** This lively mixed-use neighborhood and small commercial center at the town line on Route 27 is shared with Pembroke. It has a unique identity and should be planned with regard to the discussion in the 2002 Pembroke Master Plan and the later Community Development Plan.

To differing degrees each of these areas is in need of attention to protect its character, property values, and safety and to function as a distinct Hanson neighborhood. Monponsett in particular needs improvement of streets and sidewalks and landscaping of vacant areas. South Hanson needs land use adjustments to take advantage of the railroad station, along with sidewalks for pedestrian access to the station, and more broadly, close study and implementation of the future TOD plan.

#### 4. Business Areas

Retail business has been concentrated in South Hanson and in Hanson Center along Liberty Street. Hanson has been fortunate in that new businesses have generally used

Figure II-12 Monponsett Plan





Highway-oriented major motorcycle accessory firm on route 27 near East Bridgewater and away from either commercial center

limited curb cuts, provided adequate parking and provided lighting. However, many owners need to be encouraged to provide landscaping and better on-site pedestrian circulation. Although the zoning has extensive design requirements for several specific uses, such as personal wireless service facilities, there are no detailed design criteria for most retail uses.

In addition to the retail businesses in areas zoned for retail use, there are over 200 retail businesses, services or other enterprises being conducted from homes scattered throughout the Town. These uses require a special permit in the Residence A and Residence B Districts and are not listed as allowed at all in the Agricultural-Recreation District. However they may be allowed in practice as accessory uses.

#### 5. Industrial Areas

Although large areas were designated for industry in the previous Master Plan and extensive areas are zoned for industry, there is very little industry in Hanson. There are now two industrial parks, the town-owned Hanson Commerce Park off Route 27 and the partially-developed Hanson Industrial Park just east of the commuter railroad tracks in South Hanson. Another industrial concentration is along Hawks Avenue south of the railroad tracks and west of Pleasant Street. This former cranberry processing center now accommodates the long-established Lite Control plant.

Some of the original industrially zoned land has been rezoned as Residence A. The remaining land zoned for industry is not attractive to most industries because the town's highway access is poor, the labor market is limited, no municipal sewer service exists and the available sites are not large. The once-important cranberry processing industry has left town and there is little reason to believe that Hanson can attract another major industry (see the Economic Element.) However, the Town can concentrate on start-up

firms and small employers in suitable areas because there are good town services, railroad passenger service, a supportive town and an adaptable regional labor force.

#### 6. Open Space

The town has varied formal and informal open spaces and recreation facilities, but there are gaps in the overall system, and some resource areas need increased protection. See Chapter V, "Open Space, Recreation, Natural, Cultural and Historic Element," where special attention is given to open space corridors, water resources, scenic views, wildlife habitat, historic and cultural sites, conservation land, and recreation.

#### 7. The Plymouth County Hospital

The town-owned former Plymouth County (TB) Hospital occupies approximately 55.4 acres between High Street and the Wampatuck Cranberry Bogs. There are 20.8 acres at or adjacent to main hospital grounds on parcels 49/1 and 49/1-1a with another 34.6 acres to the north on parcel 49/1-1. This parcel accommodates the building housing the UMass Extension Service, the Water Department standpipe easement, an antique Cape house and several other buildings just off of High Street. It then goes north in a long, narrow strip at least 2000 feet to a point past Bonney Hill Lane and the site of the hospital's former sewage disposal lagoons.

The two-story main hospital buildings contain an estimated 46,000 square feet with another estimated 9800 square feet in the apparent former administration buildings on High St. and other space in lesser structures. Much of this has deteriorated during the years of disuse and limited security including recent fire damage to two annex buildings caused by vandals. A former development agreement for mixed residential reuse broke down after several years and the town has taken back ownership. It is now securing the buildings and a town committee is re-examining possible reuses of the buildings and land.



Part of the Town-owned former Plymouth County Hospital



A Vandalized - and since partially burnt - portion of the Hospital Annex with broken windows on unsecured upper floors

#### F. RECOMMENDATIONS

As noted at the beginning of this section, a land use plan is the foundation for achieving the Town's vision (see page 1). Depending on the choices made today, the Town's future will be directed towards one of any number of options: more or less residential growth; greater preservation of open space and natural resources or less attention to these issues; increased economic development, reinforcement of existing businesses, or a

laissez-faire attitude towards the local economy in an age of intense regional and "virtual" competition; and so on, for each element of this plan.

For the sake of discussion and analysis we can group these futures into general "scenarios" or attitudes/approaches toward growth, development, and existing resources. It must be noted, however, that any plan that is eventually implemented will represent a "blend" of different positions on these complex and controversial issues. That said, Hanson has several options to direct its future.

Option 1: Continue the present low density scattered growth policies

Option 2: Direct growth to the existing Town centers with limited design review

Option 3: Reinforce the centers, protect open space, improve non-residential areas, limit the rate of growth and review new development for high-quality design

In order to achieve the goals and objectives described in this Plan, the recommended land use plan for Hanson is to build on the best features of the existing land use pattern, to preserve open space, to concentrate intensive development in and near the two centers, to reduce the potential buildout in the low density areas and to preserve the quiet green Town that the residents value.

### Proposed Zoning Change ~ Route 58 Liberty Street Intersection of Winter Street to Intersection of East Washington Street

The proposed extension of the zoning district on Liberty Street would enhance the diversity of the district and attract new business uses. This proposal would enable the existing businesses to expand their current activities. Proposed improvement and design standards would be initiated in order to plan for compatible land use patterns. Building design guidelines would eventually play a major role in the implementation of these goals.

There are many different types of criteria that may be utilized in the expansion of a business/commercial zone. One of the Town of Hanson's priorities would be to preserve the character of the Town and create a visual pattern between old and new land uses. This can be achieved by being sensitive to the building scale, detail, materials, color and general building form. Creativity of design along the Route 58 area would introduce and attract the public to new business opportunities.

The layout and the circulation system are important to the pedestrian and the vehicle movement patterns of the community. The curb cuts on Route 58 would need to be limited in order to reduce additional traffic generation along Route 58. Traffic flow patterns would not be unnecessarily interrupted on this busy route if the curb cuts were limited. In the planning of new business/commercial uses, sidewalks would be

constructed on Liberty Street to create a user friendly environment for walking pedestrians.

TABLE II-8 SUMMARY OF HANSON LAND USE OPTIONS (Options may not be mutually exclusive)				
AREA	OPTION ONE Continue the present low density scattered growth policies	OPTION TWO Direct growth to the existing Town centers with limited regulation of design	OPTION THREE Reinforce the centers, protect open space, improve non-residential areas, limit the rate of growth and ensure high- quality design	
CENTERS	No change	Intensified	Improved area development/Reinforced centers	
SOUTH HANSON	No change	Intensified	Improved area development/Reinforced center	
NEIGHBORHOODS	No change	Intensified	Reinforced centers development	
LOW DENSITY AREAS/NEIGHBORHOODS  No change		Limited effect on existing areas	Open space protected/Limited effect on low density areas	
OTHER NEIGHBORHOODS	No change	Improved	Improved	
BUSINESS	Strip	Improved/Strip contained	Improved/strip contained/South Hanson Development fortified	
INDUSTRY	No change	No change	Potentially increased development	
OPEN SPACE CORRIDORS/GREENWAYS	Loss of Resources	Encourages preservation	Aggressive acquisition and/or preservation	

#### 1. Evaluation of Strategies

It is intended that the Hanson's residents be able to achieve their vision and to meet their land use goal in an efficient, relatively cost-free manner. The goal is "wise management of land use to assure the maintenance and enhancement of the quality of the Town." Based on the preceding analysis, there are many land use measures which the Town may consider to direct the growth and future development of Hanson and achieve its goals. Table II-9 below lists these strategies and illustrates how they meet the land use policies determined growing out of the visioning process. They may require a combination of complementary reduced lot sizes, preserved open space and possible selective sewering.

While this master plan update was being prepared, the Commonwealth adopted a Smart Growth Policy and the Sustainable Development principles to achieve smart growth. The principles include concentrated development near village centers, transit oriented development, expanded housing and transportation opportunities and use of existing infrastructure. The Town Center and South Hanson are suitable smart growth areas.

Chapters 40R and 40S, which have been adopted by the State to encourage smart growth, have potential for Hanson and are consistent with the Executive Order 418 Community Development Plan and the goals of the Master Plan. They are, at a minimum, cost neutral, and depending on the projects developed, may be a revenue plus for the Town.

The Town received funding through E. O. 418, which enabled it to plan to achieve Objective 2 through the implementation of the Hanson Community Development Plan in 2004.

TABLE II-9 STRATEGY EVALUATION				
STRATEGY	POTENTIAL ADVANTAGES	POTENTIAL DISADVANTAGES	POTENTIAL FOR HANSON	
Policy Objective 1: Im	prove and protect villages			
Adopt mandatory flexible development in Agricultural Residential and AA Districts		None	Good	
Adopt design guidelines	Increased amenities and Town image	May be perceived as limiting growth, if overly restrictive	Good	
Reduce strip Business zoning	Concentrate growth in centers, lessen sprawl	Lost outlying property value, less space for businesses	Good	
Policy Objective 2: Rev		*		
Provide incentives for development in South Hanson	Limited Town cost especially using chapters 40R and 40S.	None	Good	
Policy Objective 3: Im	prove commercial areas			
Design Improvement Program	Minimum Town Cost	None	Good	
Sign Design Regulations	Helps business/Improves Town image	None	Good	
Policy Objective 4: Rei	nforce character of the T	own	1	
Increase lot size	Reduces buildout	No town expenditure Consumes land	Poor	
Decrease residential lot coverage	Reduces buildout	No Town expenditure consumes land	Poor. In place	
Define lot area based on buildable land	Reduces potential Buildout	No Town expenditure Consumes more land	Good (in place)	

STRATEGY	POTENTIAL ADVANTAGES	POTENTIAL DISADVANTAGES	POTENTIAL FOR HANSON
Limit # of permits issued per year, based on sustainable growth figure	Even rate of growth	Difficult to administer	Fair
Provide bicycle /pedestrian subdivision connectors	Increases pedestrian mobility	Some loss of privacy	Good In Rules and Regulations
Policy Objective 5: Res	spect historical, architectu	ral, and cultural heritage	of the Town
Improve entrances to Town	Increases Town Identity/Increases property values	None	Good
Begin a shade tree program	Limited cost	None	Excellent
Adopt scenic road bylaw	Limited Town cost	Administration	Good
Policy Objective 6: En	courage maintenance of op	oen space and quiet atmos	sphere
Purchase land	Reduces potential buildout	Cost	Good to Fair
Purchase CRs/APRs	Reduces potential buildout	Cost (though less than outright purchase)	Good
Put more land under Chapter 61 A and B	Preserves natural features	Up to Owners Not permanent	Fair
Adopt Community Preservation Act	Increased state-matched funding for open space, historic preservation and affordable housing	Slight tax increase, matching funds may diminish	Excellent
Zoning (e.g. cluster, etc.)	Allows development while protecting open space	None	Excellent
Public education program	Provides support for Implementation	Limited	Excellent

#### 2. Phasing of Recommendations

Not all implementation actions can occur at once, but some work best in combination. Some require additional study, or the drafting of technical language (e.g., new bylaws,

TABLE II-10 Phasing of Recommendations				
RECOMMENDATION	PHASE	RESPONSIBLE AGENCY		
Adopt design guidelines to reinforce the character of the town	One	Planning Board and Town Meeting		
Revitalize South Hanson	On-going	Planning Board & Commercial Interests		
Improve commercial areas	On-going	Planning Board & Land Owners (public/private cooperation)		
Public education program	On-going	Planning Board		
Prevent commercial sprawl	On-going	Planning Board and Town Meeting		
Encourage more intensive development in the South Hanson station area	One	Planning Board and Town Meeting		
Preserve open space	On-going	Conservation Commission, Town Meeting, and Open Space Committee		
Establish open space corridors/greenways	On-going	Conservation Commission, Open Space Committee, and Town Meeting		
Provide connection between subdivisions	On-going	Planning Board		
Adopt mandatory flexible development	Two	Planning Board and Town Meeting		
Adopt Community Preservation Act	One	Open Space, Housing, Historic Preservation Officials and Selectmen		

design guidelines); others, such as the acquisition of new open space, may need to wait for the proper opportunity to arise; and some actions must follow sequentially from others. Table II-10 above offers a recommended schedule for implementing the action items reviewed above which appear to be most promising and most pressing.

# **AREA OF PROPOSED ZONING CHANGE**

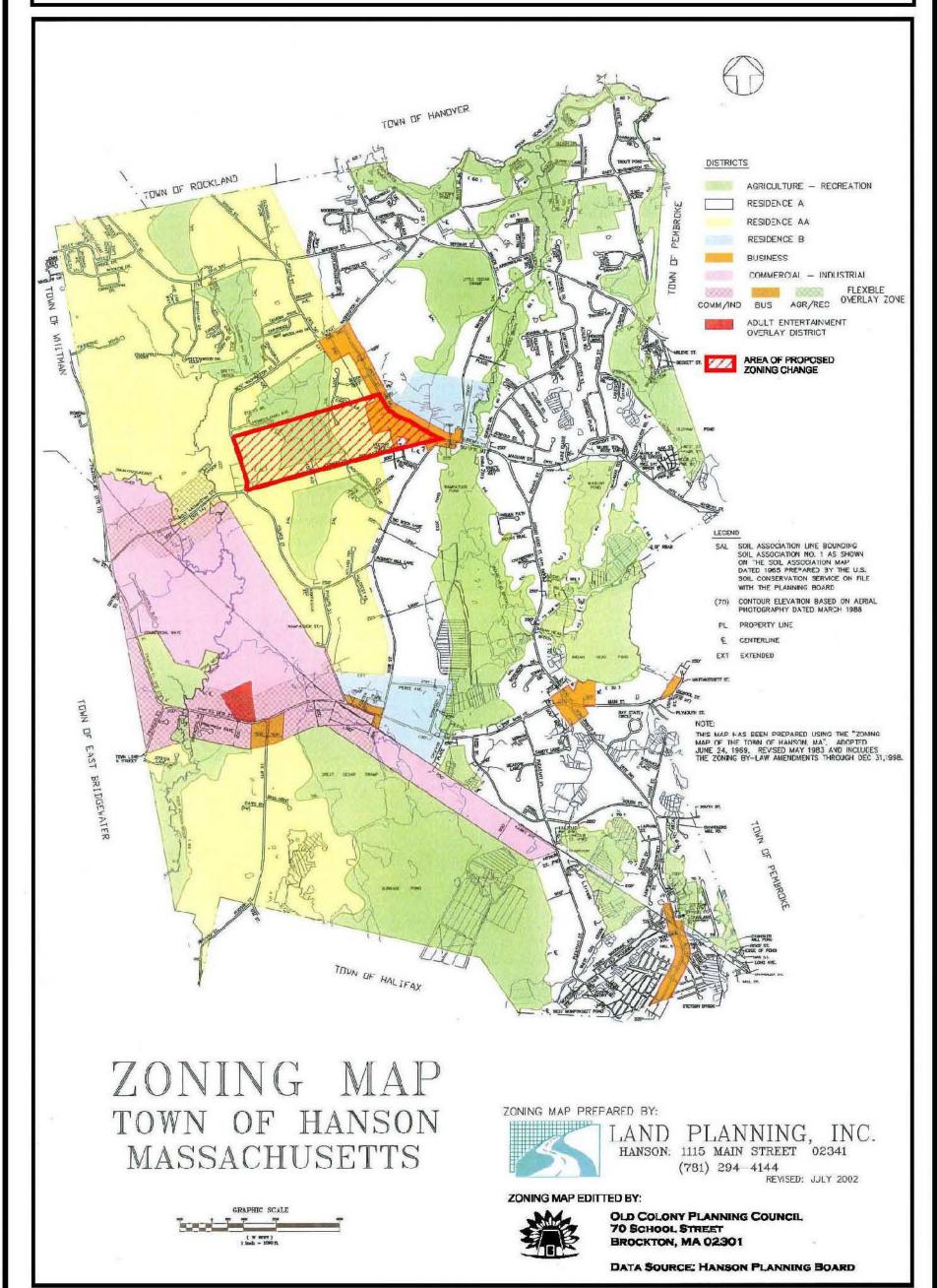


FIGURE II - 13

# III HOUSING

#### Introduction

Hanson has a reputation for pleasant, well-maintained homes and lots. These homes have been built in various time periods and reflect the styles and taste of the eras in which they were constructed. They provide adequate and comfortable housing for most Town residents.

# A. HOUSING GOALS, POLICIES AND OBJECTIVES

# 1. Background

The following housing goal and housing policies were developed after collecting information from residents during the *Visioning* Session. At the session, residents listed affordability of housing, the quiet, heavily treed roads, and its intimate small-town character as reasons for selecting Hanson as a place to live. They expressed a 'like' for diversity of housing options, and they expressed concern for the inadequacy of elderly housing in Town.

# Housing Goal

Encourage a diversity of housing options, such as town houses, cluster housing, assisted living, and age-restricted housing (for those over 55)



An expanded antique Cape Cod house



A popular Hanson house; a vernacular contemporary cape

# 2. Housing Policy Objectives

- **Policy Objective #1:** Allow a mix of housing options for young families and for seniors who wish to remain in Hanson, but not necessarily in the homes where they raised their families or grew up.
- **Policy Objective #2:** Consider housing options for the elderly and disabled, including managed health care facilities and accessory apartments.
- **Policy Objective #3:** Address affordable housing as defined by the State in *Chapter 40B* of the Massachusetts General Laws.
- **Policy Objective #4:** Comply with *Executive Order 418* (signed by the Governor January 21,1999), which encourages towns to plan for new housing opportunities. This Order reinforces *Executive Order 215* of March 15, 1982, directing state agencies to consider a community's housing practices and policies when distributing funds. (The Town has completed the plan required to meet this objective See the 2004 Hanson Community Development Plan.) The order also states that plans shall include, among other things, the locations where the community will create new housing opportunities, locations where it will target commercial or industrial economic development (if any), how it will improve its transportation infrastructure (or how existing infrastructure will handle growth), and where and how it will preserve open space.

#### **B. HOUSING INVENTORY AND CONCERNS**

#### 1. Overall

Over 90% of Hanson homes are single-family houses. Older homes are scattered throughout the Town. The median selling price for single-family houses in Hanson in February 2004 was \$313,000, a steep rise from 2001, when it was \$215,000.

New housing, apart from condominium development, is primarily located on Form A or ANR lots along existing roads, with 316 such lots created in the 1990s, or in medium-size subdivisions. These totaled 184 lots in the 1990s averaging 15 per year. "Form A" refers to the Planning Board form for determination that approval is not required under the Subdivision Control Law, *Massachusetts General Laws*, Chapter 41, Sections . 81K–81GG, and "ANR" stands for "Approval Not Required." Over time a greater proportion of lots will be in subdivisions as existing frontage is consumed.

Such lots along existing roads can affect town character more than most subdivisions, since they block views of rear open space and. are far more evident than lots in a small subdivision. On the other hand, ANR lots may protect rear farmland which would be consumed in a subdivision. Which is preferable depends on the resources affected. To protect the streetscape when the back land is less valuable than the frontage, some reports have suggested incentives whereby a developer of a a given number of ANR lots would be allowed slightly more lots on a replacement subdivision.



Traditional 19<sup>th</sup> Century house, apparently expanded quite early or built with the wing.

Table III	-1: Definitive Subdivision	s in Hanson: 1990–2006		
Year	Name	Location	Number of Lots	Houses Built To Date
1990	King's Landing	Off Liberty Street	7	7
1991	None	Corner of Franklin & Main Streets	3	3
1992	<b>Colonial Heights</b>	High Street & County Road	25	3
	Rosewood Estates	Off Indian Head Street	13	13
1993	Woodbrook Lane	Off King Street	25	25
	Catherine Road	Off Franklin Street	14	14
1995	Washington West Meadows	Off West Washington Street	13	13
	Collamore Estates	Off Whitman Street	18	18
1997	Dunham Farm (Condominiums)	Off Main Street	1	*
	Alden Way	Off Liberty Street	22	22
1998	Cranherry Estates Off Indian Head Stree		4	4
1998	Meadow Brook Estates	Off Franklin Street	9	9
1999	Pleasant Meadow Estates	Off Pleasant Street	9	9
	Hemlock Hills	Off Cross Street	6	3
2000	Millennium Estates	Off Whitman Street	5	5
	<b>Audubon Estates</b>	Off Brook Street	12	12
2001	<b>Stonewall Estates</b>	Whitman Street	14	14
2001	Sydney Estates	Off Main Street	4	4
	Anne Marie Lane	Off Bonnie Hill Lane	3	3
	Ransom Road	Off Indian Head St.	4	1
2003	<b>Edgewood Estates</b>	Off Brook Street	8	2
	<b>Brookside Estates</b>	Off Main Street	12	*
	Deer Hill	Off Whitman Street	6	*
	Grove Point Way	Off Pine Grove Ave.	2	*
2004	Brookside Estates, Phase II	Off Main Street	5	0
	Deer Hill Road Extension	Off Whitman Street	10	7
2005	Pine Hills Estates	Off E.Washington St.	12	4
2005	<b>Great Cedar Condos</b>	Off Main Street	29	0
2006	Hemlock Hills-2	Off Cross Street	6	3
Total			214	198



Distinctive angular house on High Street and Pierce Avenue.



Potential restoration prospect - Cape on hospital grounds

# 2. Housing Mix

Table III–5 shows Hanson's mix of housing types..

In 2003 thirty-three new houses were built in Hanson, generally with three or four bedrooms. According to the 2000 Census, this number of bedrooms is consistent with the number in most new houses elsewhere. Since 1990, an average of 35 new housing units have been built in Hanson per year. Less was built during the recession of the early nineties, and more during the upswing of 1997 and 1998. In 1999, housing starts reverted to the pre-recession rate. About 37% of these new houses are being built within subdivisions.



A contemporary house off High Street

In addition, many seasonal homes n the Monponsett Pond area have been converted to year-round homes and enlarged.

Table III-2 Form A/ANR* Approvals: 1990—2006						
* Subdivision Approval Not Required						
Year	Number of Approvals	Number of Lots				
1990	16	29				
1991	9	19				
1992	10	14				
1993	6	7				
1994	21	44				
1995	12	24				
1996	18	51				
1997	14	41				
1998	17	38				
1999	15	49				
2000	12	19				
2001	23	44				
2002	18	40				
2003	13	35				
2004	17	27				
2005	13	17				
2006	9	3				
TOTALS	231	501				

Table III-3 HOUSING UNIT TYPE					
Unit Type	Number	Percent of Units			
<b>Total Housing Units (2005)</b>	3,212	100.00%			
Single-family units	3,042	94.7%			
2 or more units	124	3.9%			
Condos (Mostly multi-unit)	46	1.4%			
Owner-Occupied Units (2000)		89.0%			
Renter-Occupied Units (2000)		11.0%			

Source: Hanson Assessor's Office and 2000 U.S. Census.

The largest current project is the 121-unit market-rate, age-restricted (55+) Stonebridge townhouse condominium development with units priced over \$300,000. It is on upland bracketing wetlands between Liberty St. and Winter St. It will greatly increase in Hanson's condominium supply and its supply of attached single-family houses which are regulated as multi-unit structures.

#### 3. Costs

The average assessed value for a single-family home in Hanson in 2004 was approximately \$314,000, while the average sales price was \$322,250 and the average sales price for condominium units was \$329,900. It is unusual for condominium units to be more expensive but this reflects the units on the market and sold at the time. In 2001, buildable residential lots in Hanson cost between \$40,000 and \$120,000, depending on location. Single-family housing rentals start at around \$1,600 and the few apartment rentals start at \$1,200.

Over the past 10 years, median sales prices for single-family detached houses have risen steadily from \$124,900 in 1995 to \$356,250 in 2005, and dropped slightly to \$312,000 through April of 2006. At the same time sales prices of condominium units have risen from \$122,400 in 1992 and \$122,000 in 1996 (there is no sales data for 1993, 94 or 95), to a peak of \$329,900 in 2004 and then dropped to \$254,250 in 1995. Again, these prices reflect the mix of units on the market at a given time as well as the overall trend in rising prices. Thus, some of the houses averaging \$124,900 in 1995 were probably older and smaller than those averaging \$356,250 in 2005 since the latter would include many large houses in new subdivisions.

Given the rising prices on the private market there is a growing need for lower-cost housing for low and moderate-income households. This need is partly met by public housing through the Hanson Housing Authority and partly through local efforts to create a wider range of "affordable" housing by private developers working under Chapter 40B, and by the regional non-profit South Shore Housing Development Corporation.

#### 4. Responses to Costs

## a. Public Housing

The Hanson Housing Authority maintains 68 senior/adult disabled units in the attractive Meetinghouse Lane development, six family units at the former L.Z.Thomas School, and eight units for income-eligible disabled in a group home. All of these units are currently filled, and there are approximately 140 names on the waiting list for the senior/adult disabled units. Approximately forty five people on the list are Hanson residents. The average wait is one to 10 years for Hanson residents, and considerably longer for non-residents. The Authority also manages 25 certificates for Section 8 housing, all but one of which is used outside of the town due to the shortage of local rental housing. There is typically a very long list for such certificates.



1929 L. Z. Thomas School, converted to family housing by the Hanson Housing Authority. Note resident on typical second floor deck.

#### b. Affordable Housing

Chapter 40B was enacted in 1969 to encourage development of affordable housing throughout the Commonwealth. This is defined as housing for those persons whose income level is below (80%) of the regional median household income for a household of four people with adjustments for other size households.. The Act states that unless 10% of the housing stock is "subsidized" and. "affordable" for low or moderate-income households, a developer may seek waivers from local laws and regulations in order to create such housing via a Comprehensive Permit from the Zoning Board of Appeals and may appeal any refusals to the State's Housing Appeals Committee.



Meetinghouse Lane Elderly Housing

This "affordable housing" threshold for Hanson would be 317 units, figured at ten percent (10%) of 3,167, the number of units recorded in the 2000 U.S. Census. Because only 113 units currently qualify as affordable, an additional 204 would be required to meet the threshold. Similar deficits occur in most small communities.

- One Chapter 40B project, the 70-unit Depot Village rental project, was approved in 2003, but is not yet under construction. It is north of the commuter rail station and east of the Industrial Park and would offer 25 % very affordable units. It is on approximately 28.3 acres. The site is between undeveloped land in the Industrial Park (owned by the same developer), some adjacent vacant land, and single-family housing along Phillips and Holmes Street. This juxtaposition of holdings and uses will require careful site design and review to ensure compatibility between the housing and the potential new industries, particularly if the owner considers using the vacant northern portion of the park for an expanded housing development. However, the Town Planner expects the vacant land to remain part of the Park and to be developed for industry, not to be converted to residential use.
- Another 40B project, the 11-acre, 50-unit age 55+ Dunham Farms was approved in 2004 and is near completion. It is also near the South Hanson station. It has the minimum 25 percent affordable units required under Chapter 40B, but the affordable sale units sold slowly until the asset limit was raised significantly.
- Other family housing opportunities have been explored by groups like South Shore Housing. These would have had a much higher proportion of affordable units than private-market Ch. 40B projects, but were not feasible at the time.





Dunham Farms under construction (left) and abutting market rate multi-unit housing (right) at corner of Main and High Streets at the edge of the proposed TOD-I District

## c. Residential Zoning

Present zoning permits single-family residences in each of the five (5) Residential Zoning Districts on the minimum lot sizes, as listed in Table 3–6. Up to eight units in a structure are allowed in the Residence B District and in the Flexible Zone. However 60,000 square-feet is required for the first four units and 5,000 square feet for each additional unit.

