1.1 Existing Land Use

The land use section provides information about land use and development in Barnstable including built and natural environments. Based on this inventory the section then describes the Town's planning strategies for managing land uses to protect and preserve resources and support a sustainable economic base and vibrant culture for residents and visitors.

Topographic features influenced European colonial settlement patterns. Avoiding the difficult interior terrain, most settlement was located near the shores where land is more level. As a roadway network became established, settlement progressed along major travel routes.

Barnstable and Cape Cod developed an economy based on local natural resources. Agricultures, fishing and boat building caused land use to change. Forest cover was cleared for fields, farmsteads, and lumber used for building material and fuel. Villages developed near harbors. As industrial uses made an appearance, additional development took place. These uses eventually brought the railroads and new residents with more land dedicated to development.

Wide spread use of the automobile caused the most significant change in Barnstable's land use since European settlement. Initially used to bring the affluent summer visitors to the cool shores of Barnstable, as the use of the automobile grew so did its effect on land use. After the mid-twentieth century, the post World War II population boom coincided with increasing use of the automobile that brought many new residents. This increased population and their vehicles required paving existing roads, building new roads and significant year round residential use development. These new residents also required more goods and services so uses that are more nonresidential were developed to meet those needs.

The history of Barnstable's development is evident along its roadways and lanes. The early settlement patterns remain along quiet Main Streets through our village centers, a few agricultural uses and working waterfronts. These structures and uses remain in their original orientation that is often not directly to the street but to other features such as wind direction, homesteads, neighbors or water features. This development pattern regarded the pedestrian and later the slow moving horse and buggy as primary users. The expected function of the built environment was shelter and livelihood. More recent land uses developed largely in response to the automobile with each use oriented to a roadway without regard to natural features. The expected function of today's built environment still includes shelter and livelihood but quick and easy access for automobiles is now an equal expectation. The road, parking lot and driveway compete with our natural environment as foremost features in our landscape. This is true for both residential and non-residential uses. This is the auto-oriented environment we see today along our roadways.

This plan looks at these development patterns and sets a course to diminish the effects of auto-oriented development wherever possible and feasible. A parallel course is set to strengthen our village centers and maintain the character preserved there. Growth is welcomed in appropriate places. To ensure that Barnstable retains the capacity to provide drinking water, fresh and salt-water recreation, and open spaces as well as goods and services, incentive strategies for redevelopment and in some cases undevelopment are presented.

1.1.1 The Built Environment

Building Permit Activity

The following table illustrates the rate of development in Barnstable over the last 10 years. The trend is toward redevelopment and away from new development. These trends are expected to continue given the diminishing supply of land without significant development constraints.

Residential Development

The following table reflects the total residential buildout as documented by two separate buildout analyses conducted for the town. The entire text of these analyses, *Hyannis Buildout Analysis* dated September 9, 2005 and *Barnstable Buildout Analysis* dated July 11, 2006, are included in the Appendices.

Most of the residential development has occurred in the last 30 years. Infrastructure needs associated with residential growth are numerous: wastewater, water supply, road repair, transportation improvements, recreational amenities, schools and government services. Like many Cape Cod towns, Barnstable has not fully absorbed the rapid growth of the past few decades. Preparing for anticipated growth and intensification of existing development is very difficult, perhaps impossible, given municipal budget constraints.

The Town's Growth Management Ordinance, adopted in 2001, sets an annual building permit limit of 96 new market rate units and 36 new affordable units. These limits have not been met or exceeded since their adoption.

1997 LCP Building Permit Data				
1996	233			
1997	233			
1998	231			
1999	244			

Comprehensive Plan 2007 Building Permit Data

Calendar Year	Residential New Construction	Residential Additions & Renovations	Non- Residential New Construction	Non-Residential Additions & Renovations	
2000	201	527	19	132	
2001	180	458	27	97	
2002	111	573	17	119	
2003	96	607	29	126	
2004	67	693	17	148	
2005	98	604	16	167	
2006	73	607	10	157	

The primary challenge for the next five years will be to develop effective programs to address infrastructure shortfalls either through changes to capital management policy or managing growth or, perhaps most sensibly, a combination of approaches. Seasonal Residential Units US Census data indicates that approximately 4,752 or 21% of residential dwelling units are used seasonally. This leaves 79% in year round use. Seasonal residential uses affect municipal infrastructure differently. While there is no impact on schools - wastewater, traffic and drinking water infrastructure must have the capacity to meet these seasonal demands.

Commercial and Industrial Development

The tables shown on the following page depict buildout data. These figures show a surprising potential for growth. Barnstable land use policy directs growth to the Downtown Hyannis area. This analysis indicates that those policies can be implemented successfully given the potential for growth there. The potential for growth for all industrial and commercial areas outside Downtown Hyannis is about 46%. The Town must look for ways to direct some of the growth potential away from the villages and highway corridors where infrastructure is not available or growth is not welcomed and into the Downtown Hyannis area, where infrastructure can be provided efficiently and economically.

These tables also show considerable potential for growth in the Regional Commercial Center Strategic Planning Area (See map). Spanning industrial and commercial zoning districts, increases in these uses could further impact traffic circulation, community character and drinking water supply. This buildout potential information requires thorough analysis of zoning allowances, traffic management options, impacts to natural and historic resources and community character enhancements for this regional center.

Institutional Development

Institutional development categorizes land uses that are exempt from use regulations but must adhere to reasonable dimensional regulations, building, wetland and health regulations and codes. They include government, religious, private non-profit and educational uses.

State law, Chapter 40A, Section 3, allows such uses to locate in any developable location in any zoning district. Because these are exempt from use regulations, it is quite difficult to predict growth potential. For the same reason it is also very difficult to prepare infrastructure plans because development potential is unknown. It will be particularly important to

Buildout for Commercial Zoning Districts

Commercial Buildout Potential	Highway Business	B Business	VB Districts	Marine Business	Mall Overlay District	Downtown Hyannis Districts (GIZ)	Totals
Maximum Buildable Area SF	5,212,824	5,915,387	2,542,052	396,583	1,815,799	12,168,055	28,050,700
Existing Development SF	3,965,168	4,103,453	1,569,266	282,463	796,199	5,466,925	16,183,474
Remaining Development Potential SF	1,247,656	1,811,934	972,786	114,120	1,019,600	6,701,129	11,867,225
Total Potential Increase %						-	73%
% Potential Increase in the GIZ Districts						122%	
% Potential Increase all other Commercial Districts							48%

Buildout for Industrial Zoning Districts

Industrial Buildout Potential	Industrial*	Industrial Limited	MSOD	Totals
Maximum Building Area SF	4,512,816	1,143,450	1,777,248	7,433,514
Existing Development SF	1,079,031	189,325	355,999	1,624,355
Remaining Development Potential SF	3,433,785	954,125	1,421,249	5,809,159
% Potential Increase				358%

*This assumes reclamation of the gravel mines

strengthen communication with large institutional presences in Barnstable to better prepare for any growth or redevelopment they may be planning or anticipating.

This plan calls for implementation of design guidelines for non-residential development. These guidelines would properly apply to institutional structures and sites. While the town cannot apply land use policy, it can mitigate impacts to community character and historic resources and ensure that site development adheres to these guidelines.

Roadway Network

Both commercial and residential areas are affected by the automobile. Road widening, parking and paving standards, traffic speed and design requirements are driven by the perceived needs of automobile users. Our post war, post automobile settlement patterns preclude large scale reduction in traffic, which is generated primarily by residential uses. The town will improve conditions through land use designations closely tied to the Capital Improvement Plan, Chapter 90 expenditures and active participation with the Massachusetts Highway Department. The primary areas for attention are the pedestrian friendly village centers and the auto oriented corridor nodes.

The town should develop a more standardized context sensitive design process for roadway improvements on local, regional and state owned roadways. The town has maintained and protected the character of many of its historic, scenic roadways. Improving operation, reducing excess paving, appropriate and adequate stormwater management, sidewalks, lighting, pedestrian amenities, street trees and standardized signage should be included in the context sensitive design process. The **Roadway Network** map depicts Barnstable's roadway network.

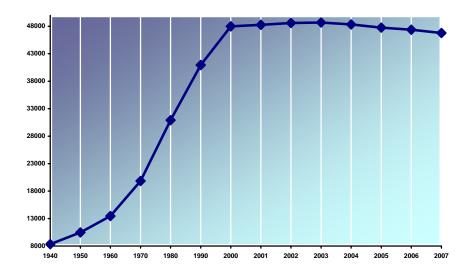
1.1.2 Population

In contrast to the 1997 LCP population analysis, most recent US Census Bureau and Town resident population estimates show a stable population that is trending down from the most recent peak. There may be several reasons for this trend. As shown in the Building Permit Activity chart on page 1, new residential construction has slowed dramatically since the peak periods of the 1980's.

The Town and County are experiencing an out migration of working families in search of more affordable housing markets. In the last six years

Barnstable County has experienced a natural decrease in population, that is, there were more deaths than births—5,000 more. Even though there was an in-migration of about 8,000 people from the US and international sources the total population for the county in the last six year has increased about 2500 or about 3%. It is likely that these demographic changes also contribute to the steady decline in Barnstable school population over the last six years—about a 10% decline over the 2000 school population.

As of the 200 Census, Barnstable residents age 65 and over comprised 20% of town residents. Those between the ages of 55 and 64 comprised an additional 10.6%. The single fastest growing sector was the 45-54 age group that, at 15%, increased 46% over the 1990 census. Although some time has elapsed since the collection of this data, it seems clear that, even with retirement out-migration trends, Barnstable's senior population will increase demand on healthcare, recreational, and service sectors.



Potential Population at Residential Buildout

Predicting how these trends may continue as we approach residential buildout is beyond the scope of this plan. To estimate buildout population, the 2006 year round population and year round dwelling units were used. Dividing these yields an average population per year round dwelling unit of 2.14.

Residential buildout indicates the potential to add approximately 4,700 new and redeveloped year round residential units. By multiplying the average population per dwelling unit of 2.14 by 4,700 (10,058) and adding that to the 2006 year round population of 47,380, a buildout population of 57,438 is estimated for Barnstable. With building permits for new residential construction averaging about 90 a year, the buildout population may be reached by 2059.

These figures are very different from the projection included in the 1997 LCP (Appendix). Using data created during the years of explosive growth, the '97 figures are as accurate as the data upon which they relied. The true course of buildout may lie somewhere between these planning estimates.