Opportunities to convert a single-family dwelling to a two-family dwelling are limited by the Hanson Zoning Bylaw, which only allows such conversion in a dwelling existing at the time of the adoption of the passage of zoning in 1955, only in the Residence A and AA Districts, only on a lot of at least 40,000 square feet, and only with a Special Permit. (Section VI.B.2.d. of the Hanson Zoning Bylaw) A smaller second unit in a structure is commonly called "an accessory apartment." The Residence B District and the Flexible Zone do not permit conversions to two-family structures, though they may allow new construction with up to eight units per building by special permit as noted above. (Section VI.C.2.b and Section VI.H.2t)

#### d. Additional Housing Opportunities

Plymouth County Hospital. The town-owned former County Hospital buildings and land offer opportunities for varied housing development, including assisted living, mixed ages and incomes, age-restricted housing, and new cluster development. As noted above, a developer chosen in 2001 to rehabilitate the existing Hospital building into a 70 to 75-unit assisted living residence and construct 40–45 age-restricted cottages was unable to perform, and the site was returned to town ownership. Further uses for the site might include parks, a community center, and additional town facilities. The town is now studying reuse alternatives. These will require careful planning and assurances that a significant number of units remain affordable.

Table III-4: Zoning Districts						
Zoning District	Permitted Use: Single-Family	Permitted Use: Multi-Family by Special Permit	Lot Size			
Agricultural Recreation			40,000 square feet			
Residence A	•		30,000 square feet			
Residence AA	•		40,000 square feet			
Residence B	•	•	30,000 square feet. But 60,000 square feet for the first four units and 5,000 square feet for each additional unit.			
Flexible Zone		Assisted Living al Permit	35,000 square feet			

**Buildable Land** The Regional **Build Out Analysis** prepared under the Community Preservation Initiative of the Executive Office of Environmental Affairs found 3,510 acres of buildable land in Hanson as of 2000, with a potential for 3,907 lots under current zoning.

**Retirement Housing** In 2004 the Planning Board approved a project for 121 market-rate units in a retirement village, the previously noted Stonebridge Commons, on 60 acres with access from Winter and Liberty Streets. Opportunities for similar developments exist in South Hanson.

**Potential 40R / 40S actions in South Hanson** Chapter 40R allows communities to overcome zoning obstacles to Smart Growth development through overlay zoning allowing the desired development as-of-right, subject to appropriate dimensional and use standards and fine tuning through site plan review. The required provisions include increased residential densities and inclusion of at least 20 percent affordable units. The act requires an initial state approval of the site as "eligible" but allows no potentially obstructive local discretionary approval processes.

The recently enacted Chapter 40S provides for state support for the net educational cost (after increased property tax and excise tax revenue) created by new housing produced in Smart Growth districts under Chapter 40R.

If adequately funded, Chapters 40R and 40S may do much to encourage and facilitate development of considerably more affordable housing in the community.

The 40R approach might incorporate/ the emerging, very prescriptive, design-oriented "Form-Based" zoning approach now proposed for the former South Weymouth Naval Air Station. This uses detailed design standards, illustrations and diagrams to show the type, appearance, massing, streetscape impacts. etc. of desired development, not just the allowed uses and basic dimensional standards. Accordingly, it requires considerable advanced detailed planning. Developing this approach could be supported by a grant from the state's housing-oriented Priority Development Fund.

#### e. Conclusion

Although affordable housing is a major issue throughout the northeast, affordability and senior housing were mentioned by residents during the visioning process. Current housing statistics support the need to address these issues, as well as the need to provide greater housing choices.

This element's recommendations, especially items one through five below, attempt to address these needs. In addition to these findings, Hanson has given attention to housing in the 2006 Executive Order 418-funded South Hanson Transit Oriented Development (TOD) study. This recommends diverse housing types near the station and in the adjacent surrounding neighborhood, potentially implemented through Chapters 40R and 40S.

#### C. STRATEGIES AND RECOMMENDATIONS

A diverse population in Hanson can be maintained by employing a variety of housing options. This population will range from single people and young families, to empty nesters and a healthy and vibrant senior population, whose taxes benefit all residents and who cause no school system expenditures.

Strategies commonly used to encourage the development of varied housing types, including senior and affordable housing, were reviewed for their applicability in Hanson, and specific strategies are proposed, based on the citizen *Visioning* as well as on interviews with Town staff and the chairs of Town boards and committees. These specific strategies follow and related major strategies are evaluated on Table 3-7.

- 1) Encourage smaller added Accessory Apartments in owner-occupied houses that meet Title V requirements and that retain the character of the home and the neighborhood. Additional requirements should include a certificate of occupancy by the owner, inspection of the Accessory Apartment by the Inspector of Buildings every two years, and appropriately located parking.
- 2) Require 10% affordable units in as-of-right subdivision of 10 or more lots.

- 3) Require housing to remain affordable in perpetuity through resale deed restrictions or rental restrictions.
- **4) Integrate affordable housing units within mixed-income developments** and keep them compatible in design, appearance, construction and quality of materials.
- 5) In lieu of providing affordable units on site, allow applicants to contribute equivalent off-site units or cash of equivalent value to a local affordable housing fund. The method of payment shall be agreed upon between the applicant and the Housing Authority, Housing Partnership or Selectmen and shall be a condition of development approval.
- 6) Provide additional incentives for maintaining a diversified population, such as increasing the property tax credit for eligible seniors and encouraging their use of property tax deferral opportunities.
- 7) Establish additional housing options for seniors (other than single-family), such as Age-Restricted housing, Assisted Living, Continuing Care, and Congregate housing.
- 8) Establish a public/private partnership to review public and private sites, including the Plymouth County Hospital Site, and to develop those with a potential for meeting the housing needs of local and regional residents.
- 9) Continue to provide open space residential development alternatives for developers in order to provide and link open spaces.
- **10**) **Establish a South Hanson mixed residential district** in the proposed Transit Oriented Development area at the commuter rail stop.
- 11) Adopt zoning provisions under Chapter 40R to allow increased density at the South Hanson commuter rail station, and to receive state reimbursements per unit, along with support in incremental school costs through Ch. 40 S.
- **12**) **Adopt the Community Preservation Act** to increase state-matched resources for needed community housing, open space, and historic preservation activity.

Selected strategies are evaluated below in Table III-7.

Strategy	Potential Advantages	Potential Potential Disadvantages for Hanson		Phase
Establish Revolving Fund for rent and/or mortgage	Can target loans to address needs. Proceeds from loans can be recycled back into program.	Limited available to Town, State and Federal resources, or private funding. Takes municipal staff time.	Fair	1, 2, 3
Offer Tax Relief for Seniors	Reduces ownership costs. Helps to retain Seniors.	Loss of tax revenues.	Excellent	1
Housing Grants	Can target grant to address needs.	Requires municipal staffing or consultant assistance. Limited available Town, State, and Federal resources.	Fair	1, 2, 3
Prepare clearinghouse for affordable properties.	Encourages reuse of homes.	Takes municipal staff time.	Good	2
Publicize housing education programs	Promotes good homeownership/ Neighbors	Takes municipal staff time, bank support and/or volunteers.	Excellent	1
Provide technical home assistance	Promotes good homeownership/ neighbors.	Takes municipal staff time, and volunteers.	Excellent	1
Require some affordable housing in larger subdivisions and specially permitted projects and at the Plymouth County Hospital site or money in lieu thereof	Provides additional affordable housing	Minimizes development incentives	Good	2
Use resale deed restrictions, or rental restrictions to require affordability in perpetuity to maintain housing as affordable	Assures that affordable units remain affordable	None	Excellent	1
Encourage accessory apartments in	Increases housing stock; Enables people to remain in their homes	None	Excellent	1

Strategy	tegy Potential Potential Advantages Disadvantages		Potential for Hanson	Phase
owner-occupied houses meeting Title V requirements				
Mandate a certificate of occupancy for accessory apartments	Assures compliance	Requires staff time	Fair	3
Inspect accessory apartments every 2 years	Assures compliance	Requires staff time	Fair	3
Provide increased property tax credits for eligible seniors and/or encourage property tax deferral	Enables retired and elderly to remain in their own homes	Reduced tax revenue	Good	2
Establish a public/private partnership, e.g. through a local Housing Partnership Committee, to review potential public and private sites	Provides opportunity to encourage housing development	Increases role of government	Good	2
Continue providing open space residential development alternatives for developers, in order to provide and link open spaces	Protects the environment; Provides housing variety; Contributes to Town character	None	Excellent	1
Establish a mixed residential zone along with mixed residential and business uses in the area of the commuter rail stop in South Hanson	Encourages mixed use; Promotes/improves character of area; Encourages use of rail	Requires Town Meeting action	Excellent	1

Table III-5: Evaluation of Strategies to Meet Housing Goal and Policies						
Strategy Potential Advantages		Potential Disadvantages	Potential for Hanson	Phase		
Adopt zoning regulations for assisted living and over-55 housing	Encourages housing diversity	Requires Town Meeting action	Excellent	1		
Adopt the Community Preservation Act	Supports housing Historic preservation and Open Space actions	Needs TM/election vote	Excellent	1		

# IV ECONOMIC DEVELOPMENT

#### A. ECONOMIC DEVELOPMENT GOALS AND POLICIES

The Goal for Economic Development, as written in this project's Visioning Report, is to

"Broaden the economic base of the Town to keep in balance with population needs."

# **Economic Development Policies**

The Visioning Report lists the Policies that will achieve this Goal:

- **Policy Objective #1:** Encourage existing business centers by making commercial and industrial property attractive, and provide appropriate incentives to encourage development with architectural variety that is consistent with the Zoning Bylaw.
- Policy Objective #2: Encourage appropriate use of industrial zoned land.
- **Policy Objective #3:** Encourage effective and appropriate customary and innovative home occupation opportunities.
- **Policy Objective #4:** Actively support efforts to improve communication infrastructure.
- **Policy Objective #5:** Work with Regional Planning Agencies to support regional economic growth.
- **Policy Objective #6:** Work with existing businesses to help them survive and expand.

#### B. INTRODUCTION/CURRENT CONDITIONS

Hanson is primarily a residential community and in recent history has not provided major employment opportunities to its residents.

#### 1. Businesses and Employment

In February 2005 the state Department of Employment and Training reported that Hanson had a total labor force of 5,399 of whom 300 (5.6 percent) were unemployed. According to the 2000 U.S. Census, most people (62.5 percent of all workers) worked either in "management" positions or in "sales/office" positions. When looked at by industry, "education, health and social services" accounted for the highest number of employees (1,059), followed by "retail trade" (715).

#### Jobs

Job growth overall has been slow, declining after the 1999 high of 1921 for four years, and then recovering for a new high of 2080 in 2004. Some of the reason for the slow overall growth was the dramatic decline in government employment since 1990. This decline is presumably due to the closing of the Plymouth County Hospital and some due to the decline in the national economy. Unemployment dropped from a high of 11.4% in 1991 to a low of 2.7% in 2000 and then increased, reaching to 5.6% in 2005.

#### 2. Employment and Unemployment

#### **Employment**

Employment in Hanson declined from the 1921 of 1999, to 1758 in 2003 and then grew to its highest point (up to 2004) of 2080 in 2004, As is true generally, Manufacturing continued to decline while the greatest growth was in Services and Finance, Insurance and Real Estate (FIRE). Trade began to recover after a major drop in 2002. See Table IV-1.

# Unemployment

In February 2005, Hanson had a total labor force of 5,399 of which 300 (5.6 percent) were unemployed. This unemployment represents a rise from the 10-year low of 2.7 percent recorded in 2000. Over time the town rate has gone from typically being higher than the state rate, to equal or slightly lower as shown by the selected years on Table IV-4-2. The long term trend probably reflects changes in the labor force's occupations more than increased local employment opportunities.

#### C. ECONOMIC DEVELOPMENT PROGRAM

#### 1. Reasons to Encourage Economic Development

Appropriate types and amounts of economic development can bring a variety of advantages to residential communities such as Hanson.

#### **Local Employment**

Employment in local businesses, especially retail businesses and services, offers opportunities for part-time employment, for local services, for reduced travel time for workers and customers, for increased Town recognition and for a reinforced sense of place

#### Taxes:

Local businesses pay taxes that generally exceed the cost of the public services they consume. Businesses thus help restrain the growth in the tax rate.

Table	Table IV-1: Employment and Wages in Hanson											
	PAYROLL & WA	GES		EMPLOYMENT FIGURES								
Year	Total Annual Payroll	Average Annual Wage	Total Establishments	Total Employment	Agriculture Forestry Fishing	Government	Construction	Manufacturing	TCPU	Trade	FIRE	Services
1985	\$24,185,900.00	\$14,947.00	144	1,618	conf	384	102	332	conf	462	116	141
1986	\$26,844,699.00	\$16,210.00	155	1,656	conf	386	102	331	conf	475	122	150
1987	\$31,661,600.00	\$18,857.00	174	1,679	94	409	100	349	conf	493	105	124
1988	\$34,030,801.00	\$18,990.00	184	1,792	80	391	128	356	24	613	64	135
1989	\$34,861,786.00	\$19,696.00	187	1,770	63	382	125	317	6	626	50	201
1990	\$36,359,572.00	\$21,313.00	197	1,706	59	402	118	296	6	652	42	131
1991	\$29,442,973.00	\$18,898.00	185	1,558	57	240	75	305	5	584	40	252
1992	\$30,351,237.00	\$19,125.00	177	1,587	56	194	55	394	9	578	35	266
1993	\$33,371,242.00	\$19,711.00	184	1,693	55	115	72	422	13	660	37	319
1994	\$33,185,151.00	\$19,718.00	182	1,683	50	123	75	389	16	702	39	289
1995	\$35,669,892.00	\$21,106.00	179	1,690	55	124	54	393	14	721	47	282
1996	\$39,300,499.00	\$22,091.00	179	1,779	60	122	58	518	19	677	46	279
1997	\$43,376,813.00	\$23,209.00	176	1,869	64	124	64	561	32	700	41	283
1998	\$45,942,310.00	\$24,347.00	177	1,887	64	126	69	558	32	740	38	260
1999	\$49,056,082.00	\$25,537.00	185	1,921	58	126	87	558	21	748	43	280
2000	\$53,253,172.00	\$28,958.00	188	1839	59	136	78	458	23	737	41	307
2001	\$48,732,355.00	\$26,688.00	191	1821	17	138	73	450	28	752	38	330
2002	\$49,548,602.00	\$27,248.00	197	1817	-	-	77	370	-	438	36	341
2003	\$49,396,107.00	\$28,080.00	199	1758	-	_	69	347	-	451	37	361
2004	\$72,824,819.00	\$34,996.00	206	2080	-	-	75	338	_	440	104	456

*TCPU* = *Transportation*, *Communication* and *Public Utilities* 

FIRE = Finance, Insurance and Real Estate

conf = data suppressed due to confidentiality; totals reflect data availability

Note: Changes in industry definitions occurred in 1988, so data prior to that year are not strictly comparable to the more recent data.

Source: Commonwealth of Massachusetts, Division of Employment and Training (ES-202 Series)



A Unique Hanson industry modernizing 60-Year old Grumman Widgeon amphibians at Cranland Airport - including fabricating major components when needed

Table	Table IV-2: Labor force, Employment and Unemployment in Hanson							
Year	LABORFORCE	EMPLOYMENT	UNEMPLOYMENT	UNEMPLOYMENT RATE	STATEWIDE RATE			
1983	4,186	3,774	412	9.8%	6.9%			
1993	5,207	4,803	404	7.8%	6.9%			
2001	5,394	5,218	176	3.3%	3.7%			
2002	5,474	5,225	249	4.5%	5.3%			
2003	5,430	5,134	296	5.5%	5.8%			
2004	5.415	5,415	278	5.1%	5.2%			

Note: Employment within this data series is measured by place of residence, rather than by place of employment as in the ES-202 Series.

Changes in labor market area definitions occurred in 1990 and changes in methodology occurred in 1987, so data prior to these years are not strictly comparable to the more recent data.

Source: Commonwealth of Massachusetts, Division of Employment and Training (Local Area Unemployment Statistics)

## **Handicapped and Travel Restricted Residents**

Local businesses provide employment opportunities for town residents who for physical, financial or family reasons cannot travel to another place of employment. This group includes people too young or too old to drive, those who have a disability that keeps them from driving and people taking care of family members who cannot be away from the home for extended periods of time.

#### **Support for local businesses**

Local businesses provide a basis for support of local government and charitable activities. During Hanson's *Visioning* Session, one of the "Likes" listed about the Town was "Generous merchants."

Businesses also need the services and products of other businesses and help create a market for each other. In addition, more business activity provides a market base for office supply, copying, computer stores and other commercial activities upon which businesses depend. Local presence of these stores and services reduces costs of running a business.

#### 2. Local Economic Development Efforts

**Creation of the Commerce Park** The town's most definitive act has been creation of the Town-owned Hanson Commerce Center from many small tax-title parcels in the early 1970s. It was later suggested that the town create an Economic Development Industrial Corporation (EDIC) to manage the park and pursue any other such opportunities, but the Park has remained under the Selectmen.

Uses are slightly limited by zoning regulations protecting the town's Crystal Springs well field at the southern end of the park far from any potentially contaminating uses. However, the town has found many acceptable uses and the Park is largely developed. However, some vacant land remains as can be seen in the aerial photo on page IV-9. Access to the park is being much improved by reconstruction of the nearby intersection of Routes 14 and 27 and installation of traffic signals there.

**Supportive Zoning** As seen on the zoning map (Figure II-19) Hanson has passed zoning allowing commercial and industrial uses along selected areas on major roads and in an extensive area along the railroad racks.

The Business District areas around the junctions of Routes 27 and 58, Hudson Street and Route 27, Route 27 and Mattakeesett Street on the Pembroke line at Bryantville, and Route 27 and High St. are fairly well-defined. In contrast, the Business strip along Monponsett Street in the Monponsett neighborhood includes considerable residential uses, and the Hanson Center Business strip along both sides of Route 58 from West Washington Street to Winter Street and part way up High Street and County Road is far

too extensive to concentrate commercial uses in the Center. This sprawl-inducing effect is slightly reduced by the shallower depth of the Business zoned strip north and south of Alden Way. The 225-foot depth limits the size of commercial uses.

Over-zoning for Business use may seem supportive, but beyond a certain point can lessen the need/incentive to concentrate uses which can make a more efficient, pedestrian-friendly commercial center.

The very extensive area zoned for Commercial-Industrial uses runs south of the train tracks from Pleasant Street to Main Street, and then runs at a great depth along the tracks between Main Street and the Whitman town line, all the way west of Main Street / Route 27 to the East Bridgewater Line.

All of this Industrial zoning has accommodated the largely developed Hanson Commerce Park described above, and the less-developed privately owned Hanson Industrial Park west of Phillips Street in South Hanson. It also includes the pre-existing industrial/ Cranberry handling complex along Hawks Avenue in the Burrage neighborhood south of the railroad and west of Pleasant Street. The last is now home to the sizable Lite Control plant.

In all, this extensive industrial zoning has allowed two new parks, and accommodates pre-existing uses on Hawks Avenue which otherwise have been continued as grandfathered uses.

In addition the town has considerable land along major roads in the Commercial-Industrial District which also comes under the new Flexible Zoning Bylaw Overlay District. This supports varied compatible mixed-uses by allowing single-family residential uses as-of-right and allowing a great range of multi-family residential, office, retail, entertainment, and hospitality uses, and mixed-use structures by special permit. It offers many possibilities, but requires 35,000 square foot lots and comparable yards (front 35;'side 20;'and rear, 15.') Thus it does not quite support a compact walkable TOD. It is mapped over Commercial-Industrial and Residence A land along the easternmost part of Route 14, and along Commercial-Industrial, Adult Entertainment, and Business zoned land along Route 27 from the East Bridgewater line to High Street except for land bracketing the Commerce Park to the north and south.

This district allows for much creativity, but the recent South Hanson Transit Oriented Development Study suggests allowing higher density development on smaller lots in the TOD area, possibly through Chapters 40R and 40S.

#### **Areas of Special Interest**

The Routes 14/58 Commercial Center As discussed below, Hanson's vibrant civic and commercial center would benefit from overall design guidelines and from land use regulations encouraging intensified non- residential uses contiguous to the present

shopping center, rather than across the street or farther along Liberty Street or County Road.

**South Hanson Station TOD** The South Hanson Station area has some potential for higher density mixed-use Transit Oriented Development, as discussed below. While it does not have the frequent service of a transit line, it has far more auto-free accessibility than the rest of the town or much of the region.

Cranland Airport The small Cranland Airport is privately-owned but publically accessible. It has a non-illuminated 1,760-foot x 60-foot grass strip, seven hangers, and emergency-only fuel and repair services. It houses the firm modifying and updating Grumman Widgeon amphibians noted earlier. Though originally focused on serving agricultural spraying operations for the cranberry growers, Cranland serves general aviation, e.g. business and recreational flights. It has no scheduled passenger or freight service or current plans for expansion or improvement. It is valuable in offering opportunities for small business and general aviation aircraft to visit firms in the area. Thus it complements the larger, but more remote airports in Plymouth, Marshfield and Norwood and the smaller private strips in Whitman and Pembroke. It partially replaces the long-closed airports in Hanover and Brockton.

# **3. Current Economic Development Efforts**

**Committees/Commission** Hanson currently has no Economic Development Commission or Economic Development Industrial Corporation (EDIC). It leaves work on these issues to the Board of Selectmen and the Town Administrator, with assistance from the Old Colony Planning Council/Economic Development District, and the private Metro-South Chamber of Commerce and Plymouth County Development Council.

**Studies** Hanson recently cooperated in preparing the Old Colony Planning Council's South Hanson Transit Oriented Development Study, supported by the Vision 20/20 for South Eastern Massachusetts Program, and has since applied for state Smart Growth Technical Assistance funds with which to build on that report in drafting a TOD zoning bylaw, most likely under Chapter 40R.

## D. CONDITIONS FOR ECONOMIC DEVELOPMENT

#### 1. Barriers to Economic Development

Hanson has two major barriers to economic development, lack of easy highway access and its reputation as a residential community.

#### Access

Because Hanson is at least 30 minutes from a major highway interchange, it is not an attractive site for businesses that require access to large numbers of employees or

customers which have to ship goods by their own trucks. (Reportedly common carriers serve the town as well as they do towns near major highways, so the trucking constraint basically applies to a firm's own trucking.) Nonetheless, individual specialized firms such as Presidential Titanium on Route 27 have successfully located in Hanson.

To facilitate rail freight access for firms lacking a siding the town earlier considered developing a "team track" multi-user siding system, near the Commerce Park. This would have allowed trucking goods the last short distance to nearby firms who could not have their own siding, but it has not been developed.

#### **Public Awareness**

Except by local residents, there is little recognition of the business potential in Hanson. Because of the poor access, which protects the Town's character, most people in the region are unfamiliar with Hanson's resources or current plans.

#### 2. Opportunities for Economic Development

Although lacking in access and in business image, Hanson does have some valuable assets to attract and support economic development. These include a place for larger-scale business development, space for accommodating senior care facilities, and opportunities to encourage small businesses and home offices.

**Large Scale Business Development** Most important is the readily available estimated 55 acres at the former County Hospital site and other land in the (South) Hanson Industrial Park and the Town-owned Commerce Park. However, none of these sites can be successfully developed or be developed further without a careful planning and marketing program to:

- Determine the type of development desired
- Assess what growth industries meet the development criteria
- Produce physical access and marketing plans to attract those industries
- Analyze potential uses for the Hanson Industrial Park, compatible with nearby housing, or find another use for the remaining land
- Explore opportunities offered in the Hawks Avenue area in light of the nearby major open space acquisition and the off-site expansion plans of the major tenant.
- Assisted Living facilities and the larger Continuous Care Communities are a cross between housing and health care businesses. They generate local employment because they need to provide food, entertainment and services to residents. Although accessibility is an issue, it is not as important to these facilities as it is to a research facility or a factory. This is a possible use of some of the former County Hospital.



Bottom Right, Room for More Firms at the Town-Sponsored Hanson Commerce Park on Route 27

Home Offices and Small Businesses Growth of such activities is more likely to be successful for Hanson and less difficult to achieve than large-scale economic development efforts. Although less likely to produce major tax benefits, they have other advantages as a form of economic development. They require less in the way of public infrastructure such as new roads, water and sewers. They support daytime activity in the Town and they support other local businesses. They can help retired people who are employed there maintain sufficient income to keep their homes and to remain part of the community. At the *Visioning* Session, one of the "Dislikes" mentioned about the Town was "lack of Planning so people can stay in Town."

#### Such home businesses require:

- High speed, dependable communication, especially Internet access. For all but the
  most intensive users of the Internet, this access can be provided over cable wires or
  via a telephone system capable of providing DSL service
- Local support businesses such as copy centers and office supply stores
- A zoning and building code that protects the neighborhoods without setting unnecessary barriers to running a small, low-traffic producing business in residential areas.
- In addition, experience shows that a formal or informal association or meeting place for people working from homes or small offices is very important.

#### E. RECOMMENDATIONS

#### 1. Economic Development Objectives and Actions

- **a. Hospital Reuse** The hospital buildings and surrounding land are valuable community assets. Efforts by the Town to encourage a variety of new uses are already underway. Those efforts should include a consideration of the site's economic development potential. Uses to be considered include:
- An Assisted Living or Continuous Care Community
- A Regional Recreation facility. Such a facility could be private or a public–private joint venture
- An environmentally-oriented Office Campus
- A campus for a small college or related institution
- **b. Support of home businesses** Hanson's zoning does not unnecessarily limit home businesses. In addition, the Town's cable system, now controlled by Comcast, provides high speed Internet access anywhere in the Town. However, as part of the Plan, the Town is encouraged to further support the development of home businesses by:
- Encouraging the development of a business group to provide mutual support and deal with the problems of working from home such as solitude, lack of equipment, need for advice
- At all times, providing current business support materials and equipment in the Library.
- **c.** Revaluating its Market and Marketing the Town's Commerce Center World, national and regional economies have all changed significantly since the last major effort to market the town-owned "Hanson Commerce Center." A quick and relatively inexpensive study should be undertaken to determine if the evolving "economy" and high land prices elsewhere have created new markets for this area. If potential uses can be identified, then a marketing study should determine if attracting new development is feasible.
- **d. South Hanson Station Area** South Hanson has many attributes including residential areas, some businesses, and a commuter railroad stop. The station area has considerable economic potential, which can be realized if local circulation and the appearance of the business center is improved. Two recent studies of the area have been completed; The South Hanson Center Report by CYMA 2 supported under Executive Order 418, and the Vision 20/20-supported South Hanson Transit Oriented Development Study by the Old Colony Planning Council. The first study recommends mixed-use housing, retail development, better parking and improved sidewalks and landscaping.

The second study further examines land use and circulation issues and resulting TOD potentials, and recommends supportive zoning, either a two-tiered approach through a conventional zoning bylaw, or as-of-right zoning under Chapter 40R.



South Hanson - MBTA parking lot in center; partially developed Hanson Industrial Park and planned Depot Village site to north of parking lot; former Ocean Spray complex proposed for reuse and / or redevelopment on both sides of RR track southeast of T parking lots; and protected Great Cedar Swamp wetlands south of tracks

The Housing Section of this plan recommends such rezoning under provisions of Chapter 40R, which will provide some reimbursement from the Commonwealth for passing the bylaw and more for the permitted new units as well as support under the new Chapter 40R for any resulting net increase in school costs.

e. Commercial Center along Routes 14/58 Design guidelines are needed to encourage improvements to existing business and industrial areas. Special attention should be given to signage, landscaping, curb cuts, and architectural guidelines to protect the potential for business, to avoid traffic conflicts and to assure compatibility with the character of the Town. Consideration should also be given to the relationship of the adjacent land uses to the commercial uses and to means of concentrating and intensifying the commercial center, preferably around the present shopping center on the south side of Liberty Street, and to improving local pedestrian and vehicular circulation.



South Hanson - Older buildings in Current Use - fully occupied by music businesses and studios.



South Hanson - Deteriorated former Ocean Spray warehouses south of the tracks, proposed for redevelopment

The following Table IV-3 summarizes and evaluates the major economic development policies and related strategies emerging from this study. The next table, Table IV-4, summarizes and justifies the major economic development recommendations.