Comprehensive plans include predictions for a number and date of buildout population to allow infrastructure and service sectors time to plan, capitalize and otherwise prepare for these new residents. This task in itself is difficult to incorporate into strained municipal budgets. Barnstable is still working to absorb fully the dramatic growth of the 1980's. Given these conditions, implementing land use and growth management policies that allow the most efficient distribution of services and infrastructure is imperative. The town must continue on its course to direct growth to locations where infrastructure is available or where capacity can be added cost effectively.

Seasonal Population

In 2002, Tischler & Associate conducted a Fiscal Impact Analysis for the Town of Barnstable (Appendix). Included in that report is an analysis of seasonal population:

Because Barnstable is a seasonal destination, visitors to Barnstable have a significant fiscal impact on the Town's revenues and expenditures. The Town estimates the seasonal population to be 126,000 (including the permanent population of 47,821). Visitors to Barnstable include those who stay overnight in hotels or seasonal housing units and day-trippers. The fiscal impacts of these different visitors vary.

To get a better understanding of the visitors to Barnstable, Tischler & Associates estimated the number of visitors who stay overnight in seasonal and vacant housing units and hotel rooms and day-trippers. Tischler & Associates estimates the population staying overnight in hotels or seasonal housing units to be 30,512. This number together with the permanent population of 47,821 results in a seasonal population of 78,333. The number of day-trippers is calculated to be approximately 47,667 determined by subtracting the seasonal population from the peak population of 126,000.

The town should continue to study seasonal population and monitor trends or changes in that population that may further impact service delivery, traffic congestion, drinking water supply and natural resources.

1.1.3 Natural Environment

Land Features

The highest elevations in Barnstable are found along the Sandwich moraine that runs roughly parallel to the Mid-Cape Highway in an east west direction. The north and south slopes of the moraine are home to oak pine forest type. These slopes are preserved as forest in the western part of town, but have been largely developed east of Route 149.

At the highest points, the south slopes of the moraine are briefly steep then level off with depressions housing large fresh water bodies and estuarine systems that eventually drain into Nantucket Sound. The northern slopes of the moraine are steeper, but level off towards the Great Marsh and the shores of Cape Cod Bay.

Fresh Water Features

The majority of Barnstable's fresh water ponds are located in the outwash plain in the southern part of town. Mostly kettle hole ponds, there are 61 ponds at least 2 acres or more in size; 11 of those are great ponds of 10 acres or more. Lake Wequaquet is the third largest fresh water body on Cape Cod at 654 acres including Bearse Pond. The fresh water ponds comprise about 5 percent of the town's surface area and are all connected to the aquifer. The total acreage of all open water in Barnstable is over 1,800 acres, or about 17 percent of the town's surface area.

Rivers in Barnstable such as the Bumps, Centerville and Marston's Mills Rivers are spring fed streams that run north to south on the outwash plain. Others that run to Nantucket Sound are Santuit, Little, and Skunknet. In addition, there is Hall's, Stewart's and Snows which are known as creeks. On the north side, there is Maraspin, Mill and the many creeks in the Great Marsh such as Scorton, Eel, Great Island, Smith, Boat Cove, Spring, Bridge, and Brickyard. This is a partial list – the estuarine systems are comprised of many smaller streams that are recognized by area residents. In some cases, these streams connect fresh water ponds and so have become fish

runs. Near the shores, these streams mix with tidal waters and become part of the estuarine system. Some streams have had their flows altered or regulated by the cranberry industry over several hundred years.

Freshwater wetlands are increasingly scarce in Barnstable. These wetland habitats include vernal pools, bogs, wet meadows, swamps, shrub swamps and marshes. Over the years, much of these habitats have been fragmented or filled in a way that impairs their function. Barnstable still has over 250 acres of fresh marsh, a small amount of sphagnum bog and the largest area of cranberry bog of any Cape Cod town at 242 acres.

Coastal Features

Totaling about 100 miles, Barnstable has more coastline than any other town in the Commonwealth. Harbors, bays, estuaries, and tidal flats are formed at the intersection of land and water. The coastline is the most dynamic environment in Barnstable continually changing from natural effects of the Atlantic Ocean, wind and storms.

Barrier beaches and coastal dunes are also part of this environment and subject to change from natural forces.

Barnstable has extensive salt-water wetland areas. Barnstable is home to 27 percent of Cape Cod's salt marsh, most of that in the Great Marsh south of Sandy Neck. Salt marsh accounts for 10 percent of the surface area of town. These areas are important habitat and breeding grounds for coastal species. Salt marshes also perform an important flood control function by absorbing storm surge.

1.1.4 Working and Cultural Landscape Features

A cultural landscape is a geographic area that includes cultural and natural resources associated with an historic event, activity, person, or group of people. Cultural landscapes can range from thousands of acres of rural land to homesteads with small front yards. They can include grand estates, farmlands, public gardens and parks, college campuses, cemeteries, scenic highways, and industrial sites. Cultural landscapes are the text and narrative of cultures and express regional identity. They also exist in relationship to their ecological contexts.

Cultural and working landscapes in Barnstable are not well known. These areas should be inventoried and thoroughly documented to provide opportunities for education and, where necessary, preservation. On Cape

Cod, the National Seashore is farthest ahead in documenting these essential community character attributes.

http://www.nps.gov/archive/caco/heritage/index.html. Another nearby example is the Blackstone River Valley National Heritage Corridor. http://www.nps.gov/blac/. The following list, from a variety of sources, is partial and will expand as a result of the recommended documentary process.



Archaeological Resources

Barnstable is home to more than 40 known Native American archaeological sites, 70 recorded 18th- and 19th-century historic archaeological sites, 74 individually designated historic structures, estates, farmsteads and markers. Protecting and preserving these invaluable links to our past is critical.

Archaeological resources are protected in Barnstable through the Conservation Commission. Under town by-laws, the Commission has the authority to require archaeological surveys where proposed work within resource areas may have an impact on archaeological sites. The Conservation Commission works with the Barnstable Historical Commission to determine which projects are likely to impact sites. The Historical Commission scans the Conservation Commission agenda in advance. If impacts are determined, the Conservation Commission is notified and takes over the review.

Architectural Resources

Architectural resources are somewhat protected through the town's various historic districts and individual structure designations. Barnstable has 14 nationally and state recognized historic districts and a local historic district, Hyannis Main Street Waterfront Historic, as well as the regional Old King's Highway Regional Historic District. There are 74 individually designated historic structures, estates, farmsteads and markers.

Redevelopment will continue to put pressure on significant historic structures. Increasing the use of design guidelines, pre-application review and public education in addition to continuing vigilance on the part of historic groups are important to protection and preservation of architectural resources. Together with the natural environment of oceans, beaches, ponds and open landscapes, architectural resources form a foundation for our local economy.

Agricultural Lands

Once dependent on agricultural lands for subsistence, modern food production economy has rendered those lands more valuable as commodity for development. Agricultural lands are provided with special property tax status and this status is the inventory currently available. Barnstable has 749 acres, or about 2% of its land area, of land that receive Chapter 61A tax status. An inventory must be conducted to determine how much of this land is in active agricultural use.

The recently organized Agricultural Commission will provide the Town with more complete information as they carry out their work.

Working Waterfronts

Harbors

Harbors and marinas provide support services to traditional fishing and shellfishing activities and to the growing recreational boating public. The architecture of structures surrounding these areas reflects their long history as integral parts of settlements. Water-dependent support industries such as boat yards, sail lofts and other water dependent uses are prevalent in these cultural landscapes and should be retained and supported. Three coastal areas in Barnstable host water dependent activities that have formed a cultural landscape over many decades and centuries. Barnstable Harbor is a small harbor with a long history of use. Shipping, fishing, shore whaling and transportation have all contributed to the character of this area. Today the harbor functions as a center for local fishing fleet, recreational and tourist boating. Across the harbor, Beach Point on Sandy Neck retains its character as an early summer colony of beach cottages complete with lighthouse

Hyannis harbor continues its history as a regional port for a commercial fishing fleet however; its more recent place in American history is more evident. Many visitors who search out this harbor are looking for the Kennedy Compound and associated sites such as the Memorial. Today most port activities focus on transporting passengers and freight to Nantucket year round. While this coastal area retains the essential character of a seaside town, this cultural landscape is clearly in transition. The town should continue its active role in shaping the harbor for the future while including its past.

The harbor area on West Bay in Osterville is home to the Crosby Cat Boat that has been built in this location since 1850. Home to boat building, yacht services, docking and mooring facilities since the early 19th century, this area provides marine services for recreational boaters. These activities have long been associated with the area. The surrounding coastal neighborhoods of Wianno and Grand Island and the open spaces of Dead Neck and Sampson's Island complete this landscape.

Aquaculture

Shellfishing has been an important industry in Barnstable since well before European colonization. Today Barnstable provides many opportunities for recreational shellfishing and a very active aquaculture industry. This use of working waterfronts enhances our maritime heritage and contributes to a vital economic sector. As these same coastal areas become more desirable for recreational users, conflicts have arisen. This conflict must be examined and resolved through a thoughtful public process.

Historic Industrial Features

These sites may not be as readily apparent as other cultural landscapes. Sites of early industry can include millponds, Marstons Mills Mill Pond for example; manufacturing uses such as the West Barnstable Brick Yard, shipbuilding sites, railroads and whaling try works. Other smaller or lesserknown uses may be lost or irretrievably obscured.



County Government Features

Barnstable County government was established in 1685. Its initial function was limited to a court system for resolving civil disputes and criminal cases but gradually more functions were added such a deed registry and other county government components present today.

Massachusetts has 14 counties that were regional administrative districts before the Revolutionary War. In 1997 most were abolished with functions turned over to state agencies or converted to state departments administered locally. Barnstable County has submitted a special charter to the legislature

to remain a strong county government and is on of the few remaining regional government entities in the Commonwealth.

Roadway Corridors

Barnstable's roadway network has evolved from the trails used by indigenous inhabitants. Many of those trails also used by colonial settlers became important for transport and communication. Route 6A, designated part of the Kings Highway in the late 17th century, has been a major east west route for Cape Cod since that time. Stagecoach stops, government activities, trade, agriculture and industry are part of the rich history of this corridor.

Another important part of this landscape type is the cart paths or ancient ways that may be fading from existence as they become obscured by development. These ways should be documented and steps taken to preserve their status.

Indigenous Settlement Areas

Because of their extreme vulnerability to human interference specific archaeological sites, their content or their function are not made public. What can be shown are the areas where the likelihood of archaeological resources is high. These areas, shown on the map Sensitive Archaeological Areas are depicted as buffers around fresh water bodies, coastal areas and streams. It is likely that these areas provided conditions that favored settlement. Barnstable should consider adopting site-specific development review standards to help identify and protect these resources.

1.2 Land Use Management

Land use management is the primary task of the Comprehensive Plan. Barnstable must implement land use management policies to achieve balance between the location, preservation and protection of uses of land, including housing, commerce, recreation, open space, natural resources, and infrastructure necessary to support existing land uses and anticipated changes in land use.

This subsection looks at anticipated changes, existing land use tools and strategies needed to manage successfully the identified redevelopment, infill and growth opportunities.

1.2.1 Areas and Resources Most Susceptible to Change

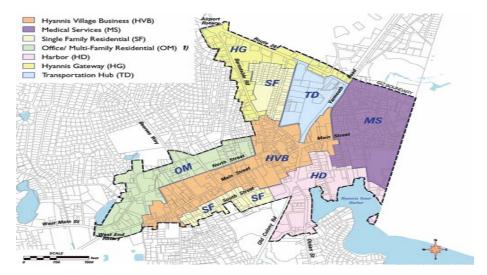
Barnstable has been a regional center for government and commerce since the 17th century. These systems evolved, changed and expanded over the last four centuries but a constant over these years has been the essential character of the town. As the built environment has grown in response to regional needs, the community has worked with measurable success to keep rural seaside character in village centers and along scenic roadways. The legacy of civic involvement still thrives in community, social service groups along with resource and historic protection groups, and town and county government. Barnstable values all facets of its community life but recognizes that change is inevitable. As it has taken steps in the past, Barnstable will work to keep valued community components intact through continuing change. Key community elements of Barnstable are:

- The scale and individual charm of the villages.
- A world class natural setting.
- County government and regional commerce.
- Historic architecture
- Historic scenic landscapes.
- A strong sense of community, civic pride, civic engagement and stewardship.

Maintaining these treasured and valuable attributes as growth, redevelopment and expansion continue are the key challenges taken up by this plan. Land uses must be monitored and managed to protect and enhance these attributes. Certain areas are more susceptible to change

Page 1-9

because of available land, changing market forces, changing climate conditions or redevelopment potential.



These areas include:

Downtown Hyannis This area is designated for growth. Through the Growth Incentive Zone, most components for managing planned growth and change in this area are in place. The Town will implement prioritized infrastructure improvements necessary to support existing development and attract new growth. The Hyannis Main Street Waterfront Historic District, Barnstable Historic Commission and the Planning Board's Design and Infrastructure Plan (DIP) seek to preserve architectural character in Hyannis and guide new development and redevelopment to be compatible in scale and design.

Regional Commercial Center The Town recognizes that this area has potential to grow and change under existing regulations. This area, located along two major traffic corridors, Route 132 and Route 28, serves as a regional center that provides goods and service needs for residents of Barnstable and Cape Cod. Existing regulations are not sufficiently managing traffic, economic development and community character in this area.

Route 28 Corridor

This east west regional corridor traverses low and medium density residential development interspersed with scattered non-residential uses, intensely developed highway business areas and the regional commercial center arranged along the eastern portion of the corridor. The buildout analysis indicates significant growth potential in the commercial zones along this corridor. The corridor is also home to scattered site non-residential land uses outside of the designated corridor nodes with the potential to change or expand use by virtue of their non-conforming status.

West Main Street Corridor

This long strip of Highway Business zoned roadway has potential to change use and intensity under existing regulations. Traffic overburdens this roadway and its many access points, community character is compromised by strip development and residential uses are not fully integrated into the streetscape. A cohesive land use strategy is not in place for this neighborhood that is also a gateway to Downtown Hyannis.

Lands Subject to Coastal Storm Flowage

These lands, depicted on the **Surface** and Coastal Resources Strategic Planning Areas map, are under pressure from residential redevelopment due to their desirable seaside location. Not only is development pressure expected to continue but climate change including sea level rise also will change these sensitive areas.

Agricultural Lands

Agricultural use has steadily diminished in Barnstable. Development pressure, primarily from the residential market, created more value for these lands than agricultural use imparts. Given these conditions, these trends are expected to continue.

Sensitive Habitat Areas

Sensitive habitat areas have also decreased in Barnstable also primarily from residential development pressure. These areas shown on the Sensitive Habitat map are increasingly subject to change from development impacts, stormwater runoff, wastewater discharge, recreational users and climate change.

Historic and Cultural Landscapes

Page 1-10

Section 1 Land Use

These heritage-defining resources are disappearing from lack of proper inventory or identification, development pressure and in some cases neglect. Without a plan of action this trend will continue.

1.2.2 Existing Land Use Management Growth Management Department

In September 2005, the Town began a new endeavor to direct its growth and development. The Town created the Growth Management Department by merging previously separate town divisions to create a multi-disciplinary team. The mission of the Growth Management Department is to preserve the character of the seven villages and improve the quality of life for town residents by developing and implementing land use, traffic management, community development and property management strategies while promoting sustainable economic development.

To maximize the ability to streamline permitting and implement cohesive land use and growth management policies it may be advisable to have all land use boards and agencies such as the Planning Board, Zoning Board of Appeals, Historical Commission, Historic Districts, Conservation Commission and Board of Health in the same division. The Town should thoroughly explore this option and consider reorganizing departments accordingly.

Growth Incentive Zone

In 2006, the Downtown Hyannis Growth Incentive Zone (GIZ) was approved by the Cape Cod Commission and the Barnstable County Assembly of Delegates. The GIZ allows for town review of up to 600 new residential units and up to 585,180 square feet of new commercial space within the Hyannis Main Street area. The same amount of development, with certain very limited exceptions, is not required to submit to Cape Cod Commission review.

This streamlined regulatory approach, in conjunction with recently approved zoning changes and an increased capacity to manage growth by the Town, will provide a clear incentive for those interested in investing in Downtown Hyannis.

During the early settlement of Barnstable, Hyannis was noted as having the deepest and best harbor on the south side of town. The railroad arrived in Hyannis in 1854 making the Cape accessible to the mainland. With the formation of the Hyannis Land Company in the post-war era, the first Hyannis land boom was underway and the area was transformed into a

The 1970s saw the introduction of auto oriented strip mall and disinvestment in downtown Hyannis began. The town soon became the regional center of the Cape for retail, financial, governmental and medical services. The small New England seacoast image of Hyannis as a community with a narrow, tree-lined "Main Street" accented with white steeples, the public green and views to the harbor and water was bypassed and suffered from the diversion of investment along the Route 132 corridor.

This Growth Incentive Zone allows the Town to direct opportunity to the center of the Village of Hyannis by supporting village-scale density and mixed use zoning furthering a town-wide plan to create a healthy community and a sustainable economy. Downtown Hyannis is an area of Barnstable with existing growth infrastructure and capacity, but has many underperforming properties. This plan maximizes the infrastructure advantage while minimizing the negative impacts of growth. It highlights the potential for people to live and work on a smaller environmental footprint reinforced by steps taken to offset growth in other areas of Town where development threatens those human and environmental measures that determine our quality of life. In order to support increased year- round residential users and visitors, the Main Street corridor has special regulations to require that the streetscape is pedestrian friendly with appropriate uses and building facades and entrances at an appropriate pedestrian scale.

Zoning Ordinance

The Town of Barnstable adopted the Town Council form of government in April of 1989. This form of government allows the Planning Board and other entities to propose changes to the zoning ordinance to Council, which acts as the legislative body. While the supermajority vote is still necessary, the opportunities are more frequent than the traditional town meeting form of government and allows the town to be more responsive to change.

The Zoning Ordinance is the primary land use regulation in Barnstable. It contains provisions for land use in all zoning districts, provisions for non-conforming uses and also allows use variances. These zoning ordinances undermine land use planning and need adjustment to conform to the town's growth management policies.

Use Variance

Use variances are currently not allowed on Routes 132, 149, 28 and West Main Street. In order to implement growth management policy and ensure a

more predictable process, after examination and review, it is recommended that the use variance be discarded in all residential districts. The residents of Marstons Mills and Hyannis requested the elimination of the use variance provision in their respective village plans.

Non-Conforming Uses

Non-conforming uses are present in various zoning districts both residential and non-residential. For non-conforming uses in non-residential zoning districts, new criteria must be established. Performance standards that implement land use policies for each area should be adopted. Incentives must be included in these new regulations to ensure that redevelopment is appropriate to infrastructure and community character.

In residential districts, non-conforming use standards must also be tailored to implement land use policy for the area. These non-conforming uses could be allowed to change to other specific non-conforming uses that are in keeping with the character and infrastructure in that location. These properties will be evaluated as sending areas for a Transfer of Development Rights (TDR) program.

Comprehensive Zoning Ordinance Revision

The Zoning Ordinance must be reviewed and analyzed for repetitiveness, opportunities to condense and streamline, incorporate a more user-friendly format and correct and update references.

Other Land Use Regulations

Growth Management Ordinance

In 2001, the Town adopted a Growth Management Ordinance that established a limit on the number of residential building permits that may be issued in a single year. The ordinance establishes annual limits on building permits for market rate and affordable housing dwelling units. The intent of the ordinance is to ensure that residential growth does not outpace the town's ability to provide infrastructure and services necessary to support new residential development. The ordinance creates a building permit limit of 96 new market rate units and 36 new affordable units that may be constructed in each year. The annual permit limits established in the Growth Management Ordinance have not been met or exceeded since their adoption.

District of Critical Planning Concern

In February 2001, Barnstable nominated the entire town as a District of Critical Planning Concern (DCPC) to address the rate of residential growth. Following the required public process, the Growth Management Ordinance was adopted to manage residential development.

Another DCPC for the Pond Village area of Barnstable Village was designated in January 2006 to protect freshwater pond quality, a portion of Barnstable Harbor and the historic and scenic character of a 115-acre area north of Route 6A near Barnstable village. This DCPC also resulted in twoacre minimum lot size for this area. During this process, Village residents expressed a desire to adopt this minimum lot size requirement throughout the entire village.

Subdivision Rules and Regulations

The most recent version of the Subdivision Rules and Regulations (SRR) was adopted in 2003. The SRR provide regulation for dividing land and laying out roadways. The SRR purpose states: ... protecting the safety, convenience and welfare of the inhabitants of the Town by regulating the laying out and construction of ways in subdivisions providing access to the lots therein.... with due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways and in the adjacent public ways... coordinating the ways in a subdivision with each other and with the public ways in the Town and with the ways in neighboring subdivisions.

These regulations should be reviewed to ensure that their construction standards are appropriate for the land use they serve. A context sensitive design process should be incorporated into the SRR standards.