**Table IV-3: ECONOMIC DEVELOPMENT STRATEGY EVALUATION Issues Addressed Evaluation of Strategy Strategy Employment** Good for South Hanson; **Policy Objective #1:** Encourage existing important in Center; Fair business centers Tax revenue prospects elsewhere due to limited access **Employment** Environmental Policy Objective #2: Encourage Fair appropriate use of industrial zoned land protection Tax revenue **Policy Objective #3:** Encourage effective **Employment** and appropriate home occupation Good Traffic opportunities Policy Objective #4: Actively support Fair—this is also a regional utility/cable efforts to improve Home occupations issue communication infrastructure Policy Objective #5: Work with Regional **Employment** Planning Agencies to support regional Tax revenue Excellent economic growth Circulation Policy Objective #6: Work with existing **Employment** businesses to help them survive and Good Income expand

Table IV-4: ECONOMIC DEVELOPMENT RECOMMENDATIONS						
RECOMMENDATIONS		PHASE		JUSTIFICATIONS		
RECOMMENDATIONS	One	Two	Three			
Revise, refine and implement hospital reuse plan		•		Increase employment opportunities and increase tax revenue.		
Encourage Assisted Living or Continuous Care Communities	•	•	•	Increase local employment opportunities and met needs		
Work with neighboring towns to create a regional recreation facility. (see Chapter V)				Creates jobs.		
Develop business group to provide mutual support and deal with the problems of working from home	•	•	•	Reduces commuting. Consistent with policies established in the <i>Visioning</i> process.		
Provide additional business support materials and equipment in the Library.	•	•	•	Reduces commuting. Consistent with policies established in the <i>Visioning</i> process.		
Undertake design improvements in Center commercial area and in Station area	•			Consistent with policies established in the <i>Visioning</i> process, strengthens community structure, increases local business.		
Study industrially zoned land and industrial incentives		•		Consistent with policies established in the <i>Visioning</i> process.		
Implement industrial zoning recommendations Rezone where industry is inappropriate			•	Consistent with policies established in the <i>Visioning</i> process.		
Appoint a committee to promote the community Consider creation of economic development commission or EDIC.	•	•	•	Consistent with policies established in the <i>Visioning</i> process.		
Cooperate with the Plymouth County Development Council, and the Old Colony Planning Council	•	•	•	Provides data and encourages business in the county.		

# V OPEN SPACE, RECREATION, CULTURAL, HISTORICAL AND NATURAL RESOURCES

#### Introduction

Hanson recognizes the important role its natural and cultural resources play in preserving its character. Residents treasure its serenity, green appearance, open space and aesthetic qualities. They support preservation of open space and protection for all its land resources and actively work to support the linking of existing conservation lands, in order to create lifelong recreational opportunities and provide stewardship of its surface water resources, water supplies and forests.

#### A. CHARACTER OF THE COMMUNITY

The Town of Hanson, in Plymouth County, incorporated in 1820, is 16.07 square miles in size. Located 25 miles southeast of Boston, it is accessed by major Routes 58, 27 and 14. Originally agricultural, Hanson now consists of several small centers and residential subdivisions. Hanson is somewhat rural in nature, with little industry and few businesses. Bordered on the east by Pembroke, on the south by Halifax, on the west by East Bridgewater and Whitman, and on the north by Rockland and Hanover, Hanson continues to evolve into an increasingly residential community as a result of the continuing suburbanization of Boston. It is now generally considered to be a suburban "bedroom" community, since a majority of residents work outside of the Town.

The amount of urban developed land has increased steadily in Town going from 23 percent of the town's acreage in 1984 to over 54 percent by 2005.

# **Visioning Session**

As noted earlier, at the April 1, 2000, visioning session residents expressed a strong like for Hanson's natural features, the size and scale of the Town, and its quietness and serenity. They disliked some aspects of its visual condition, particularly noting road and street trash, abandoned and rundown buildings and a perceived under-utilization of recreational resources.

#### **B. OPEN SPACE**

This section draws on several more detailed open space and community development plans. Major recent plans are described below.

#### 1. Status of recent Open Space and Recreation Plans

# • Bay Circuit Proposals

In 1988, the Hanson Planning Board developed its *Bay Circuit /Open Space and Recreation Plan*. This included actions needed to complete the Bay Circuit locally as described below, along with the usual basic open space and recreation concerns.

The 1988 plan proposed a main Bay Circuit Greenbelt connecting the Drinkwater River to the Great Cedar Swamp along the Indian Head River, Wampatuck Pond, the County Hospital land and the Indian Crossway. It also proposed spurs to Little Cedar Swamp in north-central Hanson and from "Great Cedar Swamp to the Shumatuscacant River and Poor Meadow Brook and water department land ..(providing) a greenbelt linking Hanson's significant open spaces to those in Whitman and Abington.". The plan acknowledges that "one can neither hike or canoe the entire proposed network" but points out that it can provide varied recreation opportunities and may ultimately be connected with surrounding communities in the spirit of Charles W. Eliot's original Bay Circuit concept. The plan lists four key parcels and 46 others for possible purchase or acquisition of easements allowing passage. Local officials continue working with the Bay Circuit Alliance and other communities to complete the Trail in this region.

#### • 1996 Plan

In 1996 the Board determined that the Plan needed to be updated to more recent Bay Circuit Trail recommendations, the evolving water supply situation and recent conservation acquisitions in order to qualify for Self Help and other open space acquisition assistance. The plan's purposes were to:

- Evaluate open space goals and objectives
- Establish long-range planning for the Town
- Compile a list of accomplishments attained
- Address the linkage system of open space and trails
- Continue development of an integrated program of recreation/conservation through the coordinated efforts of the schools, all Town departments and private and non-profit organizations.

#### Highlights of the 1996 Open Space and Recreation Plan

The Plan includes discussion about Hanson's community Goals and Objectives, an analysis of needs, a five-year action plan and public comments. Like previous plans, the document addresses the Town's regional setting, its history, population characteristics, growth and development patterns, transportation system, water supply systems, sewer service and zoning among other things. It also contains an environmental analysis and

inventory covering water resources, surface water bodies, discussion of aquifer and well protection districts and details about surface drainage, geology, soils, vegetation, climate, wildlife and topography, and addresses agricultural land, lands under Chapter 61A, scenic landscapes, and areas of critical concern. The plan has since been extended in the 2004 Community Development Plan discussed below.

#### Goals

In addition to Town-wide Goals and the Vision established by the Town (See Chapter One, Introduction), Hanson adopted specific Open Space Goals in 1988, 1996 and 1998 and added to them in 1999.

#### The 1988, 1996, 1998 Goals:

- To preserve and enhance Hanson's character and natural heritage in the face of increased urbanization and population growth.
- To provide a linked system of open space and trails through Hanson that is accessible to the general public, tied to adjacent communities and maintained by private/non-profit organizations and volunteers.
- To identify, establish, protect and maintain a new ground water supply(s) and ground water recharge area(s) within the Town to be used as municipal water supplies, which will end the water hook-up moratorium and provide for future growth.
- To develop an integrated program of recreation/conservation through the coordinated efforts of the schools, various Town departments and private/non-profit organizations.
- To protect and preserve all surface water resources in Hanson, including ponds, rivers, streams and marshes, and to encourage their use by developing points of public access.
- To expand and improve recreational opportunities within Hanson by the enlargement of existing facilities and administer them by a newly established committee whose responsibility shall be to maintain and manage all Townowned parks and fields.<sup>1</sup>

# The 1999 Open Space Goals and Policies:

- To protect natural and cultural resources and open space natural systems and recreation areas, and link these tracts by greenways and a trail system thereby connecting passive and active recreational areas.
- To preserve the serenity, green appearance, open space and aesthetic characteristics of the Town, which contribute to the quality of life for future generations.
- To plan and control commercial and residential growth with the objective of improving the appearance of the Town.

<sup>&</sup>lt;sup>1</sup> The Parks and Fields Commission has been established.



Needed access improvement; Unsigned Beginning of Mapped Indian Crossway / Bay Circuit Trail Segment at Southern End of Crooker Place off Main Street

#### 2. 2004 Community Development Plan Recommendations

The most recent resource protection / open space proposals are those below from the 2004 Community Development Plan. These draw on and extend those from the 1988, 1996, and 1999 Open Space and Recreation plans and they are adopted in this plan. The following ranking balances current concerns with past recommendations and notes timely opportunities. They are shown on the following map of Resource Protection / Open Space recommendations

- RP/OS -1 Acquisition of trail and greenway easements behind house lots along the Indian Head River. (Recommendations 1 and 2 in the 1988 Plan) These would extend from the present Wagon Trail Conservation holding on the River to a downstream 10-acre Plymouth County parcel which has parking and access off State Street. The County parcel in turn abuts Rocky Run Brook and its Trout Pond which are proposed for acquisition in the 2004 Pembroke Community Development Plan
- RP/OS 2 Resource Protection Extension of the Aquifer Protection District to cover an approximately 900 acre portion of the Zone II recharge land potentially affecting the proposed Brook St. Well. The configuration best protecting the well will reflect the well's location and relevant groundwater and surface water flows.
- RP/OS 3 Acquisition of approximately 125 acres of bogs and managed upland forest between Burrage Pond and Elm St. This is part a 250 acre holding

bracketing the Hanson /Halifax line and a coordinated joint acquisition and management effort is recommended.

- RP/OS 4 Potential acquisition of upwards of 102 acres of bog and upland. These are between Camp Kiwanee, Indian Head Pond, and Indian Head Brook, and very close to the Pembroke Town Forest. The upland could be held for open space and resource protection purposes with the bogs leased to private growers when market conditions allow.
- RP/OS 5 Two mapped parcels including a house at the end of Big Rock Lane offering a connection between the County Hospital land and a cemetery between High St. and Wampatuck Pond. It might be possible to get a pond side easement along the back of the lots connecting these holdings and increasing access to the west bank of the Pond (The Assessors map shows 2 parcels while the colored aerial photo shows the cemetery abutting the house lot.)
- RP/OS 6 Acquisition of easements allowing hiking along the Bretts Brook Corridor (originating south of Whitman St.) and the Shumatuscacant River Corridor from the Whitman Town line past present Conservation holdings north of West Washington St., and across West Washington St. to their junction at the beginning of the Poor Meadow Brook corridor. Explore/ implement any similar opportunities on the short segment of Stetson Brook from Chandler Mill Pond in Pembroke past the Columbia bogs and on to East Monponsett Pond in Halifax.
- RP/OS 7 Acquisition of scattered stream-side parcels between the Commission's 62-acre Hoder land and 63 acres of streamside conservation property between Joanne Drive and Winter Street and acquisition of hiking easements along unprotected portions of the Indian Head Brook Corridor between Indian Head Pond and Wampatuck Pond.
- RP/OS 8 Acquisition of further hike-able easements along the Poor Meadow Brook across from the present Commerce Park and Water Department lands and outside of present conservation holdings, across Route 27 past present holdings and on the East Bridgewater Town line.
- RP/OS 9 Acquisition/improvement of sufficient easements to allow walking along the White Oak Brook Corridor from the Conservation holdings fronting on Monponsett St. through the intervening bogs to South St., past other bogs and bog reservoirs North and South of the railroad tracks and further Conservation land, and on through the Pleasant St. waterland to Monponsett Pond.
- RP/OS 10 Explore potential acquisition of part or all of the Rainbow Camp holdings (reputedly the last surviving summer camp in Hanson) prior to any

possible change in ownership or use in order to protect the southwest shore of Maquan Pond and the existing town open spaces resources. This has about 20 acres between Indian Head St. and Maquan Pond near the Camp Kiwanee / Cranberry Cove properties.

- RP/OS 11 Bay Circuit Trail Completion. Negotiating needed easements or rights of passage, installing signs and improving trails and publicizing this segment of the Bay Circuit Trail as it wends its way from East Bridgewater to Pembroke.
- RP/OS 12 Develop playgrounds / tot lots on scattered town holdings. Include sitting areas, tables, and activities (e.g. exercise circuits) to help adults combat isolation.
- RP/OS 13 Acquire the estimated 40 acres between the Lite Control Plant, the Burrage Wildlife area and Town Conservation land next to the Indian Crossway.

#### C. GEOGRAPHIC CHARACTERISTICS / NATURAL RESOURCES

Geographically, Hanson consists of three "bands" of woodlands crossing the Town, separated from one-another by three "strips" of lowlands. Hanson lies within two major surface watersheds, the South Coastal Watershed in the northwest part of Town, and the Taunton River Watershed in the southern section. There are also 10 ponds in Town, totaling 392 acres in surface area. Due to the large areas of wetlands and soils that drain poorly, most residential development in Hanson is off of existing major roads. All areas of Hanson have on-site sewage disposal. As urban developed land has continued to increase, forest and agricultural/open land has steadily decreased. By 1984 it had decreased to 50 percent of the total acreage in Town.

The Town of Hanson lies at the headwaters of two major surface watersheds: the North River watershed, where waters flow from the northern and eastern sections of Town east to the South Coastal Basin, and the Taunton River system, where waters flow south from the western and southern parts of Town towards Narragansett Bay.

Much of Hanson is low and wet, particularly in the great Cedar Swamp to the south and Little Cedar Swamp in the north. Great Cedar Swamp is a very important resource as its water storage capacity acts to reduce flood potential and then release runoff slowly. Uplands adjacent to the Great Cedar Swamp also have potential for use as a future surface or ground water supply. Development of additional water supply as a backup system is critical for Hanson. The Department of Environmental Protection (DEP) is monitoring water supplies of both Hanson and Brockton, since that city does not have enough water to serve its residents and allow for future growth. Protecting Hanson's potential and present well sites from contamination is vital.

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#### 1. Water Resources

#### • Groundwater

Hanson began its groundwater-testing program during the 1960s drought. By 1979, it wanted to be less dependent on the Brockton and Abington-Rockland supplies, since it was becoming evident that Brockton's supplies would not adequately meet Hanson's growing demands. It is now basically self-sufficient though it can get emergency service from Brockton and other communities.

The Town is continuing to develop its own groundwater resources by upgrading its Crystal Spring Well field, Hanson's first water supply system, and exploring a possible well off of Pleasant St. just north of West Monponsett Pond. In the face of development-driven demands for more water, the Town should continue to review its groundwater resources and consider expanding its aquifer and well protection districts. The Board of Health could consider the feasibility of a Septic Maintenance Program and prepare appropriate guidelines.



End of paved trail going north from Hospital along edge of Ridder property, large field in distance

#### • Surface Water Bodies

Hanson contains 10 ponds totaling 392 acres in surface area that provide the Town with approximately 10 miles of shoreline. The larger ponds are used extensively for fishing, boating and other forms of recreation. None of the ponds are used exclusively for a public water supply, although since the 1960s the Monponsett Ponds (and Oldham and Furnace Ponds in Pembroke) have been seasonally diverted to Silver Lake and are major components of Brockton's supplies.

Under current state rules, the diversion from Monponsett Pond can legally occur only from October to May (unless the towns request it to lower pond levels) and only when the Pond and the Lake are above and below certain water levels, respectively. Pond management is a major local concern since high levels flood septic systems and cover beaches while low levels lessen boating opportunities. The present regulations preclude significantly increased diversions.



Hanson's Indian Head Pond viewed from Pembroke

# • Stream-Based Open Space: Green Corridors

"Green Corridors," now frequently termed "Greenways" may be defined by waterways, wildlife migration routes, or passive recreational trails. Hanson has few large publicly owned open spaces. Yet several nearly contiguous greenways exist: *The Indian Head Brook Corridor* going from the west bank of Indian Head Pond to Wampatuck Pond, *The Poor Meadow Brook Corridor* running into East Bridgewater, *The Brett's Brook Corridor, The White Oak Corridor* flowing to East Monponsett Pond, and the *Stetson Brook Corridor* flowing from Stetson Pond in Pembroke to the East Monponsett Pond.

The Town has unique opportunities to complete these five outstanding greenway trails which will greatly assist wildlife and provide exceptional recreation open space and waterways for its citizens.

#### 2. Vegetation and Wildlife

Vegetation is an important physical characteristic of the environment. It stabilizes the soil, provides windbreaks, contributes to the protection of streams, offers habitat for many kinds of wildlife, acts as a buffer zone between incompatible land uses, and supplies recreational opportunities.

#### • Trends in Agricultural Acreage

In the 1984 Land Use Analysis, Hanson had 733 acres of land classified as agricultural or open space. It was defined as "cropland," "pasturelands" or "woody perennials, fruit orchards or nurseries" with the last category including cranberry bogs. As of the 1999 MassGIS aerial photo inventory the town had 154.6 acres in cropland, 51.62 acres in pasture, and 529.13 acres in "woody perennials, fruit orchards or nurseries" mostly in cranberry production, for a total of 735.35 acres in agriculture. While the total was almost unchanged the mix would show a decline in crop land and pasture and an increase in cranberry bogs, reflecting the bog expansions of the late 1980s and early 1990s.

Cranberry cultivation was encouraged in Hanson in the 20<sup>th</sup> century due to the large amounts of wetlands. The cranberry bogs now add scenic views and a cultural and historical perspective to the landscape. They are also protected under the *Wetlands Protection Act*. Following a great expansion in capacity after a surge in prices in the eighties, there was a devastating drop in prices in the nineties, leading to abandonment of many bogs – some of which are now being restored as prices gradually improve. Following the decline, the state Division of Fisheries and Wildlife purchased the extensive Northland (ex-United Cape Cod Cranberries) bogs on the Hanson-Halifax line to create the Burrage Wildlife area. A portion of this may be considered for lease to growers if compatible with the overall project.

Despite the small area under cultivation, Hanson also has approximately 1,892 acres of agricultural land under Chapter 61A. This reflects extensive areas of support land (sand sources, reservoirs, buffer land...) around and between the bogs.

In general, Chapters 61, 61A and 61B work to the benefit of all, as they allow a farmer, forester or recreation land owner to be taxed on the present use of the land rather than its value on the open real estate market, thereby reducing the pressure to sell for development. While the land is not free from development pressures, and is not technically "open space", it is open at the present time, providing residents with many open space benefits. The 1996 Open Space Plan Draft concludes, "As Hanson prepares itself for a more urban future, it should seriously consider techniques to preserve its fields and bogs. These include additional 61A designations, examining agricultural

preservation restrictions and the purchase and leasing of bogs." The town sought to buy the Wampatuck bogs (below) but a private owner prevailed and is now restoring them.



The Wampatuck Bogs viewed from Robinson Street - formerly abandoned, now being restored

Low-lying wetlands and pond habitats provide nesting and feeding areas for several native waterfowl species, and growing populations of non-native mute swans. Migrating birds also depend on these areas for rest, food and shelter. As Hanson experiences more pressure from development, natural areas are becoming more suburbanized, resulting in shrinkage and fragmentation of habitats and increasing pressure on wildlife populations. Certain species that require larger, unbroken areas of habitat for survival are particularly impacted. The Town should maintain and add to its biological inventory and protect the habitats needed to sustain viable plant and animal populations.

#### • Town Forest

The Town's former Poor Farm property of approximately 38 acres of woods, fields and wetlands between Indianhead Street and Wampatuck Pond was designated a Town Forest in 1938. The Forest offers opportunities for passive recreation, scenic views, and nature/environmental education. There are trails for forest maintenance, non-motorized recreation, nature study, and fishing access to Wampatuck Pond.

Other open space and recreation holdings are listed in the past Open Space plans.



Long view into State-owned Burrage Wildlife Management Area extending into Halifax.

# **D. RECREATION**

Recreational land has remained relatively constant over recent years. It includes Camp Kiwanee, which is on the National Register of Historic Places, ball fields, a skateboard park and fields for baseball, soccer, football and general use.



Hanson's new skateboard park

The Town has recognized the importance of recreation, conservation and open space, and is committed to its protection. The Parks and Fields Commission has proposed a 6-10

acre multi-use Sports and Recreation Complex. However, in recent years, Hanson has had limited financial resources for acquisition and maintenance of facilities. Establishing a new Town committee to coordinate, identify and plan for recreational programs Townwide would help unify Hanson's public and private recreational facilities.

## E. CULTURAL AND HISTORIC RESOURCES

The Town is fortunate to have institutions and physical assets such as the Thomas Mill, the Library, the Hanson Cultural Council and the Hanson Historical Society among its cultural resources. In addition the Hanson Grange, the American Legion Post, a Senior Center, the Arts Lottery Council, the Town Hall (recently expanded in great sympathy with its 19<sup>th</sup> Century style) and the Memorial Auditorium contribute to the cultural life of the community. Beyond this there is the 1748 Congregational Church, the similar but much simpler 1820 Baptist Church, and the expanded 20<sup>th</sup> Century St. Joseph the Worker Catholic Church. In addition, creating much of Hanson's fabric are the many 18<sup>th</sup> and early 19<sup>th</sup> century houses and the later, much-modified 19th Century houses in the Burrage Model Village on Reed St. The town also has an Historical Commission and various fraternal organizations.

In contrast to these resources, Hanson does not have any designated Historic Districts nor an Historic District Commission to regulate changes in townscape and the exterior appearance of historic building in such a districts.



New illuminated ball field with town barn complex to rear

#### F. CONCLUSION / RECOMMENDATIONS

Protection of natural resources has been and should continue to be promoted through regulatory tools such as the aquifer well protection districts, low salt areas, agricultural/recreation districts and flood insurance district, all provisions in the Zoning Bylaws, and the activities of the Conservation Commission under the Wetlands Protection Act (MGL Ch 131, Secs. 40 and 40a.)

Hanson is currently exploring ways to protect recreation and conservation lands by promoting use of conservation easements and restrictions and by encouraging developers to provide open space in new developments. It is recommended that the town also work for adoption of the Community Preservation Act for a state-matched source of funds for Open Space protection, Historic Preservation and creation/preservation of affordable Community Housing

In addition Hanson should consider identifying and establishing an Historic Preservation District and creating an Historic District Commission to oversee preservation of the exterior appearance of historic buildings in such a district.

The Town's updating of land use regulations has become a critical issue in the development process. The Zoning Bylaw Committee, a subcommittee of the Planning Board, has worked diligently to review, revise and update the existing zoning bylaws and to make recommendations on land use policies and future strategies for the Town. These should be studied closely and be acted upon.

In addition, other Committees are working to implement the recommendations of other elements of this Plan and of related studies.

A summary of this Plan's Conservation/Open Space, Recreation and Historical/Cultural recommendations (in addition to those from the 2004 Community Development Plan listed above) follow in Tables V-1, V-2, and V-3.

Table V-1 Recommendations-Conservation/Open Space								
RECOMMENDATIONS		PHASE	2	JUSTIFICATIONS				
RECOMMENDATIONS	One Two Three		Three	JUSTIFICATIONS				
CONSERVATION								
Identify all 61,61A and 61B land.	•			Provides limited protection and information for acquisition when land is removed from 61 protection.				
Develop list of lands that are candidates for 61A and 61B designation.	•			Provides information to encourage designation.				
Educate landowners about the value of participation in conservation-restricted land.	•	•	•	Provides information to encourage designation.				
Promote and encourage private land stewardship.	•	•	•	Protects quality of land.				
Examine agricultural preservation restrictions and Town purchase and leasing of cranberry bogs.	•	•		Protects bogs and land now used for bogs.				
Select and preserve frontage parcels that allow wildlife corridors. Consider easements for parcels with frontage on Winter Street in private ownership.	•			Protects wildlife habitat.				
Encourage developers to provide open space in new developments.	•	•	•	Protects resources and enhances quality of life.				

CONSERVATION, CO	NT'D			
Develop conservation programs in coordination with schools and private/non-profit organizations.	•	•	•	Increases appreciation of natural resources.
Add Cluster Development Provisions.	•	•	•	Allows open space preservation in projects.
Develop an integrated program for recreation and conservation facilities.	•	•	•	Improves recreation opportunities.
Distribute maps and other information in several locations throughout Town and on town website about Town-owned lands and list of scenic vistas.	•	•	•	Increases appreciation of natural resources.
Support and act on still-relevant proposals of past open space plans and the 2004 Community Development Plan, particularly transitory opportunities for acquisition.	•	•	•	Build on past work to meet continuing needs.
Support proposals of the ten-year Town Forest Stewardship Plan, promote similar plans for other panels.	•	•		Increases appreciation of natural resources.
Work for adoption of the Community Preservation Act.	•			Provide state-matched funds for open space, historic preservation and affordable housing activities.

Table V-2 Recommendations-Recreation							
RECOMMENDATIONS		PHASE		JUSTIFICATIONS			
RECOMMENDATIONS	One	Two	Three	JUSTIFICATIONS			
RECREATION							
Conduct Town-wide survey re: specific kinds of recreation desired.		•		Provides basis for recreation plan.			
Consider a regional recreation facility in cooperation with neighboring towns.	•			Increases recreation opportunities.			
Establish a new Town Committee to coordinate Townwide recreational programs.		•		Improves recreation opportunities.			
Implement Camp Kiwanee Master Plan.		•	•	Improves recreation opportunities.			
Consider adding sidewalks of a non-traditional design away from the road or curb.	•	•		Improves walking opportunities and cycling opportunities for hesitant riders and respects the town's character.			
Identify recreational facilities, fields, and equipment needing repair or replacement. Establish and advertise a plan of priorities.	•	•	•	Provides information for recreation planning.			
Develop inspection and maintenance schedule for recreational fields, facilities and equipment.	•	•	•	Assists in development and maintenance of facilities.			

RECREATION, CONT'D				
Maintain a record of usage for each field and facility.	•	•	•	Provides information for recreation facility planning.
Bay Circuit Trail:  Monponsett Pond and Burrage Pond Act on possible Bay Circuit linkage opportunities with Halifax.  To work with Mass Wildlife to improve linkage on the Burrage Wildlife Management Area. Identify portion area on the Halifax border.  Parcels which form key linkages should be considered for acquisition, restrictions or easements. Other parcels with dwellings, entirely wet or unbuildable should also be considered.	•	•	•	Increases non-motorized circulation.  Increases non-motorized circulation.  Increases non-motorized circulation.
One parcel would make an actual linkage to Pembroke realistic.  Now undeveloped, its purchase is also recommended in the <i>Bay Circuit Trail Implementation Plan</i> .		•		Increases non-motorized circulation.
Develop an integrated program for recreation and conservation facilities.	•	•	•	Improves recreation opportunities.
Develop town-wide recreational and functional foot and bicycle paths.	•	•	•	Increased opportunities for non-motorized circulation.
Carefully consider varied uses for the former county hospital site.	•	•	•	May increase recreation and open space (greenway) opportunities.

Table V-3 Recommendations-Historic and Cultural								
RECOMMENDATIONS		PHASI	E	JUSTIFICATIONS				
RECOMMENDATIONS	One	Two	Three	JUSTIFICATIONS				
HISTORIC AND CULTURAL RESOURCES								
Conduct a regulatory and protective study of the vistas, farms, historic sites, monuments and buildings.	•	•	•	Preserves character of Town.				
Work towards priority achievement as recommended for the Historic District National Register status for  1. United Cape Cod Cranberry Co.  2. Central Packaging House Area.  3. North Hanson.	•	•		Preserves character of Town.				
Work towards priority achievement as recommended for the Historic District National Register status for selected sites identified above and work towards preservation /reuse of the many endangered buildings.	•	•		Preserves character of Town.				
Work towards priority achievement of National Register status as recommended for <b>Hanson Town Hall</b> / Seek restoration of its rooftop decorative iron work.	•	•		Preserves character of Town.				

RECOMMENDATIONS		PHAS	E	JUSTIFICATIONS		
RECOMMENDATIONS	One	Two	Three	JUSTIFICATIONS		
HISTORIC AND CULTURAL RESOURCES, CONT'D						
Work for adoption of the Community Preservation Act.	•			Provide state-matched funds for open space, historic preservation and affordable housing activities.		
Explore establishment of a local historic preservation district, designate district, and establish needed local Historic District Commission.	•	•		Preserves character of town through detailed review / regulation of exterior changes to historic structures.		

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# VI FACILITIES

### Introduction

This element of the Master Plan assesses community facilities and services in Hanson to determine present day adequacy and future physical needs related to the Town Hall, fire, police, schools, library, water, sewer, cemeteries and senior and youth center facilities. Discussions of public roads, open spaces, and recreational areas are in the Circulation and Natural/Open Space/Recreation Resources elements respectively.