Wetland Regulations

Wetland regulations were adopted by the town in 1987. Chapter 237: Wetlands Protection Purpose states: *The purpose of this chapter is to protect wetlands and related water resources, and their values and functions, including, but not limited to, the following: public or private water supply; groundwater; storm damage prevention; flood control; erosion and sedimentation control; prevention of water pollution; wildlife habitat; shellfish; fisheries; recreation; public trust rights in trust lands; aesthetics; agricultural and aquacultural values; and historical values (collectively, "the wetlands values protected by this chapter").*

Areas that may need additional local regulation include lands subject to coastal storm flowage and the vegetated shores of coastal plain ponds.

Board of Health Regulations

The Legislature has delegated regulatory authority to boards of health to preserve and protect public health. The Barnstable Administrative Code describes the charge of the Board of Health:

"The Board of Health seeks to preserve and maintain the Town's public health standards and protect its environmental resources by educational means and by strict enforcement of various regulations, ordinances, State Health Codes, General Laws, in particular MGL Chapter 111, and Federal law. The Board carries out duties and responsibilities assigned by either state or local legislation, as these primarily concern public health standards and protection of environmental resources. The Board establishes policies and programs for implementation by the Health department. The Board of Health is an advisory and regulatory committee of the Town."

Barnstable Administrative Code § 16.02.

These regulations should be updated to include more protective measures in barrier beach areas and marine embayments. To prepare the town for federal and state nitrogen limit standards in coastal waters, a town wide sewer neutral policy and limits on nitrogen discharge from onsite septic systems should be adopted.

1.2.3 Land Use Management Strategies

The overall growth management strategy for Barnstable encourages growth and redevelopment in locations where dense development is appropriate and viable because of available roadway infrastructure, wastewater infrastructure and because the location is harmonious with green infrastructure that includes open space and sensitive natural resources. This strategy will reduce, and where possible reverse, land consumptive development patterns and will promote a more conservative land use pattern that respects the past, supports today's vibrant multi-faceted community, and allows thorough and careful preparation for future needs. Growth management strategy for strategic planning areas are as follows:

Compact Development Factor

Compact development is a smart growth approach that concentrates development where infrastructure can be efficiently provided and access to transportation is readily available. Infill, mixed-use, greyfield development and cluster development are forms of compact development.

The Town calculated, for the GIZ application (Appendix), the factor by which compact development can reduce the environmental footprint for residential and commercial development. Impact on nitrogen discharge, traffic, water use and stormwater were analyzed. For compact residential development the environmental impact was reduced by about 40% overall. Commercial compact development reduced the environmental impact by about 24%.

Development outside of areas with opportunities to walk to shopping, work, recreation, and other necessary pursuits is, by its nature, more demanding on our resources than is development in the Downtown Hyannis area. Downtown Hyannis GIZ Application

Infill and Redevelopment

To promote compact development infill and redevelopment of existing developed commercial areas is the preferred form of development. Working with stakeholders in each area the town will review existing conditions and regulations; analyze infrastructure and regulatory needs; develop necessary infrastructure plans; and provide regulatory incentives so that community character and traffic management concerns are addressed. The goal is to create an environment where businesses can thrive; infrastructure is improved or upgraded; and residents can access goods and services in a safe, efficient manner.

Infill and redevelopment provides opportunities to improve overall design for better function and community character enhancement. Site design, building design and landscaping will be important components of these regulatory changes. Interconnection of adjacent properties, transportation corridor access management, and streetscape and site enhancements will be provided and the permit process will be clarified and simplified.

New Development

New commercial development in the Town of Barnstable will be evaluated for appropriate location. Efforts shall be directed first to locating proposals that fit the criteria for the Hyannis Growth Incentive Zone (GIZ) within that growth center.

When it is not feasible or appropriate to locate new commercial development within the GIZ, development shall be evaluated for impacts to roadway levels

of service and capacity in the location where they are proposed. New development will also be evaluated for impacts to the Town's sewer and roadway network, water quality, economic opportunity and community character.

Concurrency Policy

Concurrency is the timing of infrastructure and service provision necessary to mitigate impacts of development without decreasing existing levels of service. If a development proposal is determined to cause levels of service to decline, then the development may not be permitted unless the impacts are mitigated or there is funding in place to mitigate the impacts within 5 years.

Concurrency is required for wastewater, water supply, traffic, stormwater, historic resources, affordable and workforce housing, recreation, open space, access to public lands, and sensitive habitat protection.

Concurrency may be waived to provide incentive for a project with limited impacts to concurrency areas or that result in greater compliance with Comprehensive Plan land use polices. In the GIZ concurrency has already been identified for buildout projections and implementation is proceeding.

Traffic Neutral Policy

To ensure that growth does not exceed resource and infrastructure capacities, the Town should consider adopting a traffic neutral policy for the following roadway segments and intersections of Strategic Planning Area major traffic corridors: Attucks Way, the Airport Rotary, Route 28 in its entirety, Route 132 from Exit 6 to the Airport Rotary, West Main Street and Yarmouth Road/Willow Street. Commercial development and infill and redevelopment in these areas outside the Growth Incentive Zone shall be permitted only if the proposal demonstrates that it improves existing levels of service on these segments and at these intersections.

The Town Council should consider a Traffic Neutral Ordinance for the above referenced roadways within twelve months of the Council vote to adopt this Comprehensive Plan.

Sewer Neutral and Nitrogen Limit Policy

Historically Title V served as the de-facto limit for growth. As the town moves forward with sewering, it must consider growth impacts in terms of the amount of sewage treatment capacity available. Residential land use is the

To ensure that growth does not exceed resource and infrastructure capacities, the Town Council should consider adopting a Sewer Neutral and Nitrogen Limit Ordinance for each area to be sewered prior to any Town Council vote to authorize construction funding for wastewater infrastructure for that area. If adopted, a sewer neutral and nitrogen limit policy may be amended from time to time to incorporate changes made necessary by policies, definitions or regulations adopted by the Commonwealth or the Cape Cod Water Protection Collaborative.

In areas that continue to use onsite systems, limited expansion of wastewater discharge may be allowed in return for a deed restriction limiting the nitrogen discharge for the property the system serves.

Exceptions to the sewer neutral policy and nitrogen limit policy may be made for developments that receive transfer of development rights or other growth management techniques that direct growth to designated growth or redevelopment areas.

Density Transfer

Transfer of Development Rights (TDR) is a land use tool that allows certain parcels, called sending parcels, to limit their development potential through permanent restrictions and then allows other parcels, called receiving parcels, to develop at a higher density than would otherwise be allowed.

TDR's are a component of the Downtown Hyannis GIZ and may be proposed for the Route 132 Regional Commercial Center as a receiving area. The town is in the process of studying sending and receiving areas as well as the type(s) of credits that may be transferred.

The town has begun the mapping necessary for TDR ordinance development. Using four filters, traffic, sensitive habitat, nitrogen contribution and water supply, the town has developed a draft policy for sending areas. In the GIZ there should be no allowances for exceeding density allowed by current zoning without a density transfer from outside the GIZ. For the Regional Commercial Center, once it is determined that the area is able to accept new growth, there should be no expansion of non-residential land

uses without a transfer of density.

Another TDR program element under consideration is transferring development rights from non-conforming uses or uses located in areas where commercial growth is not encouraged or expanded. Allowing and facilitating the transfer of development rights from these parcels is a fair process and may be more effective than zoning changes, which are always complicated by vested right provisions.

1.3. Location of Development

Barnstable adopts the following growth management policies for the location of new development and intensification of existing development: Growth shall be located in areas where infrastructure capacity is in place or has the ability to absorb development impacts through planned expansion.

1.3.1 Strategic Planning Areas

Strategic planning areas are areas of Barnstable that require study, analysis, policy development and regulatory changes to ensure that land use and growth management policies are implemented quickly and effectively.

The Strategic Planning Area map depicts the following areas:

Growth Center - This area is designated for growth.

This plan update designates one growth center: the Downtown Hyannis Growth Incentive Zone. The Town will direct development, infill and redevelopment to Downtown Hyannis where infrastructure and capacity to expand infrastructure coexist with underperforming properties. To offset this growth the town will implement a TDR strategy within a year of Comprehensive Plan adoption. Other strategies such as acquisition and zoning changes will continue as described in the GIZ documents.

Route 132 Regional Commercial Center – This area is designated for redevelopment, infill and green buffers between defined areas of dense development. Perhaps, after further study, it may be possible to designate this area for growth that does not detract from GIZ development.

In the Hyannis area, Route 132 and parts of Route 28 are densely developed primarily with commercial uses. In addition to this corridor development, the Industrial area is used for commercial light industrial development and is zoned for medical services. This area provides a wide range of commercial

goods and services for the town and the region.

Barnstable is examining options for this Regional Commercial Center, an area along Route 132 that includes major retail developments and industrially zoned lands. A detailed planning study is underway to determine appropriate boundaries, infrastructure needs, buildout potential under existing zoning, land uses, and impacts to natural resources, infrastructure and economic development. However, all non-residential development appropriate for the GIZ area shall continue to be directed to the GIZ.

Incentive-based zoning, regulatory agreements, and TDR are regulatory tools that may be implemented in this area to assure improved traffic flow and appropriate site design. The Town will promote redevelopment and infill in this area while addressing traffic impacts, ground water protection, design and site layout of new development and infill and redevelopment. With proper regulation, this area may serve as the town's second growth center, and will be evaluated for its capability to accept increased density under a Transfer Development Rights system.

Additional planning and regulatory implementation is necessary to ensure that growth in the Route 132 Regional Commercial Center will not outpace the ability of the Town to provide infrastructure and services for new development and infill and redevelopment. The planning tasks include infrastructure capacity analysis, analysis of land uses that will not overload area roadways and sewer service, determining limits for impervious area, protection of drinking water supplies from contamination and design criteria to protect and preserve community character.

Pedestrian Oriented Village Centers – These areas are designated for redevelopment as may be appropriate. In order to maintain their strength as business and community centers, villages need to retain their traditional mix of uses. The historic village centers are pedestrian oriented mixed-use areas with small-scale retail and offices, bed and breakfast operations, community facilities and activities that serve village residents.

These areas consist of the existing commercial district in five villages: Barnstable, Centerville, Marstons Mills, Osterville and West Barnstable. For ongoing study, each village center will be evaluated using the key filters of community character and historic preservation and redevelopment options

will be examined. Of the seven villages, Hyannis has now been designated as a Growth Incentive Zone, and Cotuit is zoned for residential uses. The Cotuit village center area has small scale pre-existing non-conforming uses that support nearby residents and visitors. The remaining five villages, Barnstable, Centerville, Marstons Mills, Osterville and West Barnstable have a development pattern that follows the delineation of existing business zoning districts.

After study, a bright line delineating these village centers may be drawn. The village business zoning districts will be analyzed for appropriate uses and redevelopment potential. The goals for these planning areas are managing existing development, actively guiding redevelopment and planning for necessary capital improvements.

The **Barnstable** Village business district is fully developed while retaining its historic character through protection afforded by the Old Kings Highway Local Historic District. **Centerville** maintains a historic village feel but is at risk from inappropriate use allowances in the BA district. Although **Cotuit** has lost historic houses to large-scale residential development, it retains much of its historic character. **Hyannis** has just completed the GIZ process and implementation will provide incentives for revitalization with streetscape and design improvement. **Marstons Mills** is working to re-create the original village conter provides a thriving business area but may be at risk of losing its historical identity because no effective design guidelines exist for development and redevelopment and due to the large scale of residential structures. Full development of the commercial zoning district in **West Barnstable** could affect village character. The Village residents' vision.

Auto Oriented Route 28 Corridor Nodes - These areas are designated for redevelopment and infill.

While the villages of Cotuit, Marstons Mills, Osterville, Centerville and Hyannis have retained their historic cores, 20th century development arrayed itself parallel to the major roadways with individual access points at each location. As shown on the Strategic Planning Area Map, portions of Route 28 in Centerville, the Marstons Mills/Cotuit area at Putnam Road and the Willow Street/Yarmouth Road area of Hyannis are key commercial areas supporting auto oriented businesses and services. Three nodes along the Route 28 traffic corridor require land use management for traffic congestion and community character.

While a few commercial establishments in these areas have a longer history, the great majority came into being to attract trade from automobile traffic using this regional transportation corridor. Typically, the uses are not seasonal and have no pedestrian access.

By designating these as Strategic Planning Areas, the town sets on a course to engage landowners and residents in a process that will address commercial district boundaries, signage clutter, traffic and access management, architectural and site design concerns and create infill and redevelopment guidelines.

Regulatory changes may include establishing design criteria, zoning changes, and other tools necessary to encourage appropriate infill and redevelopment. Goals for these planning areas are managing existing development, actively guiding infill and redevelopment to address parking, screening and roadway access issues, detailed planning for capital improvements, and studying the potential for using these as sending areas or perhaps limited receiving areas for TDR. Incentives for infill and redevelopments and additional height or lot coverage allowances to improve site design and streetscape.

West Main Street Corridor Infill and Redevelopment Area – This area is designated for redevelopment.

This area consists of the entire length of West Main Street and the properties with access to West Main Street. This area of Hyannis is particularly impacted by strip development and poor roadway and intersection levels of service. Currently zoned Highway Business, this area traverses two Wellhead Protection Zones and traffic is negatively impacted by the use patterns of travelers seeking to avoid the congestion of Route 28.

This area is a top priority for more detailed planning and regulatory actions. A detailed planning study is needed to determine infrastructure needs including wastewater management, buildout potential under existing zoning, infill and redevelopment options, impacts to natural resources, transportation

and economic development, and the potential of this area as a sending area for transfer of development rights. Performance based zoning standards for traffic and wastewater are needed in this area. Goals for this planning area are improved community character, a defined neighborhood center for West Main Street including incentives to allow businesses to locate within this center, traffic congestion relief, traffic calming measures, streetscape improvements and drinking water protection.

Regional Transportation and Drinking Water Supply Areas – The BMA area is designated for redevelopment that does not further compromise drinking water supplies or exacerbate existing traffic conditions.

The Barnstable Municipal Airport area is located on top of Hyannis Water Division aquifer recharge areas. The airport also abuts and accesses through the Airport Rotary, the most dangerous intersection on Cape Cod. A Master Plan for the airport is underway but must include coordination with the town at its earliest stages and then throughout the process. As a regional transportation hub, there are many opportunities for collaboration between the town and the airport. Moving passengers from the terminal to the RTA and Island ferries by transit to alleviate some rotary traffic, providing benefit from airport services to area residents and ensuring maximum protection of water supply lands from aircraft and vehicle fueling and repair operations are areas for mutual exploration and cooperation.

The Island Ferry terminals are located in the GIZ Growth Center as well as the Hyannis harbor working waterfront. The ferries' freight and passenger operations impact drinking water supplies and regional transportation. **Harbors and Working Waterfronts** – These areas are designated for redevelopment that ensures the preservation of water dependent uses. The Barnstable, Hyannis and Osterville on West Bay harbors have existing working waterfronts; commercial fishing and related uses occupy lands directly adjacent to the water. Of key importance as character-defining scenic areas, they are also valued as cultural resources and recreation areas serving residents and visitors.

Hyannis Harbor is also important to the local economy as port for a small, productive fishing fleet. Hyannis Harbor, newly reconnected to Main Street, incurs heavy use as the major marine transportation hub for the Islands. Peak season transportation of passengers and freight acutely affects local streets and harbor uses yet currently provides little benefit to the local economy.

These harbor areas may be suitable for new regulations that ensure protection of water dependent uses and supporting commercial uses. Hyannis Harbor in particular is suited for an infill and redevelopment plan that allows the harbor area to become more fully integrated into the fabric of downtown Hyannis.

Other Commercially Used Areas – These are designated as TDR sending zones. Use changes that positively impact community character and traffic congestion will be conditionally allowed.

These areas consist of scattered site non-residential, non-conforming uses residential districts and commercially zoned districts located outside areas targeted for dense development.

Route 28 Hyannis/Centerville HB Districts

These areas are not designated for redevelopment or infill. These very small, unconnected HB districts are located along Route 28 and are remote from other commercially developed areas. Located in an area that is primarily residential, full development of these districts may exacerbate existing traffic management and community character issues.

Osterville BA

Because of its value for drinking water supply protection, lack of infrastructure and location away from the village center, this area is not designated for redevelopment or infill. The BA district in Osterville is located in a strip along South County Road. This district is separated from the downtown by some distance. The Centerville Osterville Marstons Mills Fire District owns a large parcel in this district. This parcel and other abutting parcels are held for drinking water supply protection. The district is developed primarily as office with some retail and light industrial uses. Regulations governing existing uses should be reviewed for responsiveness to water supply protection, traffic and community character concerns. The BA zoning may be too permissive for this sensitive drinking water protection area.

Non-Conforming Uses

These non-residential uses located in residentially zoned areas operate legally under state and town vested right or "grandfathering" regulations. The growth management strategy for these uses includes improving existing

regulations that govern the change or expansion of these uses to ensure that natural resources, community character, traffic and access management are effectively addressed.

The goals for these uses are: managing existing development, actively guiding redevelopment, and sending the development rights to areas designated for growth or infill. With the exception of the Cotuit village center, a gradual return to residential use is the ultimate goal for these properties.

Transfer Station Area Development – This area is designated as a TDR sending zone. Incentives for growth are not proposed for this area. Use changes that positively impact community character and traffic congestion may be conditionally allowed.

This area, in the vicinity of the transfer station, contains many nonconforming use properties, includes the intersection of Route 28 and Osterville West Barnstable Road, and continues north to of Flint Street and Old Falmouth Road.

Land use management goals are: managing existing development, actively guiding redevelopment, improving streetscape and overall appearance of the area and studying its potential as a sending area for transfer of development rights.

Residential Land Uses – Only high density residential areas are designated for growth.

Comprising the majority of the town's land area, these districts must be analyzed for inappropriate use allowances, redevelopment permitting, open space and recreation needs, affordable housing development, transportation improvements and heritage preservation. Depending on location, new residential development and expansion of existing residential development may be very limited by mandatory compliance with state and federal nitrogen discharge limits as established by the Massachusetts Estuaries Program. Incentives for growth are not proposed for low and medium density areas, instead the goals are managing existing development, actively guiding redevelopment and planning for necessary capital improvements. Development of new land use regulations for these areas will incorporate incentives and performance standards.

Low Density Residential

This area includes the current Resource Protection Overlay District (RPOD). Evaluation of the underlying zoning will be made with the eventual goal of combining the disparate smaller districts into a single low-density district that retains all existing dimensional requirements but incorporates the RPOD lot size requirement.

The area north of Route 6 currently not included in the RPOD will be evaluated for inclusion in this district. Lower density zoning of up to 5 acre minimum lot size will be examined as an option for areas lacking water supply and wastewater infrastructure.

Medium Density Residential

These areas, in the southeasterly portion of Barnstable in the Centerville and Hyannis areas, are also subject to several different residential district regulations. Evaluation of these residential areas will be made with the goal of melding them into a single medium density residential district incorporating density per acre requirement for areas connected to municipal sewer or wastewater treatment systems exceeding standards for on-site septic systems.

High Density Residential

Barnstable has scattered site multifamily uses as shown on the Community Housing Map. This housing type diversifies existing housing stock, which is primarily single-family dwellings. However, multifamily housing is not appropriate in all areas. Because high-density residential use may generate traffic and wastewater impacts, specific locations should be identified for this use where infrastructure is in place or may be expanded. It may be desirable to locate high-density residential uses near densely developed commercial areas. Such a location will encourage pedestrian travel and will serve as a transition area between single-family residential neighborhoods and densely developed commercial centers.

Lands Subject to Coastal Storm Flowage – These areas are not designated for growth.

These lands, which store floodwaters, are located primarily along the north and south barrier beaches and estuarine systems in Barnstable and are shown on the Surface and Coastal Resources Strategic Planning Areas map as FEMA flood zones and Army Corps SLOSH zones.

> "Erosion and flooding are the primary coastal hazards that lead to the loss of lives or damage to property and infrastructure in developed coastal areas. Storms including hurricanes...and sea level rise contribute to these coastal hazards. The risk to coastal communities from these hazards continues to present major challenges to coastal developers, managers, and emergency responders at all levels of government. Policymakers are also challenged to balance development and natural resource protection in coastal areas."

As a general land use policy, development should not be located in areas most vulnerable to flooding. Long sought after for their proximity to Barnstable, stunning shoreline vistas and recreation resources, these coastal lands have experienced increased development and intensified use through redevelopment in the last several decades. A clear land use conflict has arisen. While highly valued in the marketplace, these lands also perform a critically important flood protection function for the community.

During past flooding events, storm waters have risen in a predictable manner as indicated by the Federal Emergency Management Agency's (FEMA) Flood Insurance Rating Maps (FIRM) and the Army Corps of Engineers' Sea, Lake and Overland Surges from Hurricanes (SLOSH) Maps. However, every change, large or small, to the topography, porosity or vegetation of these lands changes the way floodwaters behave. Diverting floodwaters from one area will not repel those waters; instead, they are simply redirected to new areas some of which may not have previously experienced flooding or may experience an increase in the depth or number of flood events. Given the changing climate that now generates more severe storm events, strategies for these vulnerable areas must be fully explored.

> "Especially in flat areas, the floodplain provides a valuable function by storing floodwaters. When fill or buildings are placed in the flood fringe, the flood storage areas are lost and flood heights will go up because there is less room for the floodwaters..."