The regional schools are technically not town facilities because they are part of the Whitman-Hanson regional system but are discussed because they are one of the most crucial public facilities.

## A. FACILITY GOALS AND POLICIES

Facilities are planned in the context of the goals that the Town sets for its municipal services. Facilities need to reinforce and support the provision of these services to residents, because adequate facilities ensure that departments are able to meet their responsibilities in accordance with their mandate.

The Goal for community facilities is to provide residents a wide range of governmental facilities, services and public utilities. Facility policies are to:

- Maintain a high degree of public safety within the Town, including provisions for police, fire and emergency services and infrastructure.
- Promote greater involvement by residents in Town affairs including volunteerism for committees, boards and elected offices.
- Focus on activities for all age groups, with special emphasis on teenage youths and seniors.
- Increase active recreation facilities and programs to keep pace with growing needs.
- Maintain a quality public school system.
- Maintain quality systems: water/drainage, sewer and wastewater, and highway.

#### B. INVENTORY

The section below discusses each of the components of Town Facilities, with a description of each facility and the issues that it faces. Recommendations follow.

Table VI-1: Town of Hans	Table VI-1: Town of Hanson Asset Inventory and Location					
Town Hall	542 Liberty Street					
Police Department	795 Indian Head Street					
Fire Department	505 Liberty Street					
Highway Department	797 Indian Head Street					
Public Library	132 Maquan Street					
Senior Center	132 Maquan Street					
Water Department	1073 West Washington Street					
Camp Kiwanee	Off Indian Head Street					
Cemetery	Off Fern Hill cemetery and private rural cemeteries					
Schools	Maquan, Indian Head,					
	Middle School and WH High School					



The recently enlarged Town Hall - minus its prior black iron roof ornamentation

### 1. Town Hall

Hanson Town Hall is an attractive 1872 building with a substantial 1999 addition done in the original style. It borders Wampatuck Pond on Route 58 in Hanson and houses the

Board of Selectmen and most other town offices.

## **Meeting Space**

The Town Hall lacks sufficient meeting space under the current usage. Hanson boards and commissions meet on Tuesday evenings -- including the Board of Health, the Conservation Commission, and the Zoning Board of Appeals. There is only one large meeting room on the second floor of the Town Hall to accommodate these meetings. The lack of other adequately sized rooms forces other boards and commissions to meet in their own offices which often are equipped only with a small conference table. Controversial issues lead citizens to gather in the hallway. This makes the public process less accessible, since the Open Meeting Law is technically satisfied as long as the door is open, and conversations in the hallway add distractions.

The Veterans' agent currently does not have his own office, though his work is at times confidential in nature. Privacy cannot be guaranteed. State statute requires that Veterans' Agents have their own offices, where they can insure privacy and confidentiality.

Parking in the lots at Town Hall can be difficult to find when simultaneous meetings occur in the building, as is the case on Tuesday evenings. According to Town officials, the lots fill to capacity.

#### 2. The Police Department



Present Police Station - soon to be replaced by a bigger station on Route 27.

Hanson has a full-time Police Department consisting of a chief, lieutenant, for sergeants, fifteen patrol officers, six auxiliary officers, four full-time dispatchers, and two part-time dispatchers, all housed in a single police station. There is also a full-time administrative assistant who works for the chief.

The present station is to be replaced by a new station on a 3.96 -acre site on Main Street (Route 27) across from the Grange Hall. The station will have approximately 15,000 square feet with the potential to convert 1,500 to 2000 square feet of storage space to office space. It will house complete facilities including office space, locker rooms, a public meeting room, conference space, a fitness center, a sally port and fleet garage and secure storage of weapons, evidence and records along with a 63-vehicle parking lot. It is expected to meet projected needs for the next 15 to 20 years.

## 3. The Fire Department

Hanson has a full-time Fire Department consisting of a chief, four lieutenants and twelve full-time firefighters, all housed in a single fire station. These are supported by twelve "on-call" firefighters. There is also an administrative assistant who works for the chief.

Originally the firehouse, built in 1978, was shared with the Senior Center, but the Senior Center is now contained in a different structure, and the Fire Department has expanded into that space.

The ground floor is an open area with walls that subdivide offices, meeting space, and "daily living" space (kitchen areas, bathrooms, etc.). The offices located on the ground floor are the chief's and the office used jointly by the chief's administrative assistant. The central area on the ground floor is used for meetings and as a classroom. There is also a kitchen and a bathroom.



Main Fire Station

The second floor is the bunk area of the building, where firefighters assigned to the stationhouse stay over night. The floor has one access, and has two modes of egress (stairs and fire pole). The second floor has limited space, with beds pushed up against both side walls, a roof that slopes inward at a fairly steep pitch, and a narrow walk to access all the beds.

The second floor of the building is being redone. Bunk space will be expanded and dormers will be added.

While the space needs of the Fire Department appear adequate, the department nevertheless identified needs for the building.

According to the chief, the firehouse needs:

- A new heating system
- Rewiring of the building, including wiring for data systems and a centralized telephone system
- Reconfiguration of office space to create more administrative space for staff
- More storage space
- Addition of a modern security system, including CCTV and intercom connected to the dispatch center at the police station
- Sprinkler systems (fire suppression)
- Fire alarms (fire protection)
- A functional thermostat

The Fire Department no longer uses the second firehouse on Main Street.



Former South Hanson Fire House on Main St.

#### 4. The Highway Department

The Highway Department is located at 797 Indian Head Street (behind the Police Station); the structure was built in 1965 and occupied the same year. The Highway

Department Building is constructed of concrete cinderblock, approximately 100 feet in length, by 50 feet in width and 15 feet high. It is comprised of office space, two bathrooms and garage parking space for Highway equipment. The interior office space is comprised of a break room for employees and the main office for the Highway Surveyor and Administrative Assistant.

The office space was recently renovated including painting, new carpets and other amenities. The exterior of the Highway building was recently painted. The building was constructed to house the Highway Department, the Water Department and the Tree Department. In the 1990's the Water Department required more space for equipment and offices so they moved to vacated their own building. Behind the Highway garage is the repair shop. This originally stood at the Charlestown Navy Yard, and was dismantled by the Town of Hanson Highway Department, trucked down to its current site, and reassembled in 1975. The Highway Department was granted this building through the Federal Government Surplus Materials Program.

Currently the repair shop houses all town vehicle repairs other than the Fire Department, and it has outgrown its original intended capacity. The office space is not adequate; the parts room is full to capacity. The repair and service areas are too small to handle the workload of repairing larger equipment and the police vehicles at the same time.



The Highway Department's Town Barn Complex behind the Police Station

At the present time one bay of the repair shop is dedicated to a vehicle lift for repairing automobiles only. This lift is antiquated and needs to be replaced by an aboveground, freestanding, high capacity lift, to accommodate large trucks and automobiles.

There has been some discussion of a 40 foot x 40 foot addition to the main highway garage, constructed of concrete cinder block, for equipment storage. A 20 foot x 60 foot' addition to the repair shop – to house a new lift bay – has also been discussed.

In the main building, trucks are housed in the garage area. The entrance to the building is low and trucks are getting bigger, making it harder to store them especially when they are loaded with sanders and other equipment during the winter months.

#### 5. The Water Department

The Water Department draws on the town's Crystal Springs Wellfield just south of the Hanson Commerce Center and east of Route 27 on the East Bridgewater line. It is working to develop a new well in the Pleasant St. area just south of the Halifax line and near White Oak Brook. The system has a recently built 1,000,000 gallon storage tank on High St. The water distribution system serves essentially the whole town with only scattered private wells, and about 200 users in areas that are more readily served by the Abington-Rockland system.

Recent consumption was 256.3 million gallons per year in 2004 or an average of .7 MGD (Million Gallons/ Day). This dropped due to conservation efforts to 239.1 million gallons in 2005, for a daily average of .655 MGD. This comes to a daily consumption of 69 gallons per capita/day at the 2000 population of 9,495, and only 67 g/c/d at the estimated 2005 population of 9,772. This is just above the Department of Environmental Protection's standard of 65 gallons/capita/day. The most recent peak day used 1,000,082 gallons in 2005.

The system's present allowed withdrawal under the Water Management Act is .78 MGD, over the year, with .88 MGD allowed for shorter periods. The DEP-allowed maximum daily withdrawal for a peak day is 1.3 MGD.

The present system could support a moderate amount of growth, but more water will be needed in the long run. Accordingly the Water Department is exploring a potential well off Pleasant Street near White Oak Brook in the southernmost part of the town north of West Monponsett Pond. Pumping tests suggest a yield of about .75 MGD though treatment for iron removal would be needed and operation would be tied to the level of Monponsett Pond. Pumping would cease if the pond dropped by more than a certain amount.

While tests have been encouraging, state approval awaits resolution of appeals by the Jones River Watershed Association which is concerned about impacts on the Pond, Silver Lake and the River. If approved, the well would take pressure off the Crystal Springs Wellfield, essentially double the town's supplies and remove water supply constrains on development.

At present the 1,000,000 gallon storage tank could supply about 1.5 days' normal use in the event of a complete breakdown and about one peak-day's use. This suggests a need for more storage, but the Department points out that the town has access to major emergency supplies through connections to the Brockton system and those of adjacent towns.

In terms of supportive facilities, the Department recently purchased a modern building off Route 14 near the Crystal Spring Well field that has enough space for its current and projected needs.

The Water Superintendent indicates that the garage associated with this structure allows the department to house all its trucks and emergency equipment. Should the department need more room in the future, it is possible to add two more bays to the existing structure.

Other aspects of the Department's facilities are:

- The Superintendent's office serves a second purpose as the meeting room of the Water Board.
- Upstairs is used for parts storage as well as records storage.
- Hydrants, various sized pipes and fittings are stored outside, to the rear of the building.
- At the edge of the property line is a septic system that cannot be built upon.

Future facility needs are:

- Rearrangement of space to accommodate the Scada control and monitoring system, once it comes on line.
- A laboratory for water sampling and testing

#### 6. The Library

Built in 1991, the Library occupies most of the single floor building and uses a small totally filled basement for storage. It is expanding beyond its current confines. Contained in an appealing building linked to the Senior Center, it has already reached its capacity. and books are being piled upon books.

#### Needs include:

- Shelving for library books
- A relocated Historical Room since it now faces the southwest, subjecting delicate materials to destructive sun exposure.
- Quiet/Study Rooms previous space having been turned over to computer stations.
- Expanded Audio/Visual facilities.
- An enlarged multi-purpose Children's area allowing reading, crafts and other activities without competing with seniors for the community room.
- Magazines expanded convenient magazine racks and archives.

 Director's Office - combining accessibility with privacy by installing a dutch door.



New Library in foreground, Senior Center to rear.

#### 7. The Senior Center

The Senior Center has been located in an attractive building linked to the public library since leaving its space in the Fire Headquarters. The new facility is itself outgrown and the center has considered moving for eight years due to the lack of program space for the growing senior population.

In 2003, the report *Hanson Senior Center Feasibility Study Committee: Final Report to the May 2003 Annual Town Meeting (May 5, 2003)*, was presented to Town Meeting to outline the issues involved in potentially moving the Senior Center. The Committee working with the architectural firm of Akro Associates recommended using "a new freestanding building" after considering three options:

- Expansion of the existing facility at the Library/Senior Center building
- Renovation of the BCI building at the Plymouth County Hospital
- Building a new freestanding building at the Hospital site.

This reflected consideration of ease of construction, cost of construction, ability to expand in the future, and ability to accomplish the mission of the Council on Aging. The report did not discuss the importance of accessibility or proximity to related services or facilities which could suggest retaining a location in one of the two town centers. Instead, the report recommended a new building without explicitly recommending any site. It then postponed asking Town Meeting to fund the project due to anticipated town budget deficits.

The need for a relocated and enlarged senior center is clear. Sites since suggested include a new building at the Plymouth County Hospital site, the old South Hanson firehouse, and/or new space at an expanded library/senior center complex. Expanding the present site or converting the old firehouse would have the advantage of being near other facilities and activities while the hospital site is relatively isolated. However, expanding at the present site would have to be compatible with the library's own need for considerably more space.

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# 8. Camp Kiwanee

Camp Kiwanee is a 64-acre campground located at Maquan Pond. The camp originally was the property of Boston industrialist Albert Burrage, who built his cabin "The Needles" there in 1905. In 1922 Burrage decided to sell the property to the Camp Fire Girls, a non-profit organization which named the camp "Camp Kiwanee," and ran it for the next 57 years. In 1979, the Town of Hanson bought Camp Kiwanee from the Camp Fire Girls, and has run it since then.

The camp is now used as a town-owned park, with facilities for single-day functions such as weddings or large meetings, as well as overnight camping in cabin and a very popular beach and swimming program. Day to day operations and management are conducted by the Camp Kiwanee Management Commission.

Certain camp buildings are under consideration as National Historic Register properties.

A Master Plan was completed in 1990 that examined issues that the Camp faced. Among the issues identified in that Plan were:

- The Lodge Building: There was a narrow corridor and circulation maze that made movement within the Lodge difficult. Additionally there was some rot in the porch wood railing, in the latticework, and in a set of outdoor stairs.
- The Plan called for regular maintenance on this building to keep it attractive, including dealing with the areas of rot.
- The concrete block firehouse: It was being used as storage, but could be used for public events or studio or exhibition space. The plan called for the firehouse to become artist studios.
- Parking occurred in a "haphazard manner" with no clear indicators of where to park.



The wrap-around porch at the Camp Kiwanee Lodge

- The Plan called for handicapped parking to be placed off the eastern corner of the lodge. Additionally, according to Town zoning at the time, the Lodge all by itself would have required 250 parking spaces on the property. The plan indicates that a new lot northeast of the gatehouse would be large enough to accommodate large events at the lodge.
- Hardtop/basketball court: There was an outdoor basketball court between the Lodge and the firehouse that was in "such disrepair" that it could only be used for bicycle riding and running around.
- The plan called for the hardtop/basketball court to be turned into green space.
- Entrance drive: the handsome tree-lined single lane portion of the entrance drive was too narrow for two-way traffic. When groups, rather than single cars, try to enter and leave simultaneously passage along the drive was difficult. That is still true, and widening of that road is not likely, given ecological constraints.
- The plan indicated that the entrance drive would remain unchanged, to preserve its historical and visual nature. However, the plan called for turnouts at four

designated points "to allow traffic to flow on the narrow drive" and several informal turnouts now allow passage by single cars.

The Master Plan concluded that "Needles/Kiwanee is a recreational jewel for the Town of Hanson," and that the property should be held by the Town of Hanson and the facilities upgraded to make the camp a viable self-supporting enterprise. Significant repairs and improvements have since been made to the Lodge, essentially renovating much of it; the cottage behind the lodge has been renovated; most of the 34 rental cabins and support facilities are in good condition; and the caretaker's house is in excellent condition. The work has traditionally been done economically. For example, vocational school students restored and improved the cottage using largely donated material and labor.

The Master Plan was updated in 2004, in part to guide and support applications for funds to further upgrade facilities on the Camp.

The Camp Kiwanee Committee now identifies and supports the following needs and opportunities:

- Site Restoration/development of docks and floats and ADA-compatible access ramps to a second waterfront activity area just below the lodge. The former direct stairs from the lodge are deteriorated and inadequate, and the path along the shore is overgrown. The project would also help to keep boating activity a safe distance from the beach. The improvements have been designed and are expected to cost \$184,000, which will be sought from the town.
- Lodge the lodge has been partially renovated since the 1990 plan, but work is needed to make the second floor usable and ADA accessible.
- Fire Station The former camp fire station is proposed for conversion into an all-year drop-in recreation center.
- Access Consider creating a second access road allowing one-way movement through the camp.

#### 9. Cemeteries

Currently there is one privately operated cemetery in Hanson: Fern Hill Cemetery on High Street, and a scattering of older burial sites throughout the community. A section of the Fern Hill Cemetery is under the control of the town and there is a Town-owned tomb.



The grand pond-side veranda with a visitor in the enclosed observation booth at the Camp Kiwanee Lodge

There are approximately 1,200 available privately-owned grave sites in Fern Hill, consisting of single, two and four-grave plots. These are estimated to meet obligations at the current rate for approximately 50 years. The estimate does not take into consideration the shrinking supply of sites elsewhere in the metropolitan area as well as the rapidly increasing population in the town and on the South Shore; however, there are no plans to expand the Fern Hill Cemetery.

Future planning for Hanson cemetery requirements includes maintaining the town's scattered existing small cemeteries and burial plots, and establishing a location, or locations, for future cemetery sites. Some observers have suggested using part of the former Plymouth County Hospital grounds for a town-sponsored cemetery /crematorium.

## 10. Schools

Hanson is served by the Whitman-Hanson Regional School District which operate elementary and middle schools in the two towns and the new Whitman-Hanson Regional High School on the Franklin Street town line. The two elementary schools are the Indian Head School on Indian Head Street (Route 58) between School Street and Maquan Street, and the Maquan School to the rear on School Street between Indian Head Street and Maquan Street.



Indian Head Elementary School and town auditorium

The 80,000 square-foot Indian Head School and connected auditorium were opened in 1951 and expanded or upgraded in 1960, 1980, and 1999. It presently houses grades 3,4 and 5. It has a capacity of 530 and a year 2006 enrollment of 461 (87% of capacity), slightly down from the 468 of 2004.

The adjacent, newer, 76,000 square-foot Maquan School was opened in 1960 and was enlarged in 1987. It houses pre-kindergarten, kindergarten, and grades 1 and 2. Maquan has a capacity of 760 students and a 2006 enrollment of 580 (76.3% of capacity), up from 525 in 2004. It presently is also housing some Whitman students during the renovation of Whitman's temporarily closed Park Avenue School. According to the Superintendent's Office, it is the only school in Hanson needing upgrading, particularly attention to the electrical and fire protection systems.

More basically the two schools together serve all of the PK-6 elementary school children though grade allocations may vary between the buildings. The combined present enrollment of 1041 is at 80.7% of the total capacity of 1290.

The new 88,000 square-foot Middle School houses grades 6-8 and was opened in 1998. It has a capacity of 600 students and a 2006 enrollment of 469 (78%), down from 518 in 2004. The handsome new complex is on back land off of Liberty Street. As a result it cannot be seen by the bypassing citizenry, and it is less conveniently located for walking/bicycling to school than the elementary schools.

The 251,219 square-foot new Whitman-Hanson Regional High School was opened in 2005 and has been much praised for its innovative, energy-saving, environmentally friendly Green design and advanced, cutting edge, features such as electronic blackboards linked to computers and able to tap into or add to extensive data bases. The school has a



Maquan Elementary School

capacity of 1350 students and a 2006 enrolment of 1270 (94%), up from 1165 in 2004 in the old building. While the school itself is an exemplary modern high school the complex lacks adequate storage and maintenance space for snow plows and other grounds maintenance equipment.

The High School's location on the Hanson/Whitman line is central to the two towns, though it is not near the population center of either. Sidewalk improvements and an offroad trail from nearby neighborhoods to ease walking/bicycling to school are proposed in the Circulation Chapter.

In all, the School District feels that Hanson should have sufficient capacity for the near to mid-term future, particularly given the ability to re-assign grades to accommodate bulges in students moving through the system, and to temporarily draw upon capacity in either community. Still, the 94% of capacity at new High School and the continuing attraction of restored commuter rail service in both Whitman and Hanson suggests examining opportunities for expansion when needed.

#### C. RECOMMENDATIONS

### **Town Hall**

Availability of Meeting Space during Meeting Times

• One possibility is to reschedule Meetings of the various boards and commissions throughout the week. While this has makes it impossible to move from meeting to meeting for the sake of inter-board communication at one time, it is cost



The central portion of the large, rambling new Hanson Middle School complex

efficient, while creating only minor inconveniences to town residents. It makes greater use of space that is already available, and it has the side benefit of easing parking demands during meeting nights.

• Staggering meetings should make the current capacity adequate, and is preferable to creating more parking for example, by regrading the green area near the bandstand.

#### Other Town Hall Issues

- Managing demand for interior as well as parking space is preferable to constructing new office space or parking at the current time.
- The Veterans' Agent needs his own office, either by reallocation of space, or by division of existing office space into smaller units.
- The Town should allocate sufficient custodial time and resources to maintain all building systems, including the maintenance or replacement of windows as needed.
- The decorative black iron bric-a-brac atop Town Hall before the renovation and expansion should be located and reinstalled and perhaps be extended to the new addition unless persuasive reasons exist for its removal.

#### **Police Department**

• The forthcoming new station is expected to meet the Department's needs for the next 15 to 20 years. The design allows some expansion of the office space if needed, as discussed above.

## **Fire Department**

• While the new Fire Headquarters is well located and very spacious with many vehicle bays, it needs essential fire safety devices, including sprinklers and fire alarms and a new heating system. As an issue of basic fire safety, the Town should allocate the resources necessary to make the building safe for occupants.

## **Highway Department**

- The Highway Department should purchase a new lift, and expand the repair shed as resources allow. Shed expansion can be done quite inexpensively, particularly since the new area is envisioned as non-heated storage.
- For the long run the Department should study the functions and design of a new integrated town barn complex to replace some or all of the existing buildings.

## **Public Library**

- The Library will have to expand its operations and facilities soon, if it wants to keep pace with the high demand for its services and its expanding collection.
- The most obvious place for the library to expand is into the Senior Center, which will make finding a new Senior Center a first order of priority.
- With the expansion, children's areas can grow, collections for books and other materials can expand to meet growing demands, as can library storage space and the audio-visual and study spaces.
- A climate control system should be installed in the Historical Room.

#### **Senior Center**

- Expansion of the library into the present Center would require a new Senior Center location, and a larger Center is needed in any case. The Town should consider the three options in the 2003 report of the Senior Center Feasibility Study Committee:
- Expansion of the existing facility at the Library/Senior Center building
- Renovation /conversion of the BCI building at the Plymouth County Hospital

- Building a new freestanding building at the Hospital site.
- Comment: The report did not discuss the importance of accessibility or proximity to related services or facilities. This could suggest retaining a location in one of the two town centers. Expanding the present site or converting the old firehouse in South Hanson would have the advantage of being near other facilities and activities. Thus a senior citizen taking the Council on Aging van to the center would also be able to shop, go to the library, drop in at town hall, have a meal, or catch the train to Boston depending on the location. In contrast, someone dropped off at the hospital site would be in a relatively isolated area (except for vigorous walkers) and would be limited to the resources and activities at the center unless they got another ride.

Since expanding at the present site could conflict with the library's own need for considerably more space, other sites need to be explored. Sites to explore include:

- The closed firehouse on Main Street
- The present police station
- The Grange Hall if available

#### **Water Department**

The Water Department is well housed, and well prepared to meet for any future space and facility needs. These may include expanded storage, laboratory, and garage space.

- Continue working to develop the Pleasant Street well
- Examine and meet long-term needs for expanded storage

## **Camp Kiwanee**

- Restore / develop the recommended docks and floats and the ADA-compliant access ramps for a second waterfront activity area just below the lodge in order expand opportunities and help to keep boating activity a safe distance from the beach.
- Continue Lodge renovation to make the second floor usable and ADA accessible.
- Consider, and if feasible, implement conversion of the former camp fire station into an all-year drop-in recreation center.
- Improve their spacing and visibility, and then grade the turnout areas along the scenic one-lane portion of the entrance drive. Consider creating a second access road

allowing one-way movement through the camp if consistent with the camp's visual character.

#### **Cemeteries**

- Consider making the Cemetery Commission an independent body which can raise maintenance funds.
- Monitor burial trends to determine if / when additional plots or other facilities will be needed.

### **Schools**

- Continue to monitor growth in both Hanson and Whitman and to plan for long-term needs in order to be able to add capacity when needed.
- Meet maintenance equipment storage and repair space needs at the high school.

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#### VII CIRCULATION and TRANSPORTATION

#### Introduction

The transportation system, and its relationship to land use, plays a significant role in the settlement pattern and physical layout of a community and directly affects the quality of life and the economic viability of a community. The changes in travel demand and in transportation technology are important factors in shaping the community's transportation needs over time. The town, in its regulation of land use, and through its decisions to expand infrastructure and roads, can strongly influence changes in the settlement pattern. It is important that public policies reflect the connections between land use and transportation. The major purpose of this section is to develop a vision for the town's future transportation system that fully reflects the town's vision and goals developed for the master plan as a whole, including housing, economic development, and open space.

### A. EXISTING CONDITIONS - THE PRESENT TRANSPORTATION SYSTEM

The town's transportation system consists of its local and state roads, sidewalks and bicycle paths and any off-road bicycle and pedestrian ways, along with its commuter rail station and related parking lots and service, and any supplementary demand-responsive para-transit services or local taxi cab service.

#### 1. The Road System

A number of state-numbered routes traverse Hanson, providing local and regional access to other communities and to and from the interstate highway system. Figure VII-2 shows the road system including state-numbered highways and local roads, and their functional classifications.

The overall street system is less radial than that in many communities. While a group of major streets (County Road [Route 14], Liberty Street [Route 58], Winter Street, High Street, and Indian Head Street/Monponsett Street) converge at the center, there are also major east-west routes running to the north or south of the center such as Route 58/Whitman Street and East Washington Street to the north, and Route 27/Franklin Street/Main Street to the south. These allow some east-west traffic to go through the town without going through the center, and they provide a degree of circumferential movement not possible with more radial systems.

More specifically, Route 14 crosses Hanson from east to west from Route 27 (Franklin Street), just over the East Bridgewater town line to the Pembroke town line via a portion of West Washington Street, easterly from East Bridgewater to the intersection of Holmes Street, and via County Road east from Holmes to Liberty Street, where it merges with Route 58. Routes 14 and 58 continue on Liberty St. to Maquan Street, where Route 58 turns south running along Indian Head Street. Route 14 then runs east along Maquan Street,

from Indian Head Street to the Pembroke town line.

While the roads focus on the civic/commercial center at the junction of County Road, High Street (Route 14), Winter Street, and Liberty Street, (Route 58) the system also gives good access to the traditional industrial / heavy commercial center at South Hanson. This is on the major east-west road, Route 27/Main St., and is largely bounded by two north-south rural minor collectors, High Street and Elm Street.

Routes 27 and 14 provide access through East Bridgewater and Whitman to Brockton and to limited access Route 24 to the west. These roads also run east through Pembroke and Kingston or Duxbury to limited access Route 3 and on to Plymouth or Boston.

Route 58 runs north through Whitman and Abington, converging with Route 18 in Weymouth and running on to Route 3. It also runs south to Halifax, Plympton, and Carver to I-495 and to Wareham, Rochester, and Cape Cod.

In addition to state numbered routes, Hanson has a number of collector roads that are important for local circulation and transition to the regional network. These include: Spring Street (north of Route 58), Whitman Street, King Street, Winter Street, East Washington Street, Brook Street, State Street, West Washington Street, High Street, Elm Street and Union Street.

#### 2. Sidewalks and Bicycle Routes

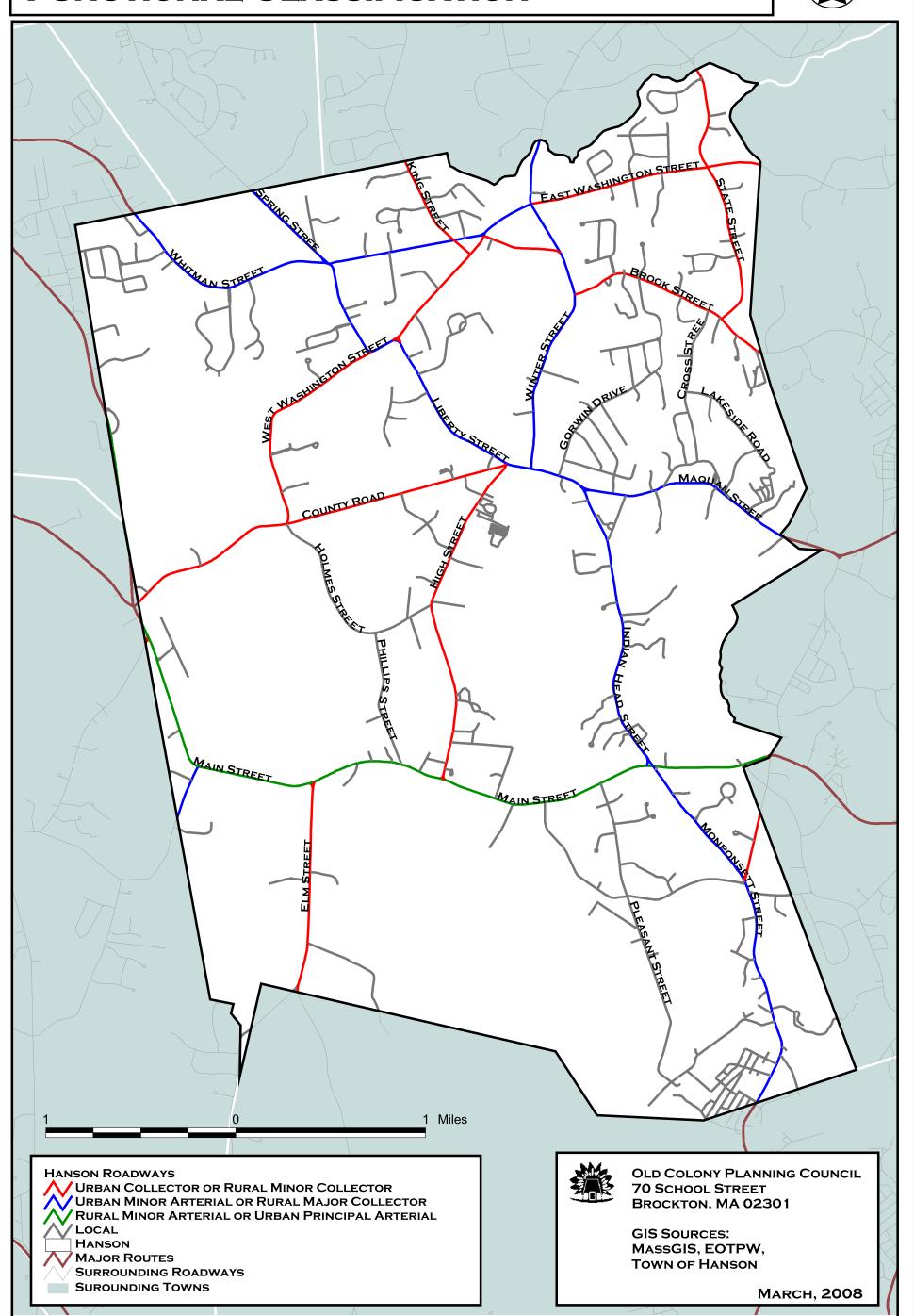
The town of Hanson lacks sidewalks and bicycle ways, or even shoulders, along most of its major and minor roads due to its long-term automobile-oriented residential development. The major exception is Route 58, which has striped shoulders on both sides of the road for bicycles. It also has sidewalks along at least one side from East Washington Street to Main Street and along the east side of the stretch from the Halifax line to the Post Office.

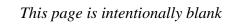
Liberty Street provides sidewalks in the heart of town along the north side of the road from Winter Street to Maquan Street. Sidewalks then run along the south side of Maquan St. to School Street. In addition, School Street between Indian Head Street and Maquan Street has limited sidewalks serving the Indian Head School, but it lacks adequate sidewalks on both sides connecting the school through to Maquan Street. In all, the pedestrian route to and from the school from the north via School Street and Maquan Street contains gaps in the sidewalk system. A number of the local streets also have sidewalks

A number of newer local streets also have sidewalks on at least one side as required by the Planning Board's Subdivision Rules and Regulations, but these often do not connect with sidewalks along the major streets as shown on Figure VII-3.

## LOCAL STREET SYSTEM & FUNCTIONAL CLASSIFICATION







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FIGURE VII-2

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These sidewalks are valuable for safety and convenience as far as they go, but they will not be useful for many longer distance walks (or cautious bicycling on multi-purpose bi-ways) until they are connected by an overall network, at least along all of the most trafficked streets, in developments to schools, stores and other destinations by short, scenic off-road routes. In addition, there is little provision for walking or pedaling from dead-end subdivisions to sidewalks along the side of the street. Such off the road pedestrian and bicycle paths can be very useful in offering a more direct route to local destinations and in offering a more peaceful walking or pedaling experience.

A good example of a local off-road path is the paved, relatively level walkway from the Meetinghouse Lane elderly development to the Shaw's shopping center. This path, partly maintained by the store, gives residents a healthy, non-driving access to the stores and other Hanson Center facilities. Other such paths to schools and other destinations or through open space areas are proposed below in Section 4 and shown on Figure V-III 19.

#### 3. Traffic Conditions

#### a. Traffic Volumes and Traffic Characteristics

The average daily traffic for major routes and connector roads in Hanson has been compiled from recent (2003-2005) counts performed by OCPC and supplementary data from the Massachusetts Highway Department (MHD.) The average daily traffic (ADT) is the average of the total traffic (in both directions) on a road segment for a 24-hour weekday period. Figure VII-4 shows the ADT on Hanson's major roads.

The highest volumes in Hanson were near the Center on Liberty Street (Routes 14/58), just east of Winter Street, with 16,950 vehicles per day (VPD). The Route 58 traffic builds up as one goes south from the Rockland line to the Center and then diminishes. At the Rockland line it is 8,720 VPD, rising to 11,355 VPD at Route 58 west of County Road and to 16,950 VPD just east of Winter Street. As Route 58 splits from Route 14, south of the Center, the volume drops from 11,215 VPD south of Liberty Street to 10,435 just north of Main Street (Route 27). As Route 58 continues as Monponsett Street south of Main Street, the volume drops to from 9,360 VPD to 9,200 VPD.

Volumes on the east-west Route 14 are highest just east of the East Bridgewater line with 7,750 VPD, dropping to 5,410 VPD east of Holmes Street, then rising to 6095 VPD just east of the Center where Route 14 splits from Route 58 east of Indian Head Street, and finally dropping again to 4,920 VPD at the Pembroke line.

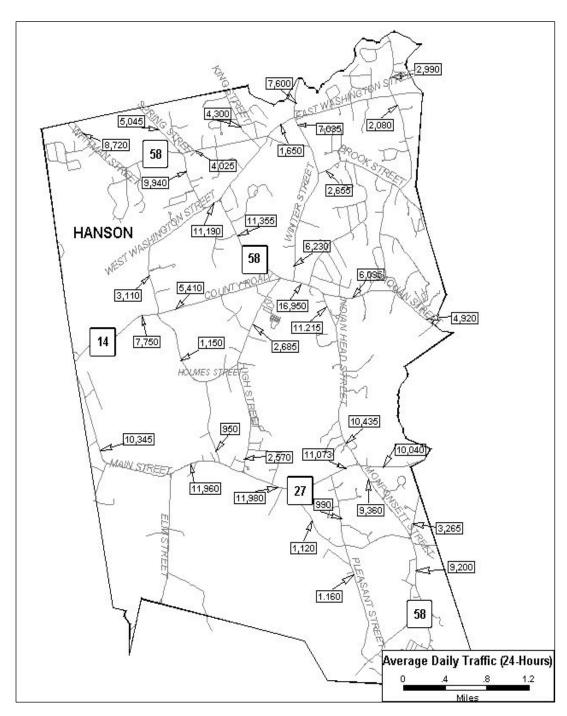
The traffic volumes on Route 27 (Franklin Street and Main Street) also increase near an activity center at South Hanson. The volume on Route 27 (Franklin Street) just north of Main Street is 10,345 VPD but increases at South Hanson Center, reaching 11,960 VPD west of Phillips Street and 11,980 VPD east of High Street. It then drops to 11,073 VPD west of the Indian Head Street (Route 57) intersection and to 10,040 VPD approaching the Pembroke line.

Other significant traffic volumes shown on Figure VII-13 "Average Daily Traffic." are:

•	Spring Street north of Route 58; 5,045 VPD
•	King Street north of Whitman Street; 4,300 VPD
•	Winter Street; 7,600 VPD north of E. Washington Street and 7,035
	VPD to the south
•	Brook Street; 2,655 VPD east of Winter Street
•	Holmes Street; 3,110 VPD north of Route 14 and 1,150 VPD south
	of Route14
•	High Street; 2,570 VPD north of Route 27, and Union Street, 3,265
	VPD north of Route 58 (Monponsett Street)

Figure VII-3

Average Daily Traffic (24-hour weekday)



#### b. Levels-of-Service and Problem Intersections

Congestion and accidents often occur at intersections due to heavy peak volumes and alignments leading to conflicting turns. Turning movements were counted during the afternoon peak hour at a number of key intersections to discern areas of congestion. Levels-of-service were analyzed for each intersection using the standards and techniques published in the ITE <u>Highway Capacity Manual</u>. Figure VII-4 shows the intersections studied, and Figure VII-5 shows the resulting 2005 turning movement volumes for key intersections.

A HANSON Turning Movement Count Locations Miles

Figure VII-4
Turning Movement Count Locations

The following Table summarizes the intersection level-of-service (LOS) analyses for the key intersections. Level-of-service analysis is a qualitative and quantitative measure of traffic flow based on the delay implied by comparing traffic volumes to the available capacity. Letter grades between A and F are used to define traffic flows, with LOS A representing free flow and LOS F representing forced flow or congested conditions. LOS D is the lowest point which motorists generally consider acceptable, while LOD E represents the point at which a facility is considered to be at capacity.

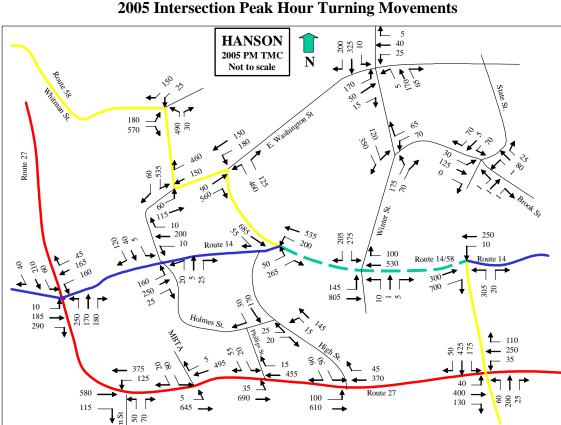


Figure VII-5
2005 Intersection Peak Hour Turning Movements

The table shows that there are four un-signalized intersections that experience very long delays and congestion (LOS "E" and "F"). These include:

- Route 58 at West Washington Street (LOS "E"),
- Route 58 Liberty Street at East Washington Street,
   Franklin Street at Oak and West Washington Street in East Bridgewater, just west of the Hanson line, and
- Main Street Route 27 at the MBTA driveway.

#### Table VII-1

#### Afternoon Peak Hour Intersection LOS

Intersection Location (Un-Signalized)	LOS
Route 58 at Whitman Street	C
Route 58 at West Washington and East Washington Street	E
Route 58 Liberty Street at East Washington Street	F
Winter Street at East Washington Street	C
Winter Street at Brook Street	C
State Street at Brook Street	В
Liberty Street at Maquan and Indian Head Street	D
West Washington at County Road and Holmes Street	C
Holmes Street at High Street	В
Franklin St at Oak and West Washington St (E. Bridgewater)	F
Main Street at Elm Street	D
Main Street at MBTA lot	E
Main Street at Phillips Street	C
Main Street at High Street	C
Intersection Location (Signalized)	LOS
Route 27 Main Street at Indian Head Street Route 58	C
Liberty Street Routes 14/58 at Winter Street	В
High Street at Liberty Street	В

The intersection of Franklin Street with Oak and West Washington Streets is included in this analysis because of its close proximity to the Hanson line and its importance to Hanson motorists. This intersection operates at LOS "F," and the installation of traffic signals at this location is included in the region's Transportation Improvement Program (TIP) to address peak hour traffic congestion. The LOS "E" and "F" conditions at the intersection of Spring Street (Route 58) with West Washington Street and East Washington Street; and the intersection of Route 58 (East Washington Street) with Liberty Street) require improvements to address delays and congestion on the minor street movements entering the intersections. The LOS "E" conditions at the Main Street Route 27/MBTA lot can be mitigated using a police traffic officer, as recommended in the OCPC Hanson Commuter Rail Study. The LOS at all other intersections during the afternoon peak is at LOS "D" and above, with delays that are generally accepted by motorists.

Note that the intersection of Liberty Street (Route 58), County Road (Route 14), and High Street is treated as two intersections due to its complicated alignment. Thus the analysis for the signalized intersection of Liberty Street (Route 58) and County Road (Route 14) does not include High Street, although it is in close proximity to Liberty Street, which creates the complicated alignment. The signalized approaches operate at LOS B although the conflicting movements here challenge most drivers. It is discussed later.

#### c. Crash Rates

The latest crash data available from the Massachusetts Registry of Motor Vehicles has been compiled to discern trends and identify problem locations. The data have been divided into two main types: crashes at intersections and non-intersection crashes that occur along the road. Tables 2 and 3 show the number of crashes and the crash rates (crashes per Million Entering Vehicles, [MEV]) for key intersections and highways in Hanson between 2001 and 2003.

Table VII-2 shows the study area intersections ranked by total number of crashes, from the most to the least, and by crash rate. As it shows, the Franklin Street /Oak Street intersection had the most number of crashes, with 37 between 2001 and 2003. This intersection also had the highest crash rate (1.93 crashes per MEV). The High Street/County Road Route 14/Liberty Street Route 58 intersection had the second highest number of crashes (19), and the second highest crash rate (1.03 crashes per MEV). The unusual alignment of this intersection with two stop sign approaches, one from High Street and one from County Road (Route 14) that merge into a single approach to Liberty Street (Route 58) creates additional cross movements for traffic turning from Liberty Street into High Street and County Road. The alignment creates additional exposure for cross-turning movement and results in frequent crashes.

The un-signalized intersection of Liberty Street/Routes 14/58 with Maquan Street Route 14 and Indian Head St. /Route 58 to the west has a crash rate of 0.85 per MEV. This is above the state average of 0.66 for un-signalized intersections. All other study area intersections have crash rates below the state average.

Table VII-3 shows the types of crashes at these intersections. Angle and rear-end crashes are the most common, with 55 and 47 respectively, followed by ran-off-the-road crashes (14) and head-on collisions (7). Sideswipe, bicycle, and pedestrian collisions were the least frequent. Just 30 of 128 total crashes (23%) at these intersections resulted in personal injuries.

Table VII-4 shows the number of crashes that occurred along major highways in Hanson and were not associated with intersection turning movements from 2001 to 2003. It shows that the most non-intersection crashes (50) occurred on Main Street/Route 27. Liberty Street/Route 14/58 had the second highest number of crashes with 41. Indian Head Street/Route 58 and Monponsett Street/ Route 58 had 20 and 19 non-intersection crashes respectively. Maquan Street/Route 14 had the highest crash rate for non-intersection crashes with 166.04 crashes per Hundred Million Vehicle Miles traveled (HMVM). Spring Street /Route 58 and Liberty Street /Route 58/18 had the second highest crash rates, with 147.27 and 147.00 crashes per HMVM respectively.

Table VII-2

Intersection Crashes and Crash Rates

Intersection	Crashes 2001	Crashes 2002	Crashes 2003	Total Crashes	Crash Rate
Franklin St. Rte. 27 at Oak St. Rte. 14 (East Bridgewater)	11	16	10	37	1.93
High St./County Rd., Rte. 14 at Liberty St. Rte. 58	7	4	8	19	1.03
Liberty St. Rte. 14/58 at Indian Head St. Rte. 58 and Maquan St. Rte. 14	6	9	1	16	0.85
Main St. Rte 27 at Indian Head St. Rte. 58	5	6	4	15	0.67
Liberty St. Rte. 15/58 at Winter St.	1	2	4	7	0.37
Winter St. at Brook St.	2	1	2	5	0.54
Rte. 58 East Washington St. at Liberty St	2	2	1	5	0.36
East Washington St. at Winter St.	0	0	4	4	0.41
County Rd. Rte. 14 at West Washington St. and Holmes St.	1	3	0	4	0.39
Rte. 58 Spring St. at East and West Washington St.	0	2	2	4	0.30
Main St. Rte. 27 at Elm St.	2	2	0	4	0.30
Rte. 58 Whitman St. at Spring St.	2	0	1	3	0.24
Main St. Rte. 27 at Phillips St.	2	1	0	3	0.22
Holmes St. at High St	1	0	0	1	0.29
Main St. Rte. 27 at High St.	1	0	0	1	0.07
Brook St. at State St.	0	0	0	0	0.00
Main St. Rte. 27 at MBTA entrance	0	0	0	0	0.00
Totals	43	48	37	128	

Table VII-3

Types of Crashes at Intersections 2001-2003

Intersection	Angle	Rear End	Head On	Ran off Road	Hit Bicycle	Hit Pedestrian	Side-Swipe	Injury Crash
Rte. 58 Whitman St. at Spring	0	3	0	0	0	0	0	0
Rte. 58 Spring St. at East and West Washington St.	1	0	1	1	0	0	1	3
Rte. 58 East Washington St. at Liberty St.	2	2	0	1	0	0	0	3
High St./County Rd. Rte. 14 at Liberty St. Rte. 58	6	10	1	2	0	0	0	5
Liberty St. Rte. 15/58 at Winter	2	4	0	1	0	0	0	2
Liberty St. Rte. 14/58 at Indian Head Rte. 58 and Maquan	6	8	1	1	0	0	0	3
East Washington St. at Winter St.	1	2	0	0	0	0	1	0
Winter St. at Brook St.	3	0	0	1	0	0	1	1
Brook St. at State St.	0	0	0	0	0	0	0	0
Franklin St. Rte. 27 at Oak St. Rte. 14 (East Bridgewater)	22	8	3	4	0	0	0	12
County Rd. Rte. 14 at West Washington St. and Holmes St.	2	0	1	1	0	0	0	1
Holmes St. at High St.	1	0	0	0	0	0	0	0
Main St. Rte. 27 at Elm St.	2	1	0	1	0	0	0	0
Main St. Rte. 27 at MBTA drive	0	0	0	0	0	0	0	0
Main St. Rte. 27 at Phillips St	1	2	0	0	0	0	0	0
Main St. Rte. 27 at High St.	1	0	0	0	0	0	0	0
Main St. Rte. 27 at Indian Head St. Rte. 58	5	7	0	1	1	0	1	0
Total	55	47	7	14	1	0	4	30

Table VII-4

Non-Intersection Crashes along the Road 2001 to 2003

Road	Crashes 2001	Crashes 2002	Crashes 2003	Total Crashes	Crash Rate
Rte. 27 Main St.	28	12	10	50	122.75
Rte. 58 Rte. 14	18	12	11	41	147.27
Liberty St.					
Rte. 58	7	7	6	20	98.20
Monponsett St.					
Rte. 58 Indian	8	7	4	19	95.34
Head St.					
Rte 14. Maquan	7	3	2	12	166.04
St.					
Rte. 27 Franklin	8	0	1	9	105.93
St.					
Rte. 58 Spring St.	5	2	1	8	147.00
Rte. 14 County	3	2	0	5	76.73
Rd.					
Rte. 14 West	0	1	4	5	58.92
Washington St.					
Rte. 58 Whitman	0	0	3	3	25.14
Street					
Rte. 58 East	0	0	1	1	32.64
Washington St.					
Totals	84	46	43	173	

Table VII-5 shows that the "ran off road" type crashes occurred most frequently (62), with rear-end and angle type crashes being the second and third most frequent (56 and 40 crashes respectively). Forty one of the 173 total highway crashes (23%) resulted in personal injuries.

Table VII-5

Types of Non-Intersection Crashes along the Road 2001 - 2003

Road	Angle	Rear End	Head On	Ran off Road	Hit Bicycle	Hit Pedestrian	Side-Swipe	Injury Crash
Rte. 58 Whitman Street	0	0	1	2	0	0	0	2
Rte. 58 Spring Street	3	2	0	3	0	0	0	3
Rte. 58 East Washington St.	0	0	0	1	0	0	0	0
Rte. 58 Rte. 14 Liberty St.	8	18	1	11	1	0	2	9
Rte. 58 Indian Head St.	6	7	0	6	0	0	0	3
Rte. 58 Monponsett St.	2	6	0	11	0	0	1	2
Rte. 14 West Washington St.	0	3	0	2	0	0	0	0
Rte. 14 County Rd.	0	1	0	3	0	0	1	2
Rte. 14 Maquan St.	4	0	0	6	0	0	2	4
Rte. 27 Franklin St.	5	3	0	0	0	1	0	2
Rte. 27 Main St.	12	16	0	17	2	0	3	14
Totals	40	56	2	62	3	1	9	41

#### 4. Roadway / Pavement Surface Conditions

A Pavement Management System (PMS) has been developed by OCPC under contract with the MHD to fulfill requirements under federal funding statutes (ISTEA and TEA-21). It is designed to survey federal-aid eligible roads (under National Highway System and Surface Transportation Program funding, NHS and STP) and to determine their pavement management needs. OCPC uses the Road Manager software program for this purpose. The Program includes a pavement deterioration curve that demonstrates the rate of deterioration of pavement and the implications for maintenance costs. It then calculates Pavement Condition Index (PCI) scores for the surveyed road segments. The PCI is an index derived from an evaluation of pavement distress factors, average daily traffic, and roadway classification. It ranges from 1 to 100, with 100 indicating a flawless road surface.

The MHD has developed classifications for the PCI scores for Road Manager software users as follows:

- >95 = excellent condition
- 85 to 94 indicates = good condition
- 84 to 65 = fair condition
- <65 = poor condition.

Road Manager includes five default repair strategies that are assigned to each road segment based upon the road surface condition. These are reconstruction, rehabilitation, preventative maintenance, routine maintenance, and no immediate maintenance. Routine maintenance includes pothole filling and crack sealing; preventative maintenance may include extensive crack sealing, chip sealing, micro surfacing, or overlays less than two inches; rehabilitation may include full and partial depth patching, joint and crack sealing, grouting and under sealing, and grinding and milling in conjunction with overlays over two inches; reconstruction involves the complete removal and replacement of a failed pavement section.

In May of 2005 by OCPC staff did windshield surveys to update the pavement condition files for Hanson's federal-aid roads (NHS and STP). Figure VII-6 shows the survey results and the PCI index for each segment. Figure VII-7 shows the recommended repair for each road assigned by Road Manager based on these findings.

Figure VII-6

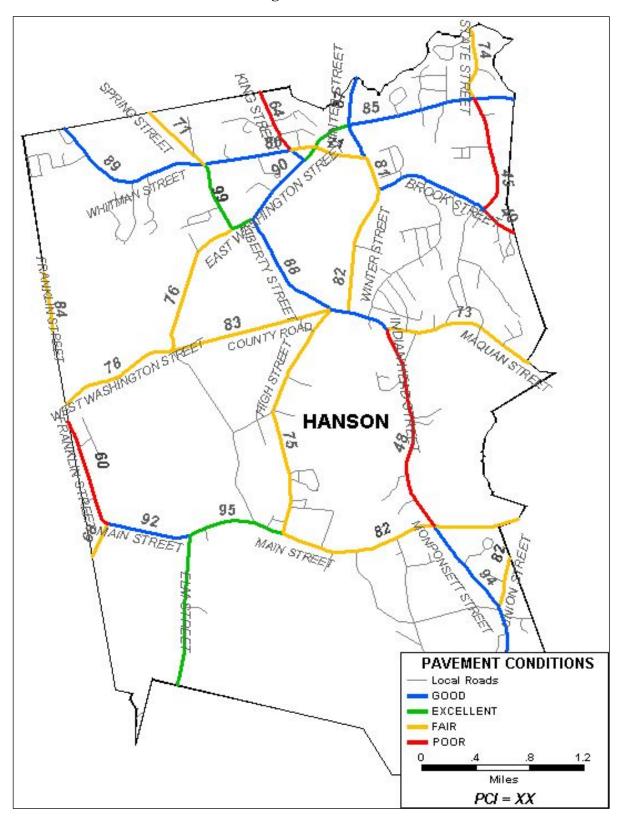


Figure VII-7

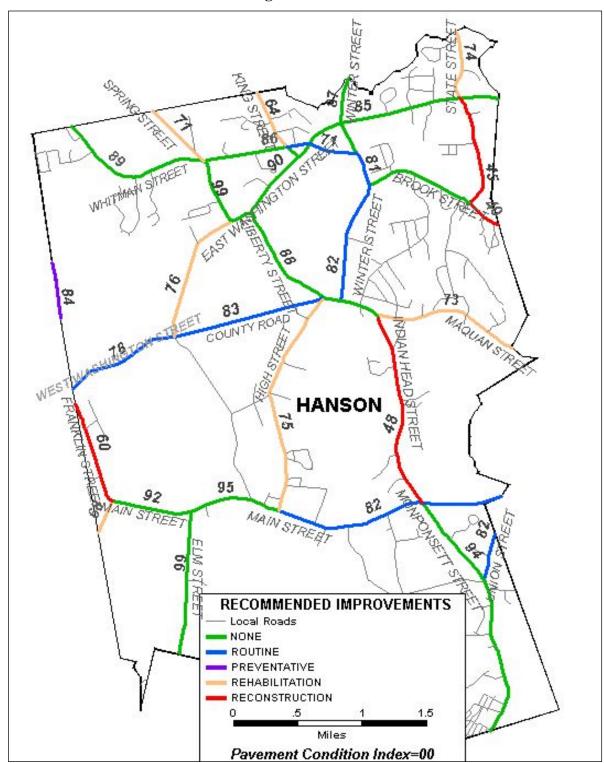


Figure VII-8 below shows the total estimated costs for the recommended repairs to Hanson's federal-aid roads. The reconstruction estimates are the highest at \$1,428,267; the rehabilitation costs are second highest at \$962,381; the routine costs are the second lowest at \$166,781 and the preventative costs are the lowest at \$35,468.

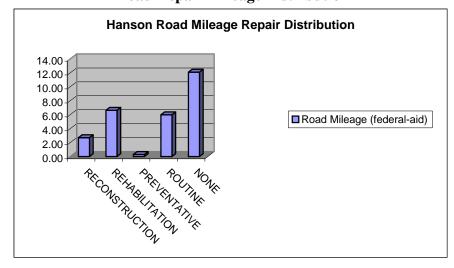
Figure VII-8
Estimated Costs of Road Repairs



Figure VII-9 shows the road mileage recommended for each repair strategy for federal-aid roads in Hanson. In Hanson, 2.71 miles need reconstruction; 6.63 miles need rehabilitation; 0.31 roads need preventative maintenance; 6.0 miles of roads need routine maintenance; and 12.12 miles need no maintenance.

Figure VII-9

Road Repair Mileage Distribution



Comparing the two graphs shows that although only 2.71 miles of road need reconstruction, the associated costs are the highest at \$1,428,267. The 6.0 miles requiring routine maintenance is the second highest in length, but the second lowest in cost at \$166,781. Rehabilitation costs are also high at \$962,381 for 6.63 miles of road. This shows reconstruction and rehabilitation are proportionally more expensive than routine and preventative maintenance. Early road repair and maintenance lowers costs and improves the lifecycle for pavement surfaces. Deferred maintenance leads to higher costs over time.

#### 5. Estimates of Near Future Traffic under Expected Conditions

A five-year horizon was chosen for estimating future traffic. These estimates are based on a general background annual growth rate and traffic from anticipated development. The background annual growth rate reflects OCPC data on historic traffic growth on Hanson roads. Probable development over the next five years draws on the 2004 Hanson Community Development Plan and the 2005 South Hanson Transit Oriented Development (TOD) Study done by OCPC.

Table VII-6 shows potential developments and the associated afternoon peak hour trip generation. The trip generation was estimated based on the Institute of Transportation Engineers' publication, Trip Generation, 7<sup>th</sup> Edition. The exact use of some of these future projects is not yet known so the number of trips is estimated.