Federal Emergency Management Agency

National Flood Insurance Program

Relative sea level rise will now play an important role by increasing coastal flood hazard. The standard for predicting sea level rise has been 1 foot in 100 years. As this time frame is beyond the normal lifespan, it is difficult to imagine the need for limits on coastal development. Recent climate change science is changing that time frame. Because of influences in geology and climate change and sea level rise for Cape Cod is now predicted to be 3 feet within the next 50 to 100 years – the next generation will experience this change.

The cumulative effects of human tinkering with coastal systems, predicted sea level rise and increasing severity of storms require immediate attention. A careful and detailed inventory of lands subject to coastal storm flooding, analysis of the effects on public safety and private property and recommendations for "No Adverse Impact" solutions is a priority for Barnstable. A "No Adverse Impact" policy ensures that the actions of one property owner do not adversely impact flooding risk for other properties or imperil public safety. As it plans infrastructure the Town should consider the increased threat of coastal flood hazards as it prioritizes infrastructure improvements.

Sensitive Habitat Areas – These areas are not designated for growth.

These areas, shown on the Sensitive Habitat map, are important to the overall health and well-being of Barnstable's natural resource systems. While open lands in all forms provide habitat for flora and fauna of varying degrees of rarity they also perform a critically important function by ensuring that our drinking water supply is adequately recharged and will remain pure. Marshes and estuaries are natural flood control mechanisms and provide nursery environments for marine animals. Ponds and streams are important to the hydrologic cycle.

Wherever possible, development should be located away from these sensitive areas. Acquisition, TDR, incentive regulations and performance standards must be implemented to protect sensitive habitat from the impacts of development.

Agricultural Lands – These areas are not designated for growth.

As previously noted, agricultural lands are diminishing. However, the demand for locally grown produce, dairy products and meats is growing on

Cape Cod as it is elsewhere. This renewed interest may strengthen local agriculture. A regional organization aimed at marketing these local products, Edible Cape Cod, <u>http://www.ediblecapecod.com/</u>, is an excellent resource detailing the types and locations of these local food production activities. The Centers and Corridors map shows areas of Barnstable that may be suitable for redevelopment as agriculture, dairy or animal husbandry.

Ordinances, regulations and policies should be reviewed and analyzed to ensure that maximum protection is afforded to agricultural uses. The Town should determine steps necessary to encourage redevelopment of prime agricultural soils to agricultural use.

1.4 Community Character

Throughout the course of Barnstable's history -- the town was formally established in 1639 -- a distinctive character has evolved - a seacoast community with seven distinct villages. The rural small town character is a combination of seaside location and built environment set within cultural and natural landscapes.

Rapid change and development has altered community character. The following issues have contributed to this problem:

- Commercial development that has been allowed to sprawl along roadway corridors.
- Large lot, un-clustered single-family home development.
- Inappropriate shoreline development, such as large-scale residential development, private recreational structures that impact viewsheds and compete with water dependent uses.
- Corporate branding and formula business.
- A significant increase in auto-oriented land uses along major transportation corridors.
- Loss, obscuring or dilapidation of unique historic architectural features, cultural and natural landscapes.

1.4.1 Design of the Built Environment

Residential Development

Residential development patterns have mirrored the post war patterns seen across the country and have not meshed well with the efficient provision of infrastructure or the community character of the Town of Barnstable.

Large lot, un-clustered residential development, produced in response to

recent decades of explosive growth, have converted rural woodlands and cultural landscapes to suburban use. The early Subdivision Rules and Regulations, developed in 1973, set a single standard for development across the entire town. These regulations in combination with the existing Zoning Ordinance are not designed to avoid residential sprawl and are not sufficient to protect our character or heritage. This combined with demographic trends and market forces resulted in residential development that detracts from the character of Barnstable.

Subdivision Design

The Subdivision Rules and Regulations and the Zoning Ordinance set broad standards for development regardless of location. The Subdivision Rules and Regulations and the Zoning Ordinance will be evaluated and updated to provide standards for conservation oriented cluster subdivision, structural scale that arises from community context and roadway design based on land use categories designated in this plan.

Scale of Residential Development

In some areas, structures exceed the scale of surrounding properties and landscapes. The towns' Ordinances and Regulations will be reviewed and existing attributes and community concerns will be evaluated. Then, the Ordinances and Regulations will be amended to ensure new development, infill and redevelopment reasonably relates to surrounding structures, settings and landscapes.

Non-Residential Development

Because most commercial areas are nearing buildout, infill and redevelopment are becoming more common. Barnstable must prepare for expansion, conversion and re-development of commercial properties.

In highway business areas, infill and redevelopment provides opportunities to improve strip commercial development by providing incentives for infill and redevelopment while garnering traffic circulation benefits such as interconnecting developments, managing access along heavily traveled regional roadways, transit opportunities and streetscape improvements.

Revision of the pre-existing non-conforming uses and structures ordinances to a traffic conservative and design-oriented standard is also a high priority. Adoption of these revised regulations will more effectively protect community character.

Corporate Branding and Formula Business

Corporate branding and formula business strategies affect both the character and economy of Barnstable. National and international corporations use their structures to advertise and brand their business. Corporate design standards do not consider local character, landscapes or neighborhood impacts. Barnstable has taken some steps to regulate the appearance and function of corporate formula business. The GIZ regulations contain design standards that effectively prohibit corporately branded structures.

The village of Centerville is currently considering a Zoning Ordinance amendment that incorporates a prohibition on formula business. Formula businesses require franchises to contain all elements of the chain without local variation. The corporate branding requirements for outward appearance and signage of formula business affect community character. The business elements that are required to conform to a national formula can also affect locally owned businesses.

Community Design Goals

To protect community character the Town proposes design guidelines. These types of guidelines communicate in a positive way. They clearly state what the town is looking for instead of listing what the town does not want. Barnstable's design goals would enable to developers, designers, property owners and individuals to understand how to protect community character and incorporate these principles into building and site design elements.

To accomplish community character design goals the Town will develop design guidelines that include the following goals:

- 1. Create consistency with the historic and maritime character of the area.
- 2. Create livable neighborhoods for year round residents.
- 3. Preserve views and public access to fresh and coastal waters.
- 4. Enhance pedestrian access and public spaces.

Development guidelines for architecture and site design as well as suggested infill and redevelopment strategies to mitigate development impacts will be included.

1.4.2 Cultural Resources

In addition to the structures and landscapes discussed above, there are other important aspects to Barnstable's cultural heritage. Museums, the presence of artists, artisans, their work and display spaces and community gathering spaces serve to preserve our cultural heritage and foster the creative community expression of today's cultural experiences. The town must do more than recognize the valuable contributions these resources contribute to quality of life in Barnstable. The town must examine land use regulations and determine actions necessary to ensure continuation of these uses.

Museums

Barnstable has a number of museums displaying exhibits and artifacts that bear local and national significance. Village historical museums are found in Barnstable, Centerville and Osterville. Village libraries, such as Sturgis in Barnstable, are also venues that display local historic artifacts. The region's maritime heritage is displayed at the Cape Cod Maritime Museum on Hyannis Harbor and the Trayser—Coast Guard Heritage Museum complex set in the former customhouse near Cobb's Hill in Barnstable village. The John F. Kennedy Museum on Main Street in downtown Hyannis draws visitors from across the country and foreign lands. The Cahoon Museum of Art displays fine art in permanent and special collections.

The Town values theses museums as cultural resources and should continue to support these uses. Guidance and support will be provided for proposed museum uses looking to locate in the GIZ or in appropriate village locations.

Arts and Artisans

Barnstable has many local artists that practice and show their craft in their homes and studios throughout town. A myriad of galleries show local, regional, national and international art and crafts. The creative sector is a key part of our economy that also supports others such as the visitor-based sector.

Downtown Hyannis is home to many retail art and craft uses. The town is working to strengthen this presence with live/work spaces for artists including the soon to be developed artist housing on Pearl Street. Villages have identified art and artisan uses as desirable for their historic centers. Zoning Ordinance amendments will help achieve this vision.

A site has been identified and fundraising is underway for a performing arts center in Hyannis. Other performing arts venues, such as Cotuit Center for

the Arts, Barnstable Comedy Club and the performing Arts venue at Barnstable High School help keep the Cape's rich theatrical heritage alive.

Community Gathering Spaces

New England history unfolded in the public gathering spaces of the towns and cities. Village greens, common space and meetinghouses witnessed historic and cultural gatherings that shaped our history. These resources include the Old Selectmen's Building, Liberty Hall, Freedom Hall, county government buildings, Aselton Park and Hyannis Village Green. Those listed here range in age and function as community spaces. The town should determine if additional protections are needed for these through a mechanism such as securing landmark status or other similar processes. As mentioned in the discussion regarding cultural and working landscapes, additional inventory work is needed to ensure that the complete resource is known.

Ways to Water

Development has had an impact on the coastal shore. Barnstable has 170 miles of seacoast. Of that coastline, 18.77 miles are ocean shores, with 9.47 miles accessible to the public and in public ownership, mostly along the 6-mile barrier beach known as Sandy Neck. Only 3.59 miles along Nantucket Sound provide public access.

As for inland fresh water bodies, there are 55 ponds and lakes providing 47.58 miles of freshwater beaches. 9.21 miles of the pond front provides for public access.

Sea and pond access, both physical and visual, has become increasingly important as the demand for recreational and tourism activities grows. The number and area of beaches has remained static during the period of dramatic growth that began in the 1970's. Much of the seacoast and pond edges are privately owned and public access to the water has dwindled. Increasingly, large buildings, fences and plantings block water views of town-owned ways to water.

A thorough study and inventory is well underway through the Growth Management Department. More than 75 ways to water have been identified. Research is ongoing to determine the exact nature these ways and the type of public access for which they are best suited – auto, which requires parking, bicycle or pedestrian. Once that phase of the project is complete, management strategies will be implemented for the ways to water.

1.5 Green Infrastructure

The term Green Infrastructure is an interconnected network of environmentally significant areas, protected open space, other open lands and working landscapes that retain ecological functions, protect water quality, support the growth management strategies of this plan and contribute to overall quality of life in Barnstable.

1.5.1 Fragments and Cores

Large, medium, and small cores have been identified for the entire Commonwealth. This MassGIS Core Habitat layer depicts the most viable habitat for rare species and natural communities in Massachusetts. These areas are shown on the Sensitive Habitat map. Fragments are smaller areas that have only a small amount of interior but are important in developed areas where little natural land remains.