Table VII-6

**Future Trip Generation** 

Project	Location	PM Peak Trips (in and out of development)
Depot Village 70 apartment units, 20% affordable housing	Off of Phillips Street	43 trips, 30 entering and 13 exiting
Dunham Farms – 52 units under construction (Senior housing)	Route 27	10 trips, 4 entering and 6 exiting
Expansion of the Industrial Park (60,000 sq. ft.)	Phillips Street	52 trips, 10 entering and 42 exiting

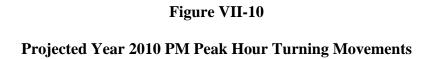
#### **Future Levels-of-Service**

The afternoon peak hour volumes were estimated by increasing the existing peak hour volumes according to expected five-year annual growth rate and adding trips generated by the expected projects listed above. Figure VII-10 shows the year 2010 PM peak turning movements for the key intersections. The results of subsequent PM peak level-of-service analyses for the key intersections are then shown on Table VII-7.

Table VII-7 shows that two un-signalized intersections will operate under failed conditions (LOS "F") by 2010. The Route 58 West Washington Street at East Washington Street intersection and the Route 58 Liberty Street at East Washington Street intersection will both operate under LOS "F" conditions. The intersections of Main Street at Elm Street and at the MBTA lot intersection will operate under LOS "E" conditions.

The study area's signalized intersections are expected to operate under acceptable conditions (LOS "C" or better). Thus the now un-signalized intersection of Franklin Street at Oak Street and West Washington Street (Routes 14 and 27) just past the East Bridgewater line operates under failed (LOS "F") conditions, but is expected to operate at LOS "C", with acceptable delays, when signalized.

On the following map (Figure VII-10) Route 27 is colored red; Route 58 is yellow; Route 14 is blue; and the segments of Routes 14 and 58 that run together are dashed green line.



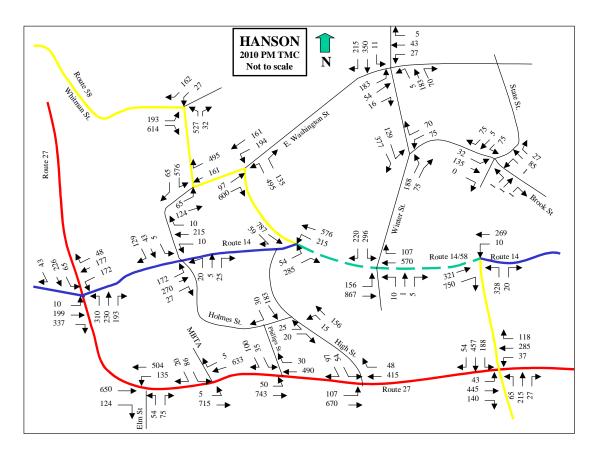


Table VII-7
Projected Year 2010 Levels-of-Service

Intersection Location (Un-Signalized)	LOS
Route 58 at Whitman Street	D
Route 58 at West Washington and East Washington Street	F
Route 58 Liberty Street at East Washington Street	F
Winter Street at East Washington Street	C
Winter Street at Brook Street	В
State Street at Brook Street	В
Liberty Street at Maquan and Indian Head Street	D
West Washington at County Road and Holmes Street	C
Holmes Street at High Street	В
Main Street at Elm Street	E
Main Street at MBTA lot	E
Main Street at Phillips Street	C
Main Street at High Street	D
Intersection Location (Signalized)	LOS
Route 27 Main Street at Indian Head Street Route 58	C
Liberty Street Routes 14/58 at Winter Street	В
Franklin St at Oak and West Washington St (E. Bridgewater)	C
High Street at Liberty Street	В

#### **6.** Planned Road Improvements

#### a. Transportation Improvement Program (TIP) Projects

The Old Colony TIP currently does not list any transportation projects for Hanson. However, the East Bridgewater/Hanson reconstruction/signalization project for the West Washington Street Route 14 at Franklin Street Route 27 intersection was advertised during fiscal year 2005 as part of the Old Colony Transportation Improvement Program. The improvements to the intersection include signalization, pavement reconstruction, and geometric improvements and are underway as of August 2006.

The OCPC 2003 Long-Range Transportation Plan includes three resurfacing projects for roads in Hanson. These projects are awaiting approval by the Mass Highway Department for inclusion in the Transportation Improvement Program (TIP). These include: resurfacing Elm Street, resurfacing Spring Street, and resurfacing West Washington Street.

#### b. The Chapter 90 Program

The Town of Hanson 2004 Annual Report listed three streets that are slated for surface and drainage improvements using Chapter 90 funds in 2005. These were Harvey Circle to East

Washington Street, Baker Street to Hill Road, and Roller Coaster Road from Crescent Street to a private way.

#### **B.** ALTERNATIVE TRANSPORTATION MODES

#### 1. Commuter Rail Service

The Hanson MBTA Commuter Rail Station on Route 27 in South Hanson is served by the Plymouth and Kingston branch of the Old Colony Line of the MBTA Commuter Rail system. The others stations on the line are Kingston/Plymouth, Halifax, Whitman, Abington, South Weymouth, Braintree, Quincy Center JFK/UMASS (in Dorchester), and South Station in Downtown Boston. There are fourteen inbound trains and fifteen outbound trains on weekdays, with five inbound trains during the morning peak and four outbound trains during the afternoon peak. The approximately 45-55 minute trip between Hanson and Boston cost \$5.25 oneway and \$10.50 round trip as of November 1, 2004.

#### a. Utilization of the Hanson Station

Most passengers drive to the station alone and park, though some share rides or are dropped off (Kiss and Ride). Only a few walk or bicycle from nearby neighborhoods, though one of the goals of the South Hanson Transit Oriented Development (TOD) project is to increase mixed-use development within walking distance. Accordingly, the following text discusses station utilization in terms of parking lot use, while realizing that total ridership is greater than that suggested by parked cars alone.

The station's parking lot contains 427 parking spaces, as counted by Old Colony Planning Council staff. On the most recent visit in October of 2005, 385 vehicles were parked at the lot for a utilization rate of 90 percent. This is lower than the 98.6 to 99.8 percent of 2001 for this lot, but up from the 2004 rate of 84 to 86 percent. Several factors may have played a role in this declining and then rising usage. Job losses and decentralization of jobs from Boston into suburban areas may have reduced the number of commuters, while the opening of the new I-93 northbound tunnel and other downtown traffic changes may have made driving to Boston more attractive than before to some commuters. In contrast, the recent increase in use may reflect the recent surge in gasoline prices.

The pattern of decreasing then rising utilization is not unique to Hanson, but rather reflects a network-wide trend observed in 2004 and 2005. Data collected by Old Colony Planning Council suggests an overall decline in Old Colony Commuter Rail, patronage but it is not possible to tell if this is a short-term anomaly or a continuing trend. The recent spike in commuter rail use shows that commuters who have alternative transportation modes available are flexible and will use mass transit if the conditions are warranted.

Table VII-8 shows the utilization of the Hanson commuter rail lot from June 1998 to October of 2005, while Figures VII-11 and VII-12 show the origins of these commuters based on a May, 2004 license plate survey of vehicles parked at the Hanson Station. These reflect the

addresses from which the vehicles are registered. The data was mapped to show the distribution of commuter origins.

The maps show that the majority of those using the Hanson Station come from communities to the east, with the greatest number coming from Pembroke, followed by those coming from Hanson itself. Many users come from the area along and east of Route 58 while a smaller, yet significant number come from the south and west of the station, especially from Halifax which has nearly 40 users. This probably reflects the location of the Halifax station at the northeastern corner of the town, making the Hanson station as convenient for many Halifax riders and \$.25 less expensive. Some of the ridership from the east should decline once Greenbush line service to the southern end of Scituate begins.

**Table VII-8** 

**Hanson Commuter Rail Parking Lot Utilization** 

	Spaces Utilized (Lot	Utilization
	Capacity 427 spaces)	Rate
Date of Survey		
Jan-1998	220	51.5%
June-1998	242	56.7%
June-1999	380	89.0%
June- 2000	320	74.9%
April- 2001	426	99.8%
June- 2001	421	98.6%
May- 2002	368	96.0%
May- 2004	362	84.8%
July- 2004	354	84.3%
April-2005	372	88.6%
July- 2005	313	73.3%
Oct2005	385	90.0%

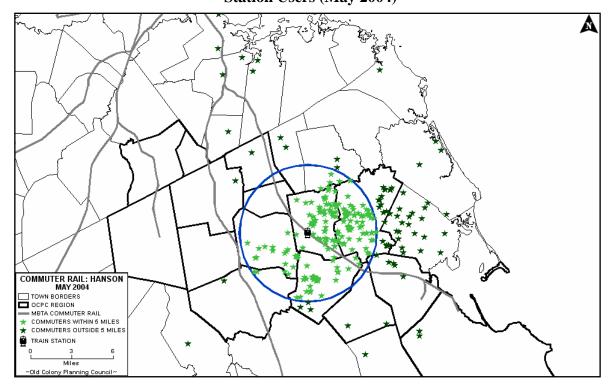
TableVII-9

Percentages of Commuters' Vehicles from Top 5 Origin Communities

May 2004	Parked Cars	Percent of Total
Total Parked	362	100.00%
Pembroke	93	25.69%
Hanson	63	17.40%
Halifax	37	10.22%
Kingston	24	6.63%
East Bridgewater	18	4.97%
Others	127	35.09%

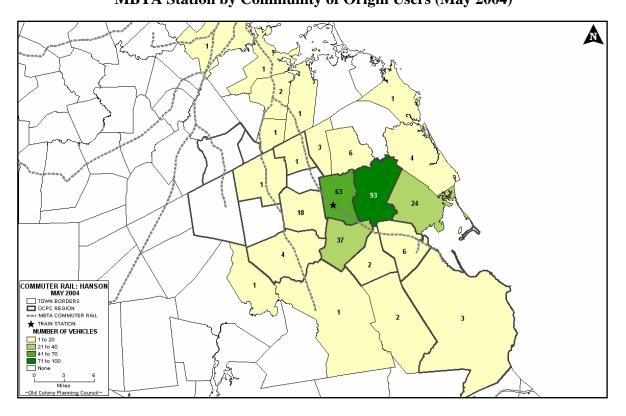
Figure VII-11

Registration- Based Trip Origins of Hanson Commuter Rail
Station Users (May 2004)



Number of Parked Commuter Vehicles at Hanson MBTA Station by Community of Origin Users (May 2004)

Figure VII-12



The data showing communities of origin are consistent with evening turning movement records, which show many more cars exiting the station to the east(left) than to the west (right). During a two-hour count from 4:00 PM to 6:00 PM, 80 percent of the departing vehicles turned left onto Main Street eastbound. Further, the mapped data suggest that much of the left-exiting traffic continues past Phillips Street and High Street, which gives access to the northern parts of Hanson, and goes further east, particularly to Indian Head Street (Route 58) and Mattakeeset Street in Pembroke. Many passengers from the northern part of Hanson may use the nearby and cheaper Whitman Station.

#### a. Local Traffic Impacts of the Hanson Commuter Rail Station

At the request of the Town, OCPC assessed PM peak period station area traffic flows in January 2005. This focused on the impacts of commuter traffic on the nearby intersections along Route 27 (Main Street). The study analyzed levels of service (LOS) at the intersections with the MBTA station access drive, Phillips Street, and High Street. It found that the MBTA station drive/Route 27 intersection was congested during the afternoon peak hour. There were long delays on the MBTA site drive approach to Route 27 averaging approximately 43 seconds (LOS "E"). In contrast there were acceptable delays, LOS "C" averaging 20 seconds, at Phillips Street. Slightly longer delays, averaging 24 seconds (also LOS "C"), were experienced at High Street by drivers entering Route 27

there. Levels-of-service "A" to "D" conditions are considered to be acceptable in urban areas, though LOS "D" involves long delays. Levels-of-service "E" and "F" are considered to be congested conditions. The study recommended stationing a traffic control police officer at the MBTA Station drive to improve peak hour flows.



Intact, but unused old South Hanson Station (left) across from new station's minimal shelter

#### 2. Local Buses

There is no general purpose or commuting bus service from or through Hanson. The transportation program of the South Shore Community Action Council provides Para-transit services to Hanson for senior citizens and individuals with special needs.

#### 3. Air transportation

The town has one, small privately owned, publicly accessible airport serving general aviation, Cranland. It is in the southeastern corner of the town just off Route 58 and near the Halifax MBTA commuter rail station It has one non-illuminated asphalt runway 1,760 feet long and 60' wide, along with seven hangers and emergency-only fuel and repair services. It has traditionally housed agricultural spraying operations serving the region's cranberry industry, and has no scheduled passenger or freight service. It is home to a unique firm modernizing and upgrading Grumman Widgeon Amphibians discussed in the Economic Development Chapter. There are no present plans for expansion of services or facilities. Cranland offers a point of access to this part of Southeastern Massachusetts for private planes and business fliers who may find it closer to their destinations than the larger airports in Plymouth and Marshfield. This gives it an economic development value to the community and region beyond the operation itself.

#### C. TRANSPORTATION NEEDS

The Transportation system serves many needs ranging from commuting and distribution of goods to very broad community development objectives. However it assumes that nearly all residents drive or can be driven since there is no local public transportation except for the demand-responsive para-transit service for the elderly or those with special needs. The following examines some of these needs and related trends, and their implications for Hanson's transportation system.

#### 1. Changing Journey to Work Trip Characteristics

Journey to work trips are the basis of much transportation planning because they are crucial to earning a living for most people, and because they generally come at peak times when capacity is most strained. Hanson residents mostly drive to work, though an increasing number now take the train. They are also taking longer to get to work.

According to the 1990 and 2000 U.S. Census data, the number of jobs within the town increased from 2,293 in 1990 to 2,376 in 2000, for a 4 percent increase over 10 years (though State Department of Employment and Training (DET) data suggests a subsequent decline.) At the same time the number of Hanson residents in the workforce increased by 22.2 percent, from 4,555 to 5,567 between 1990 and 2000. With over twice as many residents working as there are jobs in the town, most people commute to jobs elsewhere and having a range of transportation choices is important.

#### a. Changes in Destinations

In 1990, 835 (17.8%) of Hanson's employed residents worked in the town, but by 2000 this had dropped to 723 (15.5%). As Table VII-10 below shows, there has been a general drop in the number and percentage of workers commuting to nearby destinations such as Brockton, Plymouth, Kingston, Abington, Avon, Easton, and Stoughton, while there has been an increase in the number commuting to closer destinations such as Bridgewater, East Bridgewater, Halifax, Pembroke, Plympton, West Bridgewater, and, most significantly the adjacent town of Whitman with 226 of its jobs filled by Hanson residents. In all, the number of residents working in OCPC communities including Hanson dropped from 1952 (41.6%) to 1703 (31.5%) even as the total number of workers grew from 4,688 to an estimated 5,417.

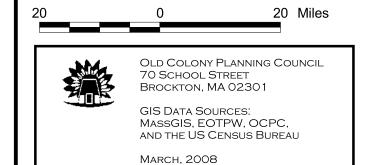
Present out-commuting patterns from Hanson can be seen on Figure VII-13,"Workforce Export." This shows the residents' dispersed job locations throughout eastern Massachusetts, with clusters in Boston, around Hanson, and within communities along Route 3. Beyond these, some residents travel to jobs in Lowell to the north, to Cape Cod, Fall River and New Bedford to the south, and to Worcester to the west, and generally along the highway system. The 1990-2000 increase in this pattern of dispersed employment is shown on Table VII-10, Destinations of Hanson Commuter 1990-2000, and on Figure VII-14, the map of Employment Import 1990-2000. One of the effects of these trends is shown on Table VII-13 showing generally increased commuting times.

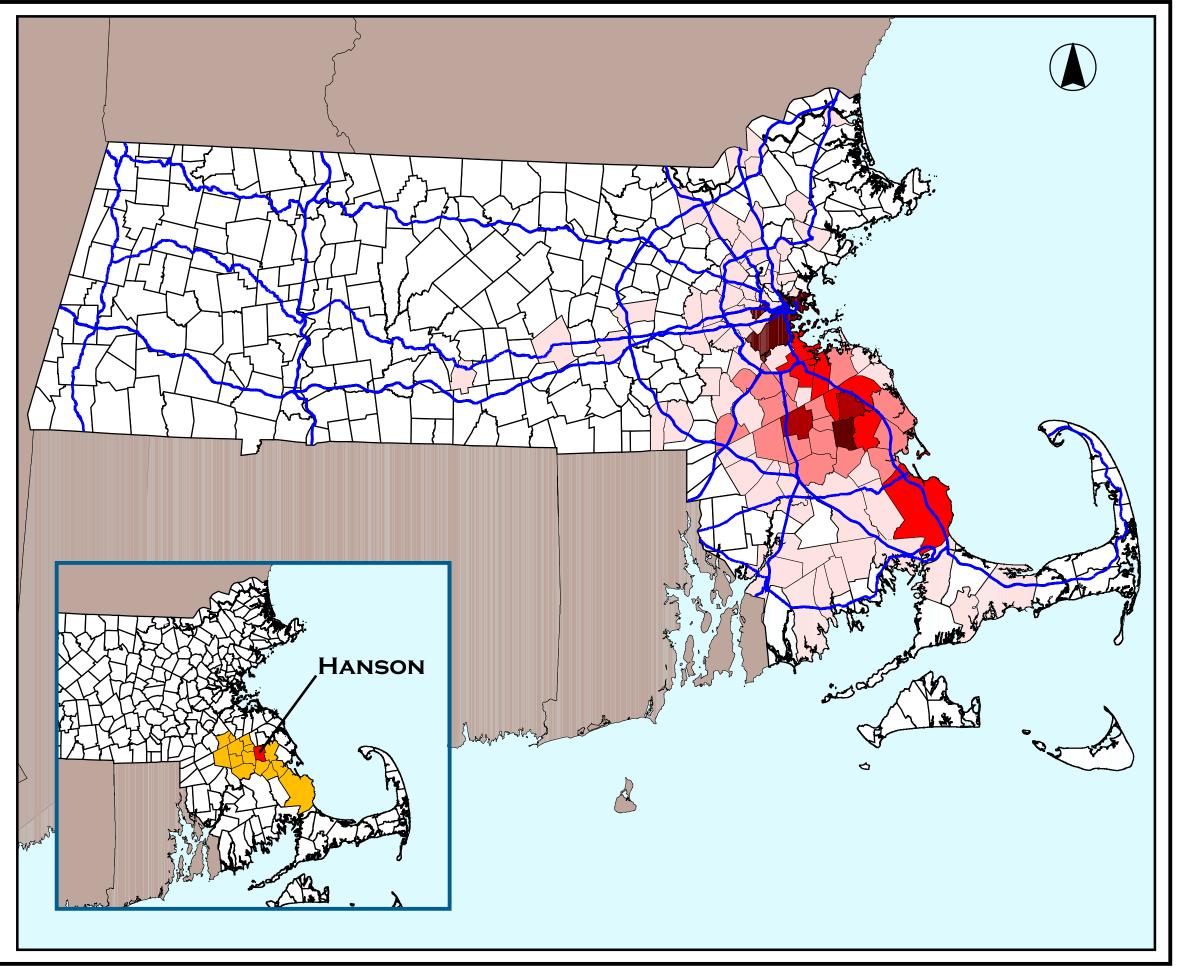
# Town OF HANSON 2000 WORKFORCE EXPORT

TOTAL RESIDENTS IN WORKFORCE ~ 5,000









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Overall, these data show that despite poor access to major highways, Hanson residents are willing to travel long distances to jobs that are near such highways.

These maps and data also indicate that while more residents have very short drives or just a moderate good-weather bicycle ride to adjacent or nearby communities of Pembroke, Whitman, Bridgewater, East Bridgewater, and Halifax, an increasing number of residents are traveling farther for work. Unfortunately the available year 2000 trip table does not list the out-of-region destinations, but the pattern on the map suggests that an increasing number are heading north toward the Boston area on the restored commuter rail line as well as to outlying destinations on the highway system. One question is whether these changes (and the increased travel times noted below) reflect needs for improvements or responses to opportunities.

Table VII-10

Destinations of Hanson Commuters 1990-2000

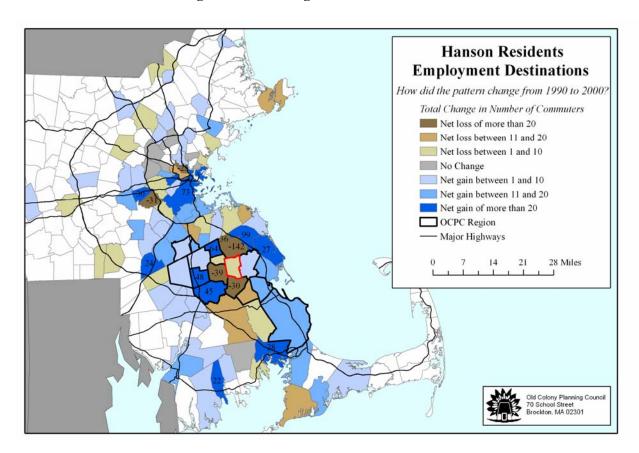
Destination	1990		2000	
	Total	Percent	Total	Percent
Abington	45	.95	38	.7
Avon	38	.81	n/a	n/a
Bridgewater	26	.55	76	1.62
Brockton	370	7.9	140	3.0
East Bridgewater	82	1.75	109	2.32
Easton	35	.75	25	.53
Halifax	70	1.49	79	1.7
Hanson	835	17.8	723	15.5
Kingston	50	1.1	17	.4
Pembroke	114	2.43	143	3.05
Plymouth	115	2.45	74	1.6
Plympton	20	.42	36	.77
Stoughton	58	1.24	12	,25
West Bridgewater	n/a	n/a	5	.11
Whitman	94	2.0	226	4.82
Other Plymouth County	975	20.08	n/a	n/a
Other Norfolk County	923	19.7	n/a	n/a
Other Bristol County	72	1.54	n/a	n/a
Boston	490	10.4	n/a	n/a
Other Suffolk County	20	.42	n/a	n/a
Essex County	7	.14	n/a	n/a
Other	249	5.3	n/a	n/a
Total	4688*		5417**	

<sup>\*</sup> Workers from a labor force of 4.555

Source: US Census Transportation Planning Package Trip Tables, 1990,2000

<sup>\*\*</sup> Workers from a 5567 labor force @ 2.7% unemployment

Figure VII-14
Changes in Commuting Destinations 1990-2000



#### b. Changes in the Origins of In-Commuters

Access to jobs and services in Hanson from other communities is also important even though the numbers are far smaller. Increased access such as that experienced near the new South Hanson MBTA station can help to increase local opportunities and to enhance the much-needed non-residential tax base.

During the 1990s there were changes in patterns of in-commuting to jobs in Hanson, as well as in the out-commuting patterns discussed above. As shown on Figure VII-15, the Employment Import Map, and on the Table VII-11, Hanson draws on a large area, but this is still smaller than the area to which its residents commute. Most of these workers come from adjacent communities, but some come from as far away as Boston and Cape Cod.

The 1990-2000 change in these patterns is shown on Table VII-11 and on Figure VII-16, the map of Employment Import 1990-2000. As can be seen, increased numbers of workers are coming from adjacent or nearby towns such as Abington, Bridgewater, Pembroke and West Bridgewater, while smaller numbers are coming from East Bridgewater, Halifax, and Whitman. At the same time the number of jobs reported in the town dropped from 2293 VII-34

to 1836 during the same period, further increasing the need to commute.

The overall pattern reflects the fewer jobs in the town, particularly the fewer specialized or high-paying jobs for which people will commute great distances. The changes show an increase in in-commuting distances, but the overall pattern remains. Though these people travel a shorter distance than out-commuters, they still need good local roads, transit options, and good access to and from the regional highway system.

Table VII-11
Residence of Employment in Hanson (In-commuters and locally employed Residents)
1990-2000

Destination	1990		200	0
Abington	58	2.5%	109	5.9%
Avon	5	2 %	50	2.7%
Bridgewater	50	2.1%	71	3.9%
Brockton	162	7.1%	375	20.4%
East Bridgewater	97	4.2%	43	2.3%
Easton	6	3%	37	2.0 %
Halifax	105	4.6%	40	2.2 %
Hanson	835	36.4 %	723	39.4%
Kingston	40	1.7%	70	3.8%
Pembroke	86	3.7%	124	6.8%
Plymouth	153	6.6%	132	7.2%
Plympton	35	1.5%	8	4%
Stoughton	58	2.5%	62	3.8%
West Bridgewater	0	0%	48	2.6%
Whitman	155	6.8%	90	4.9%
<b>Other Plymouth County</b>	208	9.1%	n/a	n/a.
<b>Other Norfolk County</b>	111	4.8%	n/a.	n/a.
<b>Other Bristol County</b>	61	2.7%	n/a.	n/a.
Boston	33	1.4%	n/a.	n/a.
Other Suffolk County	0	0%	n/a.	n/a.
<b>Essex County</b>	6	3%	n/a.	n/a.
Other	87	3.8%	n/a.	n/a.
Total	2293 In-	1	1836	
	commuters	j	obs	

Source: US Census Transportation Planning Package Trip Tables, 1990, 2000; Mass. Department of Employment and Training.

#### c. Changes in Journey to Work Travel Modes

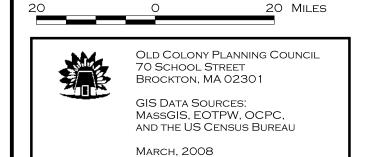
From 1990 to 2000 the number of commuters driving alone increased by 338, and the number of transit users grew by 123, while the numbers carpooling, motorcycling, bicycling, or walking all dropped. The increased public transit use parallels the opening of the Hanson commuter rail station on Route 27 in 1997. Table VII-12 shows these changes. The significant drop in car pooling may reflect diminished concern with fuel prices or the effects of increasingly scattered jobs giving fewer opportunities to share rides. The last three losses may also reflect the overall scattering of opportunities, but this could be offset somewhat by the increased number working in adjacent communities.

# Town OF HANSON 2000 EMPLOYMENT IMPORT

**TOTAL RESIDENTS IN WORKFORCE ~ 5,000** 







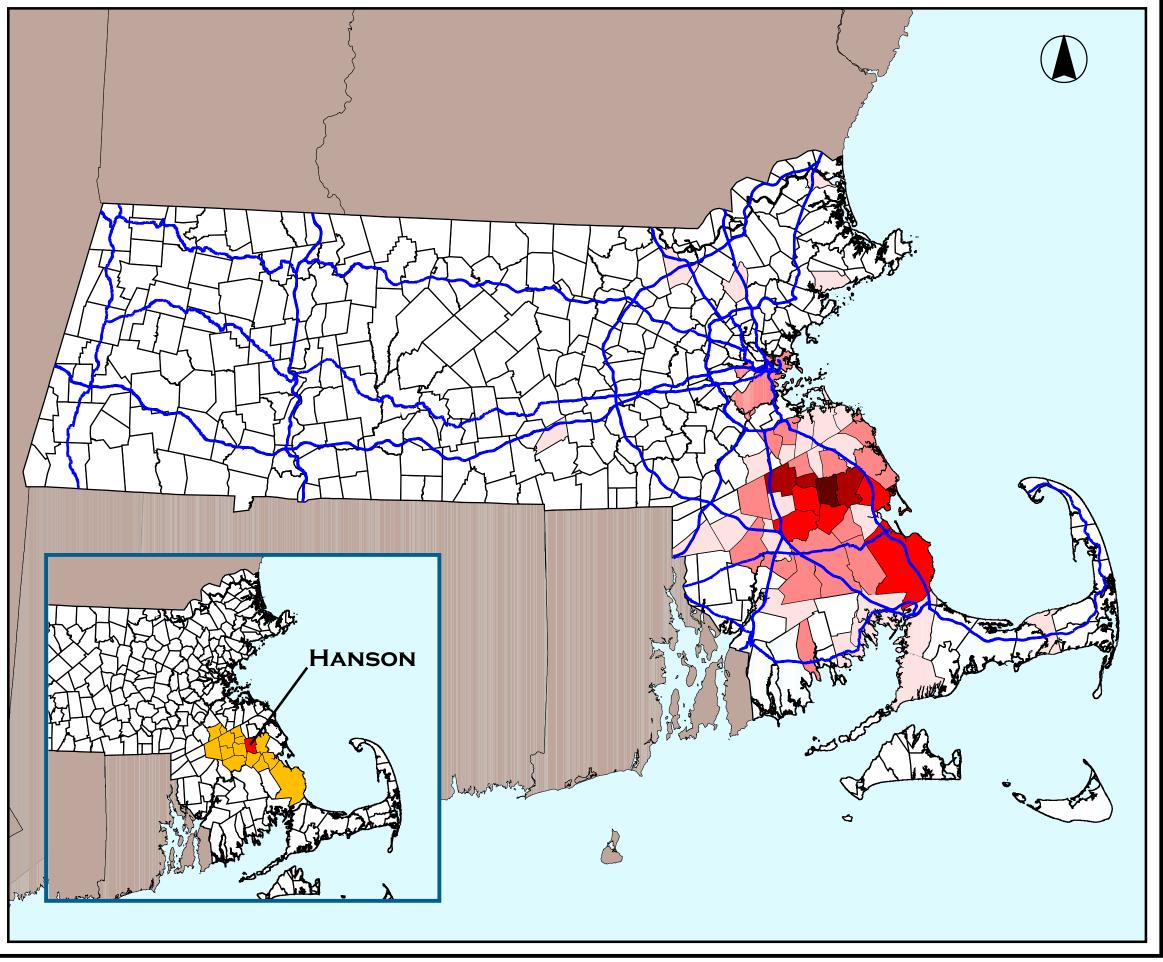




Figure VII-16
Changes in In-Commuting 1990-2000

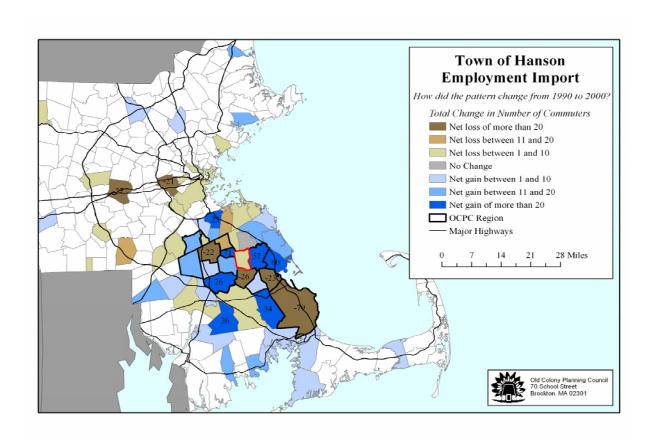


Table VII-12

Hanson Residents' Modes of Travel to Work

			%	
MODE OF TRAVEL TO WORK	1990	2000	CHANGE	GAIN/LOSS
Drove alone	3,958	4,296	8.5%	338
Carpooled	454	303	-33.3%	-151
Public Transit	82	205	150.0%	123
Motorcycle	10	0	-100.0%	-10
Bicycle	26	6	-76.9%	-20
Walked	42	13	-69.0%	-29
TOTAL	4,572	4,823		

#### d. Changes in Travel Time

From 1990 to 2000 commuters from the Town of Hanson experienced the regional trend toward longer (one-way) commutes as shown on Table 13.Significantly larger numbers were commuting for periods of 35-44 minutes, 45-59 minutes, 60-89 minutes, and even over 90 minutes; and the mean travel time increased from 27.5 minutes to 32.6 minutes. At the same time, fewer people were traveling for less than 15 minutes. The largest increase occurred in the 60-89 minute category, which means that more residents were spending over an hour commuting each way in 2000 than in 1990. The trend toward longer commutes presumably reflects the greater acceptability of a long rail trip as well as the continued dispersion of jobs and housing.

In all, the journey-to-work data shows both the need for efficient roadway and transit systems for such trips, and for all other trips a community makes and the need to design communities which reduce the need for so many trips.

Table VII-13
Town of Hanson: Travel Time to Work

			%	
TRAVEL TIME TO WORK (MIN)	1990	2000		GAIN/LOSS
< 10	559	539	-3.6%	-20
10-14	502	372	-25.9%	-130
15-19	577	583	1.0%	6
20-24	571	651	14.0%	80
25-29	259	347	34.0%	88
30-34	718	498	-30.6%	-220
35-44	343	509	48.4%	166
45-59	434	525	21.0%	91
60-89	419	619	47.7%	200
> 90	101	200	98.0%	99
TOTAL	4,483	4,843	8.0%	360
MEAN TRAVEL TIME (minutes)	27.5	32.6		

#### 2. Other Trip

Other trips are those made locally or to other communities for purposes ranging from shopping and school to sightseeing and recreation. The mode chosen depends on cost, convenience, distance, weather and the options available.

In some cases trips which could be made on foot or by bicycle are done in cars or school buses for lack of direct routes from neighborhoods or even a lack of sidewalks along reasonably direct routes. This argues, at a minimum, for connecting dead-end subdivisions with passable bicycle/pedestrian ways to other developments, schools, stores and other destinations. These would allow walking or riding by a safe, direct route, rather than by a roundabout route along busy roads which would encourage driving.

Beyond this, many subdivisions are relatively isolated even by automobile. They could be better served by being tied to the rest of the road system, thereby again allowing shorter trips to many destinations and adding needed flexibility throughout the network. However, such changes would have to be made while discouraging unnecessary cut-through traffic or loss of neighborhood seclusion.

In other cases, shopping and civic destinations like the Post Office are scattered just far enough from related destinations to require separate trips, rather than a "park-once" trip. However, the town is fortunate to have the complex of commercial and civic uses found along Liberty Street between High Street and Winter Street; the school and library complex off School Street and Indian Head Street; and the commercial / industrial / rail grouping in the traditional South Hanson Center.

Major objectives of this plan and related recent plans are to fill gaps in the roadway system; to complete the pedestrian/bikeway system noted above; and to site and design future development to reduce separate trips. Ideally the last would allow most local trips to be within walking distance of mixed uses in a Transit-Oriented Development. The last would be focused around a transit or commuter rail station like that at South Hanson so that commuting and recreational trips will have easy access to rail service while a good number of very local trips are walkable.

#### 3. Other Present Needs

#### a. School Access and Safe Routes to School

The installation of sidewalks connecting neighborhoods to schools is a major objective of the town's sidewalk program. National studies have shown that the number of school children who walk to school has dropped off dramatically. This is due mainly to the patterns of residential development that are mainly geared toward auto use. Such development disperses homes in a community at long distances from schools. Furthermore, the lack of continuous sidewalks on side streets and main roads, reflecting auto-oriented development, often make it unsafe for students to walk or pedal to school. Presently Hanson busses all elementary and middle school students who want to ride, while the Whitman-Hanson Regional High School busses those who are beyond two miles.

In contrast, Whitman busses elementary students who are beyond 3/4 mile and middle school students who are beyond 1.5 miles. In any case, students who want to walk may do so. Hence, it is important to make walking and bicycling safe and convenient.

In Hanson's case there are needs:

(1) To ease walking to the Indian Head School / Maquan School / Public Library / Senior Center complex with:

- Complete sidewalks on both sides of School Street between Indian Head Street and Maquan Street
- Sidewalks along both sides of twisty Maquan Street to the Pembroke line
- New sidewalks along at least one side of Gorwin Drive and Crescent Street/Cross Street and the longer streets feeding them
- (2.) To ease walking to the new Middle School off of Liberty Street with:
  - Complete sidewalks along West Washington Street, Spring Street, and perhaps Alden Way/Gray Lane within the allowed way
  - A potential walking path if needed between the mapped Village Road and the school
- (3.) More generally, to remedy the lack of sidewalks and cross country pedestrian / bicycle paths connecting to any neighborhoods within an appropriate walking distance.

#### b. Other Pedestrian/Bike Path Needs / Opportunities

Recent residential growth and the restoration of commuter rail off Route 27 have increased potential pedestrian and bicycle activity. New sidewalks should focus on filling gaps in areas of increased activity, such as South Hanson and the downtown Liberty Street (Route 14/58) area, and they should link existing sidewalks in neighborhoods to schools, playgrounds, and recreational areas. Elsewhere, cross-country trails and paths can offer short, scenic, off-road routes between neighborhoods and such destinations.

Creating such bicycle and pedestrian facilities adds useful transportation options and lessens vehicle trips on town roads, thereby helping to reduce traffic and exhaust emissions. One good example is the level paved path from Meeting House Lane Elderly Housing to the Shaws' complex on Liberty Street

The need to explore and exploit pedestrian opportunities in the South Hanson Transit - Oriented Development Study area is discussed below. In particular, extending the present sidewalk eastward, along with the construction of a sidewalk on the south side of the road will enhance near-future pedestrian activity in this area.

#### **Enhanced Pedestrian Crossings**

Steady peak hour traffic on major routes such as Main Street (Route 27) and Liberty Street (Routes 14/58) constrains pedestrian activity. Signals may be needed to stop traffic in extreme cases, but elsewhere signed pedestrian crossings may be enough to remind drivers to expect pedestrians, and to stop when someone tries to cross. Special pavement treatments, such as textured crosswalks that produce realistic brick and stone effects, can make the crossing more apparent and heighten the drivers' attention at key crossings. These designated and marked pedestrian walkways can enhance safety and ease pedestrian circulation, thereby adding to the economic vitality in the treated areas.

Figure VII-21 under item 4.8 shows a sample of a textured crosswalk. Key intersections VII-42

needing improved crosswalks include: High Street / County Road (Route 14) / Liberty Street (Route 58); Liberty Street (Route 14/58) / Maquan Street (Route 14) /Indian Head Street (Route 58); Main Street (Route 27) at the MBTA Drive; and Main Street (Route 27) at Phillips Street. Such crosswalks should also be used in the vicinity of the Indian Head School to delineate school routes across Maquan Street to School Street.

#### c. Local Transit

Local transit is rarely feasible at the low densities characteristic of Hanson. However, the need for access to the train and to other facilities by non-drivers remains. At the same time, the opportunity to serve many needs for access to services, amenities and employment in the two centers and at the two industrial parks may make some form of van or jitney service feasible.



Opportunities to ease walking to school - The landlocked new Hanson Middle School with a long walk in from Liberty Street, no sidewalks on East Washington Street, and no apparent foot/bike paths in from East Washington Street or Winter Street

# D. IMPLICATIONS OF RECENT STUDIES FOR LAND USE AND CIRCULATION ISSUES

#### 1. The 2004 Community Development Plan

The 2004 Hanson Community Development (CD) Plan by Thomas Planning Services with supporting material from the Old Colony Planning Council covered housing, economic development, and open resources and recommended actions in each area. Transportation was not an explicit subject, but the plan's findings and recommendations have implications for transportation and circulation issues.

The plan included an inventory of the community's assets and a vision for the future of Hanson along with goals, objectives, and recommendations from the ongoing master planning process in order to identify actions needed to achieve the community's vision.



Further opportunities to ease walking; The Indian Head School / Maquan School / Library / Senior Center Complex with limited sidewalks on abutting and nearby streets

#### a. Housing

The plan noted that single-family houses make up 91.7% of Hanson's housing stock; and that even at the present moderate rate of growth (an average of 35 units annually over the last decade) 3,907 houses could be added at an improbable full build-out. Such low-density growth could require a greatly expanded street system and significantly increase local traffic. However, residential growth is inhibited by lack of sewers, and the presence of wetlands that limit access to buildable uplands. Current housing projects and the

town's housing strategies support senior and assisted living housing, affordable housing, and townhouse development carefully sited around wetlands and near major roads.

These strategies can support higher density housing within walking distance of the Hanson MBTA Commuter Rail Station or relatively close to the compact Liberty Street commercial and civic center. This would help to reduce single purpose trips. The plan also supported residential re-use of the former Plymouth County Hospital in South Hanson as an opportunity for adding assisted living, age-restricted housing, and cluster development near the prospective South Hanson Transit Oriented Development (TOD) area.

Beyond this, the Plan noted a range of areas suitable for new housing. Of the 10 sites, two were in the town's commercial/civic center and four were in or close to the proposed South Hanson TOD area, while the others were on major roads. Thus six of the sites need not generate excessive trips and the other four would be on roads which are at least minor collector in Fair to Good condition.

The plan also recommended a wide range of financial regulatory and institutional issues to support diverse and affordable housing, including intensification of present uses through accessory apartments, compact cluster "Open Space Residential" development, and mixed development in the South Hanson Station area through adoption of a local overlay zoning district.

#### **b.** Economic Development

The mixed-use TOD zoning would encourage the economic revitalization of South Hanson by allowing combined complementary residential/commercial/ office and nearby industrial uses through mixed-use zoning including relatively high density housing. The plan proposed intensified uses near the uniquely accessible commuter rail station to compensate for Hanson's distance (over 30 minutes) from a major highway interchange. It supported economic development to expand local employment opportunities, to reduce travel time for workers and customers, to broaden and sustain local tax revenue, and to support local businesses.

Three of the site-specific recommendations were for expanded complementary uses and improved access along Route 27 in South Hanson and for new mixed use zoning there; two were for Flexible zoning and traffic improvements (Routes 14 and 58 and High St.) in Hanson Center; and one was for intensified use of the Hanson Commerce Park near the soon-to-be-improved intersection of Routes 14 and 27 on the East Bridgewater line. The CD Plan also encouraged re-use of the Plymouth County Hospital land, support of home businesses, revaluation of the Hanson Commerce Park and adoption of design guidelines to improve the appearance of business and industrial areas. The zoning district would encourage the installation of sidewalks and bicycle trails and would seek to improve overall traffic and pedestrian circulation.

These recommendations largely support existing concentrations of development, thereby minimizing extra trips and they explicitly support the South Hanson TOD plan discussed below. As these recommendations come to fruition, the town should evaluate their aggregate impact on the overall traffic and transportation system as well as the site-specific impacts on the road network near individual projects.

#### c. Open Space and Natural Resources

This section of the Community Development Plan recommended the acquisition of trail and greenway easements to allow hiking along a number of open space corridors including Bretts Brook, The Indian Head River, Indian Head Brook, the western edge of Wampatuck Pond, the Shumatuscacant River, Poor Meadow Brook, White Oak Brook, and possibly Stetson Brook. This section of the plan also called for the completion of the Bay Circuit Trail. Where possible it would be good to expand these trails to bicycle paths offering intratown routes off major roads.

#### 2. The South Hanson Center Plan

This section by the firm of CYMA 2 was completed in concert with the Community Development Plan and is included in it. The Plan focused on the area around the MBTA Commuter Rail Station and existing nearby commercial development along Route 27. The plan's goals include increasing economic viability and reducing traffic conflicts through mixed-use development, streetscape improvements, improved traffic control, and implementation of private design guidelines. It examined various options for rehabilitation/reuse of existing commercial buildings, redevelopment, and intensified residential uses. The Plan's recommendations for Route 27 include tighter pavement definition, new or improved curbing and curb cuts, better defined crosswalks, new sidewalks, on-street and off-street parking, and tree planting. It also calls for traffic signals and traffic-calming amenities such as raised crosswalks and textured pavements.

#### 3. The 2005 South Hanson Transit Oriented Development (TOD) Study

This study by the Old Colony Planning Council built on the South Hanson Plan to more closely examine land use patterns, building usage, and development, and the potential for Transit Oriented Development, and to draft a TOD zoning bylaw.

#### a. TOD Development

The purpose of TOD development is to concentrate varied residential, commercial, office and civic uses and amenities near a transit station in order to create a multi-use node offering easy transit access to jobs and other destinations along with pedestrian access to many nearby services and amenities. TOD bylaws (and similar Central Business District zoning bylaws) accommodate complementary mixed uses at relatively high densities. Development often takes the form of mixed commercial / residential buildings with stores / offices below and housing above, as is found in older town centers.

The assumption is that easy walking access to transit motivates people to live near the station at higher densities than in surrounding neighborhoods, and that the higher density node will support local stores and services, making the TOD area an attractive place to live for many people. This fits sites along a frequently served rapid transit line better than on a rail line now having only eight trips a day each way. Still the train gives that part of Hanson far better auto-free access than most parts of nearby communities. In addition, South Hanson has a small complex of existing businesses and under-used commercial space potentially housing attractive uses. There is also a significant amount of developable land.



South Hanson and Environs with MBTA Station at center, Wampatuck Bogs to east, Great Cedar Swamp to South, and the Industrial Park and Depot Village sites at the top center.

The Plan suggests a two-tiered approach:

- An inner TOD I area running along about half a mile of Route 27 and roughly centered on the station. This has the varied existing uses and about 13 acres of potentially developable land. The proposed zoning would allow 50-foot high multi-story buildings at 50% to 60% lot coverage on 8000-square foot lots. It is intended to encourage housing above varied commercial uses quite close to the station, and to concentrate non-residential uses in small diverse area.
- A larger TOD area in an arc about ½ mile out from the station (but excluding the wetlands south of tracks). It has about 169 acres of potentially developable land, including 22.6 acres in an approved industrial park and 20 acres approved for 40B housing. The proposed zoning would allow small duplexes as of right and 3-8 unit dwellings at about 10 to the acre on 10,000-square foot lots by Special Permit. The intent is to encourage a scattering of slightly higher-density housing within walking distance of the stations throughout this existing neighborhood, while excluding non-residential uses.

If successful, the TOD will lessen local traffic because many services and amenities including the station will be within walking distance or on a "park once" basis for drivers. If it becomes attractive as a destination, the TOD could slightly increase traffic from other parts of the town and surrounding communities via High Street, Phillips Street/Holmes Street, and Main St. (Route 27).



The proximity of the largely occupied former Ocean Spray offices to the new and old train stations

Figure VII-17 following, shows the present generalized land uses in the study area and the proposed TOD I and TOD II boundaries.

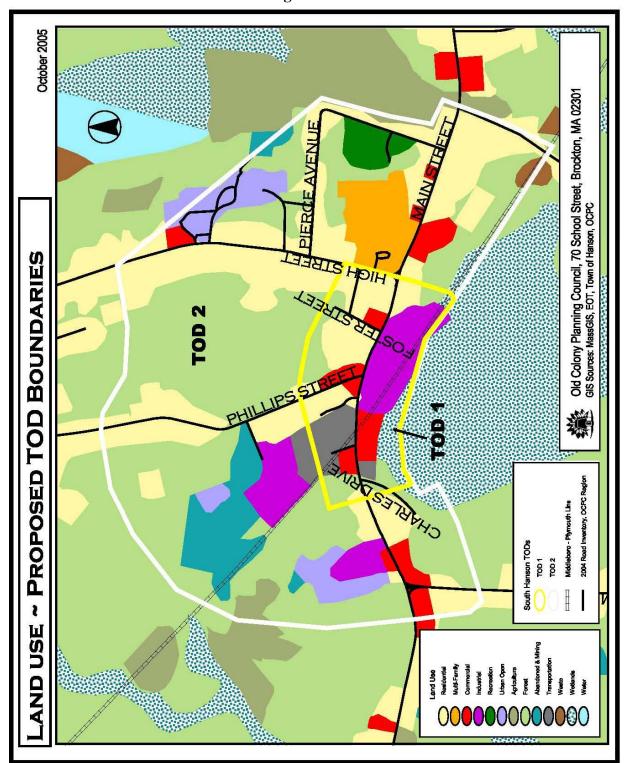


Figure VII-17

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#### E. OTHER LAND USE-RELATED NEEDS AND ISSUES

#### 1. Hanson Center / Route 27 Commercial Area

#### a. Overall Circulation Needs

The traffic counts, turning movement analyses, and crash analyses show circulation and safety deficiencies along Liberty Street (Routes 14 and 58) in the town's commercial and civic core at Hanson Center. The town's highest traffic volume (16,950 VPD) is on Liberty Street just east of County Road and High Street. Approximately 1,685 vehicles per hour, or 28 vehicles per minute, pass in either direction during the peak hour. This volume causes long delays for vehicles turning from side streets or driveways onto Liberty Street due to the lack of sufficient gaps in the mainstream traffic. There are also high crash rates at the awkward High Street / County Road (Route 14) /Liberty Street intersection and at the Liberty Street / Maquan Street (Route 14) / Indian Head Street (Route 58) intersection.

The Liberty Street/County Road/High Street intersection has the town's highest crash rate of 1.03 (since the Route 27/14 intersection with a rate of 1.93 is actually in East Bridgewater). Improvements are needed to lessen confusion here and to decrease cross movement conflicts. The proposed solution is a roundabout (discussed later) which should remove these conflicts, and calm traffic on Liberty Street by reducing speeds there.

The Liberty Street / Maquan Street/Indian Head Street intersection just to the east has the town's second highest crash rate, 0.86. The recommended solution is installation of a traffic signal. This should create platoons in the traffic, thereby increasing gaps in the Liberty Street traffic and allowing more efficient flow from side streets and driveways. The signals will also decrease crash exposure here. Level of service analyses, with the inclusion of signals, predict a future LOS "B" condition with very little delay for turning movements. These improvements are easily integrated with the proposed sidewalks along Liberty Street, and the traffic controls should allow safe pedestrian crossings.

#### **b.** Local Functional Considerations

As discussed in the Introduction and in the Economic Development section of this Master Plan, the recommended objectives and strategies include "Improving the commercial areas through public/private cooperation," and "Encouraging existing business centers." Since most of the firms in Hanson Center are in one shopping center, this plan notes that "Hanson has been fortunate in that new businesses have generally limited curb cuts and provided adequate parking and lighting. Many owners need to be encouraged to provide landscaping and better on-site pedestrian circulation."

The benefit of grouping stores in the Shaw's Shopping Center is its compactness and the shared parking and curb cuts, along with the location near major public facilities such as Town Hall and the fire station. Some free-standing businesses are just east of the Shaw's complex and can share access and parking. However, others are just beyond High Street or, like the CVS pharmacy, gas station and donut shop, are across busy Liberty Street. Their location generates more turns on and off Liberty Street and discourages shoppers from trying to park once and do their business on foot. It would be good to facilitate such patterns by encouraging commercial expansion contiguous to the existing center, and improving the local pedestrian system.



Two hazardous intersections; Liberty Street / High Street / County Street (above); and Liberty Street / Maquan Street (below)



#### 2. Other Areas - The Monponsett Neighborhood

As noted in the Land Use section, the densely settled Monponsett neighborhood bracketing Hanson and Halifax needs improved sidewalks and streets, including paving and protective storm drainage.

#### 3. Relocation / Reuse of the Original South Hanson Train Station

As shown by the photograph in Section 2.1.2, the revived commuter rail service uses the original station site, but not the intact adjacent original station building. Rather, the new station uses a new high platform on the opposite side of the tracks with the minimal overhead weather protection characteristic of the new stations. Reportedly, the MBTA did not use the original station to avoid displacing a business in the building. The firm is now gone and the building offers the chance for a comfortable indoor waiting room, ticket office, newsstand, or coffee shop. Since the station is on the far side of the tracks, it would be necessary to move it. Presumably this would be to a spot near the station entrance, hopefully elevated and integrated with the new high platform.

#### **Implementation Possibilities**

- Explore use of the MHD's flexible but very competitive local and state-wide Transportation Enhancement Programs. The local program is administered by the Old Colony Planning Council. It competes with needed roadway projects and the Council now has requests far beyond any potential funds. The state-wide program is operated by the MHD and can fund local projects if they have an impact beyond the particular community.
- Draw on Community Development Preservation Act historic preservation funds if the program is adopted as recommended.
- Seek state Historic Preservation funds from the Massachusetts Historic Commission in the Office of the Secretary of State.

#### 4. Parking and Access Management

Parking lots are part of the circulation system since most trips cannot be completed without parking the vehicle. These are built with varied sizes, forms and surface types, usually depending upon the land uses they serve - industrial, commercial, retail, and housing.

The lots are automobile-oriented in design because their main purpose is to store vehicles, while people conduct business. A problem that follows is that the driver becomes a pedestrian within the lot once the vehicle is parked and must negotiate a safe path on foot to his/her destination. The design of some lots can be hazardous to pedestrians, especially where long walks are required to the building entrance.



Hanson Center, Meetinghouse Lane elderly development and walkway to Shaws on far left; Shaws Market and other stores sharing parking in center; Routes 14, 58 and High Street intersection and CVS to the right, and Town Hall on peninsula to far right

Another basic concern is the sheer areas required. Hanson's basic requirement of one space per 150 square feet of retail floor area is twice that of Pembroke, which requires one space per 300 square feet. It should be reconsidered after examining the use of local lots. Off-site spaces are allowed, but must be within 300 feet of a building's main entrance. Yet there may be other possibilities. It would be good to examine the possibility of using more distant spaces, or of sharing spaces with use which have complementary peak-use periods.

Such lots are, in effect, transition zones, as well as temporary repositories for vehicles. In light of present parking lot design standards there is give little consideration to internal foot traffic. Therefore, design changes are warranted that consider all activities including reaching the lot from a major road, finding a space and parking, and continuing on foot. Although much thought goes to landscaping, lighting, location, capacity, and storm runoff, little goes to pedestrian safety, pedestrian circulation, and access between adjacent properties and sidewalks.

The town should consider more flexible parking lot design standards that take into account pedestrian circulation, safety, and accessibility.

A related consideration is designing parking lot access and egress to have the least impact on the capacity and safety of the adjacent road. This involves "Access Management," i.e. planning of the design, location, and operation of driveways, median openings, interchanges, and street connections. This can benefit a corridor by improving safety and capacity. Possible design solutions to access management problems include:

- Shared drives between sites
- Longer "throat lengths" for internal driveways in lots
- The connection of adjacent commercial properties
- The construction of shared service roads serving multiple destinations and reducing needed curb cuts on the arterial road.

# F. DEVELOPMENT TRENDS, THE BUILD-OUT ANALYSIS, AND PROBABLE CONTINUED SINGLE FAMILY DEVELOPMENT

As discussed earlier in the Land Use section, the recent state-supported Build Out analysis found 3,510 potentially developable acres allowing 3,907 new lots under present zoning, and an additional 11,721 residents (at 2.6 per dwelling unit). This would more than double the population from 9,772 (2005) to 21,494. This assumes that nearly all new housing will be in single-family detached houses, as is 94.7% of the present housing. The present or prospective multi-family developments are limited to three projects in South Hanson; the proposed 70-unit, Ch. 40B Depot Village, an existing small development near High Street, and the 52-unit Ch.40B age-limited Dunham Farms now under construction; along with the Housing Authority's Meeting House Lane development for the elderly off of County St. near the Center, and a 121- unit age-restricted project between Winter Street and Liberty Street.

The calculated Build-Out may be more than is likely, since all land is unlikely to be developed, and there may be a limited number of potential in-migrants from other communities. On the other hand, possible rezoning to allow more multi-unit housing, increased use of Chapter 40B to override restrictive zoning, and/or use of Innovative / Alternative wastewater disposal systems could allow significantly more housing to be built on some sites while consuming less land per unit.

Conversely a significant down-zoning by increasing lot area requirements could dampen the potential population while consuming more land for the population accommodated.

At present the continuing single-family development will increase traffic town-wide as most people will live relatively far from stores and community facilities and will drive most places. If such development occurs it will be important to design the new subdivision roads and related bicycle and pedestrian paths to connect with one another and with the existing street system in several places. This will be necessary to avoid over-taxing the present road system and to give flexibility to the overall system. To help to require this, the town would do well to adopt an Official Map as allowed under the Zoning Act. This would indicate the town's intended future overall circulation system, including bicycle and pedestrian ways, and require developers to conform to it. With such additions, and with completion of

recommended improvements, Hanson's circulation system should be able to handle likely future volumes.

# G. RECOMMENDATIONS / PRIORITIES / IMPLEMENTATION MEASURES

- 1. Extension of the Sidewalk System and other Pedestrian / Bicycle Ways
- a. Sidewalk Linkages via the Safe Routes to School and Enhancement Programs

Recent residential growth and the restoration of commuter rail has increased potential pedestrian and bicycle activity and added to the need for safe sidewalks and off-road bicycle /pedestrian ways for travel to school and other local trips. These should serve areas of increased activities, such as the South Hanson Transit Oriented Development (TOD) and Hanson Center along Liberty Street (Routes 14/58) and link existing residential sidewalk segments to schools, playgrounds, and recreational areas. Such pedestrian and bicycle facilities add travel options and lessen other vehicle trips, thereby reducing traffic congestion. The recommended actions follow.