Cores provide habitat for a wide range of species, from interior-dependent forest species to species that use marsh, dune, and beach habitats. Cores also provide benefits in terms of open space, recreation, water quality, including drinking water protection. Ideally, core habitat and habitat fragments would be supported and connected by protected open space.

1.5.2 Reconnecting Fragments and Cores

The Town has actively pursued an open space protection program for many decades. The results are shown on the Open Space map as Protected Open Space. Comparing this map to the Sensitive Habitat map shows fragmentation of sensitive habitat areas and encroachment into others. Core habitats may remain but are in many cases isolated from other habitat areas or open space by developed lands. Those species requiring unfragmented habitat have faded from the fabric of Barnstable.

Using these maps as a guide acquiring lands that abut or are in close proximity to protected open space and sensitive habitat is a key aspect of effective open space acquisition strategy. An acquisition strategy that reconnects these fragments of open space and habitat cores may be a more effective allocation of limited resources. Protected status must be quickly achieved for the small amount of undeveloped land that remains in Barnstable.

The town has begun to imagine areas that could be protected or even undeveloped to reconnect some of these fragments to other fragments and core habitat areas. The Corridors and Centers Concept map depicts green infrastructure reconnection strategies for Barnstable. A Green Infrastructure Plan with an overall goal to provide connections between existing core habitat and habitat fragments is the town's next step in Open Space planning efforts. Green Infrastructure planning is as important as planning for other capital facilities and is critically important to a sustainable community.

Barnstable should not limit its vision for Green Infrastructure by looking only at undeveloped open lands. The Green Infrastructure Plan will look at every opportunity to secure interconnections. Where connections are needed in developed areas, strategies for implementation may include easements on portions of developed lands, transfer of development rights and undevelopment through acquisition or TDR.

1.6 Sustainable Practices

Sustainable practices are highlighted in several of the following sections. Specifically Natural Resources, Economic Development and Facilities and Infrastructure all discuss sustainable practices. In addition to these Barnstable should explore adopting, through regulation, policy or other means, general green development principles. The Town should make every effort to reduce the environmental footprint of existing infrastructure and to ensure that new infrastructure is as "green" as possible.

1.7 Seven Villages - One Community

In response to a request by the Town to update the Local Comprehensive Plan (LCP), the Civic Associations and residents in the villages formed individual village Local Planning Committee. 1997 Village Plans were updated to reflect conditions in the villages that changed since the 1997 LCP was adopted. These updated village plans reflect the needs of the villages, such as business and housing growth management, also focused on the desire to retain historic value and preserve the environment. The process relied on residents' thorough knowledge of their village and their desire to preserve its character. The results of that process are the seven Village Plans included in their entirety in the Village Plan Section.

Barnstable Village

Barnstable Village is quintessential Cape Cod. The historic landscapes and views are closely tied with the identity of the Town and County. They are the

foundation of the tourist economy and the perception of the town as a desirable place to live. Barnstable Village's historic resources remain largely intact and highly valued. The village recognizes that its historic resources are most important to its character and to the economy of the town.

Centerville

The "village assets" of Centerville are numerous, ranging from the beauty and charm of its Main Street, to sunset at Craigville Beach. The traditional New England image is present throughout much of the Village, making it one of the most desirable villages for year-round and summer residents and a destination for tourists and vacationers. Most of its historic buildings, today numbering 118 documented structures, and its scenic areas, remain intact. The river-ways and inland water bodies provide natural focal points for the many Village neighborhoods.

Cotuit

Cotuit's peninsular location and intimate relationship with the sea is one of its greatest assets, has shaped its history, and now creates some of its biggest challenges. In addition to its treasured waters, the residents of Cotuit put an extremely high premium on open areas. These include central water protection lands, Mosswood Cemetery, and conservation areas such as Eagle Pond, Lower Little River, the Hovey property, Sampson's Island, and Crocker Neck Reservation, plus various wetlands and bogs. Four fresh water ponds, the largest being Lovell's Pond, cover an area of over 60 acres.

Hyannis

Recognizing that the Village of Hyannis is a downtown area for the Town of Barnstable, but also has many multi-cultural and diverse neighborhoods, we have set our goals, policies and strategies to serve the needs of both segments of Hyannis, but foremost among our goals is to maintain the Village character of Hyannis.

Through the coordination efforts of the Local Planning Committee a unified set of principles for guiding growth in the Village of Hyannis has been developed:

- To preserve, maintain and improve residential neighborhoods and village character.
- To protect natural resources.
- To improve distribution of recreational, conservation and open spaces.

- To provide, encourage and support year round economic opportunities.
- To designate development/redevelopment activity of a commercial non-residential nature in specific nodes, using defined boundaries and recognizing the unique characteristics of each.

Marstons Mills

Village residents describe Marstons Mills as having a rural village character that they value and wish to retain. Marstons Mills is one of the more rural of the Barnstable villages. The center of the village has retained its traditional uses - a store has existed on the site of the Cash market for more than one hundred years. Three community buildings, the library, Liberty Hall and the Methodist church form a little community center off the main commercial center of the village.

The Mill Pond was identified as the favorite view. Residents are proud of the expanse of open space at the golf course, airfield and horse farm. These town owned lands provide scenic views of the open rural character reminiscent of the old Marstons Mills and are identifying features of this village, and indeed of the whole town.

Osterville

The attractive seaside village of Osterville, rich in history and cultural heritage, was founded in 1648 as "Cotacheset". It was primarily a seafaring village, the home of sea captains, shipbuilders, salt-workers, cranberry growers and oyster men. The name of Osterville did not come into use until 1815. Today Osterville's 5.8 square miles preserves its association with the sea at its traditional summer resort quality. Osterville's distinct areas include the more rural northern area along Bumps River Road, Tower Hill, Easy Bay, the village center, Seapuit, Osterville Harbor and the historic area of Wianno and the island communities of Little and Grand Island (Oyster Harbors).

The village attributes include the 5 mile Nantucket coastline and the 17 mile shoreline along the coastal bays and river estuaries. The shoreline encircles 1300 acres of protected waters and the coastline has 102 acres of protected barrier beaches. Thirteen inland ponds and lakes total 75 acres of surface water. Open land totaling 305 acres is held in the public interest to protect the natural environments in and around Osterville. Two private golf courses retain an additional 228 acres of open space.

West Barnstable

West Barnstable was the second area of the town to be settled by the Colonists after the 1639 settlement of Barnstable Village. West Barnstable remained a remote agricultural village of farmhouses, barns and outbuildings set in open pasturelands along Route 6A and a few side roads. In 1854, the railroad came to West Barnstable, and development occurred around the railroad station. Today, village residents identify this area as their principal village center. The village has several community facilities including the library, community building and softball field, all of which are actively used.

At village meetings, residents expressed the opinion that they wanted the village to retain its rural and historic character. Protection of old farms is of concern to long time residents, many of whom do not wish to see the old farmlands subdivided and developed. Residents do not want to see widening of historic roads.

Land Use Action Plan

Consistency

This plan adopts the Regional Policy Plan Goals 1.1, 1.2 and 1.3. In lieu of adopting the Minimum Performance Standards, the following sections outline Barnstable's action plan in support of these goals. Goal 1.1 Growth shall be located in areas where infrastructure capacity is in place or has the ability to absorb development impacts through concurrently planned expansion. Redevelopment of existing developed areas is the preferred form of development.

Action 1.1.1 New non-residential development in the Town of Barnstable will be evaluated for appropriate location. Development appropriate for the Hyannis Growth Incentive Zone will be directed to that growth center. Strategies

• Create financial incentives for growth and redevelopment to occur in designated development areas.

• Identify and implement incentives such as predictable and time sensitive permitting; designating town staff to assist applicants in the regulatory process; using development agreements.

Action 1.1.2 When it is not feasible or appropriate to locate new nonresidential development within the GIZ, development will be evaluated for impacts to roadway levels of service and capacity in the location where they are proposed. Such new development will also be evaluated for impacts to the Town's land use policies, concurrency, water quality, economic development and community character.

Strategies

- Complete planning and regulatory work necessary to define further the boundaries for the Regional Commercial Center and Auto Oriented Route 28 Corridor Strategic Planning Areas.
- Analyze village business zoning districts for appropriate uses and redevelopment potential. Develop and adopt regulations that appropriately and adequately manage existing development and guide redevelopment.
- Maintain and improve community character by preventing further spread of strip development and improve community character of existing development. Discourage non-residential sprawl by down zoning in areas between Rt. 28 Strategic Planning Areas, village centers, outside of Regional Commercial Center and the GIZ.
- Promote infill development in appropriate locations including greyfield development, redevelopment and reuse. Identify specific redevelopment opportunities and incentives to ensure the redevelopment of these areas.
- Adopt Zoning Ordinances to limit formula business in village business districts and for non conforming uses in residential districts. Adopt corporate branding limitations throughout Barnstable with the possible exception of the Regional Commercial Center.
- Develop and adopt an impact fee program that supports growth management, land use management and concurrency policies. Ensure that any impact fee program does not discourage desired GIZ development.
- Adopt smart growth and sustainable development principles including requirements for conservation design cluster developments, green buffers around and between densely developed non-residential areas, mixed uses, public transit and preservation and enhancement of public open space to support

social exchange and community building.

• Every possible opportunity will be pursued to ensure that development is located away from sensitive habitat areas. Determine and adopt habitat protection program tools that include acquisition, TDR, incentive regulations and performance standards.

Action 1.1.3 Land use regulations should be adopted to ensure compatibility with land use policies of this plan.

Strategies

- Ensure that growth does not exceed resource and infrastructure capacities. The Town will adopt a traffic neutral policy.
- Ensure that growth does not exceed resource and infrastructure capacities. The Town will adopt a sewer neutral and nitrogen limitation policy.
- Ensure a consistent rate of growth by maintaining existing controls on the number of annual building permits.
- Amend the Zoning Ordinance to extend the existing prohibition on use variance throughout the entire town. Retain variance process for dimensional regulations.
- Foster economic development through planned growth and redevelopment using tools such as overlay districts, development agreements, transfer of development rights and regulatory agreements.
- Amend the Zoning Ordinance to limit expansion of non-conforming non-residential uses in residential districts, especially along major roads. Establish an acceptable amount of expansion to be allowed over the lifetime of the non-conformity and allow non-conforming uses to change only to another specifically defined non-conforming use that does not further exacerbate traffic or community character impacts.
- Non-conforming uses present in various zoning districts both residential and non-residential shall be evaluated as sending areas for a Transfer of Development Rights (TDR) program.
- The Zoning Ordinance must be reviewed and analyzed for repetitiveness, opportunities to condense and streamline, incorporate a more user-friendly format and correct and update references.
- Subdivision Rules and Regulations should be reviewed to ensure that road layout and construction standards are appropriate for the land use they serve.