Make the following sidewalk improvements - shown on Figure VII-19

- (1.) Complete sidewalks on both sides of School Street between Indian Head Street and Maquan Street
- (2.) Extend the Main Street sidewalk in the TOD area from Forest Street to Robinson Street, and on past Route 58 to the Pembroke line
- (3.) Complete sidewalks on both sides of Maquan Street / Liberty Street from School Street to Winter Street, to provide a safer route to the Indian Head School from the north
- (4.) Provide sidewalks on both sides of Maquan Street to the Pembroke line
- (5.) Add sidewalks on at least one side of Gorwin Drive and Crescent Street / Cross Street and the longer streets feeding it, especially Andrew Lane
- (6.) Add sidewalks along East Washington Street, Spring Street, and Whitman St giving access to the new Middle School
- (7.) Add a sidewalk on a section of Brook Street connecting with existing sidewalks on Taylor Drive and Country Lane
- (8.) Add a sidewalk on Winter Street from Liberty Street to East Washington Street
- (9.) Extend sidewalks on at least/ one side of Monponsett Street from Main Street (Route 27) to South Street.

- (10.) Create a walking path from West Washington Street to the Middle School
- (11.) Extend a sidewalk the length of County Road (Route 14) from the Center to the East Bridgewater line
- (12.) After completion of the Route 14 sidewalk above, cooperate with East Bridgewater and Whitman to extend sidewalks through the soon-to-improved intersection of Routes 14 and 27 (Franklin Street) to the Whitman-Hanson Regional High School
- (13.) Work with school and open space interests to develop a pedestrian / bicycle path from the bend on West Washington Street to the High School
- (14.) Ensure that sidewalks along high volume, high speed roads such as Routes 58, 27 and 14, have a two to three foot buffer from the curb in order to provide pedestrians with a comfort zone
- (15.) More generally, prepare and implement an overall plan to provide sidewalks and cross country pedestrian / bicycle paths connecting neighborhoods to schools (even though the town is willing to bus all elementary and middle school students, as discussed earlier.)
- (16.) Examine and adopt any other trails and paths proposed in the Open Space Chapter which are potentially useful connections between neighborhoods and varied resources and destinations
- (17.) Seek a pond-side easement through the lower part of two house lots near Big Rock Lane to allow a path from the town-owned former County Hospital to and through the Fern Hill Cemetery and on to the west bank of Wampatuck Pond as recommended in the Open Space Chapter of the Community Development Plan and shown in Chapter V as ROP/OS-5

#### b. Improve sidewalk and walking path design by:

(1.) Ensuring that sidewalks along high-volume, high speed roads such as Routes 58, 27, and 14 have a two to three-foot buffer from the curb giving pedestrians a comfort zone.

(2.) More generally, by preparing and implementing an overall plan to provide sidewalks and cross-country pedestrian /bicycle paths connecting neighborhoods to schools and other destinations. This is recommended even though the town is willing to bus all elementary and middle school students, as discussed earlier.

#### c. Implementation

#### (1.) Use of Safe Routes Funding

These proposed routes are within the 2-mile radius required for eligibility for the new Federally Funded Massachusetts Safe Routes program. This program promotes walking and bicycling to school in order to improve the safety of streets, reduce vehicle trips, reduce traffic congestion and air pollution, and promote healthy physical activity. This program provides 100% funding for designing, building, and improving on-street and off-street sidewalks and facilities within two miles of an elementary or middle school. Hanson should work closely with the Old Colony Planning Council and the Massachusetts Highway Department to apply for such funds.

#### (2.) Other Approaches

- Work with East Bridgewater and Whitman to coordinate the proposed sidewalks with the forthcoming improvements to the Route 14 / Route 27 intersection and to extend sidewalks along Franklin Street to the High School.
- In addition, the town should work with the Hanson Conservation Commission (particularly regarding a stream crossing) and with other open space and recreation interests to develop a bicycle / pedestrian path from the bend at the northeast corner of West Washington Street to the High School, again possibly using Safe Routes to School funds.

#### 2. Other Pedestrian/Bike Path Needs / Opportunities

#### a. Pursue opportunities in the South Hanson TOD Study area.

Particularly, the extension of the present sidewalk east and west to Robinson Street and Elm Street on both sides of Main Street. In addition, examine implementation possibilities though the Subdivision Rules and Regulations as described below.

#### **Recommended Action**

Include these issues in future planning of the South Hanson TOD area.

#### **Implementation**

Seek funds from the flexible, but very competitive, Enhancement Program for projects in other areas of the town that require sidewalks. This allows at 80 percent funding with a 20 percent local match.

#### b. Creating Neighborhood-Serving Paths through the Subdivision Control Regulations

Section 6.4 of the Hanson Subdivision Rules and Regulations says that "Easements for utilities, bicycle and pedestrian paths shall be provided where necessary across lots or along rear or sidelines of lots and shall be at least 20 feet wide for utilities and 12 feet wide for bicycle and pedestrian paths." This is a common provision but it does not seem to have led to usable bike or pedestrian paths between developments or to other destinations. The reason is probably that there are no nearby paths with which to connect, and the Board doesn't want to require an easement that goes nowhere. Yet, there are examples of present subdivisions which could benefit from short connectors. Examples shown on the following aerial photograph and on Figure II-18 are:

- Between Steven Street off Gorwin Drive and the nearby Crescent Place off Crescent Street and Cross Street.
- Between Gray Lane and Shaws Plaza, possibly via the Meetinghouse Lane Path
- Between Bound Brook Road off Brook St., Old Pine Drive off East Washington Street, and Helen Drive off of State Street
- Between Harvey Circle and Wagon Trail off East Washington Street and Adams Circle off of State Street

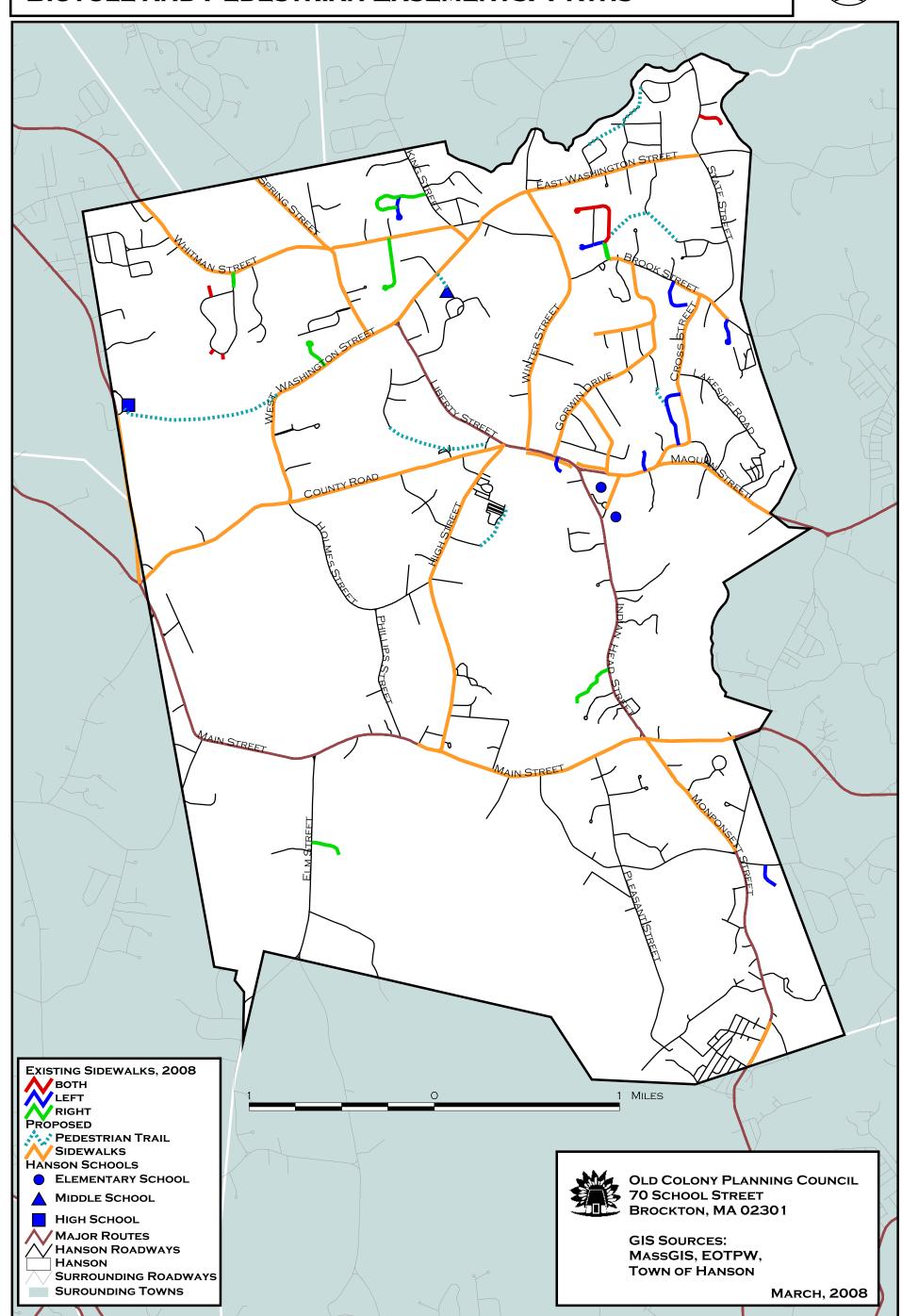
#### **Implementation**

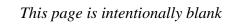
Enforce Section 6.4 of the Subdivision Rules and Regulations by identifying possible connections with future subdivisions, or adopting a skeletal bicycle and pedestrian system to guide the location of such easements. Analyze existing subdivisions, nearby terrain, significant destinations, and existing paths to suggest the probable configuration of prospective trails, then design and adopt a town-wide trail plan indicating where such easements will be necessary. Use this when reviewing subsequent subdivisions.

# EXISTING SIDEWALKS, PROPOSED EXTENSIONS & BICYCLE AND PEDESTRIAN EASEMENTS/PATHS



FIGURE VII - 18







Subdivisions with the potential for connection by bicycle / pedestrian paths. Top, left to right-Harvey Circle, and Wagon Trail off East Washington Street, and Adams Circle off State Street; Bottom, left to right-Bound Brook Road off Brook St., Old Pine Drive off East Washington Street, Helen Drive off of State Street and a potentially useable power line easement

### 3. Improve the County Road (Route14) / Liberty Street (Route 58) /High Street Intersection with a Roundabout

#### a. Level of Service Analysis

The level of service analysis shows that the intersection of Liberty Street Route 58/High Street and County Road/Route 14 operates at acceptable levels of service (LOS "B" and "C") during the afternoon peak hour under existing and future conditions. However, the alignment allows for hazardous cross movements due to the convergence of the County Road and High Street approaches. These stop-controlled approaches merge about 50 feet southwest of Liberty Street and form one approach to the signalized Liberty Street intersection.

Queues due to the signal back up to the stop signs, creating confusion and potential rear-end collisions. Thus the LOS results for the signal do not reflect the operating conditions at the two stop-controlled approaches.

Figure VII-19 shows this alignment and the potential for un-signalized cross movements between County Road and High Street that conflict with vehicles entering from Liberty Street. Not surprisingly, the accident analysis shows a high crash rate here (1.03 per MEV) with the majority being rear-end and angle-type crashes. This reflects the confusion caused by the unusual alignment.

Removal of the traffic signal and creation of a modern roundabout could remove these queues and conflicts. In addition, experience with modern roundabouts elsewhere shows that pedestrian crossings should be safe since sidewalks can be easily integrated into the alignment and the splitter islands at the approaches act as pedestrian refuges. In addition, roundabouts can improve the aesthetic quality of the landscape and add to a community's sense of place. Figure VII-20 is a conceptual illustration of the intersection re-aligned into modern roundabout. The space needed can come from the grassy area just east of the existing intersection.

Based on a preliminary analysis using the Federal Highway Administration's publication, "Roundabouts: An Informational Guide", a single-lane modern roundabout here would have a circulating flow of 1,000 vehicles per hour during the afternoon peak under existing conditions, and a projected circulating flow of 1,124 vehicle per hour by 2020. The FHWA guide recommends that the maximum circulating flow of a single-lane roundabout not exceed 1,800 vehicles per hour during the peak hour. Therefore, such a roundabout should have plenty of capacity to accommodate the peak hour traffic at this location. Nevertheless, a full, comprehensive engineering study should be completed before the decision is made to install a modern roundabout at this location, in order to take into account impacts on the right of way as well as traffic operations.

#### b. Recommended Actions

Convert the intersection to a modern roundabout with integrated pedestrian crossings.

#### c. Implementation

Do a comprehensive engineering study of potential impacts on traffic operations, pedestrian movements and right-of-way prior to final design; seek final design and construction funds. The proposed initial action is a full engineering study of a modern roundabout at this location

#### 3. Liberty Street / Maquan Street / Indian Head Street Intersection

The need to lower the crash rate of .86, and the recommendation to do so with a traffic signal are discussed above.

#### a. Recommended Action:

Install a traffic signal in place of the present stop signs, and potentially reconfigure the somewhat awkward traffic islands.

#### **b.** Implementation

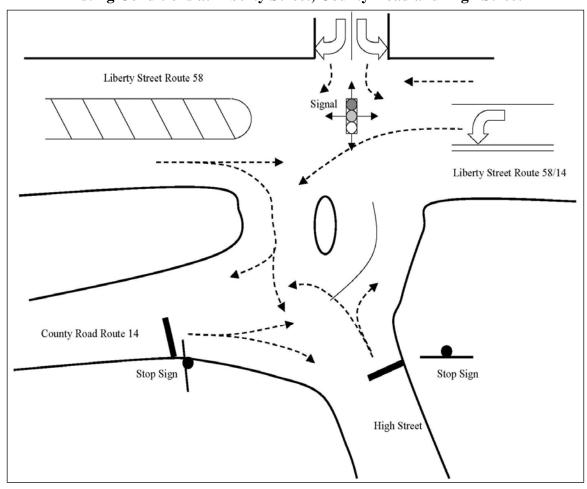
Do an engineering study to determine the most effective resolution problems here and design any lighting installation and revised geometry. In addition, the town should pursue federal funding options, e.g., the Surface Transportation System (STP) and the National Highway System (NHS).



Confusion – Rte. 14 (County Road) to left, Liberty St. (Rte.58) to rear and High St entering from right

Figure VII-19

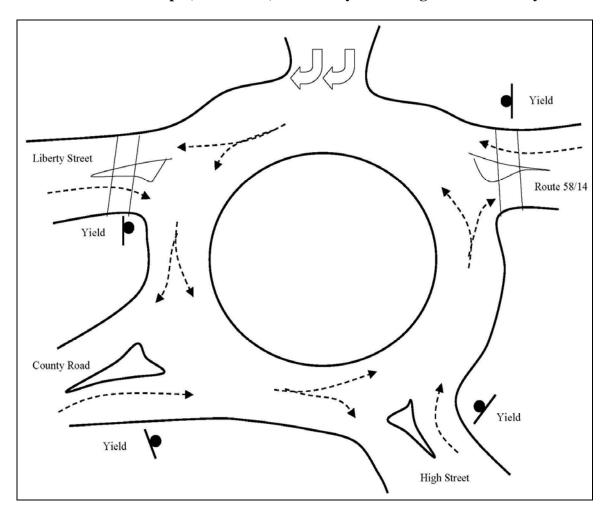
Existing Conditions at Liberty Street, County Road and High Street



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Figure VII-20

Roundabout Concept (not to scale) for County Road/ High Street/ Liberty Street



#### 4. West Washington Street at Spring Street (Route 58)

The level of service analyses for this intersection show existing and future peak hour operations at LOS "E" and LOS "F" respectively, with long delays for side street traffic from West Washington Street entering the Route 58 main street flow. Analysis shows that a traffic signal is warranted at this location to improve peak hour operations. The results of the warrant analysis, which was conducted according to the Manual of Uniform Traffic Devices (MUTCD), are included in the appendix.

#### a. Recommended Action:

Do a comprehensive engineering study to determine the impacts of traffic signals here and do a preliminary design.

#### **b.** Implementation

Pursue federal funding options, Surface Transportation System (STP) and National Highway System (NHS), for project implementation.

#### 5. East Washington Street at Spring Street/Liberty Street (Route 58)

The level of service analyses for this intersection show that existing and future peak hour operations are at LOS "F" with very long delays for side street traffic entering the Route 58 major street flow. Peak hour operations are improved to acceptable levels under signalized operations, based on LOS analysis. A warrant analysis, conducted according to the Manual of Uniform Traffic Devices (MUTCD), shows that traffic signal is warranted here to improve peak hour operations. The results of the analysis are included in the appendix.

#### a. Recommended Action

Do a comprehensive engineering study to determine the impacts of adding traffic signals at this location.

#### **b.** Implementation

The town should pursue federal funding options such as the Surface Transportation System (STP) and National Highway System (NHS).

#### 6. Monponsett Sidewalks and Streets

The limited condition of the largely unpaved roads in the Monponsett Neighborhood has been discussed earlier.

#### a. Recommended Action

Study local road and pedestrian circulation in cooperation with the town of Halifax. Design paved streets, sidewalks, and storm drainage including features protecting Monponsett Pond water quality, and make the improvements.

#### **b.** Implementation

Examine use of local funds from both Towns, and the possible use of local betterment districts.

#### 7. Parking and Access Management in Center

#### a. Recommended Actions

Study the functioning of the present parking at the Shaw's Shopping Center including utilization, access to and from Routes 58 and 14, and integration with adjacent properties as discussed in section 3.4.2 above and develop recommendations for alterations if needed.

Draw on the above and on examination of parking uses at the Center and elsewhere, then reconsider the town's parking regulations in terms of lowering the area required for retail uses and encourage off-site and time-shared parking along with principles for safer, more convenient pedestrian access.

#### **b.** Implementation

Form a merchant study advisory committee, contract with a consultant or planning agency, debate findings, and present recommendations to Town Meeting. Hanson should also consider including Access Management techniques and practices in the Town's Zoning and updating its parking lot requirements to include pedestrian circulation and access.

#### 8. South Hanson Train Station Restoration

Shown by the photograph on page VII-26, and discussed above, the revived commuter rail service uses the original station site, but not the intact original and adjacent station building. This Plan proposes moving the building close to the new high platform to allow an integrated, level pedestrian connect and restoring the station to public/private use.

#### a. Recommended Action

Acquire the station, design the new setting, move the building to the setting, restore it and provide space for potential facilities and services, and develop a mechanism for sharing maintenance and operation responsibilities,

#### **b.** Implementation

Explore the issues noted above and apply for 80% Transportation Enhancement funds, potentially matched by historic preservation funds from the Community Preservation Act, if adopted, or from the Massachusetts Historical Commission.

#### 9. Local Transit

#### a. Recommended Action

Explore ways to provide local transit by van or jitney connecting the train station and the two centers to the surrounding neighborhoods.

#### **b.** Implementation

Survey the community regarding the need/support for such service; contract with a transportation planning agency or provider such as the Brockton Area Transit Authority or the Greater Attleboro Regional Transit Agency to study the prospects for service connecting a wide loop through the town with both centers, the rail station, and public facilities/services such as the library, and to design any recommended service, and seek capital and operating funds.

#### 10. Crosswalk and sign program, textured sidewalks

Pedestrian amenities, such as textured crosswalks that look like brick and stone can enhance pedestrian crossing at key intersections as discussed earlier. These pedestrian walkways help to enhance safety and designate a pedestrian circulation system. Figure VII-21 shows a sample of a textured crosswalk.

#### a. Recommended Actions

- Review alternative designs with local interests and install textured crosswalks at High Street / County Road (Route 14) / Liberty Street (Route 58)
- Liberty Street (Route 14/58) / Maquan St. (Route 14) /Indian Head Street (Route 58)
- Main Street Route 27) at the MBTA Drive
- Main Street (Route 27) at Phillips Street.
- Maquan Street / School Street to delineate school crossings near the Indian Head and Maquan Schools.

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#### **b.** Implementation

Study the proposed intersections and confirm the needs for, and the appropriateness of, multiple measures such as lights combined with textured walks and signs; then select and install appropriate designs.

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Figure VII--21
Street Print Textured Asphalt Crosswalk



#### VIII IMPLEMENTATION

There are many programs and tools which the Town of Hanson can use to achieve its vision. Because of pressure on available land, it is timely and important that the Town take advantage of them.

This implementation section will highlight two or more specific recommendations that should be addressed first. Then it will focus on other items. Some recommendations and actions can be used in conjunction with others to ensure they are used to their full advantage. Though much attention is focused on the potential in South Hanson, residents and officials must not neglect other elements of the Town. The Town Center should receive attention and issues of open space, facilities and circulation, housing, and economic development must be addressed.

The steps for implementing the Master Plan reflect the different elements of the plan as seen in the table below.

The most applicable new tool is Chapter 40R, which makes a payment to the Town for each unit permitted as-of-right in an area of compatible mixed uses at an appropriate density and near a commuter station or town center. In addition, the newer Chapter 40S can provide an annual payment of the net school costs (after taxes from new development) from increased enrollment in a 40R district.

These tools and other state programs supporting transportation—related infrastructure and housing in Transit Oriented Development (TOD) areas can be very helpful in the proposed South Hanson TOD area. As important is the imagination, responsive support and participation of town agencies and citizen groups. The following table lists the responsible parties for the Plan's major recommendations along with the probable funding and appropriate timing of these actions.

This table will expand as various groups join in the ongoing effort. For example, a future Housing Partnership Committee or non-profit housing trust could complement and extend the resources and capacities of the one presently identified housing body, the Housing Authority.

Recommendations	Responsible Agency	Funding	Phase I	Phase II	Phase III
LAND USE					
Provide incentives for Development in South Hanson	Planning board, Zoning Bylaw Consistent with Chapter 40R		X		
Adopt a moratorium on hook-ups	Planning Board, Zoning Bylaw		X		
Provide subdivision connectors	Planning Board, Zoning Bylaw		X	X	
Improve entrances to Town	Planning Board, Zoning Bylaw Highway Department		X		
Begin a shade tree program	Highway Department Conservation Commission	Operating budget	X		
Adopt Community Preservation Act	Planning Board Board of Selectmen Conservation Commission Historical Commission Volunteer Committee	Operating budgets and/or contributions	X		
Purchase CRs/APRs	Board of Selectmen	Grants, Community Preservation Act			
Public education program	School Department	Operating Budget	X		
Adopt 40R Zoning for South Hanson	Planning Board	Operating Budget	X		

Recommendations	Responsible Agency	Funding	Phase I	Phase II	Phase III
HOUSING					
Offer tax relief for seniors	Board of Assessors Council of Elder Affairs	Town	X		
Establish a clearinghouse for affordable properties	Housing Authority	Operating Budget	X		
Publicize housing education programs	Housing Authority	Grant		X	
Encourage accessory apartments In owner-occupied houses meeting Title V requirements	Board of Appeals		X		
Inspect accessory apartments every 2 years	Building Inspector	Operating budget	X	X	X
Create a 40R district in South Hanson	Planning Board	Operating budget	X		

Recommendations	Responsible Agency	Funding	Phase I	Phase II	Phase III
ECONOMIC					
Implement hospital reuse plan	Board of Selectmen Citizen Study Committee	Selectmen Budget Community Development Block Grants	X	X	X
Work with neighboring towns to create a regional recreation facility (See Chapter V)	Board of Selectmen	Urban Self Help Grant		X	
Study industrially zoned land and industrial incentives	Planning Board Zoning Board of Appeals	Operating Budget		X	
Revise industrial zoning	Planning Board, Zoning Board of Appeals	Operating Budget			X
Adopt recommendations	Town Meeting				
Appoint a committee to promote the community, study marketing of Commerce Park and/or establishment of an Economic Development Industrial Corp.	Board of Selectmen	Operating budget	X	X	X
Cooperate with the Plymouth County Development Council	Planning Board Board of Selectmen	Operating budget	X	X	X
Create a 40R district in South Hanson	Planning Board Town Meeting	Smart Growth Grant	X		

Recommendations	Responsible Agency	Funding	Phase I	Phase II	Phase III
OPEN SPACE AND RECREATION					
Develop list of lands that are candidates for 61A and 61B designation	Conservation Commission	Grant CPA Funds	X		
Examine agricultural preservation restrictions and town purchase and leasing of cranberry bogs	Conservation Commission	Operating Budget	X		
Develop conservation programs in coordination with schools and private /non-profit organizations	Parks and Fields Commission	Operating Budget	X		
Establish a new town committee to coordinate town-wide recreational programs	Town Meeting	Operating Budget	X	X	X
Develop inspection and maintenance schedule for recreational fields, facilities and equipment	Highway Department	Operating budget	X	X	X
Adopt Community Preservation Act	Planning Board Board of Selectmen Conservation Commission Historical Commission Volunteer Committee	Operating budgets and/or contributions	X	X	

Recommendations	Responsible Agency	Funding	Phase I	Phase II	Phase III
COMMUNITY FACILITIES AND SERVICES, HISTORIC PRESERVATION					
Stagger meetings to make use of available public meeting space	Selectmen and other Boards	Operating Budget		X	
Prohibit parking in turnaround at the Town Hall	Board of Selectmen Police	Operating Budget		X	
Allocate sufficient custodial time for maintenance of buildings, including Town Hall	Board of Selectmen	Operating Budget			X
Complete new Police Department facilities	Police Department	Town Meeting	X		
Upgrade Fire Station with proper fire safety devices	Fire Department	Grant		X	
Purchase new lift for Highway Garage	Highway Department	Operating budget		X	
Expand Public Library	Board of Library Trustees	Grant		X	
Expand cemetery capacity	Cemetery Commission	Capital Budget		X	
Adopt Community Preservation Act	Planning Board Board of Selectmen Conservation Commission Historical Commission Volunteer Committee Town Meeting	Operating Budgets and/or Contributions	X		
Expand and/or relocate Senior Center, consider various sites including the Grange Hall and former South Hanson Fire Station	Council of Elder Affairs	Community Development Block Grants	X		

Recommendations	Responsible Agency	Funding	Phase I	Phase II	Phase III
CIRCULATION					
Explore solutions to the two highest crash rate intersections, Liberty St. (Rt. 58), County Rd. (Rt. 14), and High St. and Liberty St./Maquan St. (Rt. 14) and Indian Head St. (Rt. 58).	Highway Department Mass. Highway Dept. Planning Board	Departmental funds, Enhancement funds, other Mass. Highway funds	X	X	
Explore, implement roundabout at Routes 14 and 58, High Street	Highway Department Board of Selectmen	Departmental and Mass. Highway funds	X	X	
Pursue identified pedestrian and bike trails and sidewalks especially school related	Highway Department Planning Board School Department	Department and Safe Routes funds	X		
Develop a skeletal town-wide off-road bide and foot trail system binding on developers and enforced through subdivision rules and regulations and developer agreements	Planning board Highway Department Recreation Commission School Department	Developers, Self Help CPA and Safe Routes funds		X	
Install recommended sidewalks town-wide	Highway Department School Department	Highway Department Mass. Highway. and Safe Routes funds	X	X	X
Improve local circulation in South Hanson to reconcile MBTA, industrial and mixed use traffic improvements	Highway Department Planning Board MBTA	DHCD TOD grants, Department funds MHD Enhancement Program	X	X	
Improve South Hanson MBTA station by moving and incorporating original station	Board of Selectmen MBTA, Historical Commission Highway Department	DHCD TOD grants MHD Enhancement Program, CPA Historic Preservation funds	X	X	
Work with private land owners to coordinate circulation in center	Planning Board, Merchants Highway Department, MHD	Department, Merchant & MHD funds	X	X	X

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