- Wetland Regulations should be amended to include areas that may need additional local regulation including lands subject to coastal storm flowage and the vegetated shores of coastal plain ponds.
- Board of Health regulations should be updated to include more protective measures for resources in barrier beach areas and a town wide sewer neutral and nitrogen limitation policy.

Action 1.1.4 Develop necessary implementing regulations to adopt a "No Adverse Impact" policy that ensures that the actions of one property owner does not adversely impact flooding risk for other properties or imperil public safety.

Strategies

- Thoroughly inventory lands subject to coastal storm flooding and analyze impacts to public safety and private property from structures and alterations to the natural environment.
- The Town should consider the threat of coastal flood hazards as it plans and prioritizes infrastructure improvements.

Action 1.1.5 Barnstable Municipal Airport (BMA) and year round Island ferry operations shall be compatible with the Town's land use and growth management policies.

Strategies

- BMA shall prepare a comprehensive land use master plan and coordinate with town staff during its preparation and adoption.
- BMA and year round Island ferries shall ensure that its operations and the operations of its lessees do not compromise drinking water supply.
- To alleviate some traffic traveling through the Airport Rotary, the Town, BMA, Island ferries and RTA shall work to establish transit links to move air passengers to the RTA, Island ferry terminals and the Regional Commercial Center.

Goal 1.2 Development design shall protect Barnstable's natural environment and preserve uniqueness and sense of place established by its historic architecture, its scenic resources and its cultural landscapes

Action 1.2.1 Development will be located and designed to maintain the general scale and character defining features of the landscape. Adopt

necessary land use policies and regulations to ensure development and redevelopment is consistent with historic and community character protection.

Action 1.2.2 Site design regulations for non-residential development will limit access to roadways, incorporate Low Impact Development (LID) standards for stormwater management, and limit earth removal and placement and land clearing. These regulations will also require protection of sensitive habitat areas and cultural and working landscapes through clustering or other protective site-specific design.

Strategies

- Amend existing parking regulations in the Zoning Ordinance to reduce parking requirements manage access to parking areas including interconnecting parking areas of adjacent uses.
- To reduce impervious area in drinking water supply recharge areas, require parking structures for developments needing more than 200 parking spaces. These structures shall be subject to architectural, lighting and signage design standards and may require screening by buildings, site layout or landscaping.

Action 1.2.3 Amend the Zoning Ordinance to include a town wide regulation limiting earth removal and fill placement to preserve natural topographic features and community character, to protect sensitive habitat and stormwater management infrastructure from erosion and to retain natural protection from flood waters.

Action 1.2.4 To preserve landscapes, protect community character, enhance groundwater recharge, prevent erosion and prevent the spread of non-invasive plant species, amend the Zoning Ordinance to include a town wide regulation limiting land clearing and requiring vegetation restoration where land clearing exceeds established limits.

Strategy

• Adopt special permit regulations for removal of trees greater than 6" diameter. A replacement planting plan will be submitted with the special permit application.

Action 1.2.5 Work with utility companies and necessary partners to relocate or bury utilities.

Strategies

• Highest priorities are village centers including Hyannis, Rt. 6A and

on natural vegetation and landscape features prior to commencement of clearing for development. Distinguishing original landscape features should be preserved.

Section 1 Land Use

Scenic Roads. The town needs to work with the State and County to place utilities underground.

- Encourage utility companies to use insulated wires that require far • less clearance and allow a reduction in tree pruning.
- Amend the Site Plan Ordinance and other applicable regulations to require new development and re-development to locate utilities underground.

Action 1.2.6 Adopt design guidelines for non-residential development and redevelopment that include the following goals. Development guidelines for architecture and site design as well as suggested infill and redevelopment strategies will be included.

- 1. Create consistency with the historic and maritime character of the area.
- 2. Create livable neighborhoods for year round residents.
- 3. Preserve views and public access to fresh and coastal waters.
- 4. Enhance pedestrian access and public spaces.

Strategies

- Ensure compatibility with community character by incorporating historic buildings, associated landscape and site features into redevelopment.
- Include architectural guidelines for non-residential and multi-family ٠ developments. New development and redevelopment should be designed to be harmonious with Cape Cod architectural styles, scale, materials and landscape design
- Within village centers, historic areas and distinctive neighborhoods, ٠ design shall be harmonious with site, character, materials and height of neighboring buildings.
- Ensure that structures reasonably relate to surrounding structures, settings and landscapes in both residential and commercial areas.
- Site Plan Review will review development applications for building design, landscape design, historic character, lighting and signage.
- Consider adding a historic commission representative to Site Plan Review when applications for historic structures are under review.
- Amend the Zoning Ordinance to require submission of information

Develop vista pruning regulations to protect treelines that are important to community character, scenic, historic or cultural landscapes. These regulations will consider the views and vistas described in Section 6 of this plan as may be amended during the recommended process.

Action 1.2.7 Amend the Zoning Ordinance to include lighting regulations that enhance community character.

Strategies

- Prohibit internally illuminated signs. •
- Development review should ensure that all lighting components are concealed or harmonious with design and materials. Lighting shall be screened or shielded so that light and glare does not impact abutting properties or interfere with safe driving.
- Develop lighting standards for non-residential and multi-family uses • that are appropriate for our rural suburban setting.
- To prevent excessive glare from development sites, the town will • consider adopting the Cape Cod Commission's exterior lighting standards or similar standards, in the town's Zoning Ordinance

Action 1.2.8 Design guidelines for non-residential development shall apply to institutional uses to mitigate impacts to community character and ensure that site development adheres to these guidelines.

Action 1.2.9 Develop and adopt a more standardized context sensitive design process for roadway improvements on local, regional and state owned roadways.

Action 1.2.10 Support and enhance existing street tree planting programs and create new programs where necessary. High priority roads for street tree planting are Rt. 6A, designated Scenic Roads, commercial areas along Rt. 28 and Rt. 132, village centers and dense residential neighborhoods in Hyannis.

Goal 1.3 Acquire, retain, preserve and protect a maximum amount of open space for the community and its natural and wildlife habitats. Protected status must be quickly achieved for the small amount of undeveloped land that remains in Barnstable.

Action 1.3.1 Develop and adopt a Green Infrastructure Plan to formalize a strategy to protect and enhance connections between existing core habitat and habitat fragments.

Strategies

- Where connections are needed in developed areas, protection strategies for implementation may include easements on portions of developed lands, transfer of development rights and undevelopment through acquisition or TDR.
- Land in close proximity to protected open space and core habitats are the priority for protection.

Goal 1.4 Protect and enhance Barnstable's unique and fragile natural habitat and cultural resources including scenic beauty, historic areas and unique habitats.

Actions 1.4.1 Protect areas particularly along, but not limited to Route 6A and within historic districts, which contribute to the unique Cape Cod character of the town, provide historical, prehistoric or educational perspectives, and/or meet the criteria of the National Register of Historic Places or the Massachusetts Historic Commission. Historic landscapes should be preserved, and where and when appropriate, restored. Action 1.4.2 Inventory and map ancient ways or cart paths. Adopt regulations that require their presence be shown on all applications for development. Determine additional actions necessary to preserve their status as ways.

Action 1.4.3 Adopt development review standards to help identify and protect sensitive archaeological resources.

Action 1.4.4 Inventory, document and map cultural and working landscapes.

Action 1.4.5 Inventory, prioritize and adopt regulations or other effective mechanisms to protect viewsheds and vistas of open lands, woodlands, farmsteads, seacoast and water, ponds and wetlands. Other effective mechanisms may include Zoning Ordinance amendments, land acquisition and viewshed or preservation restrictions.

Action 1.4.6 Beaches and waters' edges will be retained in a natural state, open to public use and public views to the maximum extent possible.

Structures will be limited to those necessary for public recreation. Such structures shall be designed to protect this fragile environment. Built elements on public and private lands must be compatible with the landscape

Goal 1.5 Preserve and protect working waterfronts and harbors.

Action 1.5.1 Protect and strengthen the existing working harbor activities and character, maintain water views and improve public access. Strategies

- Harbor and marine uses shall provide a public edge to the water where feasible, and provide views, access and vistas while protecting water dependent activities.
- Amend the Zoning Ordinance to ensure that existing water views are protected or enhanced.

Goal 1.6 Manage residential development and redevelopment to protect sensitive embayments and drinking water supply, offset growth incentives in the GIZ and densely developed residential areas, manage traffic circulation, preserve open lands, agricultural lands and cultural, historic and scenic landscapes.

Action 1.6.1 Amend the Resource Protection Overlay District (RPOD). Strategies

- Amend regulations for zoning districts underlying the RPOD by identifying Zoning Ordinance amendments to combine these districts into a single low-density residential district. Retain existing setback and coverage requirements.
- Amend the extent of the RPOD to include all areas north of Route 6 to protect drinking water supply, historic landscapes, settings, vistas and ponds.

Action 1.6.2 To offset existing densely developed residential areas and preserve open lands, agricultural lands and cultural, historic and scenic landscapes, explore locations for a 5-acre minimum lot size district in areas with insufficient infrastructure.

Action 1.6.3 Evaluate regulations for the Medium Density Residential area, the existing small lot residential development located outside the RPOD, as may be amended, and the GIZ, and adopt necessary amendments.

Strategies

- Streamline regulations by identifying Zoning Ordinance amendments to combine these districts into a single medium density residential district incorporating density per acre requirements, design, parking and landscaping standards.
- Consider sewer neutral and nitrogen limitation policies for unsewered residential development that contribute nitrogen to sensitive embayments.

Action 1.6.4 Develop regulations that allow high-density residential use in specific areas.

Strategies

- Define specific locations for high-density residential use where traffic and wastewater infrastructure is in place, may be expanded or upgraded where nitrogen sensitive embayments will not be negatively impacted.
- Locate high-density residential uses near densely developed commercial areas to encourage pedestrian travel and serve as a transition area between single-family residential neighborhoods and densely developed commercial centers.
- Develop regulations for design, scale and architecture for high-
- Cluster open space should be allocated and arranged to be contiguous with any adjacent protected or cluster open space and should be the subject of permanent conservation restrictions.

density residential use.

Action 1.6.5 Develop a program for older residential neighborhoods to foster restoration, rehabilitation and adaptive reuse of older homes; improve neighborhood streets, parks, and public buildings.

Action 1.6.6 Residential development design should protect and enhance to the maximum extent possible existing sensitive habitat areas, protected open space and cultural and working landscapes.

Strategies

• Review and amend the Subdivision Rules and Regulation and Zoning Ordinance to include standards for mandatory conservation design cluster subdivision, architectural scale that arises from community context and context sensitive roadway design